COHERENT INC
Form 10-Q
February 07, 2018
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)
x QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Quarterly Period Ended December 30, 2017
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 incorporation or organization)	(I.R.S. Employer 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

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 x 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 x No ¨

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

Large accelerated filer x	Accelerated filer ¨
Non-accelerated filer ¨ (do not check if a smaller reporting company)	Smaller reporting company ¨
Emerging growth company ¨	

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

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

The number of shares outstanding of registrant's common stock, par value $.01 per share, on February 5, 2018 was 24,821,704.

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COHERENT, INC.

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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” 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.

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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 30, 2017	December 31, 2016
Net sales	$477,565	$ 346,073
Cost of sales	260,542	204,559
Gross profit	217,023	141,514
Operating expenses:		
Research and development	31,392	27,084
Selling, general and administrative	73,437	73,768
Gain from business combination	—	(5,416)
Impairment of assets held for sale	265	—
Amortization of intangible assets	2,606	3,878
Total operating expenses	107,700	99,314
Income from operations	109,323	42,200
Other income (expense):		
Interest income	471	143
Interest expense	(8,747)	(7,964)
Other—net	(224)	12,993
Total other income (expense), net	(8,500)	5,172
Income from continuing operations before income taxes	100,823	47,372
Provision for income taxes	58,920	16,674
Net income from continuing operations	41,903	30,698
Loss from discontinued operations, net of income taxes	(2)	(290)
Net income	$41,901	$ 30,408
Basic net income per share:		
Income per share from continuing operations	$1.70	$ 1.26
Loss per share from discontinued operations, net of income taxes	—	(0.01)
Net income per share	$1.70	$ 1.25
Diluted net income per share:		
Income per share from continuing operations	$1.67	$ 1.25
Loss per share from discontinued operations, net of income taxes	—	(0.01)
Net income per share	$1.67	$ 1.23
Shares used in computation:		
Basic	24,635	24,347
Diluted	25,025	24,644

See Accompanying Notes to Condensed Consolidated Financial Statements.

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

	Three Months Ended	
	December 30, 2017	December 31, 2016
Net income	$41,901	$ 30,408
Other comprehensive income (loss): [1]		
Translation adjustment, net of taxes [2]	92	(5,495)
Changes in unrealized losses on available-for-sale securities, net of taxes [3]	(7)	(3,334)
Defined benefit pension plans, net of taxes [4]	147	376
Other comprehensive income (loss), net of tax	232	(8,453)
Comprehensive income	$42,133	$ 21,955

(1) Reclassification adjustments were not significant during the three months ended December 30, 2017 and December 31, 2016.

(2) Tax benefits of $0 and $1,266 were provided on translation adjustments during the three months ended December 30, 2017 and December 31, 2016, respectively.

(3) Tax benefits of $4 and $1,878 were provided on changes in unrealized gains (losses) on available-for-sale securities for the three months ended December 30, 2017 and December 31, 2016, respectively.

(4) Tax expenses (benefits) of $(46) and $21 were provided on changes in defined benefit pension plans for the three months ended December 30, 2017 and December 31, 2016, respectively.

See Accompanying Notes to Condensed Consolidated Financial Statements.

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

	December 30, 2017	September 30, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$ 385,735	$ 443,066
Restricted cash	1,100	1,097
Short-term investments	37,711	32,510
Accounts receivable—net of allowances of $6,715 and $6,890, respectively	309,132	305,668
Inventories	432,809	414,807
Prepaid expenses and other assets	77,003	70,268
Assets held for sale	8,577	44,248
Total current assets	1,252,067	1,311,664
Property and equipment, net	291,308	278,850
Goodwill	418,080	417,694
Intangible assets, net	174,531	190,027
Non-current restricted cash	12,957	12,924
Other assets	127,716	126,641
Total assets	$ 2,276,659	$ 2,337,800
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term borrowings and current-portion of long-term obligations	$ 6,928	$ 5,078
Accounts payable	81,397	75,860
Income taxes payable	114,036	103,206
Other current liabilities	190,840	235,001
Total current liabilities	393,201	419,145
Long-term obligations	503,005	589,001
Other long-term liabilities	185,072	166,390
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Common stock, Authorized—500,000 shares, par value $.01 per share:		
Outstanding—24,822 shares and 24,631 shares, respectively	247	245
Additional paid-in capital	147,764	171,403
Accumulated other comprehensive income	20,138	19,906
Retained earnings	1,027,232	971,710
Total stockholders' equity	1,195,381	1,163,264
Total liabilities and stockholders' equity	$ 2,276,659	$ 2,337,800

See Accompanying Notes to Condensed Consolidated Financial Statements.

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

	Three Months Ended	
	December 30, 2017	December 31, 2016
Cash flows from operating activities:		
Net income	$41,901	$ 30,408
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	12,555	8,995
Amortization of intangible assets	15,100	12,088
Gain on business combination	—	(5,416)
Deferred income taxes	13,121	1,291
Amortization of debt issuance cost	3,815	600
Stock-based compensation	7,076	5,503
Non-cash restructuring charges	430	4,359
Other non-cash expense	377	456
Changes in assets and liabilities, net of effect of acquisitions:		
Accounts receivable	(1,219)	4,417
Inventories	(16,128)	6,613
Prepaid expenses and other assets	(6,364)	(3,559)
Other long-term assets	(3,365)	(1,083)
Accounts payable	4,676	1,439
Income taxes payable/receivable	29,751	(1,428)
Other current liabilities	(39,336)	17,911
Other long-term liabilities	2,588	1,330
Cash flows from discontinued operations	2	(1,283)
Net cash provided by operating activities	64,980	82,641
Cash flows from investing activities:		
Purchases of property and equipment	(23,683)	(15,390)
Proceeds from dispositions of property and equipment	26	123
Purchases of available-for-sale securities	(14,894)	—
Proceeds from sales and maturities of available-for-sale securities	9,711	25,108
Acquisition of businesses, net of cash acquired	—	(740,481)
Proceeds from sale of discontinued operation	25,000	—
Cash flows from discontinued operations	—	(153)
Net cash used in investing activities	(3,840)	(730,793)
Cash flows from financing activities:		
Short-term borrowings	2,354	3,920
Repayments of short-term borrowings	(622)	(23,920)
Proceeds from long-term borrowings	—	740,685
Repayments of long-term borrowings	(90,363)	(2,171)
Issuance of common stock under employee stock option and purchase plans	4,899	3,866
Net settlement of restricted common stock	(35,646)	(15,255)
Debt issuance costs	—	(25,824)
Net cash provided by (used in) financing activities	(119,378)	681,301
Effect of exchange rate changes on cash, cash equivalents and restricted cash	943	(13,504)

Net increase (decrease) in cash, cash equivalents and restricted cash	(57,295)	19,645
Cash, cash equivalents and restricted cash, beginning of period	457,087	354,347
Cash, cash equivalents and restricted cash, end of period	$399,792	$ 373,992
Non-cash investing and financing activities:		
Unpaid property and equipment purchases	$3,853	$ 4,084
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.

	December 30, 2017	December 31, 2016
Cash and cash equivalents	$ 385,735	$ 360,217
Restricted cash, current	1,100	2,232
Restricted cash, non-current	12,957	11,543
Total cash, cash equivalents, and restricted cash shown in the condensed consolidated statement of cash flows	$ 399,792	$ 373,992

See Accompanying Notes to Condensed Consolidated Financial Statements.

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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 condensed consolidated financial statements and notes thereto filed by Coherent, Inc. on Form 10-K for the fiscal year ended September 30, 2017. 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 2018 and 2017 both include 52 weeks.

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

On November 7, 2016, we acquired Rofin-Sinar Technologies, Inc. and its direct and indirect subsidiaries ("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.

2. RECENT ACCOUNTING STANDARDS

Adoption of New Accounting Pronouncement

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 is required to be adopted in the first quarter of our fiscal 2019. We elected to early adopt the amended guidance in the first quarter of fiscal 2018. The effect of adoption is a decrease in our opening retained earnings by $6.1 million with a comparable decrease to our non-current prepaid income tax balance.

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. Upon our adoption in the first quarter of fiscal 2018, we recognized a windfall tax benefit as a cumulative effect adjustment increase to our opening retained earnings of $19.8 million together with a comparable increase in deferred tax assets. With adoption occurring at the beginning of fiscal 2018, we recognized excess tax benefits from stock award exercises and restricted stock unit vesting in the first quarter of fiscal 2018 as a discrete tax benefit which reduced the provision for income taxes for the three months ended December 30, 2017 by $12.5 million. The adoption also changed the calculation of fully diluted shares outstanding for the three months ended December 30, 2017. The excess tax benefits have been excluded from the calculation of assumed proceeds in our calculation of diluted weighted average shares under the new standard. Our diluted weighted average shares outstanding as of December 30, 2017 increased by 123,470 shares due to adoption of the new standard. Additionally, effective in the first quarter of fiscal 2018, excess tax benefits are classified as an operating activity in the statement of cash flows instead of as a financing activity where they were previously presented. We adopted this guidance on a prospective basis and, accordingly, prior periods have not been

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adjusted. We have elected to not estimate forfeitures expected to occur to determine the amount of compensation cost to be recognized in each period. The remaining provisions of this amended guidance did not have a material impact on our consolidated financial statements.

Recently Issued Accounting Pronouncements

In August 2017, the FASB issued amended guidance to address the current limitation on how an entity can designate the hedged risk in certain cash flow and fair value hedging relationships pursuant to U.S. GAAP. This amendment better aligns an entity's risk management activities and financial reporting for hedging relationships through changes to both designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The amendment made specific improvements on hedge accounting for risk components in hedging relationships involving nonfinancial risk and interest rate risk for cash flow hedges of forecasted purchases or sales of a nonfinancial asset, cash flow hedges of interest rate risk of variable-rate financial instruments and fair value hedges of interest rate risk. Upon adoption, for cash flow and net investment hedges existing, an entity should apply a cumulative-effect adjustment related to eliminating the separate measurement of ineffectiveness to accumulated other comprehensive income with a corresponding adjustment to the opening balance of retained earnings as of the beginning of the fiscal year that an entity adopts the amendment. The amended presentation and disclosure guidance is required only prospectively. The new standard will become effective for our fiscal year 2020 which begins on September 29, 2019. We are currently assessing the impact of this amended guidance.

