

**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 23, 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
(I.R.S. Employer
Identification No.)

**2 Tech Drive, Suite 201, Andover,
Massachusetts**
(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:

- 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 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 October 23, 2019, MKS Instruments, Inc. announced its financial results for the quarter ended September 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 October 23, 2019](#)

104 Cover Page Interactive Data File (embedded within the Inline XBRL document)

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: October 23, 2019

By: /s/ Seth H. Bagshaw

Name: Seth H. Bagshaw

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



MKS Instruments Reports Third Quarter 2019 Financial Results

- ***Quarterly revenue of \$462 million***
- ***Non-GAAP net earnings of \$62 million, or \$1.12 per diluted share***
- ***GAAP net income of \$47 million, or \$0.86 per diluted share***
- ***Completed \$50 million voluntary principal prepayment and repriced secured term loan to Libor + 175 basis points***

Andover, MA, October 23, 2019 — MKS Instruments, Inc. (NASDAQ: MKSI), a global provider of technologies that enable advanced processes and improve productivity, today reported third quarter 2019 financial results.

“We are very pleased with our financial results for the quarter, as we delivered sequential growth in our Semiconductor end-market, driven by strong product differentiation and execution, combined with an improving demand backdrop. Although our Advanced Markets remain constrained due to global macro-economic and trade uncertainty, we remain very excited about our product and market offerings into 2020 and beyond.” said Gerald Colella, Chief Executive Officer.

Mr. Colella added, “We are also very proud that MKS has been selected to the Fortune® 100 Fastest-Growing Companies List for the third year in a row, ranking #21. Our strong operational and financial execution, combined with our commitment to innovation, have underpinned our ability to thrive as a global leader in the markets we serve – and we are just getting started.”

“In the quarter, we completed our tenth voluntary principal prepayment and fifth repricing of our secured term loan since loan origination in April 2016. These actions have lowered our annualized non-GAAP interest costs by almost \$6 million based on current interest rates, and our goal is to continue to execute on de-levering the balance sheet. We exited the quarter with \$475 million in cash and short-term investments, and \$895 million of secured term loan debt,” said Seth H. Bagshaw, Senior Vice President and Chief Financial Officer.

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

	Q3 2019	Q2 2019
GAAP Results		
Net revenues	\$ 462.5	\$ 474.1
Gross margin	44.3%	44.5%
Operating margin	14.4%	13.5%
Net income	\$ 47.4	\$ 37.7
Diluted EPS	\$ 0.86	\$ 0.69
Non-GAAP Results		
Gross margin	44.3%	45.0%
Operating margin	17.6%	18.6%
Net earnings	\$ 61.6	\$ 59.9
Diluted EPS	\$ 1.12	\$ 1.09

Third Quarter 2019 Financial Results

Revenue was \$462.5 million, a decrease of 2% from \$474.1 million in the second quarter of 2019 and a decrease of 5% from \$487.2 million in the third quarter of 2018.

Net income was \$47.4 million, or \$0.86 per diluted share, compared to net income of \$37.7 million, or \$0.69 per diluted share, in the second quarter of 2019, and \$93.3 million, or \$1.70 per diluted share, in the third quarter of 2018.

Third quarter GAAP net income included a gain from the sale of long-lived assets of \$6.8 million, acquisition and integration costs of \$2.1 million associated with the acquisition of Electro Scientific Industries, Inc., or ESI, and \$1.5 million of restructuring and other costs.

Non-GAAP net earnings, which exclude special charges and credits, were \$61.6 million, or \$1.12 per diluted share, compared to \$59.9 million, or \$1.09 per diluted share, in the second quarter of 2019, and \$103.2 million or \$1.88 per diluted share, in the third quarter of 2018.

Sales to Semiconductor customers were \$223 million, an increase of 4% compared to the second quarter of 2019. Sales to Advanced Markets were \$239 million, a decrease of 8% compared to the second quarter of 2019.

