

**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): February 27, 2023

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, 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 February 27, 2023, MKS Instruments, Inc. announced its financial results for the quarter ended December 31, 2022. 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 February 27, 2023](#)

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 hereunto duly authorized.

MKS Instruments, Inc.

Date: February 27, 2023

By: /s/ Seth H. Bagshaw

Name: Seth H. Bagshaw

Title: Executive Vice President, Chief Financial Officer and Treasurer

MKS Instruments Reports Fourth Quarter And Full-Year 2022 Financial Results

- **Record quarterly revenue of \$1.09 billion, up 42% year-over-year, exceeding the high-end of guidance**
- **Quarterly GAAP net income per diluted share of \$0.81 and quarterly Non-GAAP net earnings per diluted share of \$2.00, exceeding the high-end of guidance**
- **Quarterly GAAP net income of \$54 million and quarterly Adjusted EBITDA of \$282 million, exceeding the high-end of guidance**
- **Quarterly operating cash flow of \$184 million and free cash flow of \$130 million**
- **Record annual revenue of \$3.55 billion, up 20% year-over-year**

Andover, Mass, Feb. 27, 2023 -- MKS Instruments, Inc. (NASDAQ: MKSI), a global provider of technologies that transform our world, today reported fourth quarter and full year 2022 financial results. The Company also announced that it will be filing a Form 12b-25 with the SEC today, as it requires additional time to file its Form 10-K for the year ended December 31, 2022 due to the ransomware event it identified on February 3, 2023.

“Fourth quarter revenue and Non-GAAP EPS exceeded the high-end of our guidance range, capping an important year for MKS in which we firmly established the company as a foundational technology solutions provider focused on the core building blocks of advanced electronic devices,” said John T.C. Lee, President and Chief Executive Officer.

Mr. Lee added, “We are well into the recovery phase of our manufacturing and service operations following the ransomware incident identified on February 3rd, and we expect these operations will be restored over the coming weeks. I am very thankful for our dedicated employees who have worked tirelessly to help bring interrupted systems back online. Our team is focused on making up for lost time, delivering on our commitments and meeting the needs of our customers, whose support during the past weeks we’ve greatly appreciated.”

“We delivered strong revenue and profitability in the fourth quarter as a result of solid operational execution,” said Seth H. Bagshaw, Executive Vice President and Chief Financial Officer. “We also generated strong free cash flow in the quarter, as evidenced by a \$100 million voluntary term loan prepayment made in December.”

Mr. Bagshaw added, “We are looking forward to returning to solid growth and profitability as our business normalizes, with a focus on driving attractive gross margins associated with our proprietary and

high-value solutions, disciplined investment in the growth of our business, and extending our long-standing track record of accelerated de-levering following an acquisition.”

First Quarter 2023 Outlook

The Company anticipates the previously announced ransomware incident identified on February 3, 2023 to have a material impact on the Company's first quarter results. The full scope of the costs and related impacts of the incident has not yet been determined. As a result, the Company will not provide its usual first quarter guidance at this time.

Prior to the ransomware event, the Company expected revenue in the first quarter of approximately \$1 billion. The Company currently estimates the impact from the incident on first quarter revenue to be at least \$200 million.

The Company expects to resume its normal guidance practice for the second quarter.

Conference Call Details

A conference call with management will be held on Tuesday, February 28, 2023 at 8:30 a.m. (Eastern Time). To participate in the call by phone, participants should visit the Investor Relations section of MKS' website at investor.mks.com and click on Events & Presentations, where you will be able to register online and receive dial-in details. We encourage participants to register and dial in to the conference call at least 15 minutes before the start of the call to ensure a timely connection. A live and archived webcast and related presentation materials will be available on the MKS Investor Relations webpage at <https://investor.mks.com/>.

About MKS Instruments

MKS Instruments enables technologies that transform our world. We deliver foundational technology solutions to leading edge semiconductor manufacturing, electronics and packaging, and specialty industrial applications. We apply our broad science and engineering capabilities to create instruments, subsystems, systems, process control solutions and specialty chemicals technology that improve process performance, optimize productivity and enable unique innovations for many of the world's leading technology and industrial companies. Our solutions are critical to addressing the challenges of miniaturization and complexity in advanced device manufacturing by enabling increased power, speed, feature enhancement, and optimized connectivity. Our solutions are also critical to addressing ever-increasing performance requirements across a wide array of specialty industrial applications. Additional information can be found at www.mks.com.