In May 2017, the FASB issued amended guidance about which changes to the terms or conditions of a share-based payment require an entity to apply modification accounting. Under the new guidance, an entity should account for the effects of a modification unless, comparing to the original award prior to modification, the fair value, the vesting conditions and the classification as equity or as a liability of the modified award are all the same. The amendments in this update should be applied prospectively to an award modified on or after the adoption date. The new standard will become effective for our fiscal year 2019 which begins on September 30, 2018. We do not expect the adoption of this standard to have a material impact on our financial statements.

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 non-cash 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 2019 which begins on September 30, 2018. We have elected to not adopt the standard earlier. We are currently evaluating our contracts subject to the new guidance and have not determined the impact this standard may have on our financial statements nor have we decided upon the method of adoption.

In February 2016, the FASB issued amended guidance to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The new guidance clarifies the criteria for distinguishing between a finance lease and operating lease, as well as classification between the two types of leases, which is substantially unchanged from the previous lease guidance. Further, the new guidance requires a lessee to recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset, initially measured at the present value of the lease payments. For finance leases, a lessee should recognize interest on the lease liability separately from amortization of the right-of-use asset. For operating leases, a lessee should recognize a single lease cost, calculated so that the cost of the lease is allocated over the lease term on a generally straight-line basis. For leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election not to recognize lease assets and lease

liabilities. The new standard will become effective for our fiscal year 2020 which begins on September 29, 2019. We are currently assessing the impact of this amended guidance.

3. BUSINESS COMBINATIONS

Fiscal 2017 Acquisitions

Rofin

On November 7, 2016, we completed our 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-

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based solutions and components. Rofin's operating results have been included primarily in our Industrial Lasers & Systems segment. See Note 16, "Segment Information".

As a condition of the acquisition, we were required to divest and hold separate Rofin's low power CO_2 laser business based in Hull, United Kingdom (the "Hull Business"), and had reported this business separately as a discontinued operation until its divestiture. We completed the divestiture of the Hull Business on October 11, 2017, after receiving approval for the terms of the sale from the European Commission. See Note 18, "Discontinued Operations and Assets Held for Sale".

The total purchase consideration has been allocated to the tangible and identifiable intangible assets acquired and liabilities assumed based on a valuation analysis.

The total 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

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, "Borrowings". 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 had 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 of Rofin we owned before the acquisition.

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 concluded that all such goodwill will not be deductible for tax purposes.

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

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Cash, cash equivalents and short-term investments	$163,425
Accounts receivable	90,877
Inventory	189,869
Prepaid expenses and other assets	15,362
Assets held-for-sale, current	29,545
Property and equipment	125,723
Other assets	31,854
Intangible assets:	
Existing technology	169,029
In-process research and development	6,000
Backlog	5,600
Customer relationships	39,209
Trademarks	5,699
Patents	300
Goodwill	298,170
Current portion of long-term obligations	(3,633)
Current liabilities held for sale	(7,001)
Accounts payable	(21,314)
Other current liabilities	(68,242)
Long-term debt	(11,641)
Other long-term liabilities	(122,517)
Total	$936,314

The fair value write-up of acquired finished goods and work-in-process inventory was $26.4 million, which was amortized over the expected period during which the acquired inventory was sold, or 6 months. Accordingly, for fiscal 2017, we recorded $26.4 million of incremental cost of sales associated with the fair value write-up of inventory acquired in the merger with Rofin. The fair value write-up of inventory acquired was fully amortized in fiscal 2017.

The fair value write-up of acquired property, plant and equipment of $36.0 million will be amortized over the useful lives of the assets, ranging from 3 to 31 years. 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 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 two projects that had not yet reached technological feasibility as of the date of the acquisition. 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

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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. One project was completed in December 2017 and amortization for that project will begin in the quarter ending March 31, 2018. The other project has not been completed as of December 30, 2017, but is expected to be completed in fiscal 2019.

We expensed $17.6 million of acquisition-related costs as selling, general and administrative expenses in our condensed consolidated statements of operations in 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 (in thousands, except per share data)

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
Total net sales	$ 389,816
Net income	$ 39,183
Net income per share:	
Basic	$ 1.61
Diluted	$ 1.59

The unaudited pro forma financial information above includes the net income of Rofin’s low power CO_2 laser business based in Hull, United Kingdom, which was recorded as a discontinued operation in the three months ended December 31, 2016. See Note 18, "Discontinued Operations and Assets Held for Sale".

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.
- 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.
- Incremental interest expense and amortization of debt issuance costs related to our Euro Term Loan and Revolving Credit Facility (as defined in Note 9, "Borrowings").
- The exclusion of acquisition costs incurred by both Coherent and Rofin from the three months ended December 31, 2016.
-

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

- The exclusion of a gain on business combination for our previously owned shares of Rofin from the three months ended December 31, 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.
- The estimated tax impact of the above adjustments.

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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 30, 2017 and September 30, 2017, we did not have any assets or liabilities valued based on Level 3 valuations.

We measure the fair value of outstanding debt obligations for disclosure purposes on a recurring basis. As of December 30, 2017, the current and long-term portion of long-term obligations of $5.1 million and $503.0 million, respectively, are reported at amortized cost. These outstanding obligations are classified as Level 2 as they are not actively traded and are valued using a discounted cash flow model that uses observable market inputs. Based on the discounted cash flow model, the fair value of the outstanding debt approximates amortized cost.

Financial assets and liabilities measured at fair value as of December 30, 2017 and September 30, 2017 are summarized below (in thousands):

	Aggregate Fair Value	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Aggregate Fair Value	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs
	December 30, 2017	(Level 1)	(Level 2)	September 30, 2017	(Level 1)	(Level 2)
Assets:						
Cash equivalents:						
Money market fund deposits	$38,383	$ 38,383	$—	$61,811	$ 61,811	$—
U.S. Treasury and agency obligations [1]	20,020	—	20,020	14,986	—	14,986
Commercial paper [1]	4,997	—	4,997	21,991	—	21,991
Short-term investments:						
U.S. Treasury and agency obligations [1]	18,605	—	18,605	21,087	—	21,087
Corporate notes and obligations [1]	9,149	—	9,149	11,423	—	11,423
Commercial paper [1]	9,957	—	9,957	—	—	—
Prepaid and other assets:						
Foreign currency contracts [2]	588	—	588	1,270	—	1,270
Money market fund deposits — Deferred comp and supplemental plan [3]	270	270	—	285	285	—
Mutual funds — Deferred comp and supplemental plan [3]	19,969	19,969	—	17,585	17,585	—
Total	$121,938	$ 58,622	$ 63,316	$150,438	$ 79,681	$ 70,757
Liabilities:						
Other current liabilities:						
Foreign currency contracts [3]	(962)	—	(962)	(1,475)	—	(1,475)
Total	$120,976	$ 58,622	$ 62,354	$148,963	$ 79,681	$ 69,282

(1) 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.

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(2) 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. See Note 6, "Derivative Instruments and Hedging Activities".

(3) 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 30, 2017			
	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash and cash equivalents	$385,710	$ 25	$ —	$385,735
Short-term investments:				
Available-for-sale securities:				
Commercial paper	$9,957	$ —	$ —	$9,957
U.S. Treasury and agency obligations	18,588	19	(2)	18,605
Corporate notes and obligations	9,127	25	(3)	9,149
Total short-term investments	$37,672	$ 44	$ (5)	$37,711

	September 30, 2017			
	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash and cash equivalents	$443,066	$ —	$ —	$443,066
Short-term investments:				
Available-for-sale securities:				
U.S. Treasury and agency obligations	$21,074	$ 13	$ —	$21,087
Corporate notes and obligations	11,390	34	(1)	11,423
Total short-term investments	$32,464	$ 47	$ (1)	$32,510

None of the $5,000 in unrealized losses at December 30, 2017 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 30, 2017 and September 30, 2017 classified as short-term investments on our condensed consolidated balance sheet were as follows

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(in thousands):

	December 30, 2017		September 30, 2017	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Investments in available-for-sale debt securities due in less than one year	$37,672	$ 37,711	$30,214	$ 30,251
Investments in available-for-sale debt securities due in one to five years [1]	$—	$ —	$2,250	$ 2,259

(1) Classified as short-term investments because these securities are highly liquid and can be sold at any time.

During the three months ended December 30, 2017, we received proceeds totaling $2.4 million from the sale of available-for-sale securities and realized no gross gains or losses. 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.

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 two 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.

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 our 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.

Non-Designated Derivatives

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

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	U.S. Notional Contract Value		U.S. Fair Value	
	December 30, 2017	September 30, 2017	December 30, 2017	September 30, 2017
Euro currency hedge contracts				
Purchase	$ 116,372	$ 109,641	$(669)	$ (1,397)
Sell	$ (33,588)	$ —	$(44)	$ —
Japanese Yen currency hedge contracts				
Sell	$ (10,818)	$ (25,126)	$224	$ 591
South Korean Won currency hedge contracts				
Purchase	$ 29,580	$ —	$362	$ —
Sell	$ (49,721)	$ (28,996)	$(140)	$ 551
Chinese RMB currency hedge contracts				
Sell	$ (15,138)	$ (13,744)	$(97)	$ 128
Other foreign currency hedge contracts				
Purchase	$ 9,562	$ 3,668	$2	$ (4)
Sell	$ (2,077)	$ (2,971)	$(12)	$ (74)

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, "Fair Values".

During the three months ended December 30, 2017 and December 31, 2016, we recognized a loss of $2.6 million and a gain of $9.5 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 30, 2017 or September 30, 2017. 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 December 30, 2017 and December 31, 2016, we did not have any activities 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.

