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): May 03, 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 following provisions:	intended to simultaneously sa	atisfy the filing obligation of the registrant under any of the						
Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)								
\square Soliciting material pursuant to Rule 14a-12 under the	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:								
	Trading							
Title of each class	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								
If an emerging growth company, indicate by check mark if or revised financial accounting standards provided pursuar	9							

Item 2.02 Results of Operations and Financial Condition.

On May 3, 2023, MKS Instruments, Inc. announced its financial results for the quarter ended March 31, 2023. 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 May 3, 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: May 3, 2023 By: /s/ Seth H. Bagshaw

Name: Seth H. Bagshaw

Title: Executive Vice President, Chief Financial Officer and Treasurer



MKS Instruments Reports First Quarter 2023 Financial Results

- Global operations restored following ransomware incident
- Revenue of \$794 million
- GAAP net loss per diluted share of \$0.64
- Non-GAAP net earnings per diluted share of \$0.48
- Operating cash flow of \$37 million and free cash flow of \$20 million

Andover, MA, May 3, 2023 -- MKS Instruments, Inc. (NASDAQ: MKSI), a global provider of enabling technologies that transform our world, today reported first quarter 2023 financial results.

"We have restored our global operations following the ransomware incident we identified in February and are on track to meet our commitment to substantially recover revenue by the end of the second quarter," said John T.C. Lee, President and Chief Executive Officer. "Thanks to the dedication, hard work, and ingenuity of our 10,000-plus employees, we are a stronger and more resilient company today than we have ever been."

Mr. Lee added, "Amid macro and end market-driven softness entering the second quarter, we are making excellent progress integrating Atotech, which positions MKS to capitalize on a number of attractive long-term opportunities with our portfolio of foundational solutions across the semiconductor, electronics and packaging, and specialty industrial markets."

"We executed well in ramping factory utilization as we emerged from the ransomware incident, which, combined with prudent cost control, allowed us to deliver positive free cash flow in the first quarter, despite the unusual challenges we faced," said Seth H. Bagshaw, Executive Vice President and Chief Financial Officer.

Mr. Bagshaw added, "Moving forward, we are focused on resuming strong free cash flow generation, realizing acquisition synergies and executing our disciplined strategy of de-levering our balance sheet."

Second Quarter 2023 Outlook

The Company expects for the second quarter of 2023, revenue of \$980 million, plus or minus \$50 million, Adjusted EBITDA of \$223 million, plus or minus \$27 million, and Non-GAAP net earnings per diluted share of \$1.13, plus or minus \$0.29.

Conference Call Details

A conference call with management will be held on Thursday, May 4, 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 Investor Relations section of the MKS website.

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.

MKS is not providing a quantitative reconciliation of forward-looking Non-GAAP net earnings per diluted share and Adjusted EBITDA to their most directly comparable GAAP financial measures because it is unable to estimate with reasonable certainty the ultimate timing or amount of certain significant items without unreasonable efforts. These items include, but are not limited to, acquisition and integration costs, amortization of intangible assets, ransomware remediation costs, restructuring and other expense, asset impairment, debt refinancing, prepayments of term loan principal, and the income tax effect of these items. These items are uncertain, depend on various factors, including, but not limited to, our acquisition of Atotech Limited ("Atotech") in August 2022 (the "Atotech Acquisition"), timing of ransomware remediation, and interest rate and refinancing environment, and could have a material impact on GAAP reported results for the relevant period.

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)

	Q	1 2023	Q4 2022		Q1 2022
Net Revenues					
Semiconductor	\$	309	\$ 503	\$	488
Electronics and Packaging		222	266		60
Specialty Industrial		263	316		194
Total net revenues	\$	794	\$ 1,085	\$	742
GAAP Financial Measures					
Gross margin		42.2%	44.7	%	45.0%
Operating margin		0.1%	15.0	%	23.1%
Net (loss) income	\$	(42)	\$ 54	\$	143
Diluted (loss) earnings per share	\$	(0.64)	\$ 0.81	\$	2.57
Non-GAAP Financial Measures					
Gross margin		42.2%	45.91	%	45.0%
Operating margin		12.1%	23.6	%	25.6%
Net earnings	\$	32	\$ 133	\$	151
Diluted earnings per share	\$	0.48	\$ 2.00	\$	2.71

Additional Financial Information

At March 31, 2023, the Company had \$880 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 first quarter of 2023, 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 incident 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 incurred in connection with the Atotech Acquisition; the terms of our existing credit facilities 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 of the ransomware incident 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' Annual Report on Form 10-K for the year ended December 31, 2022 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. Amounts reported in this press release are preliminary and subject to finalization prior to the filing of our Quarterly Report on Form 10-Q for the quarter ended March 31, 2023.