Use of Non-GAAP Financial Results

This press release includes financial measures that are not in accordance with U.S. generally accepted accounting principles (“Non-GAAP financial measures”). These Non-GAAP financial measures should be viewed in addition to, and not as a substitute for, MKS’ reported results under U.S. generally accepted accounting principles (“GAAP”), and may be different from Non-GAAP financial measures used by other companies. In addition, these Non-GAAP financial measures are not based on any comprehensive set of accounting rules or principles. 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.

For further information regarding these Non-GAAP financial measures, please refer to the tables presenting reconciliations of our Non-GAAP results to our GAAP results and the “Notes on Our Non-GAAP Financial Information” at the end of this press release.

Selected GAAP and Non-GAAP Financial Measures
(In millions, except per share data)

	Quarter			Full Year	
	Q4 2022	Q3 2022	Q4 2021	2022	2021
Net revenues					
Semiconductor	\$ 503	\$ 536	\$ 495	\$ 2,041	\$ 1,825
Electronics & Packaging	266	166	73	\$ 541	\$ 344
Specialty Industrial	316	253	196	\$ 964	\$ 780
Total net revenues	\$ 1,085	\$ 954	\$ 764	\$ 3,547	\$ 2,950
GAAP Financial Measures					
Gross margin	44.7%	40.8%	46.4%	43.6%	46.8%
Operating margin	15.0%	12.4%	23.8%	17.4%	23.7%
Net income	\$ 54	\$ 6	\$ 150	\$ 333	\$ 551
Diluted EPS	\$ 0.81	\$ 0.09	\$ 2.69	\$ 5.56	\$ 9.90
Non-GAAP Financial Measures					
Gross margin	45.9%	44.9%	46.4%	45.1%	46.8%
Operating margin	23.6%	25.1%	27.1%	24.5%	27.0%
Net earnings	\$ 133	\$ 167	\$ 168	\$ 597	\$ 634
Diluted EPS	\$ 2.00	\$ 2.74	\$ 3.02	\$ 9.97	\$ 11.38

Additional Financial Information

At December 31, 2022, the Company had \$910 million in cash and short-term investments, \$5.1 billion of secured term loan principal outstanding, and up to \$500 million of additional borrowing capacity under a revolving credit facility, subject to certain leverage ratio requirements. During the fourth quarter of 2022, the Company paid a cash dividend of \$15 million or \$0.22 per diluted share.

SAFE HARBOR FOR FORWARD-LOOKING STATEMENTS

This press release contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 regarding the future financial performance, business prospects and growth of MKS Instruments, Inc. (“MKS”, the “Company”, “our”, or “we”) and the impact of the ransomware event we identified on February 3, 2023. These statements are only predictions based on current assumptions and expectations. Any statements that are not statements of historical fact (including statements containing the words “will,” “projects,” “intends,” “believes,” “plans,” “anticipates,” “expects,” “estimates,” “forecasts,” “continues” and similar expressions) should be considered to be forward-looking statements. 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 that we make are the need to generate sufficient cash flows to service and repay the substantial indebtedness we have incurred in connection with our acquisition of Atotech Limited (“Atotech” and such transaction, the “Atotech Acquisition”), which we completed in August 2022; the terms of our existing term loans under which we incurred such debt; our entry into the chemicals technology business through the Atotech Acquisition, in which we do not have experience and which may expose us to significant additional liabilities; the risk that we are unable to integrate the Atotech Acquisition successfully or realize the anticipated synergies, cost savings and other benefits of the Atotech Acquisition; the ongoing assessment and impact of the ransomware event we identified on February 3, 2023, including legal, reputational, financial and contractual risks resulting from the incident, and other risks related to cybersecurity, data privacy and intellectual property; competition from larger, more advanced or more established companies in our markets; the ability to successfully grow our business and the businesses of Atotech and Electro Scientific Industries, Inc., which we acquired in February 2019, and financial risks associated with those and potential future acquisitions, including goodwill and intangible asset impairments; manufacturing and sourcing risks, including those associated with limited and sole source suppliers and the impact and duration of supply chain disruptions, component shortages, and price increases; changes in global demand and the impact of COVID-19 or any other pandemic, including with respect to such supply chain disruptions, component shortages and price increases; risks associated with doing business internationally, including trade compliance, regulatory restrictions on our products, components or markets, particularly the semiconductor market, and unfavorable currency exchange and tax rate fluctuations, which risks become more significant as we grow our business internationally and in China specifically; conditions affecting the markets in which we operate, including fluctuations in capital spending in the semiconductor, electronics manufacturing and automotive industries, and fluctuations in sales to our major customers; disruptions or delays from third-party service providers