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7. GOODWILL AND INTANGIBLE ASSETS

During the three months ended December 30, 2017, 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 September 30, 2017 to December 30, 2017 are as follows (in thousands):

	OEM Laser Sources	Industrial Lasers & Systems	Total
Balance as of September, 30, 2017	$102,178	$315,516	$417,694
Translation adjustments and other	235	151	386
Balance as of December 30, 2017	$102,413	$315,667	$418,080

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

	December 30, 2017			September 30, 2017		
	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
Existing technology	$189,282	$ (60,146)	$129,136	$208,341	$ (66,793)	$141,548
Patents	—	—	—	330	(58)	272
Customer relationships	51,708	(16,631)	35,077	51,687	(14,259)	37,428
Trade Name	6,172	(2,302)	3,870	6,171	(1,824)	4,347
In-process research & development	6,448	—	6,448	6,432	—	6,432
Total	$253,610	$ (79,079)	$174,531	$272,961	$ (82,934)	$190,027

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 30, 2017 and December 31, 2016 was $15.1 million and $12.1 million, respectively. The change in the accumulated amortization also includes $0.1 million and $2.1 million of foreign exchange impact for the three months ended December 30, 2017 and December 31, 2016, respectively.

At December 30, 2017, estimated amortization expense for the remainder of fiscal 2018, the next five succeeding fiscal years and all fiscal years thereafter are as follows (in thousands):

	Estimated Amortization Expense
2018 (remainder)	$ 41,627
2019	53,131
2020	45,583
2021	14,103
2022	3,525
2023	2,615
Thereafter	7,499
Total (excluding IPR&D)	$ 168,083

8. BALANCE SHEET DETAILS

Inventories consist of the following (in thousands):

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	December 30, 2017	September 30, 2017
Purchased parts and assemblies	$ 124,544	$ 114,285
Work-in-process	159,280	159,784
Finished goods	148,985	140,738
Total inventories	$ 432,809	$ 414,807

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

	December 30, 2017	September 30, 2017
Prepaid and refundable income taxes	$ 27,606	$ 28,712
Other taxes receivable	16,865	15,327
Prepaid expenses and other assets	32,532	26,229
Total prepaid expenses and other assets	$ 77,003	$ 70,268

Other assets consist of the following (in thousands):

	December 30, 2017	September 30, 2017
Assets related to deferred compensation arrangements	$ 33,930	$ 31,008
Deferred tax assets	86,831	82,691
Other assets	6,955	12,942
Total other assets	$ 127,716	$ 126,641

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

	December 30, 2017	September 30, 2017
Accrued payroll and benefits	$ 55,697	$ 72,327
Deferred revenue	44,709	65,237
Warranty reserve	37,809	36,149
Accrued expenses and other	31,699	34,215
Current liabilities held for sale (See Note 18)	735	7,021
Customer deposits	20,191	20,052
Total other current liabilities	$ 190,840	$ 235,001

Components of the reserve for warranty costs during the first three months of fiscal 2018 and 2017 were as follows (in thousands):

	Three Months Ended	
	December 30, 2017	December 31, 2016
Beginning balance	$36,149	$ 15,949
Additions related to current period sales	14,140	8,814
Warranty costs incurred in the current period	(12,404)	(6,399)
Accruals resulting from acquisitions	—	12,593
Adjustments to accruals related to foreign exchange and other	(76)	(2,357)
Ending balance	$37,809	$ 28,600

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

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	December 30, 2017	September 30, 2017
Long-term taxes payable	$ 54,779	$ 35,866
Deferred compensation	37,291	34,160
Deferred tax liabilities	42,457	45,373
Deferred revenue	4,400	4,765
Asset retirement obligations liability	4,779	5,382
Defined benefit plan liabilities	40,157	39,454
Other long-term liabilities	1,209	1,390
Total other long-term liabilities	$ 185,072	$ 166,390

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 (the "Closing Date"), we entered into a Credit Agreement by and among us, Coherent Holding BV & Co. K.G. (formerly 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"). 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 facility (the "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 Euros of the capacity under the Revolving Credit Facility for the issuance of a letter of credit.

The terms of the Credit Agreement require the 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.

In the first quarter of fiscal 2018 and during fiscal 2017, we made voluntary principal payments of 75.0 million Euros and 150.0 million Euros, respectively, on the Euro Term Loan. As of December 30, 2017, the outstanding principal amount of the Euro Term Loan was 436.6 million Euros. As of December 30, 2017, the outstanding principal amount of the Revolving Credit Facility was 10.0 million Euros.

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 3.50% to 3.00% depending on the consolidated total gross leverage ratio at the time of

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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 2.50% to 2.00% 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 4.25% to 3.75%, and for revolving loans borrowed as Base Rate loans, ranges from 3.25% to 2.75%, 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.

On May 8, 2017, we entered into Amendment No. 1 and Waiver (the "Repricing Amendment") to the Credit Agreement to, among other things, (i) reduce the applicable interest rate margins with respect to the Euro Term Loans to 1.25% for Euro Term Loans maintained as Base Rate loans and 2.25% for Euro Term Loans maintained as Eurocurrency Rate loans, with stepdowns to 1.00% and 2.00%, respectively, available after May 8, 2018 if the consolidated total gross leverage ratio for Coherent and its restricted subsidiaries is less than 1.50:1.00 and (ii) extend the period during which a prepayment premium may be required for a repricing transaction until six months after the effective date of the Repricing Amendment. In connection with the execution of the Repricing Amendment, we paid arrangement fees of approximately $0.5 million in fiscal 2017, as well as certain fees and expenses of the administrative agent and the lenders, in accordance with the terms of the Credit Agreement.

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 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 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 30, 2017.

We incurred $28.5 million of debt issuance costs related to the Euro Term Loan and $0.5 million of debt issuance costs to the original lenders related to the Repricing Amendment, 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, adjusted to accelerate amortization related to voluntary repayments. 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.

Additional sources of cash available to us were international currency lines of credit and bank credit facilities totaling $29.2 million as of December 30, 2017, of which $21.4 million was unused and available. These unsecured international credit facilities were used in Europe and Japan during the first three months of fiscal 2018. As of December 30, 2017, we had utilized $6.0 million of the international credit facilities as guarantees in Europe and $1.8 million as short-term borrowings in Japan.

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

	December 30, 2017	September 30, 2017
Current portion of Euro Term Loan [1]	$ 3,255	$ 3,230
1.3% Term loan due 2024	1,482	1,477
1.0% State of Connecticut term loan due 2023	371	371
Line of credit borrowings	1,820	—
Total short-term borrowings and current portion of long-term obligations	$ 6,928	$ 5,078

(1) Net of debt issuance costs of $4.7 million and $4.7 million at December 30, 2017 and September 30, 2017, respectively.

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

	December 30, 2017	September 30, 2017
Euro Term Loan due 2024 [1]	$ 492,799	$ 578,356
1.3% Term loan due 2024	8,519	8,865
1.0% State of Connecticut term loan due 2023	1,687	1,780
Total long-term obligations	$ 503,005	$ 589,001

(1) Net of debt issuance costs of $16.8 million and $20.4 million at December 30, 2017 and September 30, 2017, respectively.

Contractual maturities of our debt obligations as of December 30, 2017 are as follows (in thousands):

	Amount
2018 (remainder)	$7,346
2019	9,795
2020	9,795
2021	9,795
2022	9,795
2023	9,714
Thereafter	473,351
Total	$529,591

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.

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Determining Fair Value

The fair values of shares purchased under the Employee Stock Purchase Plan ("ESPP") for the three months ended December 30, 2017 and December 31, 2016, respectively, were estimated using the following weighted-average assumptions:

	Employee Stock Purchase Plan Three Months Ended	
	December 30, 2017	December 31, 2016
Expected life in years	0.5	0.5
Expected volatility	47.9 %	31.6 %
Risk-free interest rate	1.21 %	0.47 %
Expected dividend yield	— %	— %
Weighted average fair value per share	$ 70.75	$ 23.37

There were no stock options granted during the three months ended December 30, 2017 and December 31, 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 1000 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:

	Three Months Ended	
	December 30, 2017	December 31, 2016
Risk-free interest rate	1.7 %	1.3 %
Volatility	37.0%	31.0 %
Weighted average fair value	$315.05	$163.17

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 30, 2017 and December 31, 2016 (in thousands):

	Three Months Ended	
	December 30, 2017	December 31, 2016
Cost of sales	$988	$ 960
Research and development	668	1,053
Selling, general and administrative	5,420	7,642
Income tax benefit	(1,609)	(1,489)
	$5,467	$ 8,166

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

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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 30, 2017, $1.0 million was capitalized into inventory for all stock plans, $1.0 million was amortized to cost of sales and $1.3 million remained in inventory at December 30, 2017. 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.

At December 30, 2017, the total compensation cost related to unvested stock-based awards granted to employees under our stock plans but not yet recognized was approximately $57.4 million. We do not estimate forfeitures. This cost will be amortized on a straight-line basis over a weighted-average period of approximately 1.8 years.

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 2018 (in thousands, except per share amounts):

	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 September 30, 2017	399	$ 118.83	176	$ 105.34
Granted	90	260.64	78	315.05
Vested [(1)]	(198)	83.69	(95)	70.57
Forfeited	(1)	145.96	—	—
Nonvested stock at December 30, 2017	290	$ 152.82	159	$ 155.76

(1)Service-based restricted stock units vested during the fiscal year. Performance-based restricted stock 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.

On November 7, 2016, we entered into a Credit Agreement, which was amended on May 8, 2017. See Note 9, "Borrowings" for further discussion of the issuance of the financing.

