



MKS: Positioned for the Age of
Miniaturization & Complexity

March 2022

 **mks**

Use of 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 of 1933 and Section 21E of the Securities Exchange Act of 1934 regarding the future financial performance, business prospects and growth of MKS. 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 are manufacturing and sourcing risks, including the impact and duration of supply chain disruptions, component shortages and price increases, the ability of MKS to complete its acquisition of Atotech Limited (“Atotech”), the terms of MKS’ existing term loan, the terms and availability of financing for the Atotech acquisition, the substantial indebtedness MKS expects to incur in connection with the Atotech acquisition and the need to generate sufficient cash flows to service and repay such debt, MKS’ entry into Atotech’s chemicals technology business, in which MKS does not have experience and which may expose it to significant additional liabilities, the risk of litigation relating to the Atotech acquisition, the risk that disruption from the Atotech acquisition materially and adversely affects the respective businesses and operations of MKS and Atotech, the ability of MKS to realize the anticipated synergies, cost savings and other benefits of the Atotech acquisition, competition from larger or more established companies in MKS’ and Atotech’s respective markets, the ability of MKS to successfully grow its business and the businesses of Atotech, Photon Control Inc., which it acquired in July 2021, and Electro Scientific Industries, Inc., which it acquired in February 2019, potential adverse reactions or changes to business relationships resulting from the announcement, pendency or completion of the Atotech acquisition, conditions affecting the markets in which MKS and Atotech operate, including the fluctuations in capital spending in the semiconductor industry and other advanced manufacturing markets, and fluctuations in sales to MKS’ and Atotech’s major customers, the ability to anticipate and meet customer demand, 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, volatility of stock price, international operations, financial risk management, and the other factors described in “Risk Factors” in Part 1, Item 1A of the Form 10-K for the year ended December 31, 2021 and any subsequent Quarterly Reports on Form 10-Q, as filed with the U.S. Securities and Exchange Commission (the “SEC”). Additional risk factors may be identified from time to time in MKS’ future filings 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 March 2, 2022, the date this presentation was published to MKS’ website.

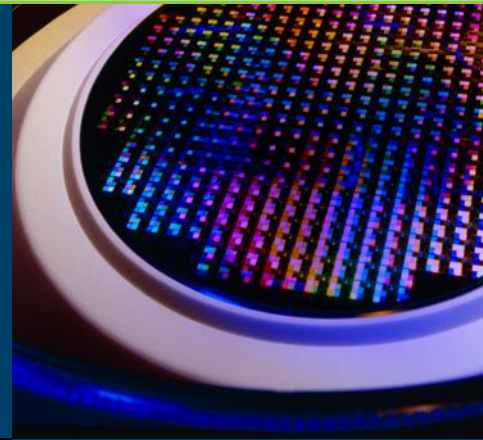
Use of Non-GAAP Financial Measures

This presentation includes 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 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. Please see the Appendix entitled “GAAP to Non-GAAP Reconciliations” at the end of this presentation for reconciliations of our Non-GAAP financial measures to the comparable GAAP financial measures.

MKS Value Proposition



Enabling key
technology trends
with foundational
solutions



Semi subsystems
leader with
broadest portfolio

Positioned for
growth in
complementary
Advanced Markets



Focus on
miniaturization
and technical
complexity drives
shareholder value



Broad and Deep Capabilities Addressing Multiple End Markets

Semiconductor

- **Deposition**
 - Atomic Layer Deposition, Plasma Enhanced Chemical Vapor Deposition
- **Etching**
 - Extreme Vertical Structures
- **Lithography**
 - 193nm Immersion, EUV
- **Metrology & Inspection**
- **Critical Wet Processing**
 - Dissolved Reactive Gases

2021 Revenue

62%

38%

Advanced Markets

- **Industrial Technologies**
 - Advanced Electronics Manufacturing
 - PCB, Electronic Components, Advanced Packaging, Solar, Display
 - Industrial
 - Process Industries, Telecom/Datacom, Industrial Manufacturing
- **Life & Health Sciences**
 - Analytical & Medical Instrumentation, Biopharma, Bioimaging, Surgery
- **Research & Defense**
 - Imaging/Infrastructure, Protection/Surveillance, Electronics/Biological Research, Ultrafast Laser Studies

Strong Multi-Year Secular Drivers

Semiconductor
Demand/Complexity
Drives WFE⁽¹⁾

⁽¹⁾Wafer Fabrication Equipment spend.

Mechanical to
Laser-Based
Manufacturing

5G+ and IoT
Proliferation

MKS is Uniquely Positioned for

Market share gains
as equipment
spend increases

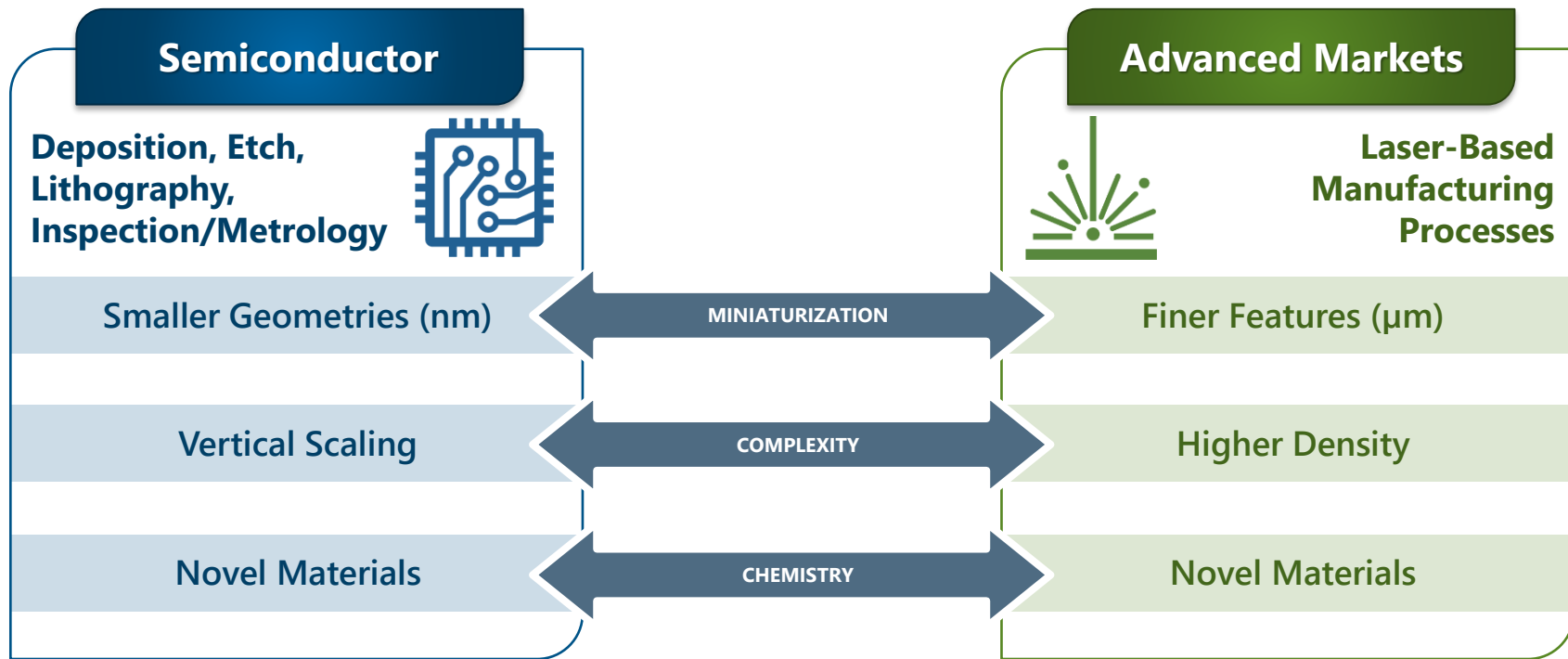
Accelerating adoption
of Lasers, Optics
and Photonics

Enablement of smaller,
feature-rich advanced
electronics

Customer Challenges: Miniaturization – Density – New Materials

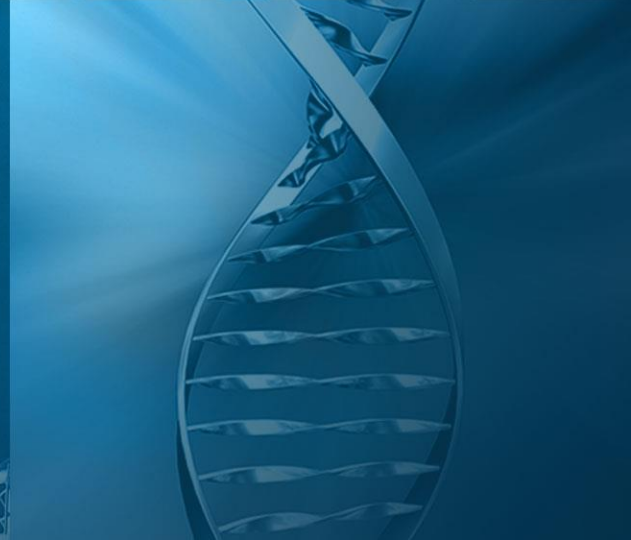
The Trends We Have Seen in Semi Are Coming to Advanced Markets

Precision Engineering Enables Technology Advances from Wafer to Workpiece



POWER PLASMA & REACTIVE GAS PRESSURE OPTICS LASERS OPTICAL SUBSYSTEMS MOTION SYSTEMS

Leader in
Critical
Subsystems For
Semiconductor
Manufacturing



MKS: Broadest Critical Subsystem Provider in WFE Ecosystem

DEPOSITION & ETCH

- RF Power
- Plasma & Reactive Gas
- Pressure & Vacuum Measurement
- Gas Delivery & Pressure Control
- Temperature Sensing

CRITICAL WET PROCESSING

- Dissolved Reactive Gas

METROLOGY & INSPECTION

- Optics & Optical Subsystems
- Lasers
- Precision Motion
- High Performance DUV Thin Film Coating

LITHOGRAPHY

