
**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): July 30, 2019

MKS Instruments, Inc.

(Exact name of Registrant as Specified in Its Charter)

Massachusetts
(State or Other Jurisdiction
of Incorporation)

000-23621
(Commission
File Number)

04-2277512
(IRS Employer
Identification No.)

**2 Tech Drive, Suite 201,
Andover, MA**
(Address of Principal Executive Offices)

01810
(Zip Code)

Registrant's Telephone Number, Including Area Code: (978) 645-5500

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 (see General Instructions A.2. below):

- 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))

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock, no par value	MKSI	Nasdaq Global Select Market

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 July 30, 2019, MKS Instruments, Inc. announced its financial results for the quarter ended June 30, 2019. 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 July 30, 2019](#)

SIGNATURES

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

MKS Instruments, Inc.

Date: July 30, 2019

By: /s/ Seth H. Bagshaw

Name: Seth H. Bagshaw

Title: Sr. Vice President, Chief Financial Officer and Treasurer

**MKS Instruments Reports Second Quarter 2019 Financial Results**

- *Quarterly revenue of \$474 million, an increase of 2% compared to Q1 2019*
- *Voluntarily prepaid \$50 million towards our Term Loan Credit Facility*
- *Non-GAAP net earnings of \$59.9 million, or \$1.09 per diluted share*
- *GAAP net income of \$37.7 million, or \$0.69 per diluted share*

Andover, MA, July 30, 2019 — MKS Instruments, Inc. (NASDAQ: MKSI), a global provider of technologies that enable advanced processes and improve productivity, today reported second quarter 2019 financial results.

“Another quarter of strong operational and financial execution drove our Non-GAAP operating margin and Non-GAAP net earnings above the mid-point of our guidance range in the second quarter despite the effects of uncertainty in the global trade environment,” said Gerald Colella, Chief Executive Officer.

Mr. Colella added, “The acquisition of ESI adds laser-based systems to our Advanced Markets portfolio, further expanding our ability to penetrate into these profitable and growing markets. The long-term growth potential in our Advanced Markets remains robust and we are committed to continue to outperform these markets over the long term. In the second quarter, we are pleased to report that, with the ESI acquisition, our revenue in Advanced Markets achieved a new record of over \$260 million in the quarter, an increase of 10% from a year ago.”

“In the quarter, we completed a \$50 million voluntary prepayment on our term loan as we are committed to reduce our leverage and interest costs. This was our ninth voluntary prepayment since loan origination in April 2016,” said Seth Bagshaw, Senior Vice President and Chief Financial Officer. “Furthermore, we exited the quarter with a strong balance sheet and liquidity with \$460 million of cash and short-term investments and trailing twelve-month net leverage ratio of under 1 times.”

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

	Q2 2019	Q1 2019
GAAP Results		
Net revenues	\$ 474.1	\$ 463.6
Gross margin	44.5%	42.7%
Operating margin	13.5%	5.0%
Net income	\$ 37.7	\$ 12.5
Diluted EPS	\$ 0.69	\$ 0.23
Non-GAAP Results		
Gross margin	45.0%	43.8%
Operating margin	18.6%	17.7%
Net earnings	\$ 59.9	\$ 61.3
Diluted EPS	\$ 1.09	\$ 1.12

Second Quarter 2019 Financial Results

Revenue was \$474.1 million, an increase of 2% from \$463.6 million in the first quarter of 2019 and a decrease of 17% from \$573.1 million in the second quarter of 2018.

Net income was \$37.7 million, or \$0.69 per diluted share, compared to net income of \$12.5 million, or \$0.23 per diluted share, in the first quarter of 2019, and \$122.9 million, or \$2.22 per diluted share, in the second quarter of 2018.

Second quarter net income included acquisition and integration costs of \$3.2 million associated with the ESI acquisition and \$1.2 million of restructuring and other costs.

Non-GAAP net earnings, which exclude special charges and credits, were \$59.9 million, or \$1.09 per diluted share, compared to \$61.3 million, or \$1.12 per diluted share, in the first quarter of 2019, and \$128.8 million or \$2.33 per diluted share, in the second quarter of 2018.

Sales to Advanced Markets were \$260 million, an increase of 7% compared to the first quarter of 2019, which was primarily attributed to the acquisition of ESI, as the first quarter only included two months of sales. Sales to Semiconductor customers were \$214 million, a decrease of 3% compared to the first quarter of 2019.