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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):

	Three Months Ended	
	December 30, 2017	December 31, 2016
Weighted average shares outstanding—basic	24,635	24,347
Dilutive effect of employee stock awards	390	297
Weighted average shares outstanding—diluted	25,025	24,644
Net income from continuing operations	$41,903	$ 30,698
Loss from discontinued operations, net of income taxes	(2)	(290)
Net income	$41,901	$ 30,408

A total of 19,375 and 110,737 potentially dilutive securities have been excluded from the diluted share calculation for the three months ended December 30, 2017 and December 31, 2016, respectively, as their effect was anti-dilutive.

13. OTHER INCOME (EXPENSE)

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

	Three Months Ended	
	December 30, 2017	December 31, 2016
Foreign exchange gain (loss)	$(2,235)	$ 13,099
Gain (loss) on deferred compensation investments, net	1,855	(52)
Other	156	(54)
Other - net	$(224)	$ 12,993

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.

On December 22, 2017, the Tax Cuts and Jobs Act (the “Tax Act”) was enacted. The Tax Act contains significant changes to U.S. tax law, including lowering the U.S. corporate income tax rate to 21.0% and implementing a territorial tax system. Since we have a September year-end, the lower U.S. corporate income tax rate will be phased in. Our U.S. federal blended tax rate will be approximately 24.5% for our fiscal year ending September 29, 2018 and 21.0% for subsequent fiscal years.

The reduction of the U.S. corporate income tax rate will cause us to adjust our U.S. deferred tax assets and liabilities to the lower U.S. federal tax rate of 21.0%. There are also certain transitional impacts of the Tax Act. As part of the transition to the new territorial tax system, the Tax Act imposes a one-time deemed repatriation tax on our foreign

subsidiaries' historical earnings. These transitional impacts resulted in a provisional net charge of $41.7 million for the quarter ended December 30, 2017. This is comprised of an estimated deemed repatriation tax charge of $48.7 million less a previously recorded deferred tax liability of $20.3 million for anticipated repatriation of our investment in a foreign subsidiary, plus an estimated deferred tax remeasurement charge of $13.3 million.

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The Tax Act changes are broad and complex. The final calculation of impacts of the Tax Act may materially differ from the above provisional estimates. Among other things, this may be due to changes in interpretations of the Tax Act, any legislative action to address questions that arise because of the Tax Act, any changes in accounting standards for income taxes or related interpretations in response to the Tax Act, or any updates or changes to estimates we have utilized to calculate the transitional impacts. The Securities Exchange Commission has issued guidance under Staff Accounting Bulletin No. 118 directing taxpayers to record impacts of the Tax Act as "provisional" when it does not have the necessary information available, prepared or analyzed (including computations) in reasonable detail to complete the accounting under ASC 740. The guidance allows for a measurement period of up to one year after the enactment date of the Tax Act to finalize the recording of the related tax impacts. We currently anticipate finalizing and recording any resulting adjustments by the end of our current fiscal year ending September 29, 2018.

The Tax Act also includes provisions for Global Intangible Low-Taxed Income ("GILTI") wherein taxes on foreign income are imposed in excess of a deemed return on tangible assets of foreign corporations. In general, this income will effectively be taxed at a 10.5% tax rate reduced by any available current year foreign tax credits. This provision is effective for taxable years beginning after December 31, 2017. Because of the complexity of the new GILTI tax rules, we continue to evaluate this provision of the Tax Act including the associated forecast of GILTI and the application of ASC 740, Income Taxes. Under U.S. GAAP, we are allowed to make an accounting policy choice of either (1) treating taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the "period cost method") or (2) factoring such amounts into our measurement of our deferred taxes (the "deferred method"). Our selection of an accounting policy with respect to the new GILTI tax rules will depend, in part, on analyzing our global income to determine whether we expect to have future U.S. inclusions in taxable income related to GILTI and, if so, what the impact is expected to be. Whether we expect to have future U.S. inclusions in taxable income related to GILTI depends on not only our current structure and estimated future results of global operations, but also our intent and ability to modify our structure. We are currently in the process of analyzing our structure and, as a result, are not yet able to reasonably estimate the effect of this provision of the Tax Act. Therefore, we have not made any adjustments related to potential GILTI tax in our financial statements and have not made a policy decision regarding whether to record deferred tax on GILTI.

Our effective tax rate on income from continuing operations before income taxes for the three months ended December 30, 2017 was 58.4%. Our effective tax rate for the three months ended December 30, 2017 was higher than the effective U.S. federal blended tax rate of 24.5% primarily due to the Tax Act one-time mandatory deemed repatriation transition tax, the impact of income subject to foreign tax rates that are higher than the U.S. tax rates, the remeasurement of deferred tax assets and liabilities based on the newly enacted U.S. federal tax rate of 21.0%, 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 the excess tax benefits from stock award exercises and restricted stock unit vesting, the benefit of foreign tax credits, the benefit of federal research and development tax credits, the benefit of a domestic manufacturing deduction under IRC Section 199 and the Singapore tax exemption.

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 U.S. federal 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.

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 adopted ASU No. 2016-09 in the first quarter of fiscal 2018. As a result of adopting the new standard, excess tax benefits from equity-based compensation are now reflected in the condensed consolidated statements of operations as a component of the provision for income taxes. The adoption of ASU No. 2016-09 resulted in a decrease in our provision for income taxes of $12.5 million for the three months ended December 30, 2017 due to the recognition of excess tax benefits for options exercised and the vesting of equity awards.

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 fiscal 2011 are closed. In September 2017, the

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Internal Revenue Service (IRS) completed its audit of Coherent, Inc.'s fiscal 2013 tax return with no adjustment. The extension of the statutes of limitations for its fiscal 2011 and 2012 tax returns will be closed on June 30, 2018. In our major foreign jurisdictions and our major state jurisdictions, the years prior to fiscal 2011 and 2013, 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 July, 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 August 2016. In November 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. The audit work began in January 2017. In the fourth quarter of fiscal 2017, all German tax audits were extended to fiscal 2015 and are currently in progress.

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.

15. DEFINED BENEFIT PLANS

Components of net periodic cost were as follows for the three months ended December 30, 2017 and December 31, 2016 (in thousands):

	Three Months Ended	
	December 30, 2017	December 31, 2016
Service cost	$469	$ 385
Interest cost	195	189
Expected return on plan assets	(99)	(123)
Amortization of prior service cost	62	93
Amortization of prior net loss	—	13
Amortization of unrecognized gain from OCI	(125)	—
Recognized net actuarial (gain) loss	(23)	230
Net periodic pension cost	$479	$ 787

16. SEGMENT INFORMATION

At December 30, 2017, we were organized into two reporting segments, OEM Laser Sources ("OLS") and Industrial Lasers & Systems ("ILS"), based upon our organizational structure and how the chief operating decision maker ("CODM") receives and utilizes information provided to allocate resources and make decisions. 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's operating results have been included primarily 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 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.

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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 continuing 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 30, 2017	December 31, 2016
Net sales:		
OEM Laser Sources	$325,657	$ 238,736
Industrial Lasers & Systems	151,908	107,337
Total net sales	$477,565	$ 346,073
Income (loss) from continuing operations:		
OEM Laser Sources	$127,717	$ 83,590
Industrial Lasers & Systems	1,213	(16,508)
Corporate and other	(19,607)	(24,882)
Total income from continuing operations	109,323	42,200
Total other income (expense), net	(8,500)	5,172
Income from continuing operations before income taxes	$100,823	$ 47,372

Major Customers

We had one customer during the three months ended December 30, 2017 that accounted for 32.8% of net sales. The same customer accounted for 23.0% of net sales for the three months ended December 31, 2016. The customer purchased primarily from our OLS segment.

We had one customer that accounted for 27.2% and 19.0% of accounts receivable at December 30, 2017 and September 30, 2017, respectively. We had another customer that accounted for 15.0% and 10.0% of accounts receivable at December 30, 2017 and September 30, 2017, respectively. 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 exiting our legacy high power fiber laser product line, change of control payments to Rofin officers, the exiting of two product lines acquired in the acquisition of Rofin,

realignment of our supply chain due to segment reorganization and consolidation of sales and distribution offices as well as certain manufacturing sites. These activities resulted in charges primarily for employee termination, other exit related costs associated with the write-off of property and equipment and inventory and early lease termination costs.

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 three months of fiscal 2018 and 2017 (in thousands):

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	Severance Related	Asset Write-Offs	Other	Total
Balances, September 30, 2017	$ 1,301	$ —	$ —	$ 1,301
Provision	629	430	105	1,164
Payments and other	(755)	(430)	(105)	(1,290)
Balances, December 30, 2017	$ 1,175	$ —	$ —	$ 1,175

	Severance Related	Asset Write-Offs	Other	Total
Balances, October 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

At December 30, 2017, $1.2 million of accrued restructuring costs were included in other current liabilities. The current quarter severance related costs are primarily comprised of severance pay for employees being terminated due to the consolidation of certain manufacturing sites. The current quarter asset write-offs are primarily comprised of inventory and equipment write-offs due to consolidation of certain manufacturing sites. The severance related costs in the first quarter of fiscal 2017 are primarily comprised of severance pay for employees being terminated due to the transition of activities out of Rofin including change of control payments to Rofin officers. The asset write-offs in the first quarter of fiscal 2017 are primarily comprised of write-offs of inventory and equipment due to exiting our legacy high power fiber laser product line and inventory write-offs due to the exit of other Rofin product lines.
By segment, $0.4 million and $6.9 million of restructuring costs were incurred in the ILS segment and $0.8 million and $0.2 million were incurred in the OLS segment in the three months ended December 30, 2017 and December 31, 2016, respectively. 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 AND ASSETS HELD FOR SALE

Discontinued Operations

Discontinued operations are from the Hull Business that we acquired as part of our acquisition of Rofin. As a condition of the acquisition, we were required to divest and hold separate the Hull Business and reported this business separately as a discontinued operation until its divestiture. We completed the divestiture of the Hull Business on October 11, 2017, after receiving approval for the terms of the sale from the European Commission. As a result of the divestiture, we recorded a loss in discontinued operations of $2,000 in the first quarter of fiscal 2018. The results from discontinued operations in the first quarter of fiscal 2018 to the date of divestiture (October 11, 2017) were immaterial and were not included in our condensed consolidated results of operations.

