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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported):

October 24, 2017

MKS Instruments, Inc.

(Exact name of registrant as specified in its charter)

Massachusetts

000-23621

(Commission

File Number)

(State or other jurisdiction of incorporation)

2 Tech Drive, Suite 201, Andover, Massachusetts

(Address of principal executive offices)

Registrant's telephone number, including area code:

Not Applicable

Former name or former address, if changed since last report

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

[] Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

[] Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

[] Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

[] Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

04-2277512

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

01810

(Zip Code)

978-645-5500

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Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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. []

Item 2.02 Results of Operations and Financial Condition.

On October 24, 2017, MKS Instruments, Inc. announced its financial results for the quarter ended September 30, 2017. The full text of the press release is attached as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Form 8-K and the Exhibit attached hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") 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 Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

99.1 Press Release dated October 24, 2017

Exhibit Index

Exhibit No.	Description
99.1	Press Release dated October 24, 2017

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 hereunto duly authorized.

October 24, 2017

MKS Instruments, Inc.

By: /s/ Seth H. Bagshaw

Name: Seth H. Bagshaw Title: Sr. Vice President, Chief Financial Officer and Treasurer <u>Top of the Form</u>

MKS Instruments Reports Third Quarter 2017 Financial Results

Achieved new quarterly records for revenue and Non-GAAP net earnings

Total quarterly revenue up 28% compared to Q3 2016

Achieved new quarterly revenue record for Light and Motion Division

Andover, Mass., October 24, 2017 — MKS Instruments, Inc. (NASDAQ: MKSI), a global provider of technologies that enable advanced processes and improve productivity, today reported third quarter 2017 financial results.

Quarterly Financial Results (in millions, except per share data)

	Q3 2017	Q2 2017
GAAP Results		
Net revenues	\$ 486	\$ 481
Gross margin	46.9%	45.7%
Operating margin	22.7%	19.3%
Net income	\$76.0	\$120.4
Diluted EPS	\$1.38	\$ 2.19
Non-GAAP Results		
Gross margin	46.9%	45.9%
Operating margin	25.5%	24.0%
Net earnings	\$85.9	\$ 77.7
Diluted EPS	\$1.56	\$ 1.41

Third Quarter 2017 Financial Results

Revenue was \$486 million, an increase of 1% from \$481 million in the second quarter of 2017 and an increase of 28% from \$381 million in the third quarter of 2016.

Net income was \$76.0 million, or \$1.38 per diluted share, compared to net income of \$120.4 million, which included a net gain of \$59.9 million resulting from the sale of the Data Analytics Solutions Business Unit, or \$2.19 per diluted share in the second quarter of 2017, and \$32.5 million, or \$0.60 per diluted share in the third quarter of 2016.

Non-GAAP net earnings, which exclude special charges and credits, were \$85.9 million, or \$1.56 per diluted share, compared to \$77.7 million, or \$1.41 per diluted share in the second quarter of 2017, and \$47.9 million, or \$0.88 per diluted share in the third quarter of 2016.

"We are very pleased with our continued progress in 2017 in achieving our objectives of sustainable and profitable growth," said Gerald Colella, Chief Executive Officer and President. Mr. Colella added, "This quarter, we again set new records for quarterly revenue and Non-GAAP net earnings which are a direct result of the strategic investments we have made, and will continue to make, in the areas of product development as well as sales and applications support functions. Looking ahead, we see a wide range of new opportunities to solve customer complex problems across the large and growing markets we serve."

"We also continue to execute on our strategy to delever our balance sheet and significantly reduce our interest cost. During the third quarter, we completed our third successful re-pricing of our Term Loan and voluntarily pre-paid another \$125 million of principal. Exiting the third quarter, our debt balance is \$448 million down from \$780 million at loan origination in April of 2016, our debt to Adjusted EBITDA ratio is below 1 times and we have reduced our non-GAAP interest expense by approximately 60% on an annualized basis," said Seth Bagshaw, Senior Vice President and Chief Financial Officer.

Additional Financial Information

The Company had \$535 million in cash and short-term investments as of September 30, 2017 and during the third quarter of 2017, MKS paid a dividend of \$9.5 million or \$0.175 per diluted share.

Fourth Quarter 2017 Outlook

Based on current business levels, the Company expects that revenue in the fourth quarter of 2017 may range from \$480 to \$520 million.

At these volumes, GAAP net income could range from \$1.34 to \$1.59 per diluted share and non-GAAP net earnings could range from \$1.52 to \$1.76 per diluted share.