Additional Financial Information

The Company had \$460 million in cash and short-term investments and \$947 million of term loan debt outstanding as of June 30, 2019, which is net of a \$50 million prepayment made during the second quarter of 2019. MKS also paid a dividend of \$10.9 million or \$0.20 per diluted share during the second quarter of 2019. The Company has available an unused \$100 million asset-based line of credit.

Third Quarter 2019 Outlook

Based on current business levels, the Company expects that revenue in the third quarter of 2019 could range from \$415 to \$465 million.

At these volumes, GAAP net income could range from \$0.39 to \$0.72 per diluted share and non-GAAP net earnings could range from \$0.69 to \$1.02 per diluted share.

Conference Call Details

A conference call with management will be held on Wednesday, July 31, 2019 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 5483628, which has been reserved for this call. A live and archived webcast of the call will be available on the Company's website at www.mksinst.com, along with the Company's earnings press release and supplemental financial information.

About MKS Instruments

MKS Instruments, Inc. is a global provider of instruments, subsystems and process control solutions that measure, monitor, deliver, analyze, power and control critical parameters of advanced manufacturing processes to improve process performance and productivity for our customers. 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, power, reactive gas generation, vacuum technology, lasers, photonics, sub-micron positioning, vibration control, optics and laser-based manufacturing solutions. We also provide services relating to the maintenance and repair of our products, installation services and training. Our primary served markets include semiconductor, industrial technologies, life and health sciences, and research and defense. Additional information can be found at www.mksinst.com.

Use of Non-GAAP Financial Results

This release includes measures that are not in accordance with U.S. generally accepted accounting principles ("Non-GAAP measures"). Non-GAAP measures exclude amortization of acquired intangible assets, costs associated with completed acquisitions, acquisition integration costs, fees and expenses related to our term loan, amortization of debt issuance costs, restructuring and other costs, windfall tax benefits from stock-based compensation, accrued taxes on subsidiary distributions, the tax effects of the 2017 Tax Cut and Jobs Act, tax cost of the inter-

company sale of an asset and the related tax effects of adjustments impacting pre-tax income. These Non-GAAP measures should be viewed in addition to, and not as a substitute for, MKS' reported results, and may be different from Non-GAAP measures used by other companies. In addition, these Non-GAAP measures are not based on any comprehensive set of accounting rules or principles. MKS management believes the presentation of these Non-GAAP measures is useful to investors for comparing prior periods and analyzing ongoing business trends and operating results.

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, business prospects and growth of MKS, and MKS' expected synergies and cost savings from its recent acquisition of Electro Scientific Industries, Inc ("ESI"). 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 MKS operates, including the fluctuations in capital spending in the semiconductor industry and other advanced manufacturing markets, fluctuations in net sales to our major customers, the ability of MKS to successfully integrate ESI's operations and employees, unexpected costs, charges or expenses resulting from the ESI acquisition, MKS' ability to realize anticipated synergies and cost savings from the ESI acquisition, the terms of our term loan, competition from larger or more established companies in MKS' markets; MKS' ability to successfully grow ESI's business; potential adverse reactions or changes to business relationships resulting from the ESI acquisition, the challenges, risks and costs involved with integrating the operations of the other companies we have acquired, the Company's 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, 2018 filed with the SEC. MKS is under no obligation to, and expressly disclaims any obligation to, update or alter these 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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MKS Instruments, Inc.
Unaudited Consolidated Statement of Operations
(in thousands, except per share data)

	Three Months Ended		
	June 30, 2019	June 30, 2018	March 31, 2019
Net revenues:			
Products	\$401,326	\$509,999	\$397,363
Services	72,784	63,141	66,198
Total net revenues	474,110	573,140	463,561
Cost of revenues:			
Products	226,213	266,890	229,710
Services	36,870	31,373	35,733
Total cost of revenues	263,083	298,263	265,443
Gross profit	211,027	274,877	198,118
Research and development	41,855	36,504	38,933
Selling, general and administrative	83,236	76,181	82,455
Fees and expenses related to term loan	—	378	5,847
Acquisition and integration costs	3,240	(1,168)	30,167
Restructuring and other	1,242	790	1,923
Amortization of intangible assets	17,552	10,901	15,727
Income from operations	63,902	151,291	23,066
Interest income	1,423	1,456	1,714
Interest expense	12,674	3,922	9,119
Other expense, net	788	281	325
Income from operations before income taxes	51,863	148,544	15,336
Provision for income taxes	14,124	25,682	2,881
Net income	<u>\$ 37,739</u>	<u>\$ 122,862</u>	<u>\$ 12,455</u>
Net income per share:			
Basic	\$ 0.69	\$ 2.25	\$ 0.23
Diluted	\$ 0.69	\$ 2.22	\$ 0.23
Cash dividends per common share	\$ 0.20	\$ 0.20	\$ 0.20
Weighted average shares outstanding:			
Basic	54,815	54,719	54,147
Diluted	55,089	55,274	54,848