Additional Financial Information

The Company had \$475 million in cash and short-term investments and \$895 million of secured term loan debt outstanding as of September 30, 2019, which is net of a \$50 million voluntary principal prepayment made during the third quarter of 2019. MKS also paid a dividend of \$10.9 million or \$0.20 per diluted share during the third quarter of 2019. The Company has available an unused \$100 million asset-based line of credit.

Fourth Quarter 2019 Outlook

Based on current business levels, the Company expects that revenue in the fourth quarter of 2019 could range from \$445 to \$495 million.

At these volumes, GAAP net income could range from \$0.58 to \$0.91 per diluted share and non-GAAP net earnings could range from \$0.85 to \$1.19 per diluted share.

Conference Call Details

A conference call with management will be held on Thursday, October 24, 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 9980809, 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, a gain from the sale of long-lived assets, windfall tax adjustments from stock-based compensation, accrued taxes on subsidiary distributions, the tax effects of the 2017 Tax Cut and Jobs Act, deferred tax adjustments 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.

Non-GAAP interest expense excludes amortization of debt issuance costs. On an annualized basis, GAAP interest savings, at the current interest rate, is approximately \$7 million, which includes approximately \$1 million of amortization of deferred financing costs.

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. 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 and any subsequent Quarterly Reports on Form 10-Q, as 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 Statements of Operations
(In thousands, except per share data)

	Three Months Ended		
	September 30, 2019	September 30, 2018	June 30, 2019
Net revenues:			
Products	\$ 386,173	\$ 426,255	\$401,326
Services	76,278	60,897	72,784
Total net revenues	462,451	487,152	474,110
Cost of revenues:			
Products	216,238	219,311	226,213
Services	41,209	35,981	36,870
Total cost of revenues	257,447	255,292	263,083
Gross profit	205,004	231,860	211,027
Research and development	41,566	31,898	41,855
Selling, general and administrative	82,101	70,822	83,236
Fees and expenses related to term loan	642	—	—
Acquisition and integration costs	2,103	36	3,240
Restructuring and other	1,525	1,364	1,242
Amortization of intangible assets	17,020	10,695	17,552
Gain on sale of long-lived assets	(6,773)	—	—
Income from operations	66,820	117,045	63,902
Interest income	1,230	1,516	1,423
Interest expense	13,542	3,719	12,674
Other (income) expense, net	(914)	326	788
Income from operations before income taxes	55,422	114,516	51,863
Provision for income taxes	7,994	21,239	14,124
Net income	<u>\$ 47,428</u>	<u>\$ 93,277</u>	<u>\$ 37,739</u>
Net income per share:			
Basic	\$ 0.86	\$ 1.71	\$ 0.69
Diluted	\$ 0.86	\$ 1.70	\$ 0.69
Cash dividends per common share	\$ 0.20	\$ 0.20	\$ 0.20
Weighted average shares outstanding:			
Basic	54,945	54,476	54,815
Diluted	55,204	54,954	55,089