Conference Call Details

A conference call with management will be held on Wednesday, October 25, 2017 at 8:30 a.m. (Eastern Time). To participate in the conference call, please dial (877) 212-6076 for domestic callers and (707) 287-9331 for international callers, and an operator will connect you. Participants will need to provide the operator with the Conference ID of 90032404, which has been reserved for this call. A live and archived webcast of the call will be available on the company's website at <u>www.mksinst.com</u>.

About MKS Instruments

MKS Instruments, Inc. is a global provider of instruments, subsystems and process control solutions that measure, control, power, monitor, and analyze critical parameters of advanced manufacturing processes to improve process performance and productivity. Our products are derived from our core competencies in pressure measurement and control, flow measurement and control, gas and vapor delivery, gas composition analysis, residual gas analysis, leak detection, control technology, ozone generation and delivery, RF & DC power, reactive gas generation, vacuum technology, lasers, photonics, sub-micron positioning, vibration isolation, and optics. Our primary served markets include semiconductor capital equipment, general industrial, life sciences, and research. Additional information can be found at www.mksinst.com.

Use of Non-GAAP Financial Results

Non-GAAP amounts exclude amortization of acquired intangible assets, an asset impairment, costs associated with completed and announced acquisitions, acquisition integration costs, restructuring charges, certain excess and obsolete inventory charges, fees and expenses related to re-pricing of our Term Loan, amortization of debt issuance costs, net proceeds from an insurance policy, costs associated with the sale of a business, the tax effect of a legal entity restructuring, other discrete tax benefits and charges, and the related tax effect of these adjustments. These non-GAAP measures are not in accordance with generally accepted accounting principles in the United States of America (GAAP). MKS' management believes the presentation of these non-GAAP financial measures is useful to investors for comparing prior periods and analyzing ongoing business trends and operating results. Annualized GAAP interest expense based upon \$780 million principal outstanding and using the LIBOR based interest rate spread in effect on April 29, 2016, was \$44.0 million. Annualized GAAP interest expense based upon \$448 million in principal currently outstanding and LIBOR plus 200 basis points would be \$19.5 million. Pro-forma revenue amounts assume the acquisition of Newport Corporation had occurred as of the beginning of 2016.

SAFE HARBOR FOR FORWARD-LOOKING STATEMENTS

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 regarding the future financial performance of MKS, our future business prospects, our future growth, and our expected synergies and cost savings from our recent acquisition of Newport Corporation. These statements are only predictions based on current assumptions and expectations. Actual events or results may differ materially from those in the forward-looking statements set forth herein. Among the important factors that could cause actual events to differ materially from those in the forward-looking statements are the conditions affecting the markets in which we operate, including the fluctuations in capital spending in the semiconductor industry, and other advanced manufacturing markets, fluctuations in net sales to our major customers, our ability to successfully integrate Newport's operations, the terms of the Term Loan financing, fluctuations in interest rates, MKS' ability to realize anticipated synergies and cost savings from the Newport acquisition, our ability to successfully grow our business, potential fluctuations in quarterly results, dependence on new product development, rapid technological and market change, acquisition strategy, manufacturing and sourcing risks, volatility of stock price, international operations, financial risk management, and the other factors described in MKS' most recent Annual Report on Form 10-K for the year ended December 31, 2016 filed with SEC. MKS is under no obligation to, and expressly disclaims any obligation to, update or alter our forward-looking statements, whether as a result of new information, future events or otherwise after the date of this press release.

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<u>Company Contact</u>: Seth H. Bagshaw Senior Vice President, Chief Financial Officer and Treasurer Telephone: 978.645.5578

<u>Investor Relations Contacts</u>: Monica Gould The Blueshirt Group Telephone: 212.871.3927 Email: <u>monica@blueshirtgroup.com</u>

Lindsay Grant Savarese The Blueshirt Group Telephone: 212.331.8417 Email: <u>lindsay@blueshirtgroup.com</u>

> MKS Instruments, Inc. Unaudited Consolidated Statements of Operations (In thousands, except per share data)