The following supplemental Non-GAAP earnings information is presented to aid in understanding MKS' operating results:

	Three Months Ended		
	June 30, 2019	June 30, 2018	March 31, 2019
Net income	\$ 37,739	\$122,862	\$ 12,455
Adjustments:			
Acquisition and integration costs (Note 1)	3,240	(1,168)	30,167
Acquisition inventory step-up (Note 2)	2,484	—	5,140
Fees and expenses related to term loan (Note 3)	—	378	5,847
Amortization of debt issuance costs (Note 4)	1,254	660	599
Restructuring and other (Note 5)	1,242	790	1,923
Amortization of intangible assets	17,552	10,901	15,727
Windfall tax benefit on stock-based compensation (Note 6)	(790)	(4,752)	(1,389)
Tax reform adjustments (Note 7)	2,731	—	—
Transition tax on accumulated foreign earnings (Note 8)	—	(659)	—
Pro-forma tax adjustments	(5,596)	(200)	(9,169)
Non-GAAP net earnings (Note 9)	<u>\$ 59,856</u>	<u>\$128,812</u>	<u>\$ 61,300</u>
Non-GAAP net earnings per share (Note 9)	<u>\$ 1.09</u>	<u>\$ 2.33</u>	<u>\$ 1.12</u>
Weighted average shares outstanding	55,089	55,274	54,848
Income from operations	\$ 63,902	\$151,291	\$ 23,066
Adjustments:			
Acquisition and integration costs (Note 1)	3,240	(1,168)	30,167
Acquisition inventory step-up (Note 2)	2,484	—	5,140
Fees and expenses related to term loan (Note 3)	—	378	5,847
Restructuring and other (Note 5)	1,242	790	1,923
Amortization of intangible assets	17,552	10,901	15,727
Non-GAAP income from operations (Note 10)	<u>\$ 88,420</u>	<u>\$162,192</u>	<u>\$ 81,870</u>
Non-GAAP operating margin percentage (Note 10)	<u>18.6%</u>	<u>28.3%</u>	<u>17.7%</u>
Gross profit	\$211,027	\$274,877	\$198,118
Acquisition inventory step-up (Note 2)	2,484	—	5,140
Non-GAAP gross profit (Note 11)	<u>\$213,511</u>	<u>\$274,877</u>	<u>\$203,258</u>
Non-GAAP gross profit percentage (Note 11)	<u>45.0%</u>	<u>48.0%</u>	<u>43.8%</u>
Interest expense	\$ 12,674	\$ 3,922	\$ 9,119
Amortization of debt issuance costs (Note 4)	1,254	660	599
Non-GAAP interest expense	<u>\$ 11,420</u>	<u>\$ 3,262</u>	<u>\$ 8,520</u>
Net income	\$ 37,739	\$122,862	\$ 12,455
Interest expense, net	11,251	2,466	7,405
Provision for income taxes	14,124	25,682	2,881
Depreciation	9,892	8,984	9,484
Amortization	17,552	10,901	15,727
EBITDA (Note 12)	<u>\$ 90,558</u>	<u>\$170,895</u>	<u>\$ 47,952</u>
Stock-based compensation	5,903	6,366	9,274
Acquisition and integration costs (Note 1)	3,240	(1,168)	30,167
Acquisition inventory step-up (Note 2)	2,484	—	5,140
Fees and expenses related to term loan (Note 3)	—	378	5,847
Restructuring and other (Note 5)	1,242	790	1,923
Other adjustments	—	—	3,337
Adjusted EBITDA (Note 13)	<u>\$103,427</u>	<u>\$177,261</u>	<u>\$103,640</u>

Note 1: Acquisition and integration costs for the three months ended June 30, 2019 and March 31, 2019, related to the acquisition of Electro Scientific Industries, Inc. ("ESI") which closed on February 1, 2019. During the three months ended June 30, 2018, we reversed a portion of costs recognized during previous periods related to the Newport acquisition, which closed during the second quarter of 2016, related to severance agreement provisions that were not met.