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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					
	March 31,		Decer	nber 31,		March 31,
		2023	2	022		2022
Net revenues:						_
Products	\$	712	\$	965	\$	648
Services		82		120		94
Total net revenues		794		1,085		742
Cost of revenues:						
Products		409		531		360
Services		50		69		48
Total cost of revenues (exclusive of amortization shown separately below)		459		600		408
Gross profit		335		485		334
Research and development		72		73		52
Selling, general and administrative		174		168		92
Acquisition and integration costs		6		11		8
Restructuring and other		1		1		2
Amortization of intangible assets		81		69		15
Gain on sale of long-lived assets		<u> </u>		<u> </u>		(7)
Income from operations		1		163		172
Interest income		(3)		(2)		_
Interest expense		85		85		6
Other (income) expense, net		(2)		15		(5)
(Loss) income before income taxes		(79)		65		171
(Benefit) provision for income taxes		(37)		11		28
Net (loss) income	\$	(42)	\$	54	\$	143
Net (loss) income per share:						
Basic	\$	(0.64)	\$	0.81	\$	2.58
Diluted	\$	(0.64)	\$	0.81	\$	2.57
Cash dividend per common share	\$	0.22	\$	0.22	\$	0.22
Weighted average shares outstanding:						
Basic		66.7		66.6		55.6
Diluted		66.7		66.7		55.8

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

	<u> </u>	March 31, 2023		cember 31, 2022
ASSETS				
Cash and cash equivalents	\$	880	\$	909
Short-term investments		1		1
Accounts receivable, net		572		720
Inventories		1,058		977
Other current assets		237		187
Total current assets		2,748		2,794
Property, plant and equipment, net		794		800
Right-of-use assets, net		240		234
Goodwill		4,327		4,308
Intangible assets, net		3,108		3,173
Other assets		149		186
Total assets	\$	11,366	\$	11,495
LIABILITIES AND STOCKHOLDERS' EQUITY				
Short-term debt	\$	88	\$	93
Accounts payable		372		426
Other current liabilities		416		433
Total current liabilities		876		952
Long-term debt, net		4,837		4,834
Non-current deferred taxes		751		783
Non-current accrued compensation		138		138
Non-current lease liabilities		219		215
Other liabilities		94		90
Total liabilities		6,915		7,012
Stockholders' equity				
Common stock		_		_
Additional paid-in capital		2,154		2,142
Retained earnings		2,215		2,272
Accumulated other comprehensive income		82		69
Total stockholders' equity		4,451		4,483
Total liabilities and stockholders' equity	\$	11,366	\$	11,495