	September 30, 2017	September 30, 2016	June 30, 2017
Net revenues: Products	\$434,710	\$335,156	\$431,950
Services	51,557	45,504	48,807
Total net revenues	486,267	380,660	480,757
Cost of revenues:	100,207	200,000	100,707
Products	223,738	183,789	229,304
Services	34,534	28,486	31,870
Total cost of revenues	258,272	212,275	261,174
Gross profit	227,995	168,385	219,583
Research and development	32,548	32,268	33,680
Selling, general and administrative	71,839	68,016	71,979
Acquisition and integration costs	2,466	2,641	790
Restructuring Asset impairment	10	_	2,064 6,719
Amortization of intangible assets	10,977	12,452	11,468
Income from operations	110,155	53,008	92,883
Interest income	873	404	507
Interest expense	7,172	12,007	6,997
Gain on sale of business		_	74,856
Other (expense) income, net	(2,485)	843	(3,277)
Income from operations before income taxes	101,371	42,248	157,972
Provision for income taxes	25,377	9,699	37,532
Net income	\$ 75,994	\$ 32,549	\$120,440
Net income per share:			
Basic	\$ 1.40	\$ 0.61	\$ 2.22
Diluted	\$ 1.38	\$ 0.60	\$ 2.19
Cash dividends per common share	\$ 0.175	\$ 0.17	\$ 0.175
Weighted average shares outstanding:	E 4 202		E 4 170
Basic Diluted	54,282 55,101	53,574 54,315	54,178 55,001
The following supplemental Non-GAAP earnings information is	55,101	54,515	55,001
presented to aid in understanding MKS' operating results:			
Net income	\$ 75,994	\$ 32,549	\$120,440
Adjustments:			
Acquisition and integration costs (Note 1)	2,466	2,641	790
Acquisition inventory step-up (Note 2)	—	4,971	
Expenses related to sale of a business (Note 3)	—	—	436
Excess and obsolete inventory charge (Note 4) Fees and expenses relating to re-pricing of term loan (Note 5)	492	_	1,160
Amortization of debt issuance costs (Note 6)	2,314	2,838	694
Restructuring (Note 7)	10		2,064
Asset impairment (Note 8)		_	6,719
Gain on sale of business (Note 9)	_	_	(74,856)
Net proceeds from an insurance policy (Note 10)	_	(1,323)	—
Amortization of intangible assets	10,977	12,452	11,468
Windfall tax benefit on stock-based compensation (Note 11)	(594)	—	(3,169)
Taxes related to sale of business (Note 12)	_	1,532	15,007
Taxes related to legal entity restructuring (Note 13) Pro-forma tax adjustments	(5,789)	(7,790)	(3,047)
Non-GAAP net earnings (Note 14)	\$ 85,870	\$ 47,870	\$ 77,706
Non-GAAP net earnings per share (Note 14)	\$ 1.56	\$ 0.88	\$ 1.41
Weighted average shares outstanding Income from operations	55,101 \$110,155	54,315 \$ 53,008	55,001 \$ 92,883
Adjustments:	\$110,155	\$ 55,000	\$ 92,005
Acquisition and integration costs (Note 1)	2,466	2,641	790
Acquisition inventory step-up (Note 2)		4,971	
Expenses related to sale of a business (Note 3)	_	_	436
Excess and obsolete inventory charge (Note 4)	—	_	1,160
Fees and expenses relating to re-pricing of term loan (Note 5)	492	—	—
Restructuring (Note 7)	10	—	2,064
Asset impairment (Note 8)	10,977	12,452	6,719 11,468
Amortization of intangible assets			
Non-GAAP income from operations (Note 15)	\$ <u>124,100</u>	\$ 73,072	\$ <u>115,520</u>
Non-GAAP operating margin percentage (Note 15)	25.5%	19.2%	24.0%
Gross profit	\$227,995	\$168,385	\$219,583
Acquisition inventory step-up (Note 2)	—	4,971	1 160
Excess and obsolete inventory charge (Note 4)	¢227.005	¢172 256	1,160 \$220,743
Non-GAAP gross profit (Note 16)	\$227,995	\$ <u>173,356</u>	\$ <u>220,743</u>
Non-GAAP gross profit percentage (Note 16)	46.9%	45.5%	45.9%
Interest expense	\$ 7,172	\$ 12,007	\$ 6,997
Amortization of debt issuance costs (Note 6)	2,314	2,838	<u>694</u>
Non-GAAP interest expense	\$ 4,858	\$ 9,169	\$ 6,303

Net income	\$ 75,994	\$ 32,549	\$120,440
Interest expense (income), net	6,299	11,603	6,490
Provision for income taxes	25,377	9,699	37,532
Depreciation	9,153	9,597	9,120
Amortization	10,977	12,452	11,468
EBITDA (Note 17)	\$127,800	\$ 75,900	\$185,050
Stock-based compensation	4,846	5,157	6,207
Acquisition and integration costs (Note 1)	2,466	2,641	790
Acquisition inventory step-up (Note 2)		4,971	_
Expenses related to sale of a business (Note 3)			436
Excess and obsolete inventory charge (Note 4)			1,160
Fees and expenses relating to re-pricing of term loan (Note 5)	492		_
Restructuring (Note 7)	10		2,064
Asset impairment (Note 8)			6,719
Gain on sale of business (Note 9)			(74,856)
Net proceeds from an insurance policy (Note 10)		(1,323)	—
Other adjustments	836	834	822
Adjusted EBITDA (Note 18)	\$136,450	\$ 88,180	\$128,392

Note 1: We recorded \$2.5 million, \$0.8 million and \$2.6 million of acquisition and integration costs during the three months ended September 30, 2017, June 30, 2017 and September 30, 2016, respectively, related to the Newport Corporation acquisition, which closed during the second quarter of 2016.