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

	Three Months Ended		
	September 30, 2019	September 30, 2018	June 30, 2019
Net income	\$ 47,428	\$ 93,277	\$ 37,739
Adjustments:			
Acquisition and integration costs (Note 1)	2,103	36	3,240
Acquisition inventory step-up (Note 2)	—	—	2,484
Fees and expenses related to term loan (Note 3)	642	—	—
Amortization of debt issuance costs (Note 4)	3,053	682	1,254
Restructuring and other (Note 5)	1,525	1,364	1,242
Amortization of intangible assets	17,020	10,695	17,552
Gain on the sale of long-lived assets (Note 6)	(6,773)	—	—
Windfall tax expense (benefit) on stock-based compensation (Note 7)	256	(287)	(790)
Tax reform adjustments (Note 8)	38	—	2,731
Accrued tax on subsidiary distribution (Note 9)	—	(2,756)	—
Transition tax on accumulated foreign earnings (Note 10)	—	863	—
Pro-forma tax adjustments	(3,709)	(659)	(5,596)
Non-GAAP net earnings (Note 11)	<u>\$ 61,583</u>	<u>\$ 103,215</u>	<u>\$ 59,856</u>
Non-GAAP net earnings per diluted share (Note 11)	<u>\$ 1.12</u>	<u>\$ 1.88</u>	<u>\$ 1.09</u>
Weighted average shares outstanding	55,204	54,954	55,089
Income from operations	\$ 66,820	\$ 117,045	\$ 63,902
Adjustments:			
Acquisition and integration costs (Note 1)	2,103	36	3,240
Acquisition inventory step-up (Note 2)	—	—	2,484
Fees and expenses related to term loan (Note 3)	642	—	—
Restructuring and other (Note 5)	1,525	1,364	1,242
Amortization of intangible assets	17,020	10,695	17,552
Gain on the sale of long-lived assets (Note 6)	(6,773)	—	—
Non-GAAP income from operations (Note 12)	<u>\$ 81,337</u>	<u>\$ 129,140</u>	<u>\$ 88,420</u>
Non-GAAP operating margin (Note 12)	<u>17.6%</u>	<u>26.5%</u>	<u>18.6%</u>
Gross profit	\$ 205,004	\$ 231,860	\$211,027
Acquisition inventory step-up (Note 2)	—	—	2,484
Non-GAAP gross profit (Note 13)	<u>\$ 205,004</u>	<u>\$ 231,860</u>	<u>\$213,511</u>
Non-GAAP gross margin (Note 13)	<u>44.3%</u>	<u>47.6%</u>	<u>45.0%</u>
Interest expense	\$ 13,542	\$ 3,719	\$ 12,674
Amortization of debt issuance costs (Note 4)	3,053	682	1,254
Non-GAAP interest expense	<u>\$ 10,489</u>	<u>\$ 3,037</u>	<u>\$ 11,420</u>
Net income	\$ 47,428	\$ 93,277	\$ 37,739
Interest expense, net	12,312	2,203	11,251
Provision for income taxes	7,994	21,239	14,124
Depreciation	10,188	8,834	9,892
Amortization	17,020	10,695	17,552
EBITDA (Note 14)	<u>\$ 94,942</u>	<u>\$ 136,248</u>	<u>\$ 90,558</u>
Stock-based compensation	5,795	5,213	5,903
Acquisition and integration costs (Note 1)	2,103	36	3,240
Acquisition inventory step-up (Note 2)	—	—	2,484
Fees and expenses related to term loan (Note 3)	642	—	—
Restructuring and other (Note 5)	1,525	1,364	1,242
Gain on the sale of long-lived assets (Note 6)	(6,773)	—	—
Adjusted EBITDA (Note 15)	<u>\$ 98,234</u>	<u>\$ 142,861</u>	<u>\$103,427</u>

Note 1: Acquisition and integration costs for the three months ended September 30, 2019 and June 30, 2019, related to the acquisition of Electro Scientific Industries, Inc. (“ESI”) which closed on February 1, 2019. Acquisition and integration costs for the three months ended September 30, 2018, related to the Newport acquisition, which closed during the second quarter of 2016.

Note 2: Costs of revenues during the three 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 September 30, 2019, related to Amendment No. 6 which included the fifth repricing of our Secured Term Loan Credit Agreement and the combination of the two existing tranches of the Secured Term Loan Credit Agreement with a maturity date in February 2026.

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

Note 5: We recorded restructuring costs during the three months ended September 30, 2019 and 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. Restructuring costs during the three months ended September 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: During the three months ended September 30, 2019, we recorded a net gain on the sale of two of our buildings in Boulder, CO and three of our buildings in Portland, OR.

Note 7: We recorded windfall tax expense (benefits) on the vesting of stock-based compensation.