Note 2: Costs of revenues during the three months ended June 30, 2019 and March 31, 2019 includes the amortization of the step-up of inventory to fair value as a result of the ESI acquisition.

Note 3: We recorded fees and expenses during the three months ended March 31, 2019 related to Amendment No. 5 of our Term Loan Credit Agreement. We recorded fees and expenses during the three months ended June 30, 2018 related to the fourth repricing of our Term Loan Credit Agreement.

Note 4: We recorded additional interest expense related to the amortization of debt issuance costs associated with our Term Loan Credit Agreement.

Note 5: We recorded restructuring costs during the three months ended June 30, 2019 and March 31, 2019 which consisted primarily of severance costs related to an organization-wide reduction in workforce, the consolidation of service functions in Asia and the movement of certain products to low cost regions. We also recorded other expense during the three months ended March 31, 2019 related to a contractual obligation we assumed as part of our acquisition of Newport Corporation. Restructuring costs during the three months ended June 30, 2018 were primarily comprised of severance costs related to transferring a portion of our shared services functions to a third party as well as the consolidation of certain shared service functions in Asia.

Note 6: We recorded windfall tax benefits on the vesting of stock-based compensation.

Note 7: We recorded tax adjustments resulting from additional guidance provided by the IRS related to 2017 tax reform.

Note 8: We adjusted the provisional transition tax on accumulated foreign earnings related to the 2017 Tax Cut and Jobs Act during the three months ended June 30, 2018.

Note 9: The Non-GAAP net earnings and Non-GAAP net earnings per share amounts exclude acquisition and integration costs, the amortization of the step-up of inventory to fair value, fees and expenses related to our Term Loan Credit Agreement, amortization of debt issuance costs, restructuring and other costs, amortization of intangible assets, a windfall tax benefit related to stock compensation expense, tax reform adjustments, transition tax on accumulated foreign earnings and the related tax effect of these adjustments to reflect the expected full year effective tax rate in the related period.

Note 10: The Non-GAAP income from operations and Non-GAAP operating margin percentages exclude acquisition and integration costs, the amortization of the step-up of inventory to fair value, fees and expenses related to our Term Loan Credit Agreement, restructuring and other costs and amortization of intangible assets.

Note 11: The Non-GAAP gross profit amounts and Non-GAAP gross profit percentages exclude the amortization of the step-up of inventory to fair value related to the acquisition of ESI.

Note 12: EBITDA excludes net interest, income taxes, depreciation and amortization of intangible assets.

Note 13: Adjusted EBITDA excludes stock-based compensation, acquisition and integration costs, the amortization of the step-up of inventory to fair value, fees and expenses related to an amendment of our Term Loan Credit agreement, restructuring and other costs and other adjustments as defined in our Term Loan Credit Agreement.

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

	Six Months Ended	
	June 30,	
	2019	2018
Net revenues:		
Products	\$798,689	\$1,006,676
Services	138,982	120,739
Total net revenues	937,671	1,127,415
Cost of revenues:		
Products	455,923	528,211
Services	72,603	61,472
Total cost of revenues	528,526	589,683
Gross profit	409,145	537,732
Research and development	80,788	71,361
Selling, general and administrative	165,691	159,130
Acquisition and integration costs	33,407	(1,168)
Restructuring and other	3,165	3,010
Fees and expenses related to term loan	5,847	378
Amortization of intangible assets	33,279	22,091
Income from operations	86,968	282,930
Interest income	3,137	2,561
Interest expense	21,793	9,352
Other expense, net	1,113	853
Income from operations before income taxes	67,199	275,286
Provision for income taxes	17,005	47,303
Net income	<u>\$ 50,194</u>	<u>\$ 227,983</u>
Net income per share:		
Basic	\$ 0.92	\$ 4.18
Diluted	\$ 0.91	\$ 4.12
Cash dividends per common share	\$ 0.40	\$ 0.38
Weighted average shares outstanding:		
Basic	54,481	54,571
Diluted	54,966	55,280

The following supplemental Non-GAAP earnings information is presented to aid in understanding MKS' operating results:

	Six Months Ended	
	June 30,	
	2019	2018
Net income	\$ 50,194	\$227,983
Adjustments:		
Acquisition and integration costs (Note 1)	33,407	(1,168)
Acquisition inventory step-up (Note 2)	7,624	—
Fees and expenses related to term loan (Note 3)	5,847	378
Amortization of debt issuance costs (Note 4)	1,853	2,491
Restructuring and other (Note 5)	3,165	3,010
Amortization of intangible assets	33,279	22,091
Windfall tax benefit on stock-based compensation (Note 6)	(2,179)	(7,788)
Tax reform adjustments (Note 7)	2,731	—
Deferred tax adjustment (Note 8)	—	878
Transition tax on accumulated foreign earnings (Note 9)	—	(2,327)
Pro-forma tax adjustments	(14,765)	(2,447)
Non-GAAP net earnings (Note 10)	<u>\$121,156</u>	<u>\$243,101</u>
Non-GAAP net earnings per share (Note 10)	<u>\$ 2.20</u>	<u>\$ 4.40</u>
Weighted average shares outstanding	54,966	55,280
Income from operations	\$ 86,968	\$282,930
Adjustments:		
Acquisition and integration costs (Note 1)	33,407	(1,168)
Acquisition inventory step-up (Note 2)	7,624	—
Fees and expenses related to term loan (Note 3)	5,847	378
Restructuring and other (Note 5)	3,165	3,010
Amortization of intangible assets	33,279	22,091
Non-GAAP income from operations (Note 11)	<u>\$170,290</u>	<u>\$307,241</u>
Non-GAAP operating margin percentage (Note 11)	<u>18.2%</u>	<u>27.3%</u>
Gross profit	\$409,145	\$537,732
Acquisition inventory step-up (Note 2)	7,624	—
Non-GAAP gross profit (Note 12)	<u>\$416,769</u>	<u>\$537,732</u>
Non-GAAP gross profit percentage (Note 12)	<u>44.4%</u>	<u>47.7%</u>
Interest expense	\$ 21,793	\$ 9,352
Amortization of debt issuance costs (Note 4)	1,853	2,491
Non-GAAP interest expense	<u>\$ 19,940</u>	<u>\$ 6,861</u>
Net Income	\$ 50,194	\$227,983
Interest expense, net	18,656	6,791
Provision for income taxes	17,005	47,303
Depreciation	19,376	18,286
Amortization	33,279	22,091
EBITDA (Note 13)	<u>\$138,510</u>	<u>\$322,454</u>
Stock-based compensation	15,177	16,792
Acquisition and integration costs (Note 1)	33,407	(1,168)
Acquisition inventory step-up (Note 2)	7,624	—
Fees and expenses related to term loan (Note 3)	5,847	378
Restructuring and other (Note 5)	3,165	3,010
Other adjustments	3,337	772
Adjusted EBITDA (Note 14)	<u>\$207,067</u>	<u>\$342,238</u>

Note 1: Acquisition and integration costs for the six months ended June 30, 2019, related to the acquisition of Electro Scientific Industries, Inc. (“ESI”) which closed on February 1, 2019. During the six months ended June 30, 2018, we reversed a portion of costs recognized during previous periods related to the Newport acquisition, which closed during the second quarter of 2016, related to severance agreement provisions that were not met.

Note 2: Costs of revenues during the six months ended June 30, 2019 includes the amortization of the step-up of inventory to fair value as a result of the ESI acquisition.

Note 3: We recorded fees and expenses during the six months ended March 31, 2019 related to Amendment No. 5 of our Term Loan Credit Agreement. We recorded fees and expenses during the six months ended June 30, 2018 related to the fourth repricing of our Term Loan Credit Agreement.

Note 4: We recorded additional interest expense related to the amortization of debt issuance costs associated with our Term Loan Credit Agreement.

Note 5: We recorded restructuring costs during the six months ended June 30, 2019, which consisted primarily of severance costs related to an organization-wide reduction in workforce, the consolidation of service functions in Asia and the movement of certain products to low cost regions. We also recorded expense during the six months ended June 30, 2019 related to a contractual obligation we assumed as part of our acquisition of Newport Corporation. Restructuring costs during the six months ended June 30, 2018 were primarily comprised of severance costs related to transferring a portion of our shared services functions to a third party as well as the consolidation of certain shared service functions in Asia. We also recorded environmental costs during the six months ended June 30, 2018, related to an Environmental Protection Agency-designated Superfund site, which was acquired as part of our acquisition of Newport Corporation.