Note 2: We recorded \$5.0 million in cost of sales during the three months ended September 30, 2016 related to the step-up of inventory to fair value as a result of the Newport Corporation acquisition.

Note 3: We recorded \$0.4 million during the three months ended June 30, 2017, related to the sale of a business, which was completed in April of 2017.

Note 4: We recorded \$1.2 million of excess and obsolete inventory charges in cost of sales during the three months ended June 30, 2017, related to the discontinuation of a product line in connection with the consolidation of two manufacturing sites.

Note 5: We recorded \$0.5 million of fees and expenses during the three months ended September 30, 2017, related to the re-pricing of our Term Loan Credit Agreement.

Note 6: We recorded \$2.3 million, \$0.7 million and \$2.8 million of additional interest expense during the three months ended September 30, 2017, June 30, 2017 and September 30, 2016, respectively, related to the amortization of debt issuance costs affiliated with our Term Loan Credit Agreement and ABL Facility.

Note 7: We recorded \$2.1 million of restructuring costs during the three months ended June 30, 2017, related to the consolidation of two manufacturing plants.

Note 8: We recorded a \$6.7 million asset impairment charge, primarily related to the write-off of goodwill and intangible assets during the three months ended June 30, 2017, in conjunction with the consolidation of two manufacturing plants.

Note 9: We recorded a \$74.9 million gain during the three months ended June 30, 2017 on the sale of our Data Analytics Solutions business.

Note 10: We recorded net proceeds of \$1.3 million during the three months ended September 30, 2016 from a company owned life insurance policy.

Note 11: We recorded a windfall tax benefit on the vesting of stock-based compensation of \$0.6 and \$3.2 million during the three months ended September 30, 2017 and June 30, 2017, respectively, relating to the implementation of a new accounting standard issued by the Financial Statement Accounting Standards Board (Accounting Standards Update 2016-09).

Note 12: We recorded \$15.0 million of taxes during the three months ended June 30, 2017 related to the sale of our Data Analytics Solutions business.

Note 13: We recorded a tax expense of \$1.5 million during the three months ended September 30, 2016 related to a legal entity restructuring.

Note 14: The Non-GAAP net earnings and Non-GAAP net earnings per share amounts exclude acquisition and integration costs, an inventory step-up adjustment to fair value, expenses related to the sale of a business, an excess and obsolete inventory charge, fees and expenses related to the re-pricing of a term loan credit agreement, amortization of debt issuance costs, restructuring costs, an asset impairment charge, a gain on the sale of a business, net proceeds from an insurance policy, amortization of intangible assets, a windfall tax benefit related to stock-based compensation expense, taxes related to the sale of a business, taxes related to a legal entity restructuring and the related tax effect of these adjustments to reflect the expected full year effective tax rate in the related period.

Note 15: The Non-GAAP income from operations and Non-GAAP operating margin percentages exclude acquisition and integration costs, an inventory stepup adjustment to fair value, expenses related to the sale of a business, an excess and obsolete inventory charge, fees and expenses related to the re-pricing of a term loan credit agreement, restructuring costs, an asset impairment charge and amortization of intangible assets.

Note 16: The Non-GAAP gross profit amounts and Non-GAAP gross profit percentages exclude an inventory step-up adjustment and an excess and obsolete inventory charge.

Note 17: EBITDA excludes net interest, income taxes, depreciation and amortization of intangible assets.

Note 18: Adjusted EBITDA excludes stock-based compensation, acquisition and integration costs, expenses related to the sale of a business, an excess and obsolete inventory charge, fees and expenses related to the re-pricing of a term loan credit agreement, restructuring costs, an asset impairment charge, a gain on the sale of a business, net proceeds from an insurance policy and other adjustments as defined in our Term Loan Credit Agreement.