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

	Three Months Ended				
	M	farch 31, 2023	December 31, 2022		March 31, 2022
Cash flows from operating activities:					
Net (loss) income	\$	(42)	\$ 54	\$	143
Adjustments to reconcile net (loss) income to net cash provided by operating activities:					
Depreciation and amortization		107	96		28
Amortization of inventory step-up adjustment to fair value		_	13		_
Unrealized loss on derivatives not designated as hedging instruments		13	7		3
Amortization of debt issuance costs and original issue discounts		8	10		_
Gain on sale of long-lived assets			_		(7)
Stock-based compensation		18	13		8
Provision for excess and obsolete inventory		18	11		4
Deferred income taxes		(10)	(50)		(2)
Changes in operating assets and liabilities, net of acquired assets and liabilities		(7 <u>5</u>)	30		(136)
Net cash provided by operating activities		37	184		41
Cash flows from investing activities:					
Maturities of investments		_	_		35
Proceeds from sale of long-lived assets		_	1		7
Purchases of property, plant and equipment		(17)	(54)		(19)
Net cash (used in) provided by investing activities		(17)	(53)	_	23
Cash flows from financing activities:					
Proceeds from borrowings		2	3		3
Payments of borrowings		(23)	(127)		(2)
Dividend payments		(15)	(15)		(12)
Net (payments) proceeds related to employee stock awards		(6)	4		(6)
Other financing activities		(1)	(2)		_
Net cash used in financing activities		(43)	(137)		(17)
Effect of exchange rate changes on cash and cash equivalents	-	(6)	31		(2)
(Decrease) increase in cash and cash equivalents		(29)	25		45
Cash and cash equivalents at beginning of period		909	884		966
Cash and cash equivalents at end of period	\$	880	\$ 909	\$	1,011
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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				
		March 31,	December 31,	March 31,	
		2023	2022	2022	
Net (loss) income	\$	(42)	\$ 54	\$	143
Acquisition and integration costs (Note 1)		6	11		8
Acquisition inventory step-up (Note 2)		_	13		_
Restructuring and other (Note 3)		1	1		2
Amortization of intangible assets		81	69		15
Amortization of debt issuance costs (Note 4)		6	7		_
Ransomware incident (Note 5)		7	_		_
Gain on sale of long-lived assets (Note 6)		_	_		(7)
Currency hedge gain (Note 7)		_	_		(5)
Windfall tax benefit on stock-based compensation (Note 8)		_	_		(1)
Foreign tax rate adjustment (Note 9)		(3)	_		_
Tax effect of Non-GAAP adjustments (Note 10)		(24)	(22)		(4)
Non-GAAP net earnings	\$	32	\$ 133	\$	151
Non-GAAP net earnings per diluted share	\$	0.48	\$ 2.00	\$	2.71
Weighted average diluted shares outstanding		66.8	66.7		55.8
Net cash provided by operating activities	\$	37	\$ 184	\$	41
Purchases of property, plant and equipment		(17)	(54)		(19)
Free cash flow	\$	20	\$ 130	\$	22