Note 8: We recorded tax adjustments during the three months ended September 30, 2019 and June 30, 2019 resulting from additional guidance provided by the IRS related to 2017 tax reform.

Note 9: During the three months ended September 30, 2018, we recorded an adjustment to a tax accrual related to a planned distribution of an MKS subsidiary.

Note 10: We adjusted the transition tax on accumulated foreign earnings related to the 2017 Tax Cut and Jobs Act during the three months ended September 30, 2018.

Note 11: The Non-GAAP net earnings and Non-GAAP net earnings per diluted 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 and amendment of our Secured Term Loan Credit Agreement, amortization of debt issuance costs, restructuring and other costs, amortization of intangible assets, a gain on the sale of long-lived assets, windfall tax adjustments related to stock compensation expense, tax reform adjustments, an accrued tax on subsidiary distribution, 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 12: The Non-GAAP income from operations and Non-GAAP operating margin exclude acquisition and integration costs, the amortization of the step-up of inventory to fair value, fees and expenses related to the repricing and amendment of our Secured Term Loan Credit Agreement, restructuring and other costs, amortization of intangible assets and a gain on the sale of long-lived assets.

Note 13: The Non-GAAP gross profit amounts and Non-GAAP gross margin exclude the amortization of the step-up of inventory to fair value related to the acquisition of ESI.

Note 14: EBITDA excludes net interest expense, income taxes, depreciation and amortization of intangible assets.

Note 15: 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 and amendment of our Secured Term Loan Credit Agreement, restructuring and other costs and a gain on the sale of long-lived assets.

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

	Nine Months Ended September 30,	
	2019	2018
Net revenues:		
Products	\$1,184,862	\$1,432,931
Services	215,260	181,636
Total net revenues	<u>1,400,122</u>	<u>1,614,567</u>
Cost of revenues:		
Products	672,161	747,522
Services	113,812	97,453
Total cost of revenues	<u>785,973</u>	<u>844,975</u>
Gross profit	614,149	769,592
Research and development	122,354	103,259
Selling, general and administrative	247,792	229,952
Acquisition and integration costs	35,510	(1,132)
Restructuring and other	4,690	4,374
Fees and expenses related to term loan	6,489	378
Amortization of intangible assets	50,299	32,786
Gain on sale of long-lived assets	<u>(6,773)</u>	<u>—</u>
Income from operations	153,788	399,975
Interest income	4,367	4,077
Interest expense	35,335	13,071
Other expense, net	<u>199</u>	<u>1,179</u>
Income from operations before income taxes	122,621	389,802
Provision for income taxes	<u>24,999</u>	<u>68,542</u>
Net income	<u>\$ 97,622</u>	<u>\$ 321,260</u>
Net income per share:		
Basic	\$ 1.79	\$ 5.89
Diluted	\$ 1.77	\$ 5.82
Cash dividends per common share	\$ 0.60	\$ 0.58
Weighted average shares outstanding:		
Basic	54,636	54,539
Diluted	55,045	55,171