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 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 three months ended December 30, 2017 and December 31, 2016 are as follows (in thousands):

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	Three Months Ended December 30, 2017	Three Months Ended December 31, 2016
Net sales	$ —	$ 4,511
Cost of sales	—	3,109
Operating expenses	—	1,546
Other expense	—	218
Loss from discontinued operations	—	(362)
Loss on disposal of discontinued operations	(2)	—
Total loss on discontinued operations	(2)	(362)
Income tax benefit	—	(72)
Net loss from discontinued operations	$ (2)	$ (290)

Assets Held for Sale

Due to the divestiture of the Hull Business on October 11, 2017, there are no assets or liabilities related to the Hull Business classified as held for sale as of December 30, 2017. Current assets and current liabilities classified as held for sale as of September 30, 2017 related to the Hull Business are as follows (in thousands):

	September 30, 2017
Cash	$ 33
Accounts receivable	6,931
Inventories	5,586
Prepaid expenses and other assets	607
Property and equipment	10,705
Intangible assets	11,400
Total current assets held for sale	$ 35,262
Accounts payable	$ 1,129
Other current liabilities	4,875
Total current liabilities held for sale	$ 6,004

In the fourth quarter of fiscal 2017, management decided to sell several entities that we acquired in the Rofin acquisition. Although the sale was not completed as of the end of fiscal 2017, we recorded a non-cash impairment charge of $2.9 million to operating expense in our results of operations in the fourth quarter of fiscal 2017 to reduce our carrying value in these entities to fair value. In the first quarter of fiscal 2018, we recorded an additional impairment charge of $0.3 million to operating expense in our results of operations to reduce our carrying value in these entities to fair value. Current assets and current liabilities classified as held for sale as of December 30, 2017 and September 30, 2017 related to continuing operations are as follows (in thousands):

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	December 30, 2017	September 30, 2017
Accounts receivable	$ 1,993	$ 1,668
Inventories	5,024	5,202
Prepaid expenses and other assets	309	472
Property and equipment	445	457
Intangible assets	806	1,187
Total current assets held for sale	$ 8,577	$ 8,986
Accounts payable	$ 264	$ 189
Other current liabilities	471	828
Total current liabilities held for sale	$ 735	$ 1,017

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19. SUBSEQUENT EVENT

On February 6, 2018, our board of directors authorized a buyback program authorizing the Company to repurchase up to $100.00 million of our common stock from time to time through January 31, 2019.

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.

We are organized into two reporting segments: OEM Laser Sources (“OLS”) and Industrial Lasers & Systems (“ILS”), based on the organizational structure of the company and how the chief operating decision maker ("CODM") receives and utilizes information provided to allocate resources and make decisions. 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 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 and Government Programs.

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:

- 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 expense, major restructuring costs and certain other non-operating income and expense items, such as costs related to our acquisition

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of Rofin. Key initiatives to reach our goals for EBITDA improvements include utilization of our Asian manufacturing locations, optimizing 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 September 30, 2017.

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.

	Three Months Ended			
	December 30, 2017	December 31, 2016	Change	% Change
	(Dollars in thousands)			
Net sales—OEM Laser Sources	$325,657	$238,736	$86,921	36.4 %
Net sales—Industrial Lasers & Systems	$151,908	$107,337	$44,571	41.5 %
Gross profit as a percentage of net sales—OEM Laser Sources	53.9 %	52.1 %	1.8 %	3.5 %
Gross profit as a percentage of net sales—Industrial Lasers & Systems	28.0 %	17.0 %	11.0 %	64.7 %
Research and development as a percentage of net sales	6.6 %	7.8 %	(1.2)%	(15.4)%

Income from continuing operations before income taxes	$100,823		$47,372		$53,451		112.8	%
Net cash provided by operating activities	$64,980		$82,641		$(17,661)		(21.4)	%
Days sales outstanding in receivables	58.3		62.7		(4.4)		(7.0)	%
Annualized first quarter inventory turns	2.4		2.1		0.3		14.3	%
Capital spending as a percentage of net sales	5.0	%	4.4	%	0.6	%	13.6	%
Net income from continuing operations as a percentage of net sales	8.8	%	8.9	%	(0.1)	%	(1.1)	%
Adjusted EBITDA as a percentage of net sales	30.9	%	28.4	%	2.5	%	8.8	%

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Net Sales

Net sales include sales of lasers, laser tools, related accessories and service. Net sales for the first quarter of fiscal 2018 increased 36.4% in our OLS segment and increased 41.5% in our ILS segment from the same quarter one year ago. 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 to 53.9% from 52.1% in our OLS segment and increased to 28.0% from 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 6.6% in our first fiscal quarter of fiscal 2018 from 7.8% in the same quarter 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 2018 decreased to 58.3 days from 62.7 days compared to the same quarter one year ago. The decrease is primarily due to the inclusion of Rofin's net sales only after the November 7, 2016 acquisition date in the DSO calculation in the first quarter of fiscal 2017 partially offset by higher sales of ELA tools used in the flat panel display market in Asia and the timing of collections of those receivables as well as the impact of our acquisition of Rofin, which has 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 2018 increased to 2.4 from 2.1 turns compared to the same quarter a year ago primarily due to the impact of including Rofin's cost of sales only after the November 7, 2016 acquisition date in the turns calculation in the first quarter of fiscal 2017.

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 5.0% for the

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first quarter of fiscal 2018 from 4.4% for the first quarter of fiscal 2017, primarily due to investments to expand our manufacturing capacity in several manufacturing sites in Germany and South Korea and higher purchases of production-related assets partially offset by the impact of higher revenues in the first quarter of fiscal 2018.

Adjusted EBITDA as a Percentage of Net Sales

We define adjusted EBITDA as operating income adjusted for depreciation, amortization, stock compensation expense, major restructuring costs and certain other non-operating income and expense items, such as costs related to our acquisition of Rofin. Key initiatives to reach our goals for EBITDA improvements include utilization of our Asian manufacturing locations, optimizing 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 30,		December 31,	
	2017		2016	
Net income from continuing operations as a percentage of net sales	8.8	%	8.9	%
Income tax expense	12.3	%	4.8	%
Interest and other income (expense), net	2.2	%	(1.5	)%
Depreciation and amortization	5.8	%	6.1	%
Restructuring charges	0.2	%	2.1	%
Purchase accounting step-up	—	%	2.7	%
Gain on business combination	—	%	(1.6	)%
Impairment of assets held for sale	0.1	%	—	%
Costs related to acquisition of Rofin	—	%	4.1	%
Stock-based compensation	1.5	%	2.8	%
Adjusted EBITDA as a percentage of net sales	30.9	%	28.4	%

SIGNIFICANT EVENTS
Acquisition and divestiture
On November 7, 2016, we completed our 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 were required to divest and hold separate Rofin’s low power CO_2 laser business based in Hull, United Kingdom (the “Hull Business”), and reported this business separately as a discontinued operation until its divestiture. We completed the divestiture of the Hull Business on October 11, 2017, after receiving approval for the terms of the sale from the European Commission. See Note 18, "Discontinued Operations and Assets Held for Sale" in the Notes to Condensed Consolidated Financial Statements.

RESULTS OF OPERATIONS

CONSOLIDATED SUMMARY

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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 30, 2017	December 31, 2016
Net sales	100.0 %	100.0 %
Cost of sales	54.6 %	59.1 %
Gross profit	45.4 %	40.9 %
Operating expenses:		
Research and development	6.6 %	7.8 %
Selling, general and administrative	15.4 %	21.3 %
Gain on business combination	— %	(1.5)%
Impairment of assets held for sale	0.1 %	— %
Amortization of intangible assets	0.4 %	1.1 %
Total operating expenses	22.5 %	28.7 %
Income from operations	22.9 %	12.2 %
Other income (expense), net	(1.8)%	1.5 %
Income from continuing operations before income taxes	21.1 %	13.7 %
Provision for income taxes	12.3 %	4.8 %
Net income from continuing operations	8.8 %	8.9 %

Net income from continuing operations for the first quarter of fiscal 2018 was $41.9 million ($1.67 per diluted share). This included $10.8 million after-tax amortization of intangible assets, $5.5 million of after-tax stock-based compensation expense, $0.9 million of after-tax restructuring costs, $0.3 million after-tax for the impairment of net assets of several entities held for sale, $41.7 million of tax charges due to the U.S. Tax Cuts and Jobs Act transition tax and deferred tax remeasurement and $12.5 million of tax benefit from the adoption of new rules for accounting for excess tax benefits and tax deficiencies for employee stock-based compensation. 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 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 30, 2017		December 31, 2016	
	Amount	Percentage of total net sales	Amount	Percentage of total net sales
Consolidated:				

Microelectronics	$268,176	56.2	%	$175,774	50.8	%
Materials processing	127,461	26.7	%	94,643	27.3	%
OEM components and instrumentation	48,856	10.2	%	46,572	13.5	%
Scientific and government programs	33,072	6.9	%	29,084	8.4	%
Total	$477,565	100.0	%	$346,073	100.0	%

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Net sales for the first quarter of fiscal 2018 increased by $131.5 million, or 38%, compared to the first quarter of fiscal 2017, with significant increases in the microelectronics and materials processing markets and smaller increases in the scientific and government programs and OEM components and instrumentation markets. The increase is partially due to the inclusion of a full quarter of Rofin net sales in the first quarter of fiscal 2018 compared to the inclusion of Rofin's net sales only after the November 7, 2016 acquisition date in the first quarter of fiscal 2017.