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

		 Three Months Ended				
		March 31,		ecember 31,	March 31,	
Gruss margin 42.2% 46.7% 45.0% Acquisition inventory step-up (Note 2) 335 468* 334 Non-GAAP gross margin 42.2% 45.9% 45.0% Operating expenses 334 32.2 45.0% Acquisition and integration costs (Note 1) 6 31.1 8 Restructuring and other (Note 3) 7 - - Gain on sale of long-lived assets (Note 6) 3 24.2 \$ 1.5 Non-GAAP prostating expenses \$ 24.2 \$ 1.4 2 Amortization of intangible assets \$ 2.2 \$ 1.7 Onn-GAAP prostating expenses \$ 2.4 \$ 1.4 Income from operations \$ 2.1 \$ 1.7 Operating margin \$ 1.1 \$ \$ 1.7 \$ 1.7 \$ \$ 1.7 \$ \$ 1.7 \$ \$ 1.7 \$ \$ \$ \$ \$ \$ \$ \$		 2023		2022		2022
Acquisition inventory step-up (Note 2) 33 49 34 Non-GAAP gross margin 422 45,9% 34 Operating expenses \$ 344 \$ 322 \$ 162 Acquisition and integration costs (Note 1) 6 11 8 Restructuring and other (Note 5) 7 - - Acquisition and integration costs (Note 6) 7 - - Acquisition and integration costs (Note 6) 8 18 69 15 Acquisition intention from a pasted sets (Note 6) 8 2 2 14 Acquisition intention from from from from from from from from	Gross profit	\$ 335	\$	485	\$	334
Non-GANP gross profit 335 489 334 Non-GANP gross margin 422% 45.9% 45.0% Operating expenses \$ 334 \$ 322 \$ 102 Acquisition and integration costs (Note 1) \$ 6 11 \$ 8 Restricturing and other (Note 3) 7 7 7 Gain on sale of long-lived assets (Note 6) 7 9 7 7 Gain on sale of long-lived assets (Note 6) 8 10 9 15 15 Annotration of intangible assets 8 2 20 1 1 2 14 1 2 1 1 2 1 1 2 1 1 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 2 1 2 1 2 2 1 2 1 2 2 2 1 2	Gross margin	42.2 %		44.7 %		45.0 %
Non-GAAP gross margin 42.5% 45.9% 45.0% Operating expenses \$ 334 \$ 322 \$ 162 Acquisition and integration costs (Note 1) \$ 1 \$ 2 Restructuring and other (Note 3) \$ 1 \$ 2 \$ 2 Rain on sale of long-lived assets (Note 6) \$ 7 \$ 7 \$ 7 Action of long-lived assets (Note 6) \$ 240 \$ 150 \$ 150 Non-GAAP operating expenses \$ 240 \$ 240 \$ 140 Non-GAAP operating expenses \$ 240 \$ 140 \$ 150 Non-GAAP operating expenses \$ 101 \$ 150 \$ 210 Accousition and integration costs (Note 1) \$ 150 \$ 210 \$ 20 Accounting any form operations \$ 1 \$ 2 22 Acquisition and integration costs (Note 2) \$ 7 \$ 1 \$ 2 2 Acquisition and integration costs (Note 2) \$ 7 \$ 1 \$ 2 2 2 \$ 1 \$ 2 2 \$ 1 \$ 1 \$ 2 2 \$ 1 \$ 1 \$ 2 \$ 2 \$ 1	Acquisition inventory step-up (Note 2)	 <u> </u>		13		<u> </u>
Operating expenses \$ 334 \$ 322 \$ 162 Acquisition and integration costs (Note 1) 6 11 8 Restructuring and other (Note 3) 7	Non-GAAP gross profit	335		498		334
Acquisition and integration costs (Note 1) 6 11 8 Restructuring and other (Note 3) 1 1 1 2 Ransonware incident (Note 5) 7 — — Gain on sale of long-lived assets (Note 6) — — — (7) Amortization of intangible assets \$ 3.1 6.9 \$ 15 Non-GAAP operating expenses \$ 2.40 \$ 2.42 \$ 144 Income from operations \$ 1 16.3 \$ 1.72 Operating margin 0.1% \$ 1.1 8 - Acquisition inventory step-up (Note 2) — 13 — - - 1.2 2 2 2 2.3 -	Non-GAAP gross margin	 42.2 %		45.9 %		45.0 %
Restructuring and other (Note 3) 1 1 2 Ransomware incident (Note 5) 7 — — Gain on sale of long-lived assets (Note 6) — — (7) Amortization of intangible assets 81 69 15 Non-GAAP operating expenses \$ 240 \$ 242 \$ 144 Income from operations 0.1% 15.0% 23.1%	Operating expenses	\$ 334	\$	322	\$	162
Ransomware incident (Note 5) 7 —	Acquisition and integration costs (Note 1)	6		11		8
Gain on sale of long-lived assets (Note 6) — — C/Y Amortization of intangible assets 81 69 15 Non-GAAP operating expenses 5 240 \$ 242 \$ 144 Income from operations \$ 11 \$ 163 \$ 172 Operating margin 0.1% 15.0% \$ 23.1% Acquisition inventory step-up (Note 2) - 13 - - Restricturing and other (Note 3) 1 1 2 2 Ransomware incident (Note 5) - <td>Restructuring and other (Note 3)</td> <td>1</td> <td></td> <td>1</td> <td></td> <td>2</td>	Restructuring and other (Note 3)	1		1		2
Amortization of intangible assets 81 69 15 Non-GAAP operating expenses \$ 240 \$ 242 \$ 144 Income from operations \$ 15 \$ 163 \$ 212 Operating margin 0.1% 15.0% 23.1% Acquisition inventory step-up (Note 2) 6 11 8 Acquisition mentory step-up (Note 3) 1 1 1 2 Restructuring and other (Note 3) 7 — — — Restructuring and other (Note 3) 81 6 1 2 Restructuring and other (Note 6) 7 — — — Gain on sale of long-lived assets (Note 6) 81 69 5 5 15 Amortization of intangible assets 81 69 5 25 10 15 Non-GAAP income from operations 8 96 25 8 6 7 — — 6 7 — — 6 6 7 — — 6 15 14	Ransomware incident (Note 5)	7		_		_