MKS Instruments, Inc. Unaudited Consolidated Statements of Operations (In thousands, except per share data)

	Nino Monthe Ende	d Soptombor 20
	Nine Months Ende	2016
Net revenues:	2017	
Products	\$1,259,582	\$774,248
Services	144,595	115,954
Total net revenues	1,404,177	890,202
Cost of revenues:		
Products	658,102	433,134
Services	92,950	74,857
Total cost of revenues	751,052	507,991
Gross profit	653,125	382,211
Research and development	99,510	77,709
Selling, general and administrative	218,038	161,545
Acquisition and integration costs Restructuring	4,698 2,596	25,190 24
Asset impairment	6,719	2 4
Amortization of intangible assets	34,946	22,990
Income from operations	286,618	94,753
Interest income	1,896	1,858
Interest expense	23,001	20,526
Gain on sale of business	74,856	_
Other (expense) income, net	(3,741)	2,336
Income from continuing operations before income taxes	336,628	78,421
Provision for income taxes	75,134	19,099
Net income	\$ 261,494	\$ 59,322
Net income per share:		
Basic	\$ 4.84	\$ 1.11
Diluted	\$ 4.75	\$ 1.10
Cash dividends per common share	\$ 0.525	\$ 0.51
Weighted average shares outstanding:		
Basic	54,076	53,423
Diluted	55,020	53,895
The following supplemental Non-GAAP earnings information is presented to aid in understanding MKS ² apprenting results:		
understanding MKS' operating results: Net income	\$ 261,494	\$ 59,322
Adjustments:	ψ 201,434	ψ 00,022
Acquisition and integration costs (Note 1)	4,698	25,190
Acquisition inventory step-up (Note 2)	.,	15,090
Expenses related to sale of a business (Note 3)	859	· _
Excess and obsolete inventory charge (Note 4)	1,160	_
Fees and expenses relating to re-pricing of term loan (Note 5)	492	713
Amortization of debt issuance costs (Note 6)	5,422	4,467
Restructuring (Note 7)	2,596	24
Asset impairment (Note 8)	6,719	—
Gain on sale of business (Note 9)	(74,856)	(1 222)
Net proceeds from an insurance policy (Note 10) Amortization of intangible assets	34,946	(1,323) 22,990
Windfall tax benefit on stock-based compensation (Note 11)	(10,413)	22,990
Taxes related to sale of business (Note 12)	15,007	_
Taxes related to legal entity restructuring (Note 13)		1,532
Pro-forma tax adjustments	(15,499)	(21,279)
Non-GAAP net earnings (Note 14)	\$ 232,625	\$106,726
Non-GAAP net earnings per share (Note 14)	\$ 4.23	\$ 1.98
Weighted average shares outstanding	55,020	53,895
Income from operations	\$ 286,618	\$ 94,753
Adjustments:	ψ 200,010	ψ 34,733
Acquisition and integration costs (Note 1)	4,698	25,190
Acquisition inventory step-up (Note 2)		15,090
Expenses related to sale of a business (Note 3)	859	· _
Excess and obsolete inventory charge (Note 4)	1,160	—
Fees and expenses relating to re-pricing of term loan (Note 5)	492	713
Restructuring (Note 7)	2,596	24
Asset impairment (Note 8)	6,719	
Amortization of intangible assets	34,946	22,990
Non-GAAP income from operations (Note 15)	\$338,088	\$ <u>158,760</u>
Non-GAAP operating margin percentage (Note 15)	24.1%	17.8%
Gross profit	\$ 653,125	\$382,211
Acquisition inventory step-up (Note 2)	—	15,090
Excess and obsolete inventory charge (Note 4)	1,160	
Non-GAAP gross profit (Note 16)	\$ 654,285	\$397,301
Non-GAAP gross profit percentage (Note 16)	46.6%	44.6%
Interest expense	\$ 23,001	\$ 20,526
	,	,===

Amortization of debt issuance costs (Note 6)	5,422	4,467
Non-GAAP interest expense	\$ 17,579	\$ 16,059
Net income	\$ 261,494	\$ 59,322
Interest expense (income), net	21,105	18,668
Provision for income taxes	75,134	19,099
Depreciation	27,605	20,767
Amortization	34,946	22,990
EBITDA (Note 17)	\$ 420,284	\$140,846
Stock-based compensation	19,835	19,826
Acquisition and integration costs (Note 1)	4,698	25,190
Acquisition inventory step-up (Note 2)		15,090
Expenses related to sale of a business (Note 3)	859	
Excess and obsolete inventory charge (Note 4)	1,160	_
Fees and expenses relating to re-pricing of term loan (Note 5)	492	713
Restructuring (Note 7)	2,596	24
Asset impairment (Note 8)	6,719	_
Gain on sale of business (Note 9)	(74,856)	
Net proceeds from an insurance policy (Note 10)		(1,323)
Other adjustments	2,405	1,495
Adjusted EBITDA (Note 18)	\$ 384,192	\$201,861

Note 1: We recorded \$4.7 million and \$25.2 million of acquisition and integration costs during the nine months ended September 30, 2017 and 2016, respectively, related to the Newport Corporation acquisition, which closed during the second quarter of 2016.