Note 6: We recorded windfall tax benefits on the vesting of stock-based compensation.

Note 7: We recorded tax adjustments resulting from additional guidance provided by the IRS related to 2017 tax reform.

Note 8: We recorded a provisional deferred tax adjustment, which also includes the reversal of a tax accrual on a French dividend, related to U.S. tax reform legislation during the fourth quarter of 2017 and updated the provisional transition tax during the six months ended June 30, 2018.

Note 9: We adjusted the transition tax on accumulated foreign earnings related to the 2017 Tax Cut and Jobs Act during the six months ended June 30, 2018.

Note 10: The Non-GAAP net earnings and Non-GAAP net earnings per share amounts exclude acquisition and integration costs, the amortization of the step-up of inventory to fair value, fees and expenses related to the repricing of the Term Loan Credit Agreement, fees and expenses related to an amendment to our Term Loan Credit agreement, amortization of debt issuance costs, restructuring and other costs, amortization of intangible assets, a windfall tax benefit related to stock compensation expense, tax reform adjustments, a deferred tax adjustment, transition tax on accumulated foreign earnings and the related tax effect of these adjustments to reflect the expected full year effective tax rate in the related period.

Note 11: The Non-GAAP income from operations and Non-GAAP operating margin percentages exclude acquisition and integration costs, fees and expenses related to the repricing of our Term Loan Credit Agreement, fees and expenses related to an amendment to our Term Loan Credit agreement, restructuring and other costs and amortization of intangible assets.

Note 12: The Non-GAAP gross profit amounts and Non-GAAP gross profit percentages exclude the amortization of the step-up of inventory to fair value related to the acquisition of ESI.

Note 13: EBITDA excludes net interest, income taxes, depreciation and amortization of intangible assets.

Note 14: Adjusted EBITDA excludes stock-based compensation, acquisition and integration costs, the amortization of the step-up of inventory to fair value, fees and expenses related to the repricing of our Term Loan Credit Agreement, fees and expenses related to an amendment to our Term Loan Credit Agreement, restructuring and other costs and other adjustments as defined in our Term Loan Credit Agreement.

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

	June 30, 2019	December 31, 2018
ASSETS		
Cash and cash equivalents	\$ 366,935	\$ 644,345
Short-term investments	92,985	73,826
Trade accounts receivable, net	313,530	295,454
Inventories	479,497	384,689
Other current assets	80,303	65,790
Assets classified as held for sale	36,750	—
Total current assets	1,370,000	1,464,104
Property, plant and equipment, net	230,649	194,367
Right-of-use asset	68,631	—
Goodwill	1,058,667	586,996
Intangible assets, net	599,372	319,807
Long-term investments	10,401	10,290
Other assets	44,228	38,682
Total assets	<u>\$3,381,948</u>	<u>\$ 2,614,246</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Short-term debt	\$ 10,931	\$ 3,986
Accounts payable	88,046	83,825
Accrued compensation	64,415	82,350
Income taxes payable	12,811	16,358
Lease liability	20,670	—
Deferred revenue and customer advances	26,597	14,246
Other current liabilities	61,686	62,520
Total current liabilities	285,156	263,285
Long-term debt, net	926,879	343,842
Non-current deferred taxes	76,042	48,223
Non-current accrued compensation	62,947	55,598
Non-current lease liability	51,141	—
Other liabilities	34,296	30,111
Total liabilities	<u>1,436,461</u>	<u>741,059</u>
Stockholders' equity:		
Common stock	113	113
Additional paid-in capital	849,585	793,932
Retained earnings	1,113,036	1,084,797
Accumulated other comprehensive loss	(17,247)	(5,655)
Total stockholders' equity	<u>1,945,487</u>	<u>1,873,187</u>
Total liabilities and stockholders' equity	<u>\$3,381,948</u>	<u>\$ 2,614,246</u>