Non-GAAP operating expenses \$ 240 \$ 242 \$ 142 Income from operations \$ 15 \$ 172 \$ 150 \$ 172 Operating margin 6 11 \$ 8 \$ 18 \$ 8 \$ 20 \$ 18 \$ 8 \$ 20 <t< td=""><td>Gain on sale of long-lived assets (Note 6)</td><td>_</td><td></td><td>_</td><td></td><td>(7)</td></t<>	Gain on sale of long-lived assets (Note 6)	_		_		(7)
Income from operations S	Amortization of intangible assets	81		69		15
Operating margin 0.1% 15.0% 23.1% Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) 13 Restructuring and other (Note 3) 1 1 2 Ransomware incident (Note 5) 7 7 Gain on sale of long-lived assets (Note 6) 7 Amortization of intangible assets 81 69 15 Non-GAAP income from operations \$ 96 \$ 257 \$ 190 Non-GAAP operating margin 8 8 6 15 Amortization of debt issuance costs (Note 4) 6 7 Non-GAAP income from costs (Note 4) 6 7	Non-GAAP operating expenses	\$ 240	\$	242	\$	144
Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) — 13 — Restructuring and other (Note 3) 1 1 1 2 Ransomware incident (Note 5) 7 — — (7) Amortization of intangible assets (Note 6) — — (7) Amortization of intangible assets (Note 6) 81 69 15 Non-GAAP income from operations \$ 96 \$ 257 \$ 190 Non-GAAP income from operations \$ 12.1% 23.6% 25.6% Interest expense, net 82 83 6 Amortization of debt issuance costs (Note 4) 6 7 — Non-GAAP interest expense, net 82 83 6 Met (loss) income \$ 42 5 143 Interest expense, net 82 83 6 (Benefit) provision for income taxes (37) 11 28 (Benefit) provision for income taxes (37) 11 28 Depreciation <td< td=""><td>Income from operations</td><td>\$ 1</td><td>\$</td><td>163</td><td>\$</td><td>172</td></td<>	Income from operations	\$ 1	\$	163	\$	172
Acquisition inventory step-up (Note 2) — 13 — Restructuring and other (Note 3) 1 1 2 Ransomware incident (Note 5) 7 — — Gain on sale of long-lived assets (Note 6) — — 7 Amortization of intangible assets 81 69 15 Non-GAAP picome from operations \$ 96 \$ 257 \$ 190 Non-GAAP operating margin 82 83 6 Interest expense, net 82 83 6 Amortization of debt issuance costs (Note 4) 6 7 — Non-GAAP interest expense, net 82 83 6 Net (loss) income \$ 42 54 \$ 143 Interest expense, net 82 83 6 (Benefit) provision for income taxes (37) 11 28 Depreciation 26 27 13 Amortization of intangible assets 81 60 15 EBITDA \$ 110 \$ 244 \$ 205 Stock-based comp	Operating margin	0.1 %		15.0 %		23.1 %
Restructuring and other (Note 3) 1 1 2 Ransomware incident (Note 5) 7 — — Gain on sale of long-lived asserts (Note 6) — — — 7 — 7 — 7 — 7 9 10 8 9 8 257 8 190 9 9 25.5% 190 9 9 25.6% 190 9 9 25.6% 190 9 25.6% 190 9 25.6% 190 9 25.6% 190 9 25.6% 190 25.6% 190 25.6% 190 25.6% 190 25.6% 190 25.6% 190 25.6% 190 25.6% 190 25.6% 190 25.6% 190 25.6% 190 25.6%	Acquisition and integration costs (Note 1)	6		11		8
Ransomware incident (Note 5) 7 — — Gain on sale of long-lived assets (Note 6) — — (7) Amortization of intangible assets 81 69 15 Non-GAAP income from operations \$ 96 \$ 257 \$ 190 Non-GAAP operating margin 121." 23.6% 25.6% Interest expense, net 8 6 7 — Non-GAAP interest expense, net 6 7 — Not (Joss) income \$ 42 \$ 54 \$ 143 Interest expense, net 82 83 6 Net (Joss) income 82 83 6 Net (Joss) income 32 11 28 Met (Benefit) provision for income taxes 33 1 1 28 Depreciation 26 27 13 28 Depreciation of intangible assets 81 69 15 25 EBITDA \$ 11 69 15 25 20 25 Stock-based compensation 8<	Acquisition inventory step-up (Note 2)	_		13		_
Gain on sale of long-lived assets (Note 6) — — — (7) Amortization of intangible assets 81 69 15 Non-GAAP income from operations \$ 96 \$ 257 \$ 190 Non-GAAP operating margin 82 83 6 Interest expense, net 6 7 — Amortization of debt issuance costs (Note 4) 6 7 — Non-GAAP interest expense, net 76 75 6 Net (Joss) income \$ 42 \$ 54 \$ 143 Interest expense, net 82 83 6 (Benefit) provision for income taxes (37) 11 28 (Benefit) provision for income taxes 31 69 15 EBITDA 81 69 15 Stock-based compensation 81 69 15 Stock-based compensation 18 13 8 Acquisition inventory step-up (Note 2) — 13 — Restructuring and other (Note 3) 1 1 2	Restructuring and other (Note 3)	1		1		2