Note 2: We recorded \$15.1 million in cost of sales during the nine months ended September 30, 2016 related to the step-up of inventory to fair value as a result of the Newport Corporation acquisition.

Note 3: We recorded \$0.9 million during the nine months ended September 30, 2017, which is comprised of legal and consulting and compensation related expenses related to the sale of a business, which was completed in April of 2017.

Note 4: We recorded \$1.2 million of excess and obsolete inventory charges in cost of sales during the nine months ended September 30, 2017 related to the discontinuation of a product line in connection with the consolidation of two manufacturing plants.

Note 5: We recorded \$0.5 million and \$0.7 million of fees and expenses during the nine months ended September 30, 2017 and 2016, respectively, related to re-pricings of our Term Loan Credit Agreement.

Note 6: We recorded \$5.4 million and \$4.5 million of additional interest expense during the nine months ended September 30, 2017 and 2016, respectively, related to the amortization of debt issuance costs affiliated with our Term Loan Credit Agreement and ABL Facility.

Note 7: We recorded \$2.6 million of restructuring costs during the nine months ended September 30, 2017, related to the consolidation of two manufacturing plants, a restructuring of one of our international facilities and the consolidation of sales offices.

Note 8: We recorded a \$6.7 million asset impairment charge, primarily related to the write-off of goodwill and intangible assets during the nine months ended September 30, 2017, in connection with the consolidation of two manufacturing plants.

Note 9: We recorded a \$74.9 million gain during the nine months ended September 30, 2017 on the sale of our Data Analytics Solutions business.

Note 10: We recorded net proceeds of \$1.3 million during the nine months ended September 30, 2016 from a company owned life insurance policy.

Note 11: We recorded a windfall tax benefit on the vesting of stock-based compensation of \$10.4 million, relating to the implementation of a new accounting standard issued by the Financial Statement Accounting Standards Board (Accounting Standards Update 2016-09).

Note 12: We recorded \$15.0 million of taxes during the nine months ended September 30, 2017 related to the sale of our Data Analytics Solutions business.

Note 13: We recorded a tax expense of \$1.5 million during the nine months ended September 30, 2016 related to a legal entity restructuring.

Note 14: The Non-GAAP net earnings and Non-GAAP net earnings per share amounts exclude acquisition and integration costs, an inventory step-up adjustment to fair value, expenses related to the sale of a business, an excess and obsolete inventory charge, fees and expenses related to the re-pricing of a term loan credit agreement, amortization of debt issuance costs, restructuring costs, an asset impairment charge, a gain on the sale of a business, net proceeds from an insurance policy, amortization of intangible assets, a windfall tax benefit related to stock-based compensation expense, taxes related to the sale of a business, taxes related to a legal entity restructuring and the related tax effect of these adjustments to reflect the expected full year effective tax rate in the related period.

Note 15: The Non-GAAP income from operations and Non-GAAP operating margin percentages exclude acquisition and integration costs, an inventory stepup adjustment to fair value, expenses related to the sale of a business, an excess and obsolete inventory charge, fees and expenses related to the re-pricing of a term loan credit agreement, restructuring costs, an asset impairment charge and amortization of intangible assets.

Note 16: The Non-GAAP gross profit amounts and Non-GAAP gross profit percentages exclude an inventory step-up adjustment and an excess and obsolete inventory charge.

Note 17: EBITDA excludes net interest, income taxes, depreciation and amortization of intangible assets.

Note 18: Adjusted EBITDA excludes stock-based compensation, acquisition and integration costs, expenses related to the sale of a business, an excess and obsolete inventory charge, fees and expenses related to the re-pricing of a term loan credit agreement, restructuring costs, an asset impairment charge, a gain on the sale of a business, net proceeds from an insurance policy and other adjustments as defined in our Term Loan Credit Agreement.