upon which our operations may rely; the ability to anticipate and meet customer demand; the challenges, risks and costs involved with integrating or transitioning local and international operations of the companies we have acquired; risks associated with the attraction and retention of key personnel; potential fluctuations in quarterly results; dependence on new product development; rapid technological and market change; acquisition strategy; volatility of stock price; risks associated with chemical manufacturing and environmental regulation compliance; risks related to defective products; financial and legal risk management; and the other important factors described in MKS' Quarterly Report on Form 10-Q for the quarter ended September 30, 2022. 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. Amounts reported in this press release are preliminary and subject to finalization prior to the filing of our Annual Report on Form 10-K for the year ended December 31, 2022.

###

Company Contact:

David Ryzhik

Vice President, Investor Relations

Telephone: (978) 557-5180

Email: david.ryzhik@mksinst.com

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

	Three Months Ended			Twelve Months Ended	
	December 31, 2022	September 30, 2022	December 31, 2021	December 31, 2022	December 31, 2021
Net revenues:					
Products	\$ 965	\$ 841	\$ 668	\$ 3,119	\$ 2,579
Services	120	113	96	428	371
Total net revenues	1,085	954	764	3,547	2,950
Cost of revenues:					
Products	531	506	359	1,774	1,371
Services	69	58	50	226	199
Total cost of revenues	600	564	409	2,000	1,570
Gross profit	485	390	355	1,547	1,380
Research and development	73	63	51	241	200
Selling, general and administrative	168	126	97	488	385
Acquisition and integration costs	11	31	9	52	30
Restructuring and other	1	5	1	10	11
Amortization of intangible assets	69	47	15	146	55
Gain on sale of long-lived assets	—	—	—	(7)	—
Income from operations	163	118	182	617	699
Interest income	(2)	(1)	—	(4)	—
Interest expense	85	80	6	177	25
Other expense (income), net	15	(1)	(2)	11	9
Income before income taxes	65	40	178	433	665
Provision for income taxes	11	34	28	100	114
Net income	\$ 54	\$ 6	\$ 150	\$ 333	\$ 551
Net income per share:					
Basic	\$ 0.81	\$ 0.09	\$ 2.71	\$ 5.57	\$ 9.95
Diluted	\$ 0.81	\$ 0.09	\$ 2.69	\$ 5.56	\$ 9.90
Cash dividends per common share	\$ 0.22	\$ 0.22	\$ 0.22	\$ 0.88	\$ 0.86
Weighted average shares outstanding:					
Basic	66.6	61.0	55.5	59.7	55.4
Diluted	66.7	61.1	55.7	59.9	55.7



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

	December 31, 2022	December 31, 2021
ASSETS		
Cash and cash equivalents	\$ 909	\$ 966
Short-term investments	1	76
Trade accounts receivable, net	720	443
Inventories	977	577
Other current assets	187	85
Total current assets	2,794	2,147
Property, plant and equipment, net	800	326
Right-of-use assets	234	184
Goodwill	4,308	1,228
Intangible assets, net	3,173	576
Other assets	186	79
Total assets	<u>\$ 11,495</u>	<u>\$ 4,540</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Short-term debt	\$ 93	\$ 9
Accounts payable	426	168
Accrued compensation	101	132
Income taxes payable	51	25
Lease liabilities	26	18
Deferred revenue and customer advances	94	37
Other current liabilities	161	71
Total current liabilities	952	460
Long-term debt, net	4,834	808
Non-current deferred taxes	783	99
Non-current accrued compensation	138	49
Non-current lease liability	215	193
Other non-current liabilities	90	44
Total liabilities	7,012	1,653
Stockholders' equity:		
Common stock	—	—
Additional paid-in capital	2,142	907
Retained earnings	2,272	1,991
Accumulated other comprehensive income (loss)	69	(11)
Total stockholders' equity	4,483	2,887
Total liabilities and stockholders' equity	<u>\$ 11,495</u>	<u>\$ 4,540</u>

MKS Instruments, Inc.
Unaudited Consolidated Statements of Cash Flows
(In millions)