Amortization of intangible assets 81 69 15 Non-GAAP income from operations \$ 96 \$ 257 \$ 190 Non-GAAP operating margin 12.1% 23.6% 25.6% Interest expense, net 82 83 6 Amortization of debt issuance costs (Note 4) 6 7 — Non-GAAP interest expense, net 6 7 — Net (loss) income \$ (42) \$ 54 \$ 143 Interest expense, net 82 83 6 (Benefit) provision for income taxes (37) 11 28 (Benefit) provision for income taxes (37) 11 28 Depreciation 26 27 13 Amortization of intangible assets 8 10 6 11 28 EBITDA 8 110 8 24 8 20 Stock-based compensation 18 13 8 8 8 10 8 12 8 Acquisition inventory step-up (Note 2) 2	Ransomware incident (Note 5)	7		_		_
Non-GAAP income from operations \$ 96 \$ 257 \$ 190 Non-GAAP operating margin 12.1% 23.6% 25.6% Interest expense, net 82 83 6 Amortization of debt issuance costs (Note 4) 6 7 — Non-GAAP interest expense, net 76 75 6 Net (loss) income 82 83 6 (Benefit) provision for income taxes (37) 11 28 (Benefit) provision for income taxes (37) 11 28 Depreciation 26 27 13 Amortization of intangible assets 81 69 15 EBITDA \$ 110 \$ 244 \$ 205 Stock-based compensation 18 13 8 Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) - 13 - Ransomware incident (Note 3) 7 - - Ransomware incident (Note 5) 7 - - (7) <tr< td=""><td>Gain on sale of long-lived assets (Note 6)</td><td>_</td><td></td><td>_</td><td></td><td>(7)</td></tr<>	Gain on sale of long-lived assets (Note 6)	_		_		(7)
Non-GAAP operating margin 12.1% 23.6% 25.6% Interest expense, net 82 83 6 Amortization of debt issuance costs (Note 4) 6 7 — Non-GAAP interest expense, net 76 75 6 Net (loss) income 82 83 6 Interest expense, net 82 83 6 (Benefit) provision for income taxes (37) 11 28 Depreciation 26 27 13 Amortization of intangible assets 81 69 15 EBITDA \$ 110 \$ 244 \$ 205 Stock-based compensation 18 13 8 Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) — 13 — Restructuring and other (Note 3) 1 1 1 2 Ransomware incident (Note 5) 7 — — - Gain on sale of long-lived assets (Note 6) — - - -<	Amortization of intangible assets	 81		69		15
Interest expense, net 82 83 6 Amortization of debt issuance costs (Note 4) 6 7 — Non-GAAP interest expense, net 76 75 6 Net (loss) income \$ (42) \$ 54 \$ 143 Interest expense, net 82 83 6 (Benefit) provision for income taxes (37) 11 28 Depreciation 26 27 13 Amortization of intangible assets 81 69 15 EBITDA \$ 110 \$ 244 \$ 205 Stock-based compensation 18 13 8 Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) — 1 1 2 Restructuring and other (Note 3) 1 1 2 2 Ransomware incident (Note 5) 7 — — - - - - - - - - - - - - - -	Non-GAAP income from operations	\$ 96	\$	257	\$	190
Amortization of debt issuance costs (Note 4) 6 7 — Non-GAAP interest expense, net 5 (42) \$ 54 \$ 143 Interest expense, net 82 83 6 (Benefit) provision for income taxes (37) 11 28 Depreciation 26 27 13 Amortization of intangible assets 81 69 15 EBITDA \$ 110 244 \$ 205 Stock-based compensation 18 13 8 Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) — 13 — Restructuring and other (Note 3) 1 1 1 2 Ransomware incident (Note 5) 7 — — - Gain on sale of long-lived assets (Note 6) — — - (7) Currency bedge gain (Note 7) — — (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Non-GAAP operating margin	 12.1 %		23.6 %		25.6 %
Non-GAAP interest expense, net 76 75 6 Net (loss) income \$ (42) \$ 54 \$ 143 Interest expense, net 82 83 6 (Benefit) provision for income taxes (37) 11 28 Depreciation 26 27 13 Amortization of intangible assets 81 69 15 EBITDA \$ 110 \$ 244 \$ 205 Stock-based compensation 18 13 8 Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) — 13 — Restructuring and other (Note 3) 1 1 2 Ransomware incident (Note 5) 7 — — Gain on sale of long-lived assets (Note 6) — — (7) Currency hedge gain (Note 7) — — (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Interest expense, net	 82		83		6
Net (loss) income \$ (42) \$ 54 \$ 143 Interest expense, net 82 83 6 (Benefit) provision for income taxes (37) 11 28 Depreciation 26 27 13 Amortization of intangible assets 81 69 15 EBITDA \$ 110 \$ 244 \$ 205 Stock-based compensation 18 13 8 Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) - 13 - Restructuring and other (Note 3) 1 1 1 2 Ransomware incident (Note 5) 7 - - - Gain on sale of long-lived assets (Note 6) - - - (7) Currency hedge gain (Note 7) - - (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Amortization of debt issuance costs (Note 4)	6		7		_
