

Safe Harbor for Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act and 21E of the Securities Exchange Act of 1934 regarding the future financial performance, business prospects and growth of MKS Instruments, Inc. ("MKS" or the "Company"). 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 forwardlooking 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 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 sales to our major customers, the impact of the COVID-19 pandemic on the global economy and financial markets, including any restrictions on MKS' operations and the operations of MKS' customers and suppliers resulting from public health requirements and government mandates, the terms of our term loan, competition from larger or more established companies in MKS' markets, MKS' ability to successfully grow our business and particularly that of Electro Scientific Industries, Inc.'s business, the challenges, risks and costs involved with integrating the operations of the companies we have acquired, 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, 2019 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 presentation.



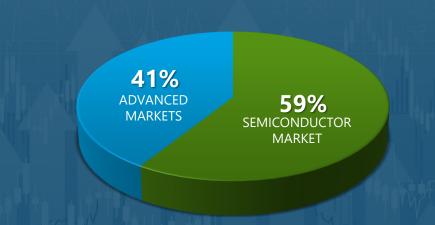
Use of Non-GAAP Measures

This presentation includes measures that are not in accordance with U.S. generally accepted accounting principles ("Non-GAAP measures"). These Non-GAAP measures should be viewed in addition to, and not as a substitute for, MKS' reported GAAP 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. Please see the Appendix entitled "GAAP to Non-GAAP Reconciliations" at the end of this presentation for reconciliations of our Non-GAAP measures to the comparable GAAP measures.



Q2'20 Results & Highlights

25.4821	Q1'20	Q2′20
REVENUE	\$536M	\$544M
NON-GAAP EPS	\$1.54	\$1.62
GAAP EPS	\$1.25	\$1.33



- Strong Semiconductor Market revenue across our product categories.
- Advanced Markets revenue remained stable.

	REVENUE
VACUUM & ANALYSIS	-2% Q/Q
LIGHT & MOTION	0% Q/Q
EQUIPMENT & SOLUTIONS	+25% Q/Q



Q2'20 Market Highlights

Semiconductor Market

REVENUE

\$321M

Q/Q GROWTH

+3%

Advanced Markets

REVENUE

\$223M

Q/Q GROWTH

0%

- Record revenue in our Power Solutions business, which solves critical etch technology challenges presented by extreme vertical scaling.
- Two design wins in Remote Plasma Sources for ALD, one of which is a key win at a leading OEM.
- Secured double digit design wins in "World Class Optics" over the past 18 months.

- Strong growth in Flex PCB drilling applications.
- Certain industrial applications affected by softer macro environment and effect of government restrictions on customers whose businesses were designated as "non-essential".
- Secured more than 10 design wins in the first 12 months since introduction of our picosecond UV lasers, with several design wins in Q2'20 alone.



Demand For MKS' Flex PCB Systems Extends Beyond Capacity Needs



Smaller Vias



Denser Flex PCBs



Flex PCB Volume



TECHNOLOGY TRANSITIONS

Advanced materials for components such as 5G antenna drive new Flex tool expenditures

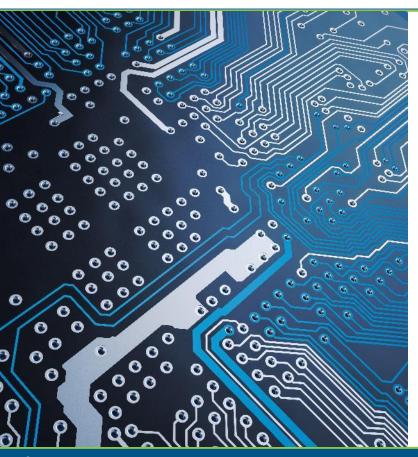
Smaller, more accurately placed vias drive increased via density per PCB layer

CAPACITY CHANGES

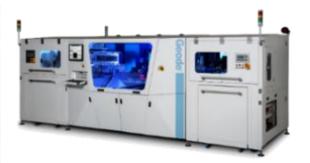
Increasing circuit complexity drives more vias per layer & more layers per PCB New features (camera, sensors, facial recognition) drive increased Flex PCB unit count