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

	Three Months Ended		
	June 30 2019	June 30, 2018	March 31 2019
Cash flows from operating activities:			
Net income	\$ 37,739	\$122,862	\$ 12,455
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	27,444	19,885	25,211
Amortization of inventory step-up adjustment to fair value	2,484	—	5,140
Amortization of debt issuance costs, original issue discount and soft call premium	1,751	868	1,202
Stock-based compensation	6,929	6,366	27,838
Provision for excess and obsolete inventory	6,990	4,959	5,063
(Recovery) Provision for doubtful accounts	(251)	261	(440)
Deferred income taxes	(180)	1,875	(2,445)
Other	851	426	66
Changes in operating assets and liabilities	(6,203)	(47,891)	(45,040)
Net cash provided by operating activities	77,554	109,611	29,050
Cash flows used in investing activities:			
Acquisition of business, net of cash acquired	—	—	(988,599)
Purchases of investments	(73,707)	(99,063)	(44,212)
Sales of investments	3,221	54,433	154,489
Maturities of investments	21,702	41,138	18,684
Proceeds from sale of assets	—	—	35
Purchases of property, plant and equipment	(13,725)	(12,428)	(14,529)
Net cash used in investing activities	(62,509)	(15,920)	(874,132)
Cash flows (used in) provided by financing activities:			
Payments of short-term borrowings	(1,750)	(17,788)	(176)
Net proceeds from short and long-term borrowings	2,301	25,082	638,638
Payments of long-term borrowings	(51,625)	—	—
Dividend payments	(10,880)	(10,942)	(10,843)
Net payments related to employee stock awards	(2,025)	(4,131)	(8,987)
Net cash (used in) provided by financing activities	(63,979)	(7,779)	618,632
Effect of exchange rate changes on cash and cash equivalents	(2,147)	631	121
(Decrease) Increase in cash and cash equivalents	(51,081)	86,543	(226,329)
Cash and cash equivalents at beginning of period	418,016	340,888	644,345
Cash and cash equivalents at end of period	\$366,935	\$427,431	\$ 418,016

MKS Instruments, Inc.
Reconciliation of GAAP Income Tax Rate to Non-GAAP Income Tax Rate
(In thousands)

	Three Months Ended June 30, 2019			Three Months Ended March 31, 2019		
	Income Before Income Taxes	Provision (benefit) for Income Taxes	Effective Tax Rate	Income Before Income Taxes	Provision (benefit) for Income Taxes	Effective Tax Rate
GAAP	\$ 51,863	\$ 14,124	27.2%	\$ 15,336	\$ 2,881	18.8%
Adjustments:						
Acquisition and integration costs (Note 1)	3,240	—		30,167	—	
Acquisition inventory step-up (Note 2)	2,484	—		5,140	—	
Fees and expenses related to term loan (Note 3)	—	—		5,847	—	
Amortization of debt issuance costs (Note 4)	1,254	—		599	—	
Restructuring and other (Note 5)	1,242	—		1,923	—	
Amortization of intangible assets	17,552	—		15,727	—	
Windfall tax benefit on stock-based compensation (Note 6)	—	790		—	1,389	
Tax reform adjustments (Note 7)	—	(2,731)		—	—	
Tax effect of pro-forma adjustments	—	5,596		—	9,169	
Non-GAAP	<u>\$ 77,635</u>	<u>\$ 17,779</u>	22.9%	<u>\$ 74,739</u>	<u>\$ 13,439</u>	18.0%

	Three Months Ended June 30, 2018		
	Income Before Income Taxes	Provision (benefit) for Income Taxes	Effective Tax Rate
GAAP	\$ 148,544	\$ 25,682	17.3%
Adjustments:			
Acquisition and integration costs (Note 1)	(1,168)	—	
Fees and expenses related to term loan (Note 3)	378	—	
Amortization of debt issuance costs (Note 4)	660	—	
Restructuring and other (Note 5)	790	—	
Amortization of intangible assets	10,901	—	
Windfall tax benefit on stock-based compensation (Note 6)	—	4,752	
Transition tax on accumulated foreign earnings (Note 9)	—	659	
Tax effect of pro-forma adjustments	—	200	
Non-GAAP	<u>\$ 160,105</u>	<u>\$ 31,293</u>	19.5%