Interest expense, net 82 83 6 (Benefit) provision for income taxes (37) 11 28 Depreciation 26 27 13 Amortization of intangible assets 81 69 15 EBITDA \$ 110 \$ 244 \$ 205 Stock-based compensation 18 13 8 Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) - 13 - Restructuring and other (Note 3) 1 1 2 Ransomware incident (Note 5) 7 - - Gain on sale of long-lived assets (Note 6) - - - (7) Currency hedge gain (Note 7) 5 2 - - (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Non-GAAP interest expense, net	76		75		6
(Benefit) provision for income taxes (37) 11 28 Depreciation 26 27 13 Amortization of intangible assets 81 69 15 EBITDA \$ 110 \$ 244 \$ 205 Stock-based compensation 18 13 8 Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) - 13 - Restructuring and other (Note 3) 1 1 2 Ransomware incident (Note 5) 7 - - Gain on sale of long-lived assets (Note 6) - - - (7) Currency hedge gain (Note 7) - - - (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Net (loss) income	\$ (42)	\$	54	\$	143
Depreciation 26 27 13 Amortization of intangible assets 81 69 15 EBITDA \$ 110 \$ 244 \$ 205 Stock-based compensation 18 13 8 Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) — 13 — Restructuring and other (Note 3) 1 1 1 2 Ransomware incident (Note 5) 7 — — Gain on sale of long-lived assets (Note 6) — — (7) Currency hedge gain (Note 7) — — (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Interest expense, net	82		83		6
Amortization of intangible assets 81 69 15 EBITDA \$ 110 \$ 244 \$ 205 Stock-based compensation 18 13 8 Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) — 13 — Restructuring and other (Note 3) 1 1 1 2 Ransomware incident (Note 5) 7 — — - Gain on sale of long-lived assets (Note 6) — — (7) Currency hedge gain (Note 7) — — (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	(Benefit) provision for income taxes	(37)		11		28
EBITDA \$ 110 \$ 244 \$ 205 Stock-based compensation 18 13 8 Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) — 13 — Restructuring and other (Note 3) 1 1 1 2 Ransomware incident (Note 5) 7 — — (7) Gain on sale of long-lived assets (Note 6) — — (7) Currency hedge gain (Note 7) — — (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Depreciation	26		27		13
Stock-based compensation 18 13 8 Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) - 13 - Restructuring and other (Note 3) 1 1 1 2 Ransomware incident (Note 5) 7 - - - Gain on sale of long-lived assets (Note 6) - - - (7) Currency hedge gain (Note 7) - - - (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Amortization of intangible assets	81		69		15
Acquisition and integration costs (Note 1) 6 11 8 Acquisition inventory step-up (Note 2) — 13 — Restructuring and other (Note 3) 1 1 1 2 Ransomware incident (Note 5) 7 — — — Gain on sale of long-lived assets (Note 6) — — — (7) Currency hedge gain (Note 7) — — — (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	EBITDA	\$ 110	\$	244	\$	205
Acquisition inventory step-up (Note 2) — 13 — Restructuring and other (Note 3) 1 1 1 2 Ransomware incident (Note 5) 7 — — Gain on sale of long-lived assets (Note 6) — — — (7) Currency hedge gain (Note 7) — — — (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Stock-based compensation	18		13		8
Restructuring and other (Note 3) 1 1 2 Ransomware incident (Note 5) 7 — — Gain on sale of long-lived assets (Note 6) — — — (7) Currency hedge gain (Note 7) — — — (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Acquisition and integration costs (Note 1)	6		11		8
Ransomware incident (Note 5) 7 — — Gain on sale of long-lived assets (Note 6) — — — (7) Currency hedge gain (Note 7) — — — (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Acquisition inventory step-up (Note 2)	_		13		_
Gain on sale of long-lived assets (Note 6) — — (7) Currency hedge gain (Note 7) — — — (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Restructuring and other (Note 3)	1		1		2
Currency hedge gain (Note 7) — — (5) Adjusted EBITDA \$ 142 \$ 282 \$ 211	Ransomware incident (Note 5)	7		_		_
Adjusted EBITDA \$ 142 \$ 282 \$ 211	Gain on sale of long-lived assets (Note 6)	_		_		(7)
Adjusted EBITDA \$ 142 \$ 282 \$ 211		_		_		
Adjusted EBITDA margin 17.8 % 26.0 % 28.4 %	Adjusted EBITDA	\$ 142	\$	282	\$	211
	Adjusted EBITDA margin	17.8 %				28.4 %