Q2'20 Equipment & Solutions Update



- Revenue of \$64M (+25% Q/Q, +14% Y/Y) due to strong demand for Flex PCB via drilling systems.
- Demand for Flex PCB via drilling systems extends beyond capacity needs and includes technology transitions as well.
- **Strong sequential non-GAAP gross margin increase** of 90 bps to 46.5%, reflecting product mix and higher volume.
- Achieved annualized cost synergies of \$17M, exceeding our original synergy target by \$2M.
- Successful qualification of our HDI tool at a beta customer.



Geode: Via drilling for HDI PCB



Revenue & Select Financial Measures

Q2′19	Q1′20	Q2′20
\$260M	\$223M	\$223M
\$214M	\$313M	\$321M
\$474M	\$536M	\$544M
45.0%	44.7%	45.3%
18.6%	20.5%	21.6%
\$10M	\$7M	\$7M
22.9%	17.0%	18.5%
\$60M	\$85M	\$89M
\$1.09	\$1.54	\$1.62
44.5%	44.7%	45.3%
13.5%	16.8%	18.5%
\$11M	\$8M	\$7M
27.2%	15.0%	20.2%
\$38M	\$69M	\$74M
\$0.69	\$1.25	\$1.33
	\$260M \$214M \$474M 45.0% 18.6% \$10M 22.9% \$60M \$1.09 44.5% 13.5% \$11M 27.2% \$38M	\$260M \$223M \$214M \$313M \$474M \$536M 45.0% 44.7% 18.6% 20.5% \$10M \$7M 22.9% 17.0% \$60M \$85M \$1.09 \$1.54 44.5% 44.7% 13.5% 16.8% \$11M \$8M 27.2% 15.0% \$38M \$69M

Q2'20 Summary

- Revenue +2% Q/Q and +15% Y/Y.
 - Semiconductor Market revenue +3% Q/Q and +50% Y/Y.
 - Advanced Markets revenue flat Q/Q.
- Non-GAAP Gross Margin +60 bps Q/Q, +180 bps above the midpoint of our guidance.
- Non-GAAP Operating Margin +110 bps Q/Q.
 - Reflecting strong financial leverage in our operating model.
- Income tax rate reflected higher U.S. mix of taxable income.
- Non-GAAP EPS of \$1.62, +49% Y/Y, exceeded the high end of our guidance.



Balance Sheet & Cash Flow

	NITHINING AND THE U.S. MINT. II.S. WHID. I	A MINING A STREET, A STREET STREET	
	Q2′19	Q1′20	Q2′20
Cash & Short-Term Investments	\$460M	\$503M	\$607M
Accounts Receivable	\$314M	\$381M	\$381M
Inventories	\$479M	\$474M	\$490M
Total Current Assets	\$1,370M	\$1,457M	\$1,570M
Total Assets	\$3,382M	\$3,475M	\$3,631M
Term Loan Principal	\$947M	\$840M	\$838M
Total Liabilities	\$1,436M	\$1,422M	\$1,504M
Stockholders' Equity	\$1,946M	\$2,053M	\$2,127M
Operating Cash Flow	\$78M	\$75M	\$139M
Free Cash Flow	\$64M	\$65M	\$118M

- Exited Q2'20 with \$607M of cash and short-term investments and \$100M of incremental borrowing capacity, subject to certain borrowing base requirements.
- Net leverage ratio of 0.5x at the end of Q2'20.
- Issued cash dividend in Q2'20 of \$11M or \$0.20 per share.
- Record operating and free cash flow in Q2'20.



Q3'20 Guidance

Q2′20	Q3′20									
\$544M	\$535M - \$585M									
Non-GAAP Financial Measures										
45.3%	44.5% - 46.5%									
\$129M	\$126M - \$134M									
\$118M	\$112M - \$138M									
21.6%	20.9% - 23.5%									
\$7M	\$6M									
18.5%	18.0%									
\$89M	\$86M - \$108M									
\$1.62M	\$1.55 - \$1.95									
55.3M	55.4M									
	\$544M 45.3% \$129M \$118M 21.6% \$7M 18.5% \$89M \$1.62M									

- Semiconductor Market revenue expected to increase sequentially.
- Overall stability in Advanced Markets expected to continue into Q3'20.
- Non-GAAP gross margin reflects anticipated product mix and revenue levels.
- Non-GAAP tax rate reflects projected geographic mix of income.







	Q2'19	Q1'20	Q2'20		Q2'	19	Q1	'20	Q2	2'20
Gross profit	\$ 211.0	\$ 239.6	\$ 246.3	Interest expense, net	\$ 1	1.3	\$	8.2	\$	6.9
COVID-19 related net costs (Note 1)	_	_	0.3	Amortization of debt issuance costs (Note 4)		1.3		0.9		0.2
Acquisition inventory step-up (Note 2)	2.5	_	_	Non-GAAP interest expense, net	\$ 1	0.0	\$	7.3	\$	6.7
Non-GAAP gross profit (Note 11)	\$ 213.5	\$ 239.6	\$ 246.6							
Non-GAAP gross margin (Note 11)	45.0%	44.7%	45.3%	Net income	\$ 3	37.7	\$	69.1	\$	73.7
				COVID-19 related net costs and credits (Note 1)		_		_		(0.9)
Operating expenses	\$ 147.1	\$ 149.7	\$ 145.5	Acquisition inventory step-up (Note 2)		2.5		_		_
Acquisition and integration costs (Note 3)	3.2	2.2	0.7	Acquisition and integration costs (Note 3)		3.2		2.2		0.7
Restructuring and other (Note 5)	1.2	0.4	3.3	Amortization of debt issuance costs (Note 4)		1.3		0.9		0.2
Amortization of intangible assets	17.6	16.3	13.8	Restructuring and other (Note 5)		1.2		0.4		3.3
Asset impairment (Note 6)	_	1.2	_	Amortization of intangible assets	1	7.6		16.3		13.8
COVID-19 related net credits (Note 1)		_	(1.2)	Asset impairment (Note 6)		_		1.2		_
Non-GAAP operating expenses (Note 12)	\$ 125.1	\$ 129.6	\$ 128.9	Windfall tax benefit on stock-based compensation (Note 7)	((8.0)		(0.9)		(1.4)
				Deferred tax asset write-off (Note 8)		_		_		3.5
Income from operations	\$ 63.9	\$ 89.9	\$ 100.8	Tax reform adjustments (Note 9)		2.7		_		_
COVID-19 related net credits (Note 1)	_	_	(0.9)	Tax effect of non-GAAP adjustments (Note 14)		(5.6)		(4.3)		(3.6)
Acquisition inventory step-up (Note 2)	2.5	_	_	Non-GAAP net earnings (Note 10)	\$ 5	9.8	\$	84.9	\$	89.3
Acquisition and integration costs (Note 3)	3.2	2.2	0.7	Non-GAAP net earnings per diluted share (Note 10)	\$ 1	.09	\$	1.54	\$	1.62
Restructuring and other (Note 5)	1.2	0.4	3.3	Diluted share count	5	5.1		55.2		55.3
Amortization of intangible assets	17.6	16.3	13.8							
Asset impairment (Note 6)		1.2								
Non-GAAP income from operations (Note 13)	\$ 88.4	\$ 110.0	\$ 117.7							
Non-GAAP operating margin (Note 13)	18.6%	20.5%	21.6%							



Dollar amounts and diluted share count in millions.

-		Provision Pre-Tax (benefit) for Income Income Taxes Tax Rate					re-Tax	Provision enefit) for come Taxes	Tax Rate	
GAAP	\$	51.8		14.1	27.2%	\$	92.4	\$	18.7	20.2%
Acquisition and integration costs (Note 3)	Ψ	3.2	Ψ		27.270	Ψ	0.7	Ψ	—	20.270
Acquisition inventory step-up (Note 2)		2.5		_			_		_	
Amortization of debt issuance costs (Note 4)		1.3		_			0.2		_	
Restructuring and other (Note 5)		1.2		_			3.3		_	
Amortization of intangible assets		17.6		_			13.8		_	
COVID-19 related net credits (Note 1)		_		_			(0.9)		_	
Windfall tax benefit on stock-based compensation (Note 7)		_		0.8			_		1.4	
Deferred tax asset write-off (Note 8)		_		_			_		(3.5)	
Tax reform adjustments (Note 10)		_		(2.7)			_		_	
Tax effect of non-GAAP adjustments (Note 9)		_		5.6	_		_		3.6	_
Non-GAAP	\$	77.6	\$	17.8	22.9%	\$	109.5	\$	20.2	18.5%

			Q1'20	
	Pı	re-Tax	Provision for	
	In	come	Income Taxes	Tax Rate
GAAP	\$	81.3	\$ 12.2	15.0%
Acquisition and integration costs (Note 3)		2.2	_	
Amortization of debt issuance costs (Note 4)		0.9	_	
Restructuring and other (Note 5)		0.4	_	
Amortization of intangible assets		16.3	_	
Asset impairment (Note 6)		1.2	_	
Windfall tax benefit on stock-based compensation (Note 7)		_	0.9	
Tax effect of non-GAAP adjustments (Note 14)		_	4.3	_
Non-GAAP	\$	102.3	\$ 17.4	17.0%

Dollar amounts in millions.



Net cash provided by operating activities Purchases of property, plant and equipment Free cash flow

C	Q2'19		21'20	Q2'20				
\$	77.5	\$	74.9	\$	139.0			
	(13.7)		(10.0)		(20.9)			
\$	63.8	\$	64.9	\$	118.1			

6.1

03:30 C..:d----

E&S Division	C	21'20	Q2'20		
Gross profit	\$	23.3	\$	30.1	
COVID-19 related net credits (Note 1)		_		(0.4)	
Non-GAAP gross profit (Note 11)	\$	23.3	\$	29.7	
Non-GAAP gross margin (Note 11)		45.6%		46.5%	

Q3'20 Guidance										
	Low G	High Guidance								
Α	mount	Percentage	Α	mount	Percentage					
\$	236.1	44.1%	\$	269.9	46.2%					
	1.9	0.4%		1.9	0.3%					
\$	238.0	44.5%	\$	271.8	46.5%					
\$	143.2		\$	151.2						
	(0.4)			(0.4))					
	(4.2)			(4.2))					
	(12.6)			(12.6))					
\$	126.0	•	\$	134.0	_					
\$	92.9	17.3%	\$	118.7	20.2%					
	0.4	0.1%		0.4	0.1%					
	6.1	1.1%		6.1	1.0%					
	12.6	2.4%		12.6	2.2%					
\$	112.0	20.9%	\$	137.8	23.5%					
\$	6.3		\$	6.3						
	(0.2)	_		(0.2))					
	\$ \$ \$ \$	\$ 236.1 1.9 \$ 238.0 \$ 143.2 (0.4) (4.2) (12.6) \$ 126.0 \$ 92.9 0.4 6.1 12.6 \$ 112.0	Low Guidance Amount Percentage \$ 236.1 44.1% 1.9 0.4% \$ 238.0 44.5% \$ 143.2 (0.4) (4.2) (12.6) \$ 126.0 \$ 126.0 \$ 92.9 17.3% 0.4 0.1% 6.1 1.1% 12.6 2.4% \$ 112.0 20.9%	Low Guidance Amount Percentage A \$ 236.1 44.1% \$ 1.9 0.4% \$ \$ 238.0 44.5% \$ \$ 143.2 \$ (0.4) (4.2) \$ (12.6) \$ \$ \$ 92.9 17.3% \$ 0.4 0.1% \$ 6.1 1.1% \$ 12.6 2.4% \$ \$ 112.0 20.9% \$	Low Guidance High G Amount Percentage Amount \$ 236.1 44.1% \$ 269.9 1.9 0.4% 1.9 \$ 238.0 44.5% \$ 271.8 \$ 143.2 (0.4) (0.4 (0.4 (0.4 (0.4 (0.4 (0.2 (0.4 (0.4 (0.4 (0.4 (0.2 (0.4 (0.4 (0.4 (0.4 (0.4 (0.4 (0.4 (0.4					

6.1

		Q3'20 Guidance								
			Low G	ıidar	ıce	High Guidance				
ge		Amount Per Share		Amount		nt Per Sl				
%	GAAP net income and net income per diluted share	\$	71.8	\$	1.30	\$	93.2	\$	1.68	
%	Acquisition and integration costs		0.4		0.01		0.4		0.01	
%	Restructuring and other		6.1		0.11		6.1		0.11	
	Amortization of intangible assets		12.6		0.23		12.6		0.23	
	Deferred financing cost		0.2		_		0.2		_	
	Tax effect of non-GAAP adjustments (Note 14)		(5.1)		(0.09)		(4.5)		(0.08)	
	Non-GAAP net earnings and net earnings per diluted share	\$	86.0	\$	1.55	\$	108.0	\$	1.95	
	Diluted share count				55.4				55.4	

Dollar amounts and diluted share count in millions.



Non-GAAP interest expense, net

Non-GAAP financial measures adjust GAAP financial measures for the items listed below. These Non-GAAP measures should be viewed in addition to, and not as a substitute for, MKS' reported GAAP 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.

Note 1: During the three months ended June 30, 2020, we recorded COVID-19 related costs and credits that were direct, incremental and not expected to recur. The amounts consisted of US and foreign payroll-tax credits for maintaining our workforce during the pandemic, offset by shift premiums and bonuses.

Note 2: Cost 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: Acquisition and integration costs were primarily related to our acquisition of ESI which closed on February 1, 2019.

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

Note 5: Restructuring and other costs during the three months ended June 30, 2020 and March 31, 2020 primarily included duplicate facility costs attributed to entering into new facility leases and costs related to the closing of a facility in Europe. Such costs for the three months ended March 31, 2020 were offset by an insurance reimbursement related to a legal settlement. Restructuring costs recorded during the three months ended June 30, 2019 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.

Note 6: During the three months ended March 31, 2020, we recorded an asset impairment charge as a result of the write-down of long-lived assets related to the pending closure of a facility.

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

Note 8: We recorded a write-off of a deferred tax asset related to foreign net operating losses.

Note 9: We recorded tax adjustments during the three months ended June 30, 2019 resulting from additional guidance provided by tax authorities with respect to the 2017 U.S. tax reforms.

Note 10: Non-GAAP net earnings and Non-GAAP net earnings per diluted share amounts exclude net credits related to the COVID-19 pandemic, amortization of the step-up of inventory to fair value, acquisition and integration costs, amortization of debt issuance costs, restructuring and other costs, amortization of intangible assets, an asset impairment, windfall tax adjustments related to stock compensation expense, a deferred tax write-off, tax reform adjustments and the related tax effect of these adjustments to reflect the expected full year effective tax rate in the related period.

Note 11: The Non-GAAP gross profit amount and Non-GAAP gross margin exclude net costs related to the COVID-19 pandemic and amortization of the step-up of inventory to fair value.

Note 12: Non-GAAP operating expenses exclude acquisition and integration costs, restructuring and other costs, amortization of intangible assets, an asset impairment, and net credits related to the COVID-19 pandemic.

Note 13: Non-GAAP income from operations and Non-GAAP operating margin percentages exclude net credits related to the COVID-19 pandemic, amortization of the step-up of inventory to fair value, acquisition and integration costs, restructuring and other costs, amortization of intangible assets and an asset impairment.

Note 14: Non-GAAP adjustments are tax effected at applicable statutory rates resulting in a difference between the GAAP and Non-GAAP tax rates. We forecast a Q3'20 GAAP tax rate of approximately 17% and a non-GAAP tax rate of approximately 18% based on forecasted Q3'20 non-GAAP adjustments, which include the related tax effects of acquisition and integration costs, restructuring and other, amortization of intangible assets and deferred financing costs.