MKS Instruments, Inc. Reconciliation of GAAP Income Tax Rate to Non-GAAP Income Tax Rate

(In thousands)

	Three Months Ended September 30, 2017						Three Months Ended June 30, 2017			
	Inc	Income Before Provision Effective			Provision (benefit)					
	Inc	come Taxes	ſt	penefit) for	Tax Rate	Inco	ome Before		for	Effective
			In	come Taxes		Inc	ome Taxes	Inc	come Taxes	Tax Rate
GAAP	\$	101,371	\$	25,377	25.0%	\$	157,972	\$	37,532	23.8%
Adjustments:										
Acquisition and										
integration costs (Note		2,466		—			790			
1)										
Expenses related to sale										
of a business							436			
(Note 3)										
Excess and obsolete										
inventory charge				—			1,160			
(Note 4)										
Fees and expenses										
relating to re-pricing		492					_			
of term loan (Note 5)										
Amortization of debt										
issuance costs		2,314					694			
(Note 6)										
Restructuring (Note 7)		10					2,064			
Asset impairment (Note										
8)				—			6,719			
Gain on sale of business										
(Note 9)		_		—			(74,856)		—	
Amortization of										
intangible assets		10,977		_			11,468		_	
Windfall tax benefit on										
stock-based		_		594			_		3,169	
compensation (Note 10)										
Tax related to sale of										
business (Note 11)		_		_			_		(15,007)	
Tax effect of pro-forma										
adjustments				5,789					3,047	
Non-GAAP	\$	117,630	\$	31,760	27.0%	\$	106,447	\$	28,741	27.0%

	Three Months Ended September 30, 2016				
		Provision	Effective		
	Income Before	(benefit) for	Tax Rate		
	Income Taxes	Income Taxes			
GAAP	\$ 42,248	\$ 9,699	23.0%		
Adjustments:					
Acquisition and integration costs (Note 1)	2,641				
Acquisition inventory step-up (Note 2)	4,971				
Amortization of debt issuance costs (Note 6)	2,838				
Net proceeds from an insurance policy (Note 12)	(1,323)				
Amortization of intangible assets	12,452				
Taxes related to legal entity restructuring (Note 13)	—	(1,532)			
Tax effect of pro-forma adjustments	—	7,790			
Non-GAAP	\$ 63,827	\$ 15,957	25.0%		

	Nine Months Ended September 30, 2017					Nine Months Ended September 30, 2016				
			Provis	sion (benefit)				Р	rovision	Effective
	Inco	ome Before		for	Effective	Inc	ome Before	(be	enefit) for	Tax Rate
	Inc	ome Taxes	Inco	ome Taxes	Tax Rate	Inc	come Taxes	Inco	ome Taxes	
GAAP	\$	336,628	\$	75,134	22.3%	\$	78,421	\$	19,099	24.4%
Adjustments:										
Acquisition and										
integration costs		4,698		—			25,190		—	
(Note 1)										
Acquisition										
inventory step-up		—		—			15,090		—	
(Note 2)										
Expenses related to										
sale of a		859					—			
business (Note 3)										
Excess and obsolete										
inventory		1,160		—			—		—	
charge (Note 4)										
Fees and expenses		100					= 10			
relating to		492					713			
re-pricing of term										
loan (Note 5)										
Amortization of		F 400					4 467			
debt issuance		5,422		_			4,467		_	
costs (Note 6)										

Restructuring (Note 7)	2,596	—		24	—	
Asset impairment						
(Note 8)	6,719	—				
Gain on sale of						
business (Note 9)	(74,856)	—		—	—	
Amortization of						
intangible assets	34,946	—		22,990		
Windfall tax benefit						
on	_	10,413				
stock-based						
compensation						
(Note 10)						
Taxes related to sale						
of business	—	(15,007)			—	
(Note 11)						
Net proceeds from						
an insurance	—	—		(1,323)		
policy (Note 12)						
Taxes related to						
legal entity	_	—			(1,532)	
restructuring (Note						
13)						
Tax effect of pro-						
forma adjustments		15,499			21,279	
Non-GAAP	\$ 318,664	\$ 86,039	27.0%	\$ 145,572	\$ 38,846	26.7%

Note 1: Acquisition and integration costs during the three and nine months ended September 30, 2017, the three months ended June 30, 2017 and the three and nine months ended September 30, 2016, relate to the Newport Corporation acquisition, which closed during the second quarter of 2016.

Note 2: We recorded \$5.0 million and \$15.1 million in cost of sales during the three and nine months ended September 30, 2016 related to the step-up of inventory to fair value as a result of the Newport Corporation acquisition.

Note 3: We recorded \$0.4 million during the three months ended June 30, 2017 and \$0.9 million during the nine months ended September 30, 2017, related to the sale of a business, which was completed in April of 2017.

Note 4: We recorded \$1.2 million of excess and obsolete inventory charges in cost of sales during the three months ended June 30, 2017 and nine months ended September 30, 2017, related to the discontinuation of a product line in connection with the consolidation of two manufacturing plants.