The increase in the microelectronics market of $92.4 million, or 53%, was primarily due to higher shipments related to ELA tools used in the flat panel display market and higher revenues from consumable parts as well as higher shipments related to advanced packaging applications. We expect continued growth in the microelectronics market with flat panel display demand fully utilizing our manufacturing capacity in fiscal 2018, higher flat panel display revenues from consumable parts due to our higher installed base, spending in the semiconductor capital equipment market at a level similar to or greater than fiscal 2017 and continued recovery in the advanced packaging market. Sales in the materials processing market increased $32.8 million, or 35%, primarily due to the inclusion of a full quarter of Rofin net sales in the first quarter of fiscal 2018 and higher shipments for marking applications. We expect continued growth in multiple materials processing applications including automotive (e.g. battery welding for electric vehicles) and machine tooling, medical device manufacturing, consumer goods manufacturing for packaging, converting, marking and additive manufacturing. We also expect continued growth in sales of our high power fiber lasers, particularly in Asia, and are expanding our manufacturing capacity accordingly. The increase in the OEM components and instrumentation market of $2.3 million, or 5%, was due primarily to higher shipments for bio-instrumentation applications partially offset by lower shipments for military and medical military applications. In OEM components and instrumentation applications, we are seeing strong demand in the bio-instrumentation market, higher demand for consumables in the medical market, in dental applications and in eye disease management as well as increased demand in the defense and aerospace market. Sales in the scientific and government programs market increased $4.0 million, or 14%, due to higher demand for advanced research applications used by university and government research groups, particularly in Asia. We expect demand in the scientific and government programs market to continue to 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 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 30, 2017			December 31, 2016		
	Amount	Percentage of total net sales		Amount	Percentage of total net sales	
Consolidated:						
OEM Laser Sources (OLS)	$325,657	68.2	%	$238,736	69.0	%
Industrial Lasers & Systems (ILS)	151,908	31.8	%	107,337	31.0	%
Total	$477,565	100.0	%	$346,073	100.0	%

Net sales for the first quarter of fiscal 2018 increased by $131.5 million, or 38%, compared to the first quarter of fiscal 2017, with increases of $86.9 million, or 36%, in our OLS segment and $44.6 million, or 42%, in our ILS segment. Net sales in the first quarter of fiscal 2018 included $113.3 million of Rofin net sales, contributing $112.2 million and $1.1 million to the ILS and OLS segments, respectively. Net sales in the first quarter of fiscal 2017 included $74.4 million of Rofin net sales since the acquisition on November 7, 2016, contributing $73.7 million and $0.7 million to the ILS and OLS segments, respectively.

The increase in our OLS segment sales was primarily due to higher shipments of ELA tools used in the flat panel display market and higher revenues from consumable parts as well as higher shipments for scientific and government programs. The increase in our ILS segment sales was primarily due to higher shipments for materials processing and microelectronics applications due to our acquisition of Rofin as well as higher shipments to the advanced packaging and medical markets.

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GROSS PROFIT

Consolidated

Our gross profit percentage increased by 4.5% to 45.4% in the first quarter of fiscal 2018 from 40.9% in the first quarter of fiscal 2017.

The 4.5% first quarter increase in the gross profit percentage was primarily due to the 2.5% favorable net impact of purchase accounting adjustments compared to the first quarter of fiscal 2017. In the first quarter of fiscal 2017, we took a charge for amortization of inventory step-up related to our acquisition of Rofin (compared to none in the first quarter of fiscal 2018). This favorable net impact also included the impact of higher amortization of intangibles related to our acquisition of Rofin in the first quarter of fiscal 2018 compared to the first quarter of fiscal 2017 due to the inclusion of a full quarter of amortization in fiscal 2018. In addition, the gross profit percentage was favorably impacted by favorable product margins (1.6%) as well as lower restructuring costs (0.8%) for inventory write-offs, primarily in our ILS segment, partially offset by higher warranty costs (0.4%) as a percentage of net sales. The improvement in product margins was primarily due to better leverage of manufacturing costs on higher volumes and favorable mix within flat panel display applications partially offset by the impact of our acquisition of Rofin due to Rofin's historical margins that are lower than Coherent's historical margins.

Our gross profit percentage 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 strengthening of the Euro.

OEM Laser Sources

The gross profit percentage in our OLS segment increased by 1.8% to 53.9% in the first quarter of fiscal 2018 from 52.1% in the first quarter of fiscal 2017.

The 1.8% first quarter increase in the gross profit percentage was primarily due to favorable product margins (1.6%) as a result of better leverage of manufacturing costs on higher volumes and favorable mix within flat panel display applications for both systems and service as well as other microelectronics and instrumentation applications partially offset by the unfavorable impact of the stronger Euro. Also contributing to the increase in gross profit percentage were lower other costs (0.6%) due to lower inventory provisions for excess and obsolete inventory as a percentage of revenue in certain business units due to the impact of significantly higher sales and lower intangibles amortization (0.1%) as a percentage of sales. These favorable impacts were partially offset by increased warranty and installation costs as a percentage of revenue (0.4%) due to higher warranty events in the microelectronics and scientific and government programs markets, primarily in China.

Industrial Lasers & Systems

The gross profit percentage in our ILS segment increased by 11.0% to 28.0% in the first quarter of fiscal 2018 from 17.0% in the first quarter of fiscal 2017.

The 11.0% first quarter increase in the gross profit percentage was primarily due to the amortization of inventory step-up related to our acquisition of Rofin in the first quarter of fiscal 2017 (8.5%) compared to none in the first quarter of fiscal 2018 as well as lower restructuring charges (2.7%) related to the exit from our historical Coherent

high power fiber laser product line in the first quarter of fiscal 2017. In addition, the improvement was due to the favorable impact of Rofin's margins before considering purchase accounting adjustments (0.7%) for a full quarter in fiscal 2018 as Rofin's global tools business has higher margins than Coherent's legacy ILS businesses. Partially offsetting the improvement, intangibles amortization increased as a percentage of revenue (0.9%) due to the inclusion of a full quarter of amortization in fiscal 2018.

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OPERATING EXPENSES:

	Three Months Ended					
	December 30, 2017			December 31, 2016		
	Amount	Percentage of total net sales		Amount	Percentage of total net sales	
	(Dollars in thousands)					
Research and development	$31,392	6.6	%	$27,084	7.8	%
Selling, general and administrative	73,437	15.4	%	73,768	21.3	%
Gain on business combination	—	—	%	(5,416)	(1.5)	%
Impairment of assets held for sale	265	0.1	%	—	—	%
Amortization of intangible assets	2,606	0.4	%	3,878	1.1	%
Total operating expenses	$107,700	22.5	%	$99,314	28.7	%

Research and development

Research and development ("R&D") expenses increased $4.3 million, or 16%, during the first fiscal quarter ended December 30, 2017 compared to the same quarter one year ago. The increase was primarily due to the inclusion of a full quarter of Rofin R&D expenses ($3.2 million) in the first quarter of fiscal 2018. The increase was also due to $1.2 million higher spending on R&D activities including headcount and materials net of lower restructuring charges for our exit from our historical Coherent high power fiber laser product line in the first quarter of fiscal 2017. There were also increases of $0.3 million for higher charges for increases in deferred compensation plan liabilities offset by $0.4 million lower stock-based compensation expense.

On a segment basis as compared to the prior year period, OLS research and development spending increased $2.3 million primarily due to higher net spending on R&D activities. ILS spending increased $2.1 million primarily due to the inclusion of a full quarter of Rofin expenses partially offset by lower spending on R&D activities including lower restructuring costs. Corporate and other spending decreased $0.1 million due to lower stock-based compensation offset by increases in deferred compensation plan liabilities.

Selling, general and administrative

Selling, general and administrative ("SG&A") expenses decreased $0.3 million, or 0%, during the first fiscal quarter ended December 30, 2017 compared to the same quarter one year ago. The decrease was primarily due to $14.2 million lower financial advisory, consulting and legal costs related to our acquisition of Rofin and $2.2 million lower stock-based compensation expense due to a $3.4 million charge due to the acceleration of Rofin options recorded in the first quarter of fiscal 2017 net of higher expense for new grants. The decreases were offset by increases due to the inclusion of a full quarter of Rofin SG&A expenses ($8.0 million) in the first quarter of fiscal 2018, $5.5 million higher other spending on legal, consulting and infrastructure related to integration activities as well as higher spending on legal and consulting related to compliance with the terms of the Credit Agreement. In addition, SG&A expense increased due to higher other variable spending in support of higher sales, $1.6 million higher charges for increases in deferred compensation plan liabilities and $1.0 million higher payroll spending for variable compensation and salaries and benefits net of lower severance restructuring costs and lower commissions due to sales mix.

On a segment basis as compared to the prior year period, OLS segment expenses increased $4.8 million primarily due to higher payroll and other variable spending as well as spending relating to a historical Rofin business unit which is included in our OLS segment. ILS spending increased $5.5 million primarily due to the inclusion of a full quarter of

Rofin expenses partially offset by lower payroll spending including lower severance restructuring costs. Corporate and other spending decreased $10.6 million primarily due to lower financial advisory, consulting and legal costs related to our acquisition of Rofin and lower stock-based compensation expense partially offset by higher other spending on legal, consulting and infrastructure related to integration activities and compliance with the Credit Agreement, higher charges for increases in deferred compensation plan liabilities and higher payroll spending.

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" in the Notes to Condensed Consolidated Financial Statements). We recognized a gain of $5.4 million in the first

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quarter of fiscal 2017 on the increase in fair value from the date of purchase for the shares of Rofin we owned prior to the acquisition.

Impairment of assets held for sale

In the fourth quarter of fiscal 2017, management decided to sell several entities that we acquired in the Rofin acquisition. Although the sale of the entities was not completed at the end of the first quarter of fiscal 2018, we recorded a non-cash impairment charge of $0.3 million to operating expense in our results of operations in the first quarter of fiscal 2018. This charge, in addition to the $2.9 million recorded to operating expense in our results of operations in the fourth quarter of fiscal 2017, reduces our carrying value of these entities to fair value.