	Three Months Ended			Twelve Months Ended	
	December 31, 2022	September 30, 2022	December 31, 2021	December 31, 2022	December 31, 2021
Cash flows from operating activities:					
Net income	\$ 54	\$ 6	\$ 150	\$ 333	\$ 551
Adjustments to reconcile net income to net cash provided by operating activities:					
Depreciation and amortization	96	64	28	216	104
Amortization of inventory step-up adjustment to fair value	13	39	—	52	
Unrealized loss (gain) on derivatives not designated as hedging instruments	7	(1)	(3)	13	(4)
Amortization of debt issuance costs and original issue discount	10	46	—	56	2
Gain on sale of long-lived assets	—	—	—	(7)	—
Stock-based compensation	13	10	9	45	37
Provision for excess and obsolete inventory	11	3	3	21	16
Deferred income taxes	(50)	6	(6)	(46)	2
Other	—	1	2	3	4
Changes in operating assets and liabilities, net of acquired assets and liabilities	30	25	11	(157)	(72)
Net cash provided by operating activities	184	199	194	529	640
Cash flows from investing activities:					
Acquisition of business, net of cash acquired	—	(4,473)	—	(4,473)	(268)
Purchases of investments	—	—	—	(1)	(497)
Maturities of investments	—	—	135	77	478
Sales of investments	—	—	35	—	169
Proceeds from sale of long-lived assets	1	—	—	9	—
Purchases of property, plant and equipment	(54)	(26)	(23)	(164)	(87)
Net cash (used in) provided by investing activities	(53)	(4,499)	147	(4,552)	(205)
Cash flows from financing activities:					
Proceeds from borrowings, net of deferred financing fees paid	3	4,979	—	4,988	1
Payments of borrowings	(127)	(826)	(2)	(962)	(15)
Payments of finance leases	(2)	—	—	(2)	—
Dividend payments	(15)	(13)	(12)	(52)	(47)
Net proceeds (payments) related to employee stock awards	4	—	11	(1)	(4)
Net cash (used in) provided by financing activities	(137)	4,140	(3)	3,971	(65)
Effect of exchange rate changes on cash and cash equivalents	31	(21)	(5)	(5)	(12)
Increase (decrease) in cash and cash equivalents	25	(181)	333	(57)	358
Cash and cash equivalents at beginning of period	884	1,065	633	966	608
Cash and cash equivalents at end of period	\$ 909	\$ 884	966	\$ 909	\$ 966

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

MKS Instruments, Inc.
Schedule Reconciling Selected Non-GAAP Financial Measures
(In millions, except per share data)

	Three Months Ended			Twelve Months Ended	
	December 31, 2022	September 30, 2022	December 31, 2021	December 31, 2022	December 31, 2021
Net income	\$ 54	\$ 6	\$ 150	\$ 333	\$ 551
Acquisition and integration costs (Note 1)	11	31	9	52	30
Acquisition inventory step-up (Note 2)	13	39	—	52	—
Amortization of debt issuance costs (Note 3)	7	43	—	51	1
Restructuring and other (Note 4)	1	5	1	10	11
Amortization of intangible assets	69	47	15	146	55
Gain on sale of long-lived assets (Note 5)	—	—	—	(7)	—
Currency hedge (gain) loss (Note 6)	—	—	(3)	(5)	7
Reversal of indefinite reinvestment assertion (Note 7)	—	30	—	30	—
Windfall tax benefit on stock-based compensation (Note 8)	—	—	—	(1)	(4)
Withholding tax related to Brexit (Note 9)	—	—	—	—	3
Tax effect of Non-GAAP adjustments (Note 10)	(22)	(34)	(4)	(64)	(20)
Non-GAAP net earnings	<u>\$ 133</u>	<u>\$ 167</u>	<u>\$ 168</u>	<u>\$ 597</u>	<u>\$ 634</u>
Non-GAAP net earnings per diluted share	<u>\$ 2.00</u>	<u>\$ 2.74</u>	<u>\$ 3.02</u>	<u>\$ 9.97</u>	<u>\$ 11.38</u>
Weighted average diluted shares outstanding	66.7	61.1	55.7	59.9	55.7
Net cash provided by operating activities	\$ 184	\$ 199	\$ 194	\$ 529	\$ 640
Purchases of property, plant and equipment	(54)	(26)	(23)	(164)	(87)
Free cash flow	<u>\$ 130</u>	<u>\$ 173</u>	<u>\$ 171</u>	<u>\$ 365</u>	<u>\$ 553</u>

MKS Instruments, Inc.
Schedule Reconciling Selected Non-GAAP Financial Measures
(In millions)