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

	Nine Months Ended September 30,	
	2019	2018
Net income	\$ 97,622	\$321,260
Adjustments:		
Acquisition and integration costs (Note 1)	35,510	(1,132)
Acquisition inventory step-up (Note 2)	7,624	—
Fees and expenses related to term loan (Note 3)	6,489	378
Amortization of debt issuance costs (Note 4)	4,906	3,173
Restructuring and other (Note 5)	4,690	4,374
Amortization of intangible assets	50,299	32,786
Gain on sale of long-lived assets (Note 6)	(6,773)	—
Windfall tax benefit on stock-based compensation (Note 7)	(1,923)	(8,075)
Tax reform adjustments (Note 8)	2,769	—
Accrued tax on subsidiary distribution (Note 9)	—	(2,756)
Transition tax on accumulated foreign earnings (Note 10)	—	(1,464)
Deferred tax adjustment (Note 11)	—	878
Pro-forma tax adjustments	(18,474)	(3,106)
Non-GAAP net earnings (Note 12)	<u>\$182,739</u>	<u>\$346,316</u>
Non-GAAP net earnings per diluted share (Note 12)	<u>\$ 3.32</u>	<u>\$ 6.28</u>
Weighted average shares outstanding	55,045	55,171
Income from operations	\$153,788	\$399,975
Adjustments:		
Acquisition and integration costs (Note 1)	35,510	(1,132)
Acquisition inventory step-up (Note 2)	7,624	—
Fees and expenses related to term loan (Note 3)	6,489	378
Restructuring and other (Note 5)	4,690	4,374
Amortization of intangible assets	50,299	32,786
Gain on sale of long-lived assets (Note 6)	(6,773)	—
Non-GAAP income from operations (Note 13)	<u>\$251,627</u>	<u>\$436,381</u>
Non-GAAP operating margin (Note 13)	<u>18.0%</u>	<u>27.0%</u>
Gross profit	\$614,149	\$769,592
Acquisition inventory step-up (Note 2)	7,624	—
Non-GAAP gross profit (Note 14)	<u>\$621,773</u>	<u>\$769,592</u>
Non-GAAP gross margin (Note 14)	<u>44.4%</u>	<u>47.7%</u>
Interest expense	\$ 35,335	\$ 13,071
Amortization of debt issuance costs (Note 4)	4,906	3,173
Non-GAAP interest expense	<u>\$ 30,429</u>	<u>\$ 9,898</u>
Net Income	\$ 97,622	\$321,260
Interest expense, net	30,968	8,994
Provision for income taxes	24,999	68,542
Depreciation	29,564	27,120
Amortization	50,299	32,786
EBITDA (Note 15)	<u>\$233,452</u>	<u>\$458,702</u>
Stock-based compensation	20,972	22,005
Acquisition and integration costs (Note 1)	35,510	(1,132)
Acquisition inventory step-up (Note 2)	7,624	—
Fees and expenses related to term loan (Note 3)	6,489	378
Restructuring and other (Note 5)	4,690	4,374
Gain on sale of long-lived assets (Note 6)	(6,773)	—
Other adjustments	3,337	772
Adjusted EBITDA (Note 16)	<u>\$305,301</u>	<u>\$485,099</u>

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

Note 2: Costs of revenues during the nine months ended September 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 nine months ended September 30, 2019, related to Amendment No. 6 which included the fifth repricing of our Secured Term Loan Credit Agreement and the combination of the two existing tranches of the Secured Term Loan Credit Agreement with a maturity date in February 2026. We also recorded fees and expenses during the nine months ended September 30, 2019 related to Amendment No. 5 of our Secured Term Loan Credit Agreement. We recorded fees and expenses during the nine months ended September 30, 2018 related to the fourth repricing of our Secured Term Loan Credit Agreement.

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

Note 5: We recorded restructuring costs during the nine months ended September 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 nine months ended September 30, 2019 related to a legal settlement from a contractual obligation we assumed as part of our acquisition of Newport Corporation. Restructuring costs during the nine months ended September 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 nine months ended September 30, 2018, related to an Environmental Protection Agency-designated Superfund site, which was acquired as part of our acquisition of Newport Corporation.

Note 6: During the nine months ended September 30, 2019, we recorded a net gain on the sale of two of our buildings in Boulder, CO and three of our buildings in Portland, OR.

Note 7: We recorded windfall tax benefits on the vesting of stock-based compensation.

Note 8: We recorded tax adjustments during the nine months ended September 30, 2019 resulting from additional guidance provided by the IRS related to 2017 tax reform.

Note 9: During the nine months ended September 30, 2018, we recorded an adjustment to a tax accrual related to a planned distribution of an MKS subsidiary.