Amortization of intangible assets

Amortization of intangible assets decreased $1.3 million in the three months ended December 30, 2017 compared to the same period last year. The decrease was primarily due to the completion of the amortization of backlog intangibles from our acquisition of Rofin in fiscal 2017 ($1.9 million lower in the comparable first quarter) partially offset by the inclusion of a full quarter of Rofin amortization expenses in the first quarter of fiscal 2018.

OTHER INCOME (EXPENSE) — NET

Other income (expense), net, changed by $13.7 million to other expense of $8.5 million in the first quarter of fiscal 2018 from other income of $5.2 million in the first quarter of fiscal 2017. The increase in net other expense was primarily due to $15.3 million lower foreign exchange net gains and $0.8 million higher interest expense partially offset by $1.9 million higher gains, net of expenses, on our deferred compensation plan assets. The lower foreign exchange gains were primarily due to a gain in the first quarter of fiscal 2017 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 and the impact of changing rates on cash conversions. Interest expense increased due to higher amortization of debt issuance costs related to the Euro Term Loan partially offset by interest expense on the commitment to fund the Euro Term Loan in the first quarter of fiscal 2017 for our acquisition of Rofin, and lower interest expense due to a decrease in interest rates on the Euro Term Loan offset by the inclusion of a full quarter of interest expense in the first quarter of fiscal 2018.

INCOME TAXES

On December 22, 2017, the Tax Cuts and Jobs Act (the “Tax Act”) was enacted. The Tax Act changes are broad and complex. The final transitional impacts of the Tax Act may materially differ from the estimates provided elsewhere in this report. Among other things, this may be due to changes in interpretations of the Tax Act, any legislative action to address questions that arise because of the Tax Act, any changes in accounting standards for income taxes or related interpretations in response to the Tax Act, or any updates or changes to estimates we have utilized to calculate the transitional impacts. Additionally, longstanding international tax norms that determine each country’s jurisdiction to tax cross-border international trade are evolving as a result of the Base Erosion and Profit Shifting reporting requirements (“BEPS") recommended by the G8, G20 and Organization for Economic Cooperation and Development ("OECD"). As these and other tax laws and related regulations change, our financial results could be materially impacted. Given the unpredictability of these possible changes and their potential interdependency, it is very difficult to assess whether the overall effect of such potential tax changes would be cumulatively positive or negative for our earnings and cash flow. Such changes could, however, adversely impact our financial results.

As discussed in Note 14, "Income Taxes" in the Notes to Condensed Consolidated Financial Statements, the Tax Act resulted in a provisional charge of $41.7 million for the quarter ended December 30, 2017. This is comprised of an

estimated deemed repatriation tax charge of $48.7 million less a previously recorded deferred tax liability of $20.3 million for anticipated repatriation of our investment in a foreign subsidiary, plus the estimated deferred tax remeasurement charge of $13.3 million.

Our effective tax rate on income from continuing operations before income taxes for the three months ended December 30, 2017 was 58.4%. Our effective tax rate for the three months ended December 30, 2017 was higher than the effective U.S. federal blended tax rate of 24.5% primarily due to the Tax Act one-time mandatory deemed repatriation transition tax, the impact of income subject to foreign tax rates that are higher than the U.S. tax rates, the remeasurement of deferred tax assets and liabilities based on the newly enacted U.S. federal tax rate of 21.0%, 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 the excess tax benefits from stock award exercises and restricted stock unit vesting, the benefit of foreign tax credits, the benefit of federal research and development tax credits, the benefit of a domestic manufacturing deduction under IRC Section 199 and the Singapore tax exemption.

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Our 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 U.S. federal 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.

LIQUIDITY AND CAPITAL RESOURCES

At December 30, 2017, we had assets classified as cash and cash equivalents and short-term investments, in an aggregate amount of $423.4 million, compared to $475.6 million at September 30, 2017. In addition, at December 30, 2017, we had $14.1 million of restricted cash. At December 30, 2017, approximately $273.4 million of our cash and securities was held in certain of our foreign subsidiaries and branches, $231.0 million of which was denominated in currencies other than the U.S. dollar. At December 30, 2017, we had approximately $272.8 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 foreign withholding taxes. 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. Historically, we have considered substantially all foreign profits as being permanently invested in our foreign operations, and we had no intent to repatriate those funds. We are continuing to review our policy in light of the changes contained in the Tax Act. 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.

See “Part I, 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 our 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 acquisitions of businesses and technologies, the repurchase of our common stock, 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 30, 2017	December 31, 2016
	(in thousands)	
Net cash provided by operating activities	$64,980	$ 82,641

Acquisition of businesses, net of cash acquired	—	(740,481)
Sales of shares under employee stock plans	4,899	3,866
Net settlement of restricted common stock	(35,646)	(15,255)
Borrowings, net of repayments	(88,631)	718,514
Debt issuance costs	—	(25,824)
Capital expenditures	(23,683)	(15,390)
Proceeds from sale of discontinued operation (the Hull Business)	25,000	—

Net cash provided by operating activities decreased by $17.7 million for the first three months of fiscal 2018 compared to the same period one year ago. The decrease in cash provided by operating activities was primarily due to lower cash flows from

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deferred revenue, the timing of shipments of large systems and from accounts receivable partially offset by higher net income and cash flows due to non-cash expenses for amortization, stock-based compensation and depreciation as well as higher income taxes payable. 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, if any, 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 (the "Closing Date"), we entered into a Credit Agreement by and among Coherent, Inc., Coherent Holding BV & Co. K.G. (formerly 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"). 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 facility (the "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 the Closing Date, the Borrower borrowed the full 670.0 million Euros under the Euro Term Loan and its proceeds were used to finance our acquisition of Rofin and pay related fees and expenses. On the Closing Date, we also used 10.0 million Euros of the capacity under the Revolving Credit Facility for the issuance of a letter of credit.

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 3.50% to 3.00% 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 2.50% to 2.00% 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 4.25% to 3.75%, and for revolving loans borrowed as Base Rate loans, ranges from 3.25% to 2.75%, 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.

On May 8, 2017, we entered into Amendment No. 1 and Waiver (the "Repricing Amendment") to the Credit Agreement to, among other things, (i) reduce the applicable interest rate margins with respect to the Euro Term Loans to 1.25% for Euro Term Loans maintained as Base Rate loans and 2.25% for Euro Term Loans maintained as Eurocurrency Rate loans, with stepdowns to 1.00% and 2.00%, respectively, available after May 8, 2018 if the consolidated total gross leverage ratio for Coherent and its restricted subsidiaries is less than 1.50:1.00 and (ii) extend the period during which a prepayment premium may be required for a repricing transaction until six months after the effective date of the Repricing Amendment.

In the first quarter of fiscal 2018 and during fiscal 2017, we made voluntary principal payments of 75.0 million Euros and 150.0 million Euros, respectively, on the Euro Term Loan. As of December 30, 2017, the outstanding principal amount of the Euro Term Loan was 436.6 million Euros. As of December 30, 2017, the outstanding principal amount of the Revolving Credit Facility was 10.0 million Euros.

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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 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 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 30, 2017.

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 $26.4 million of debt issuance costs in fiscal 2017. In fiscal 2017, we made debt principal payments $178.1 million, including voluntary prepayments of $170.7 million, recorded interest expense on the Euro Term Loan of $23.5 million, recorded $7.2 million amortization of debt issuance costs and recorded interest expense of $2.7 million for the commitment of the Euro Term Loan. In the first three months of fiscal 2018, we made debt principal payments $90.0 million, including voluntary prepayments of $88.0 million, recorded interest expense on the Euro Term Loan of $4.6 million and recorded $3.8 million amortization of debt issuance costs.

On February 6, 2018, our board of directors authorized a buyback program authorizing the Company to repurchase up to $100 million of our common stock from time to time through January 31, 2019. See Note 19, "Subsequent Event" in the Notes to Condensed Consolidated Financial Statements.

Additional sources of cash available to us were international currency lines of credit and bank credit facilities totaling $29.2 million as of December 30, 2017, of which $21.4 million was unused and available. These unsecured international credit facilities were used in Europe and Japan during the first three months of fiscal 2018. As of December 30, 2017, we had utilized $6.0 million of the international credit facilities as guarantees in Europe and $1.8 million as short-term borrowings in Japan.

Our ratio of current assets to current liabilities was 3.2:1 at December 30, 2017 compared to 3.1:1 at September 30, 2017. The increase in our ratio is primarily due to lower deferred income partially offset by lower cash and cash equivalents. Our cash and cash equivalents, short-term investments and working capital are as follows:

	December 30, 2017	September 30, 2017
	(in thousands)	
Cash and cash equivalents	$385,735	$ 443,066
Short-term investments	37,711	32,510

Working capital	858,866	892,519

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. Information regarding our operating lease payments, asset retirement obligations, long-term debt payments, pension obligations, purchase commitments with suppliers and purchase obligations is provided in Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of our Annual Report on Form 10-K for the fiscal year ended September 30, 2017. There have been no material changes in contractual obligations outside of the ordinary course of business since September 30, 2017. Information regarding our other financial commitments at December 30, 2017 is provided in the notes to the condensed consolidated financial statements in this report.

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Changes in Financial Condition

Cash provided by operating activities during the first three months of fiscal 2018 was $65.0 million, which included net income of $41.9 million, depreciation and amortization of $31.5 million, stock-based compensation expense of $7.1 million, net decreases in deferred tax assets of $13.1 million, non-cash restructuring charges of $0.4 million and $0.4 million other partially offset by cash used by operating assets and liabilities of $29.4 million (primarily decreases in deferred income and increases in inventories net of higher income taxes payable). 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 used in investing activities during the first three months of fiscal 2018 was $3.8 million, which included $23.7 million used to acquire property and equipment, purchase and upgrade buildings, net of proceeds from dispositions and $5.2 million net purchases of available-for-sale securities partially offset by $25.0 million proceeds from the sale of discontinued operations. 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 financing activities during the first three months of fiscal 2018 was $119.4 million, which included $88.6 million net debt payments and $35.6 million outflows due to net settlement of restricted stock units partially offset by $4.9 million generated from our employee stock option and purchase plans. 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 units.