Note 5: We recorded \$0.5 million during the three and nine months ended September 30, 2017 and \$0.7 million during the nine months ended September 30, 2016, of fees and expenses related to the re-pricing of our Term Loan Credit Agreement.

Note 6: Amortization of debt issuance costs for the three and nine months ended September 30, 2017 and 2016, respectively, and the three months ended June 30, 2017, are affiliated with our Term Loan Credit Agreement and ABL Facility.

Note 7: Restructuring costs for the three and nine months ended September 30, 2017 and the three months ended June 30, 2017 relate to the consolidation of two manufacturing plants, a restructuring of one of our international facilities and the consolidation of sales offices.

Note 8: We recorded a \$6.7 million asset impairment charge, during the three months ended June 30, 2017 and the nine months ended September 30, 2017, primarily related to the write-off of goodwill and intangible assets, in conjunction with the consolidation of two manufacturing plants.

Note 9: We recorded a \$74.9 million gain during the three months ended June 30, 2017 and the nine months ended September 30, 2017 on the sale of our Data Analytics Solutions business.

Note 10: We recorded a windfall tax benefit on the vesting of stock-based compensation of \$0.6 million and \$3.2 million during the three months ended September 30, 2017 and June 30, 2017, respectively, and \$10.4 million for the nine months ended September 30, 2017, relating to the implementation of a new accounting standard issued by the Financial Statement Accounting Standards Board (Accounting Standards Update 2016-09).

Note 11: We recorded \$15.0 million of taxes during the three months ended June 30, 2017 and nine months ended September 30, 2017 related to the sale of our Data Analytics Solutions business.

Note 12: We recorded net proceeds of \$1.3 million during the three and nine months ended September 30, 2016 from a company owned life insurance policy.

Note 13: We recorded a tax expense of \$1.5 million during the three and nine months ended September 30, 2016 related to a legal entity restructuring.

MKS Instruments, Inc. Reconciliation of Q4-17 Guidance — GAAP Net Income to Non-GAAP Net Earnings (In thousands, except per share data)

	Three Months Ended December 31, 2017				
	Low C	Guidance	High C	Guidance	
	\$ Amount	\$ Per Share	\$ Amount	\$ Per Share	
GAAP net income	\$74,100	\$ 1.34	\$87,700	\$ 1.59	
Amortization	10,900	0.20	10,900	0.20	
Integration costs	400	0.01	400	0.01	
Restructuring costs	800	0.01	800	0.01	
Deferred financing costs	1,000	0.02	1,000	0.02	
Tax effect of adjustments (Note 1)	(3,500)	(0.06)	(3,600)	(0.07)	
Non-GAAP net earnings	\$83,700	\$ 1.52	\$97,200	\$ 1.76	

55,200

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55,200

Note 1: The Non-GAAP adjustments are tax effected at the applicable statutory rates and the difference between the GAAP and Non-GAAP tax rates.

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MKS Instruments, Inc. Unaudited Consolidated Balance Sheet (In thousands)

	September 30, 2017	December 31, 2016
ASSETS		
Cash and cash equivalents	\$ 305,977	\$ 228,623
Restricted cash	117	5,287
Short-term investments	228,631	189,463
Trade accounts receivable, net	280,302	248,757
Inventories	319,460	275,869
Other current assets	60,716	50,770
Total current assets	1,195,203	998,769
Property, plant and equipment, net	166,928	174,559
Goodwill	589,099	588,585
Intangible assets, net	376,334	408,004
Long-term investments	10,593	9,858
Other assets	32,188	32,467
Total assets	\$2,370,345	\$2,212,242
LIABILITIES AND STOCKHOLDERS' EQUITY		
Short-term debt	\$ 4,020	\$ 10,993
Accounts payable	77,842	69,337
Accrued compensation	75,725	67,728
Income taxes payable	38,609	22,794
Deferred revenue	17,812	14,463
Other current liabilities	68,604	51,985
Total current liabilities	282,612	237,300
Long-term debt, net	435,731	601,229
Non-current deferred taxes	71,110	66,446
Non-current accrued compensation	50,080	44,714
Other liabilities	23,107	20,761
Total liabilities	862,640	970,450
Stockholders' equity:		
Common stock	113	113
Additional paid-in capital	782,597	777,482
Retained earnings	727,835	494,744
Accumulated other comprehensive loss	(2,840)	(30,547)
Total stockholders' equity	1,507,705	1,241,792
Total liabilities and stockholders' equity	\$2,370,345	\$2,212,242