	Three Months Ended			Twelve Months Ended	
	December 31, 2022	September 30, 2022	December 31, 2021	December 31, 2022	December 31, 2021
Gross profit	\$ 485	\$ 390	\$ 355	\$ 1,547	\$ 1,380
Gross margin	44.7%	40.8%	46.4%	43.6%	46.8%
Acquisition inventory step-up (Note 2)	13	39	—	52	—
Non-GAAP gross profit	\$ 498	\$ 429	\$ 355	\$ 1,599	\$ 1,380
Non-GAAP gross margin	45.9%	44.9%	46.4%	45.1%	46.8%
Operating expenses	\$ 322	\$ 272	\$ 173	\$ 930	\$ 681
Acquisition and integration costs (Note 1)	11	31	9	52	30
Restructuring and other (Note 4)	1	5	1	10	11
Gain on sale of long-lived assets (Note 5)	—	—	—	(7)	—
Amortization of intangible assets	69	47	15	146	55
Non-GAAP operating expenses	\$ 242	\$ 189	\$ 148	\$ 729	\$ 585
Income from operations	\$ 163	\$ 118	\$ 182	\$ 617	\$ 699
Acquisition and integration costs (Note 1)	11	31	9	52	30
Acquisition inventory step-up (Note 2)	13	39	—	52	—
Restructuring and other (Note 4)	1	5	1	10	11
Gain on sale of long-lived assets (Note 5)	—	—	—	(7)	—
Amortization of intangible assets	69	47	15	146	55
Non-GAAP income from operations	\$ 257	\$ 240	\$ 207	\$ 870	\$ 795
Non-GAAP operating margin	23.6%	25.1%	27.1%	24.5%	27.0%
Interest expense, net	\$ 83	\$ 79	\$ 6	\$ 173	\$ 25
Amortization of debt issuance costs (Note 3)	7	43	—	51	1
Non-GAAP interest expense, net	\$ 75	\$ 36	\$ 6	\$ 122	\$ 24
Net income	\$ 54	\$ 6	\$ 150	\$ 333	\$ 551
Interest expense, net	83	79	6	173	25
Provision for income taxes	11	34	28	100	114
Depreciation	27	17	13	70	49
Amortization	69	47	15	146	55
EBITDA	\$ 244	\$ 183	\$ 212	\$ 822	\$ 794
Stock-based compensation	13	10	9	45	37
Acquisition and integration costs (Note 1)	11	31	9	52	30
Acquisition inventory step-up (Note 2)	13	39	—	52	—
Restructuring and other (Note 4)	1	5	1	10	11
Gain on sale of long-lived assets (Note 5)	—	—	—	(7)	—
Currency hedge (gain) loss (Note 6)	—	—	(3)	(5)	7
Adjusted EBITDA	\$ 282	\$ 268	\$ 228	\$ 969	\$ 879
Adjusted EBITDA margin	26.0%	28.0%	29.9%	27.3%	29.8%

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

	Three Months Ended December 31, 2022			Three Months Ended December 31, 2021		
	Income Before Income Taxes	Provision for Income Taxes	Effective Tax Rate	Income Before Income Taxes	Provision for Income Taxes	Effective Tax Rate
GAAP	\$ 65	\$ 11	17.1%	\$ 178	\$ 28	15.9%
Acquisition and integration costs (Note 1)	11	—		9	—	
Acquisition inventory step-up (Note 2)	13	—		—	—	
Amortization of debt issuance costs (Note 3)	7	—		—	—	
Restructuring and other (Note 4)	1	—		1	—	
Amortization of intangible assets	69	—		15	—	
Currency hedge (gain) loss (Note 6)	—	—		(3)	—	
Tax effect of Non-GAAP adjustments (Note 10)	—	22		—	4	
Non-GAAP	<u>\$ 166</u>	<u>\$ 33</u>	<u>19.9%</u>	<u>\$ 200</u>	<u>\$ 32</u>	<u>16.3%</u>

	Three Months Ended September 30, 2022		
	Income Before Income Taxes	Provision (benefit) for Income Taxes	Effective Tax Rate
GAAP	\$ 40	\$ 34	85.5%
Acquisition and integration costs (Note 1)	31	—	
Acquisition inventory step-up (Note 2)	39	—	
Amortization of debt issuance costs (Note 3)	43	—	
Restructuring and other (Note 4)	5	—	
Amortization of intangible assets	47	—	
Reversal of indefinite reinvestment assertion (Note 7)	—	(30)	
Tax effect of Non-GAAP adjustments (Note 10)	—	34	
Non-GAAP	<u>\$ 204</u>	<u>\$ 37</u>	<u>18.0%</u>