	Six Months Ended June 30, 2019			Six Months Ended June 30, 2018		
	Income Before Income Taxes	Provision (benefit) for Income Taxes	Effective Tax Rate	Income Before Income Taxes	Provision (benefit) for Income Taxes	Effective Tax Rate
GAAP	\$ 67,199	\$ 17,005	25.3%	\$ 275,286	\$ 47,303	17.2%
Adjustments:						
Acquisition and integration costs (Note 1)	33,407	—		(1,168)	—	
Acquisition inventory step-up (Note 2)	7,624	—		—	—	
Fees and expenses related to term loan (Note 3)	5,847	—		378	—	
Amortization of debt issuance costs (Note 4)	1,853	—		2,491	—	
Restructuring and other (Note 5)	3,165	—		3,010	—	
Amortization of intangible assets	33,279	—		22,091	—	
Windfall tax benefit on stock-based compensation (Note 6)	—	2,179		—	7,788	
Tax reform adjustments (Note 7)	—	(2,731)		—	—	
Deferred tax adjustment (Note 8)	—	—		—	(878)	
Transition tax on accumulated foreign earnings (Note 9)	—	—		—	2,327	
Tax effect of pro-forma adjustments	—	14,765		—	2,447	
Non-GAAP	<u>\$ 152,374</u>	<u>\$ 31,218</u>	20.5%	<u>\$ 302,088</u>	<u>\$ 58,987</u>	19.5%

Note 1: Acquisition and integration costs for the three months ended June 30, 2019 and March 31, 2019 and the six months ended June 30, 2019, related to the acquisition of Electro Scientific Industries, Inc. (“ESI”) which closed on February 1, 2019. During the three and six months ended June 30, 2018, we reversed a portion of costs recognized during previous periods related to the Newport acquisition, which closed during the second quarter of 2016, related to severance agreement provisions that were not met.

Note 2: Costs of revenues during the three months ended June 30, 2019 and March 31, 2019 and the six months ended June 30, 2019 includes the amortization of the step-up of inventory to fair value as a result of the ESI acquisition.

Note 3: We recorded fees and expenses during the three months ended March 31, 2019 and six months ended June 30, 2019 related to Amendment No. 5 of our Term Loan Credit Agreement. We recorded fees and expenses during the three and six months ended June 30, 2018 related to the fourth repricing of our Term Loan Credit Agreement.

Note 4: We recorded additional interest expense related to the amortization of debt issuance costs associated with our Term Loan Credit Agreement.

Note 5: We recorded restructuring costs during the three months ended June 30, 2019 and March 31, 2019 and the six months ended June 30, 2019, which consisted primarily of severance costs related to an organization-wide reduction in workforce, the consolidation of service functions in Asia and the movement of certain products to low cost regions. We also recorded expense during the three months ended March 31, 2019 and six months ended June 30, 2019 related to a contractual obligation we assumed as part of our acquisition of Newport Corporation. Restructuring costs during the three and six months ended June 30, 2018 were primarily comprised of severance costs related to transferring a portion of our shared services functions to a third party as well as the consolidation of certain shared service functions in Asia. We recorded environmental costs during the six months ended June 30, 2018, related to an Environmental Protection Agency-designated Superfund site, which was acquired as part of our acquisition of Newport Corporation.

Note 6: We recorded windfall tax benefits on the vesting of stock-based compensation.

Note 7: We recorded tax adjustments resulting from additional guidance provided by the IRS related to 2017 tax reform.

Note 8: We recorded a provisional deferred tax adjustment, which also includes the reversal of a tax accrual on a French dividend, related to U.S. tax reform legislation during the fourth quarter of 2017 and updated the provisional transition tax during the six months ended June 30, 2018.

Note 9: We adjusted the transition tax on accumulated foreign earnings related to the 2017 Tax Cut and Jobs Act during the three and six months ended June 30, 2018.

MKS Instruments, Inc.
Reconciliation of Q3-19 Guidance - GAAP Net Income to Non-GAAP Net Earnings
(In thousands, except per share data)

	Three Months Ended September 30, 2019			
	Low Guidance		High Guidance	
	\$ Amount	\$ Per Share	\$ Amount	\$ Per Share
GAAP net income	\$ 21,400	\$ 0.39	\$ 39,800	\$ 0.72
Amortization	17,200	0.31	17,200	0.31
Deferred financing costs	800	0.01	800	0.01
Integration costs	1,700	0.03	1,700	0.03
Restructuring and other costs	1,800	0.03	1,800	0.03
Tax effect of adjustments (Note 1)	(4,700)	(0.08)	(4,700)	(0.08)
Non-GAAP net earnings	<u>\$ 38,200</u>	<u>\$ 0.69</u>	<u>\$ 56,600</u>	<u>\$ 1.02</u>
Q3 -19 forecasted shares		55,300		55,300

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.