Note 10: We adjusted the transition tax on accumulated foreign earnings related to the 2017 Tax Cut and Jobs Act during the nine months ended September 30, 2018.

Note 11: During the nine months ended September 30, 2018, 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.

Note 12: The Non-GAAP net earnings and Non-GAAP net earnings per diluted 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 and amendment of our Secured Term Loan Credit Agreement, amortization of debt issuance costs, restructuring and other costs, amortization of intangible assets, a gain on the sale of long-lived assets, windfall tax benefits related to stock compensation expense, tax reform adjustments, an accrued tax on subsidiary distribution, transition tax on accumulated foreign earnings, a deferred tax adjustment and the related tax effect of these adjustments to reflect the expected full year effective tax rate in the related period.

Note 13: The Non-GAAP income from operations and Non-GAAP operating margin excludes acquisition and integration costs, the amortization of the step-up of inventory to fair value, fees and expenses related to the repricing and amendment of our Secured Term Loan Credit Agreement, restructuring and other costs, amortization of intangible assets and a gain on the sale of long-lived assets.

Note 14: The Non-GAAP gross profit amounts and Non-GAAP gross margin exclude the amortization of the step-up of inventory to fair value related to the acquisition of ESI.

Note 15: EBITDA excludes net interest expense, income taxes, depreciation and amortization of intangible assets.

Note 16: 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 and amendment of our Secured Term Loan Credit Agreement, restructuring and other costs, a gain on the sale of long-lived assets and other adjustments as defined in our Term Loan Credit Agreement.

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

	September 30, 2019	December 31, 2018
ASSETS		
Cash and cash equivalents	\$ 386,281	\$ 644,345
Short-term investments	88,847	73,826
Trade accounts receivable, net	327,983	295,454
Inventories	463,263	384,689
Other current assets	94,011	65,790
Total current assets	1,360,385	1,464,104
Property, plant and equipment, net	236,124	194,367
Right-of-use asset	67,632	—
Goodwill	1,054,091	586,996
Intangible assets, net	580,880	319,807
Long-term investments	10,146	10,290
Other assets	45,286	38,682
Total assets	<u>\$ 3,354,544</u>	<u>\$ 2,614,246</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Short-term debt	\$ 12,623	\$ 3,986
Accounts payable	88,078	83,825
Accrued compensation	87,045	82,350
Income taxes payable	11,048	16,358
Lease liability	20,575	—
Deferred revenue and customer advances	22,363	14,246
Other current liabilities	68,925	62,520
Total current liabilities	310,657	263,285
Long-term debt, net	873,450	343,842
Non-current deferred taxes	69,190	48,223
Non-current accrued compensation	43,704	55,598
Non-current lease liability	47,294	—
Other liabilities	36,718	30,111
Total liabilities	1,381,013	741,059
Stockholders' equity:		
Common stock	113	113
Additional paid-in capital	856,437	793,932
Retained earnings	1,149,457	1,084,797
Accumulated other comprehensive loss	(32,476)	(5,655)
Total stockholders' equity	1,973,531	1,873,187
Total liabilities and stockholders' equity	<u>\$ 3,354,544</u>	<u>\$ 2,614,246</u>

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

	Three Months Ended		
	September 30 2019	September 30 2018	June 30 2019
Cash flows from operating activities:			
Net income	\$ 47,428	\$ 93,277	\$ 37,739
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	27,208	19,529	27,444
Amortization of inventory step-up adjustment to fair value	—	—	2,484
Amortization of debt issuance costs, original issue discount and soft call premium	3,601	897	1,751
Stock-based compensation	7,373	5,213	6,929
Provision for excess and obsolete inventory	6,546	5,283	6,990
Provision (recovery) for doubtful accounts	917	263	(251)
Deferred income taxes	(6,442)	(4,695)	(180)
Gain on sale of long-lived asset	(6,773)	—	—
Other	(553)	71	851
Changes in operating assets and liabilities	(18,647)	(23,882)	(6,203)
Net cash provided by operating activities	<u>60,658</u>	<u>95,956</u>	<u>77,554</u>
Cash flows provided by (used in) investing activities:			
Purchases of investments	(53,397)	(64,958)	(73,707)
Sales of investments	4,705	4,505	3,221
Maturities of investments	52,958	44,605	21,702
Proceeds from sale of assets	41,179	—	—
Purchases of property, plant and equipment	(16,499)	(15,067)	(13,725)
Net cash provided by (used in) investing activities	<u>28,946</u>	<u>(30,915)</u>	<u>(62,509)</u>
Cash flows used in financing activities:			
Payments of short-term borrowings	(2,001)	(29,803)	(1,750)
Net proceeds from short and long-term borrowings	1,241	23,635	2,301
Payments of long-term borrowings	(52,244)	(2)	(51,625)
Repurchase of common stock	—	(75,000)	—
Dividend payments	(10,898)	(10,858)	(10,880)
Net payments related to employee stock awards	(716)	(589)	(2,025)
Net cash used in financing activities	<u>(64,618)</u>	<u>(92,617)</u>	<u>(63,979)</u>
Effect of exchange rate changes on cash and cash equivalents	(5,640)	(5)	(2,147)
Increase (decrease) in cash and cash equivalents	<u>19,346</u>	<u>(27,581)</u>	<u>(51,081)</u>
Cash and cash equivalents at beginning of period	366,935	427,431	418,016
Cash and cash equivalents at end of period	<u>\$ 386,281</u>	<u>\$ 399,850</u>	<u>\$366,935</u>

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

	Three Months Ended September 30, 2019			Three Months Ended June 30, 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	\$ 55,422	\$ 7,994	14.4%	\$ 51,863	\$ 14,124	27.2%
Adjustments:						
Acquisition and integration costs (Note 1)	2,103	—		3,240	—	
Acquisition inventory step-up (Note 2)	—	—		2,484	—	
Fees and expenses related to term loan (Note 3)	642	—		—	—	
Amortization of debt issuance costs (Note 4)	3,053	—		1,254	—	
Restructuring and other (Note 5)	1,525	—		1,242	—	
Amortization of intangible assets	17,020	—		17,552	—	
Gain on sale of long-lived assets (Note 6)	(6,773)	—		—	—	
Windfall tax (expense) benefit on stock-based compensation (Note 7)	—	(256)		—	790	
Tax reform adjustments (Note 8)	—	(38)		—	(2,731)	
Tax effect of pro-forma adjustments	—	3,709		—	5,596	
Non-GAAP	<u>\$ 72,992</u>	<u>\$ 11,409</u>	15.6%	<u>\$ 77,635</u>	<u>\$ 17,779</u>	22.9%

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

	Three Months Ended September 30, 2018		
	Income Before Income Taxes	Provision (benefit) for Income Taxes	Effective Tax Rate
GAAP	\$ 114,516	\$ 21,239	18.5%
Adjustments:			
Acquisition and integration costs (Note 1)	36	—	
Amortization of debt issuance costs (Note 4)	682	—	
Restructuring and other (Note 5)	1,364	—	
Amortization of intangible assets	10,695	—	
Windfall tax (expense) benefit on stock-based compensation (Note 7)	—	287	
Accrued tax on subsidiary distribution (Note 9)	—	2,756	
Transition tax on accumulated foreign earnings (Note 10)	—	(863)	
Tax effect of pro-forma adjustments	—	659	
Non-GAAP	<u>\$ 127,293</u>	<u>\$ 24,078</u>	18.9%

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

	Nine Months Ended September 30, 2019			Nine Months Ended September 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	\$ 122,621	\$ 24,999	20.4%	\$ 389,802	\$ 68,542	17.6%
Adjustments:						
Acquisition and integration costs (Note 1)	35,510	—		(1,132)	—	
Acquisition inventory step-up (Note 2)	7,624	—		—	—	
Fees and expenses related to term loan (Note 3)	6,489	—		378	—	
Amortization of debt issuance costs (Note 4)	4,906	—		3,173	—	
Restructuring and other (Note 5)	4,690	—		4,374	—	
Amortization of intangible assets	50,299	—		32,786	—	
Gain on sale of long-lived assets (Note 6)	(6,773)	—		—	—	
Windfall tax (expense) benefit on stock-based compensation (Note 7)	—	1,923		—	8,075	
Tax reform adjustments (Note 8)	—	(2,769)		—	—	
Accrued tax on subsidiary distribution (Note 9)	—	—		—	2,756	
Transition tax on accumulated foreign earnings (Note 10)	—	—		—	1,464	
Deferred tax adjustment (Note 11)	—	—		—	(878)	
Tax effect of pro-forma adjustments	—	18,474		—	3,106	
Non-GAAP	<u>\$ 225,366</u>	<u>\$ 42,627</u>	18.9%	<u>\$ 429,381</u>	<u>\$ 83,065</u>	19.3%

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

Note 2: Costs of revenues during the three months ended June 30, 2019 and nine months ended September 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 and nine months ended September 30, 2019, related to Amendment No. 6 which included the fifth repricing of our Secured Term Loan Credit Agreement and the combination of the two existing tranches of the Secured Term Loan Credit Agreement with a maturity date in February 2026. We also recorded fees and expenses during the nine months ended September 30, 2019 related to Amendment No. 5 of our Secured Term Loan Credit Agreement. We recorded fees and expenses during the nine months ended September 30, 2018 related to the fourth repricing of our Secured Term Loan Credit Agreement.

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

Note 5: We recorded restructuring costs during the three months ended September 30, 2019 and June 30, 2019 and the nine months ended September 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 nine months ended September 30, 2019 related to a legal settlement from a contractual obligation we assumed as part of our acquisition of Newport Corporation. Restructuring costs during the three and nine months ended September 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 nine months ended September 30, 2018, related to an Environmental Protection Agency-designated Superfund site, which was acquired as part of our acquisition of Newport Corporation.

Note 6: During the three and nine months ended September 30, 2019, we recorded a net gain on the sale of two of our buildings in Boulder, CO and three of our buildings in Portland, OR.

Note 7: We recorded windfall tax (expense) benefits on the vesting of stock-based compensation.

Note 8: We recorded tax adjustments during the three months ended September 30, 2019, June 30, 2019 and nine months ended September 30, 2019 resulting from additional guidance provided by the IRS related to 2017 tax reform.

Note 9: During the three and nine months ended September 30, 2018, we recorded an adjustment to a tax accrual related to a planned distribution of an MKS subsidiary.

Note 10: We adjusted the transition tax on accumulated foreign earnings related to the 2017 Tax Cut and Jobs Act during the three and nine months ended September 30, 2018.

Note 11: During the nine months ended September 30, 2018, 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.

MKS Instruments, Inc.
Reconciliation of Q4-19 Guidance – GAAP Net Income to Non-GAAP Net Earnings
(In thousands, except per share data)

	Three Months Ended December 31, 2019			
	Low Guidance		High Guidance	
	\$ Amount	\$ Per Share	\$ Amount	\$ Per Share
GAAP net income	\$ 32,200	\$ 0.58	\$ 50,400	\$ 0.91
Amortization	17,100	0.31	17,100	0.31
Deferred financing costs	200	0.00	200	0.00
Acquisition and integration costs	1,900	0.03	1,900	0.03
Tax effect of adjustments (Note 1)	(4,100)	(0.07)	(4,100)	(0.07)
Non-GAAP net earnings	<u>\$ 47,300</u>	<u>\$ 0.85</u>	<u>\$ 65,500</u>	<u>\$ 1.19</u>
Q4 -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.