	Twelve Months Ended December 31, 2022			Twelve Months Ended December 31, 2021		
	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	\$ 433	\$ 100	23.1%	\$ 665	\$ 114	17.1%
Acquisition and integration costs (Note 1)	52	—		30	—	
Acquisition inventory step-up (Note 2)	52	—		—	—	
Amortization of debt issuance costs (Note 3)	51	—		1	—	
Restructuring and other (Note 4)	10	—		11	—	
Amortization of intangible assets	146	—		55	—	
Gain on sale of long-lived assets (Note 5)	(7)	—		—	—	
Currency hedge (gain) loss (Note 6)	(5)	—		7	—	
Reversal of indefinite reinvestment assertion (Note 7)	—	(30)		—	—	
Windfall tax benefit on stock-based compensation (Note 8)	—	1		—	4	
Withholding tax related to Brexit (Note 9)	—	—		—	(3)	
Tax effect of Non-GAAP adjustments (Note 10)	—	64		—	20	
Non-GAAP	<u>\$ 731</u>	<u>\$ 134</u>	<u>18.4%</u>	<u>\$ 769</u>	<u>\$ 136</u>	<u>17.7%</u>

MKS Instruments, Inc.
Notes on Our Non-GAAP Financial Information

Non-GAAP financial measures adjust GAAP financial measures for the items listed below. These Non-GAAP financial measures should be viewed in addition to, and not as a substitute for, MKS' reported GAAP results, and may be different from Non-GAAP financial measures used by other companies. In addition, these Non-GAAP financial measures are not based on any comprehensive set of accounting rules or principles. 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. Totals presented may not sum and percentages may not recalculate using figures presented due to rounding.

Note 1: Acquisition and integration costs during the three and twelve months ended December 31, 2022 and the three months ended September 30, 2022 primarily related to our acquisition of Atotech (the "Atotech Acquisition"). Acquisition and integration costs during the three and twelve months ended December 31, 2021 primarily related to our acquisition of Photon Control Inc. ("Photon Control") in July 2021 and the Atotech Acquisition. Acquisition and integration costs during the twelve months ended December 31, 2021 also included costs related to a proposed acquisition that was not consummated.

Note 2: Costs of revenues during the three and twelve months ended December 31, 2022 and the three months ended September 30, 2022 include the amortization from the step-up of inventory to fair value as a result of the Atotech Acquisition.

Note 3: We recorded additional interest expense related to the amortization of debt issuance costs associated with our new and prior term loan facilities.

Note 4: Restructuring and other costs during the three months ended December 31, 2022 primarily related to the closure of two facilities in Europe and movement of certain products to low cost regions. Restructuring and other costs during the three months ended September 30, 2022 primarily related to executive payments made related to the Atotech Acquisition. Restructuring and other costs during the twelve months ended December 31, 2022 primarily related to executive payments made related to the Atotech Acquisition, severance costs due to a global cost-saving initiative, the closure of two facilities in Europe and movement of certain products to low cost regions. Restructuring and other costs during the three and twelve months ended December 31, 2021 primarily related to severance costs due to a global cost saving initiative, costs related to the closure of two facilities in Europe and movement of certain products to low cost regions. In addition, restructuring and other costs during the twelve months ended December 31, 2021 included duplicate facility costs attributed to entering into new facility leases.

Note 5: We recorded a gain on the sale of a minority interest investment in a private company.

Note 6: We realized a gain in the twelve months ended December 31, 2022 from a euro currency contract used to hedge our financing in connection with the Atotech Acquisition. The contract expired on January 31, 2022. We recorded a fair value gain from the aforementioned euro currency contract in the three and twelve months ended December 31, 2021. We also recorded a fair value loss in the twelve months ended December 31, 2021 from Canadian dollar contracts used to hedge the funding of our acquisition of Photon Control.

Note 7: We no longer intend to indefinitely reinvest earnings of our foreign subsidiaries after the Atotech Acquisition. Additional income tax expense was recorded to reflect an estimate of withholding taxes that would be due on repatriation of prior period earnings.

Note 8: We recorded windfall tax benefits on the vesting of stock-based compensation.

Note 9: We recorded additional withholding taxes on intercompany undistributed earnings following the United Kingdom's withdrawal from the European Union.

Note 10: Non-GAAP adjustments are tax effected at applicable statutory rates resulting in a difference between the GAAP and Non-GAAP tax rates.