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

Three Months Ended December 31, 2022

(5)

184

1 4

33

17.8%

Three months ended March 31, 2023

	(Loss) Income Before Income Taxes	Benefit for Income Taxes	Effective Tax Rate	Income Before Income Taxes	Provision for Income Taxes	Effective Tax Rate
GAAP	\$ (79)	\$ (37)	46.6%	\$ 65	\$ 11	17.1%
Acquisition and integration costs (Note 1)	6	_		11	_	
Acquisition inventory step-up (Note 2)	_	_		13	_	
Restructuring and other (Note 3)	1	_		1	_	
Amortization of intangible assets	81	_		69	_	
Amortization of debt issuance costs (Note 4)	6	_		7	_	
Ransomware incident (Note 5)	7	_		_	_	
Foreign tax rate adjustment (Note 9)	_	3		_	_	
Tax effect of Non-GAAP adjustments (Note 10)	_	24		_	22	
Non-GAAP	\$ 23	\$ (10)	(46.8%)	\$ 166	\$ 33	19.9%
				Three Mo	onths Ended March 31, 2022	
				Income Before Income Taxes	Provision for Income Taxes	Effective Tax Rate
GAAP				\$ 171	\$ 28	16.3%
Acquisition and integration costs (Note 1)				8	_	
Restructuring and other (Note 3)				2	_	
Amortization of intangible assets				15	_	
Gain on sale of long-lived assets (Note 6)				(7)	_	

Currency hedge gain (Note 7)

Non-GAAP

Windfall tax benefit on stock-based compensation (Note 8)

Tax effect of Non-GAAP adjustments (Note 10)

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 primarily related to the Atotech Acquisition.
- Note 2: Costs of revenues during the three months ended December 31, 2022 included the amortization from the step-up of inventory to fair value as a result of the Atotech Acquisition.
- Note 3: Restructuring and other costs during the three months ended March 31, 2023 primarily related to severance costs from a global cost-saving initiative. 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 March 31, 2022 primarily related to the closure of a facility in Europe and the pending closure of another facility in Europe.
- Note 4: We recorded additional interest expense related to the amortization of debt issuance costs associated with our term loan facility.
- Note 5: We recorded costs, net of recoveries, associated with the ransomware incident we identified on February 3, 2023. These costs were primarily comprised of various third-party consulting services, including forensic experts, restoration experts, legal counsel, and other information technology and accounting professional expenses, enhancements to our cybersecurity measures, and costs to restore our systems and access our data.
- Note 6: We recorded a gain on the sale of a minority interest investment in a private company.
- Note 7: We realized a gain in the three months ended March 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.
- Note 8: We recorded windfall tax benefits on the vesting of stock-based compensation.
- Note 9: We recorded a reduction in benefit for income taxes for a retrospective approval of an income tax rate reduction from a foreign jurisdiction we received in the first quarter of 2023.
- Note 10: Non-GAAP adjustments are tax effected at applicable statutory rates resulting in a difference between the GAAP and Non-GAAP tax rates.