Changes in exchange rates during the first three months of fiscal 2018 resulted in an increase in cash balances of $0.9 million. Changes in exchange rates during the first three months of fiscal 2017 resulted in a decrease in cash balances of $13.5 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.

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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 30, 2017, 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 30, 2017, the fair value of our available-for-sale debt securities was $62.7 million, $25.0 million of which was classified as cash and cash equivalents and $37.7 million of which was classified as short-term investments. There were no gross unrealized gains and losses on available-for-sale debt securities at December 30, 2017.

We are exposed to market risks related to fluctuations in interest rates related to our Euro Term Loan. As of December 30, 2017, we owed $517.5 million on this loan with an interest rate of 3.0%. We performed a sensitivity analysis on the outstanding portion of our debt obligation as of December 30, 2017. Should the current average interest rate increase or decrease by 10%, the resulting annual increase or decrease to interest expense would be approximately $1.5 million as of December 30, 2017.

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 the foregoing currencies and 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, because of our significant manufacturing operations in Europe, a weakening Euro is advantageous and a strengthening Euro is disadvantageous to our financial results. We attempt to limit these exposures through financial market instruments. We utilize derivative instruments, primarily forward contracts with maturities of two 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" in the Notes to Condensed Consolidated Financial Statements.

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 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 30, 2017, approximately $273.4 million of our cash, cash equivalents and short-term investments were held outside the U.S. in certain of our foreign operations, $231.0 million of which was denominated in currencies other than the U.S. dollar.

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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 30, 2017. 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 30, 2017 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	1.1962	$ (82,784)	$ 713
Japanese Yen	110.9611	$ 10,818	$ (224)
British Pound	1.3307	$ 1,219	$ 7
South Korean Won	1,067.7051	$ 20,141	$ (222)
Chinese Renminbi	6.6230	$ 15,138	$ 97
Singapore Dollar	1.3439	$ (9,562)	$ (2)
Malaysian Ringgit	4.1053	$ 858	$ 5

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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 30, 2017 ("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

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 30, 2017. We continue to integrate Rofin into our systems and control environment as of December 30, 2017.

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;

(ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial 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.

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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” of our Annual Report on Form 10-K for the fiscal year ended September 30, 2017 and the risk of our businesses described elsewhere in this quarterly 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, realize the anticipated benefits of the merger or manage our expanded operations, any of which would adversely affect our results of operations.

We have devoted, and expect to continue to devote significant management attention and resources to integrating our business practices with those of Rofin. Such integration efforts are costly due to the large number of processes, policies, procedures, locations, operations, technologies and systems to be integrated, including purchasing, accounting and finance, sales, service, operations, payroll, pricing, marketing and employee benefits. Integration expenses could, particularly in the short term, exceed the savings we expect to achieve from the elimination of duplicative expenses and the realization of economies of scale, which could result in significant charges to earnings that we cannot currently quantify. 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), control and compliance processes, technology, networks and other assets of each of the companies in a cohesive manner;
- 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.

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.

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 allocated 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 was recorded as goodwill. We have

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incurred and will continue to 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 provided for a 670 million Euro term loan, all of which was drawn, and a $100 million revolving credit facility, under which a 10 million Euro letter of credit was issued. As of December 30, 2017, 436.6 million Euros were outstanding under the term loan and 10.0 million Euros were outstanding under the revolving credit facility. We may incur additional indebtedness in the future by accessing the revolving credit facility 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 us and Coherent Holding BV & Co. K.G. (formerly Coherent Holding GmbH), judgment defaults, and bankruptcy and insolvency events. If an event of default exists, the lenders may require the immediate payment of all obligations and 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.

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 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;

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- 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;
- interpretation and impact of the recently enacted and aforementioned U.S. tax law, the Tax Cuts and Jobs Act;
- 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 manage our manufacturing capacity across our diverse product lines and that of our suppliers, including our ability to successfully expand our manufacturing capacity in various locations around the world;
- our ability to successfully internally transfer products as part of our integration efforts;
- our reliance on contract manufacturing;
- 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, including with respect to Rofin’s historical business, which has traditionally experienced a reduction in sales during the first half of its fiscal year as compared to the second half of its fiscal year;

- jurisdictional capital and currency controls negatively impacting our ability to move funds from or to an applicable jurisdiction;
- 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;

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- 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;
- 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;
- negative impacts related to the “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;
- negative impacts related to the recent independence movement in Catalonia, Spain, particularly with regard to holding and operating some of our foreign entities in an efficient manner from a tax, business and legal perspective;
- negative impacts related to government instability, including the recent difficulties in forming a governing coalition in Germany;
- the future impact of legislation, rulemaking, and changes in accounting, tax, defense procurement, 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.

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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 the key components and materials, including exotic materials, certain cutting-edge optics and crystals, used 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 non-cancelable purchase orders or otherwise assume liability for a large amount of the ordered supplies, which limits 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 that are at the cutting-edge of available technologies and change frequently to meet rapidly evolving market demands. By their very nature, the types of components used in such products can be difficult and unpredictable to manufacture and may only be available from a single supplier, which increases the risk that we may not obtain such components in a timely manner. Identifying alternative sources of supply for certain components could be difficult and costly, result in management distraction in assisting our current and future suppliers to meet our and our customers' technical requirements, and cause delays in shipments of our products while we identify, evaluate and test the products of alternative suppliers. Any such delay in shipment would result in a delay or cancelation of our ability to convert such order into revenues. 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 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. We also 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.

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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 2018, 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. 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, and rescheduled or canceled orders by our customers. This could negatively impact our backlog, timing of net sales and results of operations.

As of December 30, 2017, 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 our excimer laser annealing tools (ELA) used in the flat panel display market, 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 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;

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- 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.

Worldwide economic conditions and related uncertainties 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 future sales decline or remain flat. 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.

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

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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 “Part I, Item 3. Quantitative and Qualitative Disclosures about Market Risk.”

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 and to manage our manufacturing capacity to meet customer demands. 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

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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 30, 2017, 85% of our net sales were derived from customers outside of the United States. For fiscal 2017, fiscal 2016 and fiscal 2015, 83%, 76%, and 73%, respectively, of our net sales were derived from customers outside of the United States. 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;
- 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;
- less than favorable contract terms;

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- reduced ability to enforce contractual obligations;
- 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 including, in particular, any such conflicts on the Korean peninsula, 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.

If we are unable to protect our proprietary technology, our competitive advantage could be harmed.

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 concluded patent-related litigation between IMRA America, Inc. ("Imra") and IPG Photonics Corporation and in Imra's 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 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.

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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, which 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 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 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. Such vertical integration could reduce the market opportunity for our products. As a result of the foregoing factors, we expect that competitive pressures may result in

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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.

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

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- 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.

For the three months ended December 30, 2017, our research and development costs were $31.4 million (6.6% of net sales). For our fiscal years 2017, 2016 and 2015, our research and development costs were $119.2 million (6.9% of net sales), $81.8 million (9.5% of net sales) and $81.5 million (10.2% 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

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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 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

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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:

- interpretation and impact of the recently enacted and aforementioned U.S. tax law, the Tax Cuts and Jobs Act (the "Tax Act");
- 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 and our ability to maintain favorable tax treatment as a result of various Rofin restructuring efforts and business activities;

- the outcome of discussions with various tax authorities regarding intercompany transfer pricing arrangements;
- changes that involve other acquisitions, 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 2010-2015;

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- 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 other tax laws or the interpretation of such tax laws, including the Base Erosion Profit Shifting ("BEPS") action plan implemented by the Organization for Economic Co-operation and Development ("OECD"); and
- changes in generally accepted accounting principles.

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. 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 from the treatment reflected in our historical income tax provisions and accruals, which could materially and adversely affect our operating results and financial condition.

From time to time the United States, foreign and state governments make substantive changes to tax rules and the application of rules to companies. For example, the Tax Act has a significant impact on the taxation of Coherent including the U.S. tax treatment of our foreign operations. Under the Tax Act, foreign earnings are now deemed to be repatriated and we therefore recorded a provisional tax amount for the deemed repatriation transitional tax liability. We also recorded a provisional tax amount for the remeasurement of certain deferred tax assets and liabilities based on the reduction of the U.S. federal tax rate under the Tax Act. These provisional tax amounts result in a higher effective tax rate for our first quarter of fiscal year 2018. The provisional tax amounts recorded are based on our reasonable estimate of the liabilities and we need to fully complete our assessment of them which may require additional information. We are still evaluating the tax provisions related to Global Intangible Low-Taxed Income ("GILTI") and we have not made a policy election on how to account for the GILTI provisions of the Tax Act as allowed by the U.S. generally accepted accounting standards. Our selection of an accounting policy with respect to the new GILTI tax rules will depend, in part, on analyzing our global income to determine whether we expect to have future U.S. inclusions in taxable income related to GILTI and, if so, what is the anticipated impact.

The recent U.S. tax law changes are subject to further interpretations from the U.S. federal and state governments and regulatory organizations, such as Treasury Department and/or the Internal Revenue Service. Updated guidance and interpretations could change the provisional tax liabilities or the accounting treatment of them. A significant portion of the additional provisions for income taxes we have made due to the enactment of the Tax Act is payable by us over a period of up to eight years. As a result, our cash flows from operating activities could be adversely impacted until the additional tax provisions are paid in full.

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

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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.

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ITEM 6. EXHIBITS

Exhibit No.	Description
3.1	Bylaws of Coherent, Inc. as amended and restated on January 28, 2018 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on January 31, 2018).
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.
31.2	Certification of Chief Financial 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.
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.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
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

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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 7, 2018 /s/: JOHN R. AMBROSEO
John R. Ambroseo
President and Chief Executive Officer
(Principal Executive Officer)

Date: February 7, 2018 /s/: KEVIN S. PALATNIK
Kevin S. Palatnik
Executive Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)