# **UNITED STATES** SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# **Form 10-Q**

(Mark one)

**☑ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934** For the quarterly period ended April 1, 2017

Or

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

For the transition period from

Commission file number: 000-50307

# FormFactor, Inc.

(Exact name of registrant as specified in its charter)

Delaware

13-3711155

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

7005 Southfront Road, Livermore, California 94551

(Address of principal executive offices, including zip code)

(925) 290-4000

(Registrant's telephone number, including area code)

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

Indicate by check mark whether the registrant 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 the Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ⊠ No o

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

Large Accelerated filer o

Accelerated filer x

Non-accelerated filer o

Smaller reporting company o

(Do not check if a smaller reporting company)

Emerging growth company o

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. o

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

As of May 9, 2017, 72,121,454 shares of the registrant's common stock, par value \$0.001 per share, were outstanding.

# FORMFACTOR, INC.

# FORM 10-Q FOR THE QUARTERLY PERIOD ENDED APRIL 1, 2017

# INDEX

Part I.	Financial Information	
Item 1.	Financial Statements (Unaudited):	
	Condensed Consolidated Statements of Operations for the three months ended April 1, 2017 and March 26, 2016	<u>3</u>
	Condensed Consolidated Statements of Comprehensive Income (Loss) for the three months ended April 1, 2017 and March 26, 2016	<u>4</u>
	Condensed Consolidated Balance Sheets as of April 1, 2017 and December 31, 2016	<u>5</u>
	Condensed Consolidated Statements of Cash Flows for the three months ended April 1, 2017 and March 26, 2016	<u>6</u>
	Notes to Condensed Consolidated Financial Statements	<u>8</u>
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>17</u>
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	<u>25</u>
Item 4.	Controls and Procedures	<u>25</u>
Part II.	Other Information	<u>26</u>
Item 1.	<u>Legal Proceedings</u>	<u>26</u>
Item 1A.	Risk Factors	<u>26</u>
Item 2.	<u>Unregistered Sales of Equity Securities and use of proceeds</u>	<u>27</u>
<u>Item 3.</u>	Default Upon Senior Securities	<u>27</u>
Item 4.	Mine Safety Disclosures	<u>27</u>
<u>Item 5.</u>	Other Information	<u>27</u>
Item 6.	<u>Exhibits</u>	<u>27</u>
<u>Signatures</u>		<u>29</u>
Exhibit Index		<u>30</u>

# $\ \ \, FORMFACTOR, INC.$

# CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (In thousands, except per share amounts) (Unaudited)

	Three Months Ended			
		April 1, 2017	N	March 26, 2016
Revenues	\$	128,829	\$	53,611
Cost of revenues		81,258		43,819
Gross profit		47,571		9,792
Operating expenses:				
Research and development		17,414		10,849
Selling, general and administrative		22,829		12,516
Restructuring and impairment charges, net		269		_
Total operating expenses		40,512		23,365
Operating income (loss)		7,059		(13,573)
Interest income, net		67		117
Other income (expense), net		(1,574)		(314)
Income (loss) before income taxes		5,552		(13,770)
Provision for income taxes		367		30
Net income (loss)	\$	5,185	\$	(13,800)
Net income (loss) per share:				
Basic	\$	0.07	\$	(0.24)
Diluted	\$	0.07	\$	(0.24)
Weighted-average number of shares used in per share calculations:				
Basic		71,423		58,431
Diluted		72,922		58,431

The accompanying notes are an integral part of these condensed consolidated financial statements.

# FORMFACTOR, INC.

# CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (In thousands)

(In thousands) (Unaudited)

	Three Months Ended				
		pril 1, 2017	March 26, 2016		
Net income (loss)	\$	5,185	\$	(13,800)	
Other comprehensive income, net of tax:					
Foreign currency translation adjustments		1,447		603	
Unrealized gains on available-for-sale marketable securities		_		38	
Unrealized gains on derivative instruments		157		_	
Other comprehensive income, net of tax		1,604		641	
Comprehensive income (loss)	\$	6,789	\$	(13,159)	

 $The \ accompanying \ notes \ are \ an \ integral \ part \ of \ these \ condensed \ consolidated \ financial \ statements.$ 

# FORMFACTOR, INC.

# CONDENSED CONSOLIDATED BALANCE SHEETS (In thousands, except share and per share amounts) (Unaudited)

	April 1, 2017	December 31, 2016		
ASSETS				
Current assets:				
Cash and cash equivalents	\$ 114,437	\$	101,408	
Marketable securities	7,497		7,497	
Accounts receivable, net	79,439		70,225	
Inventories, net	60,371		59,806	
Restricted cash	4		106	
Refundable income taxes	1,105		1,391	
Prepaid expenses and other current assets	 11,348		14,276	
Total current assets	274,201		254,709	
Restricted cash	1,116		1,082	
Property, plant and equipment, net	45,153		42,663	
Goodwill	188,185		188,010	
Intangibles, net	118,444		126,608	
Deferred tax assets	3,322		3,310	
Other assets	2,246		2,600	
Total assets	\$ 632,667	\$	618,982	
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$ 43,316	\$	34,075	
Accrued liabilities	26,292		30,184	
Current portion of term loan	14,601		12,701	
Income taxes payable	50		442	
Deferred revenue	6,590		5,305	
Total current liabilities	90,849		82,707	
Long-term income taxes payable	1,290		1,315	
Term loan, less current portion	116,872		125,475	
Deferred tax liabilities	3,770		3,703	
Deferred rent and other liabilities	4,536		4,726	
Total liabilities	 217,317		217,926	
Commitments and contingencies (Note 12)				
Stockholders' equity:				
Preferred stock, \$0.001 par value:				
10,000,000 shares authorized; no shares issued and outstanding at April 1, 2017 and December 31, 2016, respectively	_		_	
Common stock, \$0.001 par value:				
250,000,000 shares authorized; 71,672,152 and 70,907,847 shares issued and outstanding at April 1, 2017 and December 31, 2016, respectively	72		71	
Additional paid-in capital	840,714		833,341	
Accumulated other comprehensive loss	(2,135)		(3,740)	
Accumulated deficit	(423,301)		(428,616)	
Total stockholders' equity	415,350		401,056	
Total liabilities and stockholders' equity	\$ 632,667	\$	618,982	

The accompanying notes are an integral part of these condensed consolidated financial statements.

# FORMFACTOR, INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands) (Unaudited)

		Three Months Ended		
	April 1, 2017	ľ	March 26, 2016	
Cash flows from operating activities:				
Net income (loss)	\$ 5,185	\$	(13,800	
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:				
Depreciation	3,162		2,468	
Amortization	8,349		2,77	
Accretion of discount on investments	_		(10	
Stock-based compensation expense	3,302		2,73	
Amortization of debt issuance costs	171		_	
Deferred income tax provision	81		-	
Recovery of doubtful accounts receivable	_		(3	
Provision for excess and obsolete inventories	2,797		1,98	
Acquired inventory step-up amortization	190		_	
Loss on sale of long-lived assets	22		-	
Gain on derivative instruments	(65)		-	
Foreign currency transaction gains	(729)		(1,39	
Changes in assets and liabilities:				
Accounts receivable	(8,888)		1,26	
Inventories	(3,345)		(5,75	
Prepaid expenses and other current assets	3,068		2,10	
Refundable income taxes	286		_	
Other assets	615		(28	
Accounts payable	7,220		8,82	
Accrued liabilities	(4,780)		(3,59	
Income tax payable	(419)		(	
Deferred rent and other liabilities	71		17	
Deferred revenues	1,510		(48	
Net cash provided by (used in) operating activities	17,803		(3,03	
Cash flows from investing activities:			-	
Acquisition of property, plant and equipment	(3,465)		(1,11	
Proceeds from sale of subsidiary	14			
Purchases of marketable securities	_		(6,59	
Proceeds from maturities of marketable securities	_		12,70	
Change in restricted cash	121		_	
Net cash (used in) provided by investing activities	(3,330)		5,00	
Cash flows from financing activities:				
Proceeds from issuances of common stock	7,437		1,96	
Purchase and retirement of common stock	(2,733)		_	
Tax withholdings related to net share settlements of equity awards	(480)		_	
Payments on term loan debt	(6,875)		_	
Net cash (used in) provided by financing activities	(2,651)		1,96	
ffect of exchange rate changes on cash and cash equivalents	1,207		1,71	
Net increase in cash and cash equivalents	13,029		5,64	
Cash and cash equivalents, beginning of period	\$ 114.427	<u> </u>	146,26	
Cash and cash equivalents, end of period	\$ 114,437	\$	151,91	

# FORMFACTOR, INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands) (Unaudited)

Non-cash	investing	and	financing	activities:

Changes in accounts payable and accrued liabilities related to property, plant and equipment purchases	\$	2,035 \$	1,166
Supplemental disclosure of cash flow information:			
Income and property taxes paid, net	\$	407 \$	22
The accompanying notes are an integral part of these condensed consolidated fir	nancial st	atements	

The accompanying notes are an integral part of these condensed consolidated financial statements.

# FORMFACTOR, INC. NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

#### Note 1 — Basis of Presentation and Summary of Significant Accounting Policies

**Basis of presentation.** The condensed consolidated financial information included herein has been prepared by FormFactor, Inc. without audit, in accordance with accounting principles generally accepted in the United States of America ("GAAP") and pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). However, such information reflects all adjustments, consisting only of normal recurring adjustments, which are, in the opinion of management, necessary for a fair presentation of the financial position, results of operations and cash flows for the interim periods. The financial information as of December 31, 2016 is derived from our 2016 Annual Report on Form 10-K. The condensed consolidated financial statements included herein should be read in conjunction with the consolidated financial statements and the notes thereto included in our 2016 Annual Report on Form 10-K. The results of operations for the interim periods presented are not necessarily indicative of the results to be expected for the full year.

**Fiscal year.** We operate on a 52/53 week fiscal year, whereby the fiscal year ends on the last Saturday of December. Fiscal 2017 and 2016 contain 52 weeks and 53 weeks, respectively and the three months ended April 1, 2017 and March 26, 2016 each contained 13 weeks. Fiscal 2017 will end on December 30, 2017.

**Business Acquisition.** On June 24, 2016, we completed the acquisition of Cascade Microtech Inc. ("Cascade Microtech"), headquartered in Beaverton, Oregon. Our condensed consolidated financial statements as of April 1, 2017 included the condensed consolidated balance sheet of Cascade Microtech as of April 1, 2017 and the condensed consolidated statement of operations of Cascade Microtech for the three months ended April 1, 2017 whereas our condensed consolidated financial statements as of and for the three months ended March 26, 2016 excluded the financial position and operations of Cascade Microtech. See Note 3 to the Condensed Consolidated Financial Statements - *Acquisition*, for further details.

**Critical Accounting Policies.** Our critical accounting policies have not changed during the three months ended April 1, 2017 from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016.

**New Accounting Pronouncements.** In March 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-09, "*Improvements to Employee Share-Based Payment Accounting*", which amends Accounting Standards Codification ("ASC") Topic 718, "*Compensation - Stock Compensation*". The ASU includes provisions intended to simplify various aspects related to how share-based payments are accounted for and presented in the financial statements including:

- 1) excess tax benefits and tax deficiencies relating to share based payment awards will be recognized as income tax benefit or expense in the reporting period in which they occur (previously such amounts were recognized in additional paid-in capital);
  - 2) excess tax benefits will be classified as an operating activity in the statement of cash flows; and
  - 3) the option to elect to estimate forfeitures or account for them when they occur.

We adopted ASU 2016-09 as of January 1, 2017, which is the first day of our fiscal 2017 and made an accounting policy election to account for forfeitures as incurred resulting in a decrease of \$0.1 million in our accumulated deficit on January 1, 2017. The adjustment was reflected in our condensed consolidated balance sheet as of this date.

Additionally, we determined that there was no cumulative effect on retained earnings or other components of equity or net assets as of the beginning of the period of adoption of this guidance as the impact of recording cumulative excess tax benefits in income taxes in our condensed consolidated statement of earnings was fully offset by a valuation allowance as of the date of adoption. Finally, we will follow the prospective transition method for the recognition of windfalls and shortfalls associated with excess tax benefits and tax deficiencies relating to share based payment awards.

#### Note 2 — Concentration of Credit and Other Risks

We market and sell our products to a narrow base of customers and generally do not require collateral. Each of the following customers accounted for more than 10% of our revenues for the periods indicated:

	Three Months Ended			
	April 1, 2017	March 26, 2016		
Intel	26.7%	34.3%		
Samsung	10.3	10.4		
Total revenues attributable to customers greater				
than 10%	37.0%	44.7%		

At April 1, 2017, one customer accounted for approximately 22% of gross accounts receivable. At December 31, 2016, one customer accounted for approximately 21% of gross accounts receivable. No other customers accounted for more than 10% of gross accounts receivable at either of these fiscal period ends.

#### Note 3 — Acquisition

On June 24, 2016, we acquired Cascade Microtech which was accounted for using the acquisition method of accounting in accordance with the FASB ASC Topic No. 805, *Business Combinations*. The acquired assets and liabilities of Cascade Microtech were recorded at their respective fair values including an amount for goodwill representing the difference between the acquisition consideration and the fair value of the identifiable net assets.

The table below summarizes the assets acquired and liabilities assumed as of April 1, 2017 and December 31, 2016 (in thousands):

	Amount
Cash and cash equivalents	\$ 40,681
Accounts receivable	27,112
Inventory	38,315
Prepaid expenses and other current assets	6,249
Property, plant and equipment	19,875
Other long-term assets	818
Deferred revenue	(1,829)
Accounts payable and accrued liabilities	(23,370)
Deferred tax liabilities	(48,993)
Other long-term liabilities	(960)
Total tangible assets acquired and liabilities	
assumed	57,898
Intangible assets	149,753
Goodwill	158,141
Total acquisition price	\$ 365,792

The acquisition price was allocated to the tangible and identified intangible assets acquired and liabilities assumed as of the closing date of the acquisition based upon their respective fair values. Asset categories acquired included working capital, long-term assets and liabilities and identifiable intangible assets, including in-process research and development ("IPR&D"). The allocation of the acquisition price has been prepared on a preliminary basis and changes to that allocation may occur as additional information becomes available.

The fair values assigned to assets acquired and liabilities assumed are based on management's best estimates and assumptions as of the reporting date and are considered preliminary pending finalization of valuation analyses pertaining to intangible assets acquired, liabilities assumed and tax liabilities assumed including calculation of deferred tax assets and liabilities. Changes to amounts recorded as assets or liabilities may result in corresponding adjustments to goodwill, restructuring and impairment charges, recognized deferred tax assets and liabilities including changes to release of valuation allowance during the measurement period (up to one year from the acquisition date). Any such revisions or changes may be material as we finalize the fair values of the tangible and intangible assets acquired and liabilities assumed.

#### Note 4 — Goodwill and Intangible Assets

Goodwill by reportable segments as of April 1, 2017 was as below:

	P	Probe Cards		Systems		Total
		(in thousands)				
Goodwill, gross, as of December 31, 2016	\$	172,482	\$	15,528	\$	188,010
Foreign currency translation		_		175		175
Balance as of April 1, 2017	\$	172,482	\$	15,703	\$	188,185

Goodwill recorded from the acquisition of Cascade Microtech on June 24, 2016 was \$158.1 million as of April 1, 2017. See Note 3 to the Condensed Consolidated Financial Statements - *Acquisition*, for further details. Goodwill recorded from the acquisition of MicroProbe Inc. on October 16, 2012 was \$30.7 million as of April 1, 2017. Excluding the impact of foreign currency translation, Goodwill from these acquisitions remained unchanged from the amounts recorded as of December 31, 2016. The Company has not recorded any historical goodwill impairments as of April 1, 2017.

Gross and net intangible assets as of April 1, 2017 and December 31, 2016 were as follows (in thousands, except for weighted average useful life):

			ΑĮ	oril 1, 2017				]	Decer	nber 31, 201	6		Weighted Average Useful Life (in years)
Other Intangible Assets		Gross		Accumulated Amortization		Net		Accumulated Gross Amortization Net					April 1, 2017
Existing developed technologies	\$	142,824	\$	61,258	\$	81,566	\$	142,701	\$	56,131	\$	86,570	4.1
Trade name	•	11,934	•	3,668	Ť	8,266	•	11,921	•	2,989	•	8,932	3.8
Customer relationships		39,908		12,200		27,708		39,869		10,854		29,015	5.5
Backlog		15,590		14,686		904		15,581		13,489		2,092	0.0
Total intangible assets	\$	210,256	\$	91,812	\$	118,444	\$	210,072	\$	83,463	\$	126,609	

For the three months ended April 1, 2017, amortization expenses of \$6.3 million and \$2.0 million were included in cost of revenues and selling, general and administrative expenses, respectively. For the three months ended March 26, 2016, amortization expenses of \$2.1 million and \$0.6 million were included in cost of revenues and selling, general and administrative expenses, respectively.

Based on the carrying values of the intangible assets recorded as of April 1, 2017 and assuming no subsequent additions to or impairment of the underlying assets, the remaining estimated annual amortization expense is expected to be as follows (in thousands):

Fiscal Year	Amount		
2017	\$	22,366	
2018		28,339	
2019		25,675	
2020		23,605	
2021		12,937	
and thereafter		5,522	
Total	\$	118,444	

#### Note 5 — Debt

## Senior Secured Term Loan Facility

Our debt as of April 1, 2017 consisted of the following (in thousands):

	April 1, 2017		
Senior secured term loan	\$	132,500	
Debt issuance costs		(1,027)	
Total debt less debt issuance costs	\$	131,473	

As of April 1, 2017, the Company was in compliance with all of the financial covenants under the senior secured term loan facility.

#### Note 6 — Restructuring Charges

Restructuring charges are comprised of costs related to employee termination benefits, cost of long-lived assets abandoned or impaired, as well as contract termination costs. Restructuring charges are included in "Restructuring and impairment charges, net" in the Condensed Consolidated Statements of Operations.

During the three months ended April 1, 2017, we recorded approximately \$0.3 million of restructuring charges as a result of the consolidation of our operations. The cash payments associated with the restructuring activities are expected to be completed by the end of the third quarter of fiscal 2017. We did not record any restructuring charges during the three months ended March 26, 2016.

The activities in the restructuring accrual for the three months ended April 1, 2017 were as follows (in thousands):

	Employee Severance and Benefits		and Termination		Total
Accrual at December 31, 2016	\$	330	\$	104	\$ 434
Restructuring charges		248		21	269
Cash payments		(423)		(35)	(458)
Adjustment to restructuring charges		32		_	32
Accrual at April 1, 2017	\$	187	\$	90	\$ 277

## Note 7 — Fair Value

# Assets Measured at Fair Value on a Recurring Basis

We measure and report certain assets and liabilities at fair value on a recurring basis, including money market funds, U.S. Treasury securities, agency securities and derivatives comprised of foreign currency forward contracts and interest-rate swap contracts.

Assets measured at fair value on a recurring basis as of April 1, 2017 were as follows (in thousands):

	Level 1		Level 1 Level 2		Total
Assets:					
Cash equivalents					
Money market funds	\$	19,388	\$	_	\$ 19,388
Marketable securities					
U.S. Treasuries		_		7,497	7,497
Interest rate swap derivative contracts		_		1,009	1,009
Total assets	\$	19,388	\$	8,506	\$ 27,894

Assets measured at fair value on a recurring basis as of December 31, 2016 were as follows (in thousands):

		Level 1		Level 1 Level 2		Level 2	Total
Assets:							
Cash equivalents							
Money market funds	\$	19,350	\$	_	\$ 19,350		
Marketable securities							
U.S. Treasuries		_		7,497	7,497		
Foreign exchange derivative contracts		_		1,137	1,137		
Interest rate swap derivative contracts		_		838	838		
Total	\$	19,350	\$	9,472	\$ 28,822		

The Level 1 assets consist of our money market fund deposits. The Level 2 assets consist of our available-for-sale investment portfolio, which are valued utilizing a market approach, and derivative contracts. Our investments are priced by pricing vendors who provided observable inputs for their pricing without applying significant judgment. Broker pricing is used mainly when a quoted price is not available, the investment is not priced by our pricing vendors or when a broker price is more reflective of fair values in the market in which the investment trades. Our broker-priced investments are labeled as Level 2 investments because fair values of these investments are based on similar assets without applying significant judgments. In addition, all of our investments have a sufficient level of trading volume to demonstrate that the fair values used are appropriate for these investments.

#### Derivative Financial Instruments

Derivative assets and liabilities include foreign currency forward contracts and interest rate swap contracts. We do not use derivative financial instruments for speculative or trading purposes.

#### Foreign Currency Derivatives

The fair value of foreign currency forward contracts represents the estimated amount required to settle the contracts using current market exchange rates, and is based on the current foreign currency exchange rates and forward points. For accounting purposes, our foreign currency forward contracts are not designated as hedging instruments as defined under ASC 815, *Derivatives and Hedging*. We record the fair value of these contracts as of the end of our reporting period to our Condensed Consolidated Balance Sheets with changes in fair value recorded within "Other income (expense), net" in our Condensed Consolidated Statements of Income for both realized and unrealized gains and losses.

The location and amount of losses related to non-designated derivative instruments that matured in the three months ended April 1, 2017 and March 26, 2016 in the Condensed Consolidated Statements of Operations are as follows (in thousands):

		Amount of Loss Recognized on Derivatives				
		Three Months Ended			Ended	
Derivatives Not Designated as Hedging Instruments	Location of Loss Recognized on Derivatives	Apr	il 1, 2017	N	March 26, 2016	
Foreign exchange forward	Other income					
contracts	(expense), net	\$	(886)	\$	(1,562)	

#### Interest Rate Swaps

For accounting purposes, our interest-rate swap contracts qualify for and are designated as cash flow hedges as defined under ASC 815, *Derivatives and Hedging*. We recorded approximately \$65 thousand of hedge ineffectiveness for the three months ended April 1, 2017. The cash flows associated with the interest rate swaps are reported in net cash provided by operating activities on the Consolidated Statements of Cash Flows.

The estimated fair value of the interest rate swaps as of April 1, 2017 was reported as a derivative asset of approximately \$1.0 million, recorded within other assets (current and non-current) on the Company's Condensed Consolidated Balance Sheet and is estimated based on valuation models that use interest rate yield curves as inputs. The inputs used to estimate the fair value of the Company's derivatives are classified as Level 2. We did not have any transfers of assets measured at fair value on a recurring basis to or from Level 1 and Level 2 during the three months ended April 1, 2017 and March 26, 2016.

The impact of the cash flow hedges on the consolidated financial statements is depicted below (in thousands):

The Effect of Derivative Instruments on the Statement of Financial Performance

For the Three Months Ended

Derivatives in ASC 815 Cash Flow	Recogniz Derivati	Gain or (Loss) ed in OCI on ve (Effective ortion)	Location of Gain or (Loss) Reclassified from Accumulated OCI	Reclassii Accumulat	ain or (Loss) ied from ed OCI into ctive Portion)	Location of Gain or (Loss) Recognized in Income on Derivative	Amount of Ga Recognized in Derivative (I	Income on Ineffective
Hedging Relationships	April 1, 201	March 26, 7 2016	into Income (Effective Portion)	April 1, 2017	March 26, 2016	(Ineffective Portion )	April 1, 2017	March 26, 2016
Interest						Other		
rate			Other income			income		
contracts	\$ 120	) \$ —	(expense), net	\$ (37	) \$ —	(expense), net	\$ 14	\$ —
Total	\$ 120	) \$ —		\$ (37	) \$ —	_	\$ 14	<u>s                                    </u>

#### Assets Measured at Fair Value on a Non-Recurring Basis

We measure and report goodwill and intangible assets at fair value on a non-recurring basis if we determine these assets to be impaired or in the period when we make a business acquisition. Refer to Note 4 to the Condensed Consolidated Financial Statements-*Goodwill and Intangible Assets*, for further details. There were no assets measured at fair value on a nonrecurring basis during the three months ended April 1, 2017 and March 26, 2016.

#### Note 8 — Inventories

Inventories consisted of the following (in thousands):

	April 1, 2017	December 31 2016		
Raw materials	\$ 29,009	\$	27,402	
Work-in-progress	19,625		20,390	
Finished goods	11,737		12,014	
	\$ 60,371	\$	59,806	

#### Note 9 — Warranty

A reconciliation of the changes in our warranty liability for the three months ended April 1, 2017 and March 26, 2016, respectively, is as follows (in thousands):

	April 1, 2017	N	1arch 26, 2016
Balance at beginning of period	\$ 2,972	\$	1,116
Accruals	1,127		805
Settlements	(1,517)		(747)
Balance at the end of period	\$ 2,582	\$	1,174

#### Note 10 — Stockholders' Equity

#### Common Stock Repurchase Program

In February 2017, our Board of Directors authorized a new program to repurchase up to \$25 million of outstanding common stock to offset potential dilution from sales of common stock under our employee stock purchase plan and exercises of stock options. The share repurchase program will expire on February 1, 2020. During the three months ended April 1, 2017, we repurchased and retired 250,000 shares of common stock for approximately \$2.7 million.

On April 16, 2015, our Board of Directors authorized a program to repurchase up to \$25.0 million of outstanding common stock on the open market which expired on April 15, 2016. During the three months ended March 26, 2016, we did not repurchase any shares under this program.

Repurchased shares are retired upon the settlement of the related trade transactions. Our policy related to repurchases of our common stock is to charge the excess of cost over par value to additional paid-in capital. All repurchases were made in compliance with Rule 10b-18 under the Securities Exchange Act of 1934, as amended.

#### Restricted Stock Units

Restricted stock unit (RSU) activity under our equity incentive plan during the three months ended April 1, 2017 is set forth below:

	Units	Avera	eighted age Grant Fair Value
Restricted stock units at December 31, 2016	3,108,560	\$	8.61
Awards granted	23,622		12.70
Awards vested	(94,608)		3.51
Awards canceled	(102,721)		8.70
Restricted stock units at April 1, 2017	2,934,853	\$	8.81

The total fair value of RSUs vested during the three months ended April 1, 2017 and March 26, 2016 was \$1.2 million and \$4.0 million, respectively.

## Stock Options

 $Stock\ option\ activity\ under\ our\ equity\ incentive\ plan\ during\ the\ three\ months\ ended\ April\ 1,\ 2017\ is\ set\ forth\ below:$ 

	Options Outstanding	Weighted Average Exercise Price		Weighted Average Remaining Contractual Life in Years	Aggregate Intrinsic Value
Outstanding at December 31, 2016	2,198,031	\$	9.13		
Options exercised	(560,950)		8.09		
Outstanding at April 1, 2017	1,637,081	\$	9.48	2.23	\$ 4,073,803
Vested and expected to vest at April 1, 2017	1,637,081	\$	9.48	2.23	\$ 4,073,803
Exercisable at April 1, 2017	1,355,147	\$	9.84	1.58	\$ 2,915,206

# Stock-Based Compensation

Stock-based compensation was included in our Condensed Consolidated Statements of Operations as follows (in thousands):

	Three Months Ended				
	A	pril 1, 2017	arch 26, 2016		
Cost of revenues	\$	854	\$	633	
Research and development		1,082		796	
Selling, general and administrative		1,366		1,305	
Total stock-based compensation	\$	3,302	\$	2,734	

## Employee Stock Purchase Plan (ESPP)

During the three months ended April 1, 2017 and March 26, 2016, we issued 397,024 and 303,585 ESPP shares, respectively, under our 2012 Employee Stock Purchase Plan.

## **Unrecognized Compensation Costs**

At April 1, 2017, the unrecognized stock-based compensation was as follows (in thousands):

	recognized Expense	Average Expected Recognition Period in Years
Stock options	\$ 932	1.81
Restricted stock units	17,328	2.04
Employee stock purchase plan	687	0.33
Total unrecognized stock-based compensation expense	\$ 18,947	

# Note 11 — Net Income (Loss) per Share

The following table reconciles the shares used in calculating basic net income (loss) per share and diluted net income (loss) per share (in thousands):

		Three Months Ended			
	April 1, 2017		ľ	March 26, 2016	
Numerator:					
Net income (loss) used in computing basic and diluted net income per share	\$	5,185	\$	(13,800)	
Denominator:					
Weighted-average shares used in computing basic net income (loss) per share		71,423		58,431	
Add potentially dilutive securities		1,499		_	
Weighted-average shares used in computing basic and diluted net income (loss) per share		72,922		58,431	
Securities not included as they would have been antidilutive		126		4,257	

#### Note 12 — Commitments and Contingencies

#### Contractual Commitments and purchase obligations

Our lease, purchase obligations and contractual obligations have not materially changed as of April 1, 2017 from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016.

#### **Environmental Matters**

We did not receive any notices of violations of environmental laws and regulations during the three months ended April 1, 2017, or in our fiscal 2016. In the future, we may receive notices of violations of environmental regulations, or otherwise learn of such violations. Environmental contamination or violations may negatively impact our business.

#### **Indemnification Arrangements**

We have entered, and may from time to time in the ordinary course of our business enter, into contractual arrangements with third parties that include indemnification obligations. We have not recorded any liabilities for these indemnification arrangements on our condensed consolidated balance sheet as of April 1, 2017.

#### Legal Matters

From time to time, we may be subject to legal proceedings and claims in the ordinary course of business. As of April 1, 2017 and as of the filing of this Quarterly Report on Form 10-Q, we were not involved in any material legal proceedings other than the proceedings summarized below. In the future, we may become a party to additional legal proceedings that may require us to spend significant resources. Litigation can be expensive and disruptive to normal business operations. The results of legal proceedings are difficult to predict, and the costs incurred in litigation can be substantial, regardless of outcome.

On April 8, 2016, an individual plaintiff filed a class action lawsuit against Cascade Microtech, its directors and others, alleging breaches of fiduciary duties in connection with the acquisition of Cascade Microtech by the Company. The lawsuit, captioned *Solak v. Cascade Microtech, Inc.*, *et al.*, was filed in Multnomah County Circuit Court in the State of Oregon. On March 17, 2017, the court entered an Order Granting Final Approval of Class Action Settlement and filed a General Judgment in the case which provided for a payment of plaintiffs' attorneys' fees and the dismissal with prejudice of all claims asserted in the action.

In August 2013, a former employee filed a class action lawsuit against the Company in the Superior Court of California for the County of Alameda, alleging violations of California's wage and hour laws and other claims on behalf of himself and all similarly situated current and former employees at the Company's Livermore facilities from August 21, 2009, onward. On March 14, 2017, the court granted preliminary approval of the parties' stipulation under which the parties have agreed to settle the lawsuit, subject to court approvals and other conditions. The stipulation provides for payment by the Company of \$1.5 million in settlement of the lawsuit. As of April 1, 2017 and December 31, 2016, we have accrued in our Consolidated Financial Statements and Condensed Consolidated Financial Statements, respectively, \$1.5 million in respect of the potential payment under the stipulation of settlement.

#### **Note 13—Operating Segments**

Our chief operating decision maker ("CODM") is our Chief Executive Officer, who reviews operating results to make decisions about allocating resources and assessing performance for the entire company. We operate in two reportable segments consisting of the Probe Cards Segment and Systems Segment.

The following table summarizes the operating results by reportable segments for the three months ended April 1, 2017 and March 26, 2016 (in thousands, except percentages):

				Three Mo	nths Ended			
		April	1, 2017			Marc	h 26, 2016	
	Probe Cards	Systems	Corporate and Other	Total	Probe Cards	Systems	Corporate and Other	Total
Revenues	\$ 106,496	\$ 22,333	\$ —	\$ 128,829	\$ 53,611	\$ —	\$ —	\$ 53,611
Gross profit	\$ 42,820	\$ 12,090	\$ (7,339)	\$ 47,571	\$ 12,509	\$ —	\$ (2,717)	\$ 9,792
Gross margin	40.2%	54.1%	—%	36.9%	23.3%	—%	—%	18.3%
Operating income (loss)	\$ 21,742	\$ 5,122	\$ (19,805)	\$ 7,059	\$ (2,029)	\$ —	\$ (11,544)	\$ (13,573)

Operating results provide useful information to our management for assessment of our performance and results of operations. Certain components of our operating results are utilized to determine executive compensation along with other measures.

Corporate and Other includes unallocated expenses relating to amortization of intangible assets, share-based compensation expense, acquisition-related costs, including charges related to inventory stepped up to fair value, and other costs, which are not used in evaluating the results of, or in allocating resources to, our reportable segments. Acquisition-related costs include transaction costs and any costs directly related to the acquisition and integration of acquired businesses.

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

#### **Cautionary Statement Regarding Forward-Looking Statements**

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of the Securities Exchange Act of 1934 and the Securities Act of 1933, which are subject to risks and uncertainties. The forward-looking statements include statements concerning, among other things, our business strategy, financial and operating results, gross margins, liquidity and capital expenditure requirements, impact of accounting standards, integration of Cascade Microtech and our share repurchase plan. In some cases, you can identify these statements by forward-looking words, such as "may," "might," "will," "could," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "intend" and "continue," the negative or plural of these words and other comparable terminology.

The forward-looking statements are only predictions based on our current expectations and our projections about future events. All forward-looking statements included in this Quarterly Report on Form 10-Q are based upon information available to us as of the filing date of this Quarterly Report on Form 10-Q. You should not place undue reliance on these forward-looking statements. We have no obligation to update any of these statements. These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from those expressed or implied by these statements, including risks related to general market trends, our ability to execute our business strategy, our ability to integrate Cascade Microtech and other risks discussed in the section titled "Risk Factors" and elsewhere in our Annual Report on Form 10-K for the year ended December 31, 2016 and in this Quarterly Report on Form 10-Q. You should carefully consider the numerous risks and uncertainties described under these sections.

The following discussion and analysis should be read in conjunction with our condensed consolidated financial statements and the accompanying notes contained in this Quarterly Report on Form 10-Q. Unless expressly stated or the context otherwise requires, the terms "we," "our," "us" and "FormFactor" refer to FormFactor, Inc. and its subsidiaries.

#### Overview

FormFactor, Inc., headquartered in Livermore, California, is a leading provider of test and measurement solutions. We provide a broad range of high-performance probe cards, analytical probes, probe stations, thermal sub-systems and reliability

test systems to both semiconductor companies and scientific institutions. Our products provide electrical information from a variety of semiconductor and electro-optical devices and integrated circuits (devices) from development to production. Customers use our products and services to lower production costs, improve yields, and enable development of complex next generation devices.

On June 24, 2016, we completed the acquisition of Cascade Microtech Inc. ("Cascade Microtech"), headquartered in Beaverton, Oregon. Our condensed consolidated financial statements as of April 1, 2017 included the condensed consolidated balance sheet of Cascade Microtech as of April 1, 2017 and the condensed consolidated statement of operations of Cascade Microtech for the three months ended April 1, 2017 whereas our condensed consolidated financial statements as of and for the three months ended March 26, 2016 excluded the financial position and operations of Cascade Microtech. See Note 3 to the Condensed Consolidated Financial Statements - *Acquisition*, for further details.

Therefore, our condensed consolidated financial results for the three months ended April 1, 2017 may not be directly comparable to our condensed consolidated financial results for the three months ended March 26, 2016 due to the inclusion of Cascade Microtech's post-acquisition financial position and results for the three months ended April 1, 2017.

We operate in two reportable segments consisting of the Probe Cards Segment and Systems Segment. Sales of our probe cards and analytical probes are included in the Probe Cards Segment while sales of our probe stations, thermal sub-systems and reliability test systems are included in the Systems Segment.

We generated net income of \$5.2 million in the first three months of fiscal 2017 as compared to a net loss of \$(13.8) million in the first three months of fiscal 2016. The increase in net income was primarily due to additional post-acquisition revenues and associated net income generated from Cascade Microtech's operations during the three months ended April 1, 2017 as well as additional revenues driven by strong demand across our legacy products, which was partially offset by higher restructuring expenses, acquisition-related integration and amortization charges and other operational expenses in the three months ended April 1, 2017 as compared to the corresponding period in the prior year.

Our cash, cash equivalents and marketable securities and restricted cash totaled approximately \$123.1 million as of April 1, 2017, as compared to approximately \$110.1 million at December 31, 2016. The increase was primarily due to increased cash generated from operations as a result of higher sales. We believe we will meet our working capital requirements for at least the next twelve months with the liquidity provided by our existing cash, cash equivalents and marketable securities. If we are unsuccessful in maintaining or growing our revenues, or maintaining or reducing our cost structure in an industry downturn, or increasing our available cash through financing, our cash, cash equivalents and marketable securities could decline in future periods.

#### **Critical Accounting Policies and the Use of Estimates**

Management's Discussion and Analysis and Note 1 to the Consolidated Financial Statements in our 2016 Annual Report on Form 10-K describe the significant accounting estimates and critical accounting policies used in preparation of the Consolidated Financial Statements. Actual results in these areas could differ from management's estimates. During the three months ended April 1, 2017, there were no significant changes in our critical accounting policies or estimates from those reported in our Annual Report on Form 10-K for the year ended December 31, 2016, which was filed with the Securities and Exchange Commission on March 15, 2017.

# **Results of Operations**

The following table sets forth our operating results as a percentage of revenues for the periods indicated:

	Three Months Ended				
	April 1, 2017	March 26, 2016			
Revenues	100.0 %	100.0 %			
Cost of revenues	63.1	81.7			
Gross profit	36.9	18.3			
Operating expenses:					
Research and development	13.5	20.3			
Selling, general and administrative	17.7	23.3			
Restructuring and impairment charges, net	0.2	_			
Total operating expenses	31.4	43.6			
Operating income (loss)	5.5	(25.3)			
Interest income, net	_	0.2			
Other income (expense), net	(1.2)	(0.6)			
Income (loss) before income taxes	4.3	(25.7)			
Provision for income taxes	0.3				
Net income (loss)	4.0 %	(25.7)%			

# Three Months Ended April 1, 2017 and March 26, 2016:

## Revenues by Segment

		Three Months Ended			
	A	April 1, 2017		rch 26, 2016	
		(In thousands)			
Probe Cards	\$	106,496	\$	53,611	
Systems		22,333		_	
Total	\$	128,829	\$	53,611	

The increase in Probe Card segment revenue for the three months ended April 1, 2017, compared to the three months ended March 26, 2016 was the result of an increase in unit sales, driven by higher demand for our Foundry & Logic products, and the 2016 acquisition of Cascade Microtech. The increase in Systems segment revenue for the three months ended April 1, 2017 was the result of the 2016 acquisition of Cascade Microtech. Prior to the acquisition, we did not operate in the Systems segment.

#### Revenues by Market

Our product revenues by market were as follows for the periods indicated:

		Three Months Ended					
	April 1, March 26, 2017 2016		% Change				
		(In tho	usaı	nds, except perce	entages)		
Probe Cards Markets:							
Foundry & Logic	\$	74,310	\$	36,135	105.6%		
DRAM		28,956		16,289	77.8		
Flash		3,230		1,187	172.1		
Systems Market:							
Systems		22,333		_	100.0		
Total revenues	\$	128,829	\$	53,611	140.3%		

The increase in Foundry & Logic product revenue for the three months ended April 1, 2017, compared to the three months ended March 26, 2016 was primarily the result of increased unit sales driven by higher customer demand across all applications including microprocessors, radio-frequency, mobile, industrial and automotive, and the 2016 acquisition of Cascade Microtech. The increase in DRAM product revenue for the three months ended April 1, 2017, compared to the three months ended March 26, 2016, was the result of increased customer demand in the DRAM market, as DRAM manufacturers continue their technology node transitions. The increase in Flash product revenue was result of design wins.

The increase in Systems product revenue for the three months ended April 1, 2017 was the result of the 2016 acquisition of Cascade Microtech. Prior to the acquisition, we did not operate in the Systems market.

#### Revenues by Geographic Region

The following table sets forth our revenues by geographic region for the periods indicated:

	Three Months Ended					
	April 1, 2017	% of Revenue	1	March 26, 2016	% of Revenue	
	(I	n thousands, ex	cep	percentages)		
United States	\$ 39,841	30.9%	\$	17,555	32.7%	
Asia-Pacific						
(1)	26,006	20.2		3,595	6.7	
Taiwan	19,545	15.2		12,660	23.6	
South Korea	18,737	14.5		8,868	16.5	
Japan	15,233	11.8		3,120	5.8	
Europe	8,749	6.8		7,813	14.6	
Rest of the world	718	0.6		_	_	
Total revenues	\$ 128,829	100.0%	\$	53,611	100.0%	

<sup>(1)</sup> Asia-Pacific includes all countries in the region except Taiwan, South Korea, and Japan, which are disclosed separately.

Geographic revenue information is based on the location to which we ship the product. For example, if a certain South Korean customer purchases through their North American subsidiary and requests the products to be shipped to an address in South Korea, this sale will be reflected in the revenue for South Korea rather than North America.

The overall increase in geographical revenues across the regions was primarily attributable to additional revenues generated in the first quarter of fiscal 2017 as a result of our acquisition of Cascade Microtech and strong demand for our legacy products across the board.

#### Cost of Revenues and Gross Margins

Cost of revenues consists primarily of manufacturing materials, payroll, shipping and handling costs, manufacturing-related overhead and amortization of certain intangible assets. Our manufacturing operations rely on a limited number of suppliers to provide key components and materials for our products, some of which are a sole source. We order materials and supplies based on backlog and forecasted customer orders. Tooling and setup costs related to changing manufacturing lots at our suppliers are also included in the cost of revenues. We expense all warranty costs, inventory provisions and amortization of certain intangible assets as cost of revenues. The increase in cost of revenues was affected primarily by our Cascade Microtech acquisition and additional factors as discussed below.

Corporate and Other includes unallocated expenses relating to amortization of intangible assets, share-based compensation expense, acquisition-related costs, including charges related to inventory stepped up to fair value, and other costs, which are not used in evaluating the results of, or in allocating resources to, our reportable segments. Acquisition-related costs include transaction costs and any costs directly related to the acquisition and integration of acquired businesses.

Our gross profit and gross margin by segment for the three months ended April 1, 2017 and March 26, 2016 were as below (in thousands, except percentages):

		Three Mon	ths Ended			Three Mo	nths Ended	
	April 1, 2017				March 26, 2016			
	Probe Cards	Systems	Corporate and Other	Total	Probe Cards	Systems	Corporate and Other	Total
Gross profi	it \$ 42,820	\$ 12,090	\$ (7,339)	\$ 47,571	\$ 12,509	\$ —	\$ (2,717)	\$ 9,792
Gross margin	40.2%	54.1%	_	36.9%	23.3%	—%	_	18.3%

#### Probe Cards

For the three months ended April 1, 2017, gross margin in the Probe Cards Segment increased as a result of the inclusion of the Cascade Microtech acquisition for its product sales, higher sales from our legacy products and improvements in overall gross margins driven by improved manufacturing efficiency in our Foundry & Logic factories.

#### Systems

For the three and nine months ended April 1, 2017, gross margins in the Systems Segment increased due to the inclusion of Cascade's gross margin relating to its product sales as a result of our acquisition of Cascade Microtech. Prior to the acquisition, we operated in the Probe Cards Segment only and did not generate any Systems Segment revenue.

## Overall

The overall gross profit and gross margin for the three months ended April 1, 2017 and March 26, 2016 were as below (in thousands, except percentages):

	Three Months Ended			
	April 1, 2017		March 26, 2016	
Gross profit	\$ 47,571	\$	9,792	
Gross margin	36.9%		18.3%	

Gross profit fluctuates with revenue levels, product mix, selling prices, factory loading and material costs. For the three months ended April 1, 2017 and March 26, 2016, gross margins increased due to strong sales and gross margins in our Foundry & Logic products including the sales and gross margins of Foundry & Logic products arising from our acquisition of Cascade Microtech. The increase in gross margin was also driven by improved manufacturing efficiency in our Foundry & Logic factories.

Gross profit included stock-based compensation expense of \$0.9 million and \$0.6 million respectively, for the three months ended April 1, 2017 and March 26, 2016.

Future gross margins may be adversely impacted by lower revenues and lower factory utilization even though we have taken significant steps to reduce our operating cost structure. Our gross margins may also be adversely affected if we are required to record additional inventory provision charges and inventory write-downs if estimated average selling prices of products held in finished goods and work in process inventories are below the manufacturing cost of those products.

#### Research and Development

		Three Months Ended				
		April 1, 1 2017		1arch 26, 2016		
	(In the	(In thousands, except percentages)				
Research and development	\$ 1	17,414	\$	10,849		
% of revenues		13.5%		20.3%		

The increase in the three months ended April 1, 2017 when compared to the corresponding period in the prior year was primarily due to our Cascade Microtech acquisition resulting in an increase of \$4.8 million in employee compensation costs, \$0.4 million in general operating expenses, \$0.3 million in stock-based compensation expense, \$0.3 million in project and material costs and \$0.3 million in depreciation costs.

Stock-based compensation expense included in research and development expenses was \$1.1 million and \$0.8 million for the three months ended April 1, 2017 and March 26, 2016, respectively.

#### Selling, General and Administrative

		Three Months Ended				
		April 1, 2017	I	March 26, 2016		
	(In	(In thousands, except percent				
Selling, general and administrative	\$	22,829	\$	12,516		
% of revenues		17.7%		23.3%		

The increase in the three months ended April 1, 2017 when compared to the corresponding period in the prior year was primarily due to our Cascade Microtech acquisition resulting in an increase of \$6.5 million in employee compensation costs, \$1.6 million in consulting fees, \$1.4 million in depreciation and amortization charges, \$1.1 in travel related costs and \$0.9 in general operating costs, partially offset by a decrease of \$1.6 million in acquisition costs.

Stock-based compensation expense included within selling, general and administrative expenses was \$1.4 million and \$1.3 million for the three months ended April 1, 2017 and March 26, 2016, respectively.

#### Restructuring Charges, net

		Three Months Ended					
		pril 1, 2017	M	larch 26, 2016			
	(In t	(In thousands, except percentages					
Restructuring charges, net	\$	269	\$	_			
% of revenues		0.2%		%			

Restructuring charges are comprised of costs related to employee termination benefits, cost of long-lived assets abandoned or impaired, as well as contract termination costs.

During the three months ended April 1, 2017, we recorded approximately \$0.3 million of severance charges as a result of the consolidation of our operations. The cash payments associated with the restructuring activities are expected to be completed by the end of the third quarter of fiscal 2017. We did not record any restructuring charges during the three months ended March 26, 2016.

		Three Months Ended				
		April 1, 2017		March 26, 2016		
	(In thousands, except percentage					
Interest income, net	\$	67	\$	117		
% of revenue		—%		0.2 %		
Other income (expense), net	\$	(1,574)	\$	(314)		
% of revenues		(1.2)%		(0.6)%		

Interest income, net is primarily earned on our cash, cash equivalents and marketable securities. The decrease in interest income, net for the three months ended April 1, 2017 when compared to the corresponding period in the prior year was primarily the result of higher invested cash balances in the three months ended March 26, 2016 partially offset by higher yields on our cash balances in the three months ended April 1, 2017. Cash, cash equivalents, restricted cash and marketable securities were \$123.1 million at April 1, 2017 compared to \$151.9 million at March 26, 2016. The weighted-average yield on our cash, cash equivalents and marketable securities for the three months ended April 1, 2017 and March 26, 2016 was 0.48% and 0.27%, respectively.

Other income (expense), net is comprised primarily of interest expense on our term loan and interest-rate swap derivative contracts, term loan issuance costs amortization charges, foreign currency impact and various other gains and losses. The increase in other income (expense), net for the three months ended April 1, 2017 when compared to the corresponding period in the prior year was primarily due to approximately \$1.2 million of charges related to interest payments on our term loan and interest-rate swap derivative contracts and term loan issuance cost amortization charges.

#### **Liquidity and Capital Resources**

*Capital Resources:* Our working capital was \$183.4 million at April 1, 2017 and \$172.0 million at December 31, 2016. The increase in working capital in the three months ended April 1, 2017 was primarily due to increased cash generated from operations as a result of higher sales partially offset by an increase in our current liabilities.

Cash and cash equivalents consist of deposits held at banks, money market funds and U.S. government agency securities that at the time of purchase had maturities of 90 days or less. Marketable securities consist of U.S. government and agency securities. We typically invest in highly-rated securities with low probabilities of default. Our investment policy requires investments to be rated single-A or better, and limits the types of acceptable investments, issuer concentration and duration of the investment.

Our cash, cash equivalents and marketable securities totaled approximately \$121.9 million at April 1, 2017, as compared to \$108.9 million at December 31, 2016. Cash and cash equivalents and marketable securities included \$39.8 million held by our foreign subsidiaries as of April 1, 2017. We believe that we will be able to satisfy our working capital requirements for at least the next twelve months with the liquidity provided by our existing cash, cash equivalents and marketable securities. If we are unsuccessful in maintaining or growing our revenues, maintaining or reducing our cost structure (due to an industry down-turn or otherwise), or increasing our available cash through financing, our cash, cash equivalents and marketable securities may decline in fiscal 2017.

We utilize a variety of tax planning and financing strategies in an effort to manage our worldwide cash and deploy funds to locations where they are needed. As part of these strategies, we indefinitely reinvest a significant portion of our foreign earnings and our current plans do not demonstrate a need to repatriate these earnings. Should we require additional capital in the United States, we may elect to repatriate indefinitely reinvested foreign funds or raise capital in the United States. If we were to repatriate indefinitely reinvested foreign funds, we would be required to accrue and pay additional United States taxes less applicable foreign tax credits.

The following table sets forth our net cash flows from operating, investing and financing activities:

		Three Months Ended			
	Ap	April 1, 2017		March 26, 2016	
		(In thousands)			
Net cash provided by (used in) operating activities	\$	17,803	\$	(3,032)	
Net cash (used in) provided by investing activities		(3,330)		5,007	
Net cash (used in) provided by financing activities	\$	(2,651)	\$	1,961	

Cash flows from operating activities: Net cash provided by operating activities for the three months ended April 1, 2017 was primarily attributable to our operations generating \$22.5 million of cash (a net income of \$5.2 million which included \$17.3 million of net non-cash expenses) offset by working capital using \$4.7 million of cash. Net non-cash expenses primarily included \$8.3 million of amortization, \$3.3 million of stock-based compensation expense, \$3.2 million of depreciation, \$2.8 million of provision for excess and obsolete inventories and \$0.2 million of acquisition-related inventory step-up amortization, which was partially offset by \$0.7 million of non-cash foreign currency transaction gains.

Net cash used in operating activities for the three months ended March 26, 2016 was primarily attributable to decreased revenues and a reduction in working capital necessary to support our operations. We had a net loss of \$13.8 million and non-cash expenses of \$8.5 million, including \$5.2 million of depreciation and amortization, \$2.7 million of stock-based compensation and \$2.0 million of provision for excess and obsolete inventories which was partially offset by \$1.4 million of non-cash foreign currency transaction gains.

The net change in operating assets and liabilities for the three months ended April 1, 2017 resulted in a net use of cash of \$4.7 million, which consisted primarily of a \$8.9 million increase in accounts receivable as a result of increased sales and the timing of customer shipments, a \$4.8 million decrease in accrued liabilities due to decreases in accrued employee compensation, employee stock purchase plan withholdings and foreign sales taxes, and a \$3.3 million increase in inventory related to expected customer demand. The uses of cash was partially offset by a \$7.2 million increase in accounts payable as a result of increased inventory purchasing and the timing of vendor payments, a \$3.1 million decrease in prepaid assets and a \$1.5 million increase in deferred revenues from customer deposits.

The net change in operating assets and liabilities for the three months ended March 26, 2016 resulted in net cash provided by operations of \$2.2 million, which was primarily composed of cash generated of \$8.8 million in accounts payable driven by payments on vendor obligations, a decrease of \$2.1 million in prepaid expenses and other current assets and \$1.3 million of cash generated in accounts receivable from collections. The above generation of cash was partially offset by use of cash of \$5.8 million for inventory build, \$3.6 million of cash used in accrued liabilities due to payment of incentive compensation and a decrease of \$0.5 million in deferred revenues due to recognition of previously deferred revenues for which the revenue recognition criteria have been met.

Cash flows from investing activities: Net cash used in investing activities for the three months ended April 1, 2017 was primarily related to cash used in the acquisition of property and equipment of \$3.5 million. We carefully monitor our investments to minimize risks and did not experience other than temporary investment losses for the three months ended April 1, 2017.

Net cash provided by investing activities for the three months ended March 26, 2016 was primarily related to \$12.7 million of proceeds from maturities of marketable securities offset by purchases of marketable securities totaling \$6.6 million and cash used in the acquisition of property and equipment of \$1.1 million.

Cash flows from financing activities: Net cash used in financing activities for the three months ended April 1, 2017 primarily related to \$6.9 million of principal payments made towards the repayment of our term loan, \$2.7 million related to the repurchase of our common stock and \$0.5 million related to tax withholdings associated with the net share settlements of our equity awards, partially offset by \$7.4 million from proceeds received from purchases under our 2012 Employee Stock Purchase Plan and option exercises.

Net cash provided by financing activities for the three months ended March 26, 2016 primarily related to \$2.0 million from proceeds received from purchases under our 2012 Employee Stock Purchase Plan.

We continue to focus on improving our operating efficiency to increase operating cash flows. We believe that we will be able to satisfy our cash requirements for at least the next twelve months with the liquidity provided by our existing cash, cash equivalents and marketable securities. To the extent necessary, we may also consider entering into short and long-term debt obligations, raising cash through a stock issuance, or obtaining new financing facilities which may not be available on terms favorable to us. Our future capital requirements may vary materially from those now planned. However, if we are unsuccessful in maintaining or growing our revenues, or maintaining or reducing our cost structure in an industry down-turn, or increasing our available cash through financing, our cash, cash equivalents and marketable securities could decline in future fiscal quarters.

#### **Contractual Obligations and Commitments**

Our contractual obligations and commitments have not materially changed as of April 1, 2017 from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016.

#### **Off-Balance Sheet Arrangements**

Historically, we have not participated in transactions that have generated relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As of April 1, 2017, we were not involved in any such off-balance sheet arrangements.

#### **Recent Accounting Pronouncements**

In April 2016, the FASB issued ASU 2016-10, "Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing" and which was issued to clarify Accounting Standards Codification ("ASC") Topic 606, "Revenue from Contracts with Customers" related to (i) identifying performance obligations; and (ii) the licensing implementation guidance. The effective date and transition of ASU 2016-10 is the same as the effective date and transition of ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)," as discussed below.

In February 2016, the FASB issued ASU 2016-02, *Leases*. ASU 2016-02 requires that lease arrangements longer than twelve months result in an entity recognizing an asset and liability. The updated guidance is effective for interim and annual periods beginning after December 15, 2018, and early adoption is permitted. We are evaluating the impact of the updated guidance on our consolidated financial statements.

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers", and in August 2015 the FASB issued ASU 2015-14, "Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date," which defers the effective date of ASU 2014-09 by one year. ASU 2014-09 requires an entity to recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which an entity expects to be entitled in exchange for those goods or services. The guidance also requires expanded disclosures relating to the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Additionally, qualitative and quantitative disclosures are required about customer contracts, significant judgments and changes in judgments, and assets recognized from the costs to obtain or fulfill a contract. The standard permits the use of either the retrospective or cumulative effect transition methods. This guidance will replace most existing revenue recognition guidance in United States GAAP when it becomes effective, which for us will be at the beginning of the first quarter of fiscal year 2018 using one of the two prescribed transition methods. Early adoption of one year prior to the required effective date is permitted.

We do not plan to early adopt the guidance. We are currently evaluating the impact of this ASU on our Systems and Probes Cards Segments. Depending on the results of our review, there could be changes to the timing of recognition of revenues. We expect to complete our assessment process, including selecting a transition method for adoption, by the end of the third quarter of our fiscal 2017 along with our implementation process prior to the adoption of this ASU on January 1, 2018.

#### Item 3. Quantitative and Qualitative Disclosures about Market Risk

For financial market risks related to changes in interest rates and foreign currency exchange rates, reference is made to Item 7A: "Quantitative and Qualitative Disclosures about Market Risk" contained in Part II of our Annual Report on Form 10-K for the fiscal year ended December 31, 2016. Our exposure to market risk has not changed materially since December 31, 2016.

#### **Item 4. Controls and Procedures**

#### **Evaluation of Disclosure Controls and Procedures**

Based on our management's evaluation (with the participation of our principal executive officer and principal financial officer), as of the end of the period covered by this report, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, (the "Exchange Act")) are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

#### **Changes in Internal Control over Financial Reporting**

There have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) except as described below that occurred during the period covered by this Quarterly Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

On June 24, 2016, we completed the acquisition of Cascade Microtech, headquartered in Beaverton, Oregon and are integrating the acquired business into our overall internal control over financial reporting process. Our management is in the process of assessing the internal control over financial reporting and is implementing or revising internal controls where necessary.

#### **Limitations on the Effectiveness of Controls**

Control systems, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control systems' objectives are being met. Further, the design of any control systems must reflect the fact that there are resource constraints, and the benefits of all controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within our company have been detected. These inherent limitations include the realities that judgments in decision making can be faulty and that breakdowns can occur because of simple error or mistake. Control systems can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based, in part, on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

#### **CEO and CFO Certifications**

We have attached as exhibits to this Quarterly Report on Form 10-Q the certifications of our Chief Executive Officer and Chief Financial Officer, which are required in accordance with the Exchange Act. We recommend that this Item 4 be read in conjunction with the certifications for a more complete understanding of the subject matter presented.

## PART II. OTHER INFORMATION

#### Item 1. Legal Proceedings

The information relating to "Legal Matters" set forth under Note 12 - *Commitments and Contingencies* of the Notes to Condensed Consolidated Financial Statements of this Quarterly Report on Form 10-Q is incorporated herein by reference.

## Item 1A. Risk Factors

There have been no material changes during the three months ended April 1, 2017 to the risk factors discussed in our Annual Report on Form 10-K for the year ended December 31, 2016. If any of the identified risks actually occur, our business,

financial condition and results of operations could suffer. The trading price of our common stock could decline and you may lose all or part of your investment in our common stock. The risks and uncertainties described in our Annual Report on Form 10-K for the year ended December 31, 2016 are not the only ones we face. Additional risks that we currently do not know about or that we currently believe to be immaterial may also impair our business operations.

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

#### **Repurchase of Common Stock**

In February 2017, our Board of Directors authorized a new program to repurchase up to \$25 million of outstanding common stock to offset potential dilution from sales of common stock under our employee stock purchase plan and exercises of stock options. Under the authorized stock repurchase program, we may repurchase shares from time to time on the open market. The pace of repurchase activity will depend on levels of cash generation, current stock price and other factors. The program may be modified or discontinued at any time. The share repurchase program will expire on February 1, 2020.

During the three months ended April 1, 2017, we repurchased and retired 250,000 shares of common stock for approximately \$2.7 million.

The following table summarizes our repurchases of outstanding common stock for the three months ended April 1, 2017:

Period (fiscal months)	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Maximum Amount that May Yet Be Purchased Under the Plans or Programs
January 1 2017-January 28, 2017		\$ —	_	\$ 25,000,000
January 29, 2017-February 25, 2017	_	_	_	\$ 25,000,000
February 26, 2017-April 1, 2017	250,000	10.92	250,000	\$ 22,270,000
	250,000	\$ 10.92	250,000	

(1) On February 8, 2017, we publicly announced a new program to repurchase up to \$25 million of our outstanding common stock to offset potential dilution from sales of common stock under our employee stock purchase plan and exercises of stock options. The share repurchase program will expire on February 1, 2020.

#### Item 3. Default Upon Senior Securities

None.

#### **Item 4. Mine Safety Disclosures**

Not applicable.

#### Item 5. Other Information

None.

# Item 6. Exhibits

Exhibit		Incorp	Filed		
Number	Exhibit Description	Form	Date	Number	Herewith
31.01	Certification of Chief Executive Officer pursuant to 15 U.S.C. Section 7241, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				X
31.02	Certification of Chief Financial Officer pursuant to 15 U.S.C. Section 7241, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				X
32.01	Certification of Chief Executive Officer and 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				X
101.SCH	XBRL Taxonomy Extension Schema Document				X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document				X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document				X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document				X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document				X

This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.

# **SIGNATURE**

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.

FormFactor, Inc.

Date: May 10, 2017 By: /s/ Michael M. Ludwig

Michael M. Ludwig Chief Financial Officer (Duly Authorized Officer, Principal Financial Officer, and Principal Accounting Officer)

## EXHIBIT INDEX

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# CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO 15 U.S.C. SECTION 7241, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

#### I, Michael D. Slessor, certify that:

- 1. I have reviewed the quarterly report on Form 10-Q of FormFactor, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in the quarterly report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 10, 2017 /s/ MICHAEL D. SLESSOR

Michael D. Slessor Chief Executive Officer (Principal Executive Officer and Director)

# CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO 15 U.S.C. SECTION 7241, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

#### I, Michael M. Ludwig, certify that:

- 1. I have reviewed the quarterly report on Form 10-Q of FormFactor, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in the quarterly report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 10, 2017 /s/ MICHAEL M. LUDWIG

Michael M. Ludwig Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

# CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of FormFactor, Inc., a Delaware corporation, for the period ended April 1, 2017, as filed with the Securities and Exchange Commission, each of the undersigned officers of FormFactor, Inc. certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his respective knowledge:

1. The quarterly report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the quarterly report fairly presents, in all material respects, the financial condition and results of operations of FormFactor, Inc. for the periods presented therein.

Date: May 10, 2017 /s/ MICHAEL D. SLESSOR

Michael D. Slessor Chief Executive Officer

(Principal Executive Officer and Director)

Date: May 10, 2017 /s/ MICHAEL M. LUDWIG

Michael M. Ludwig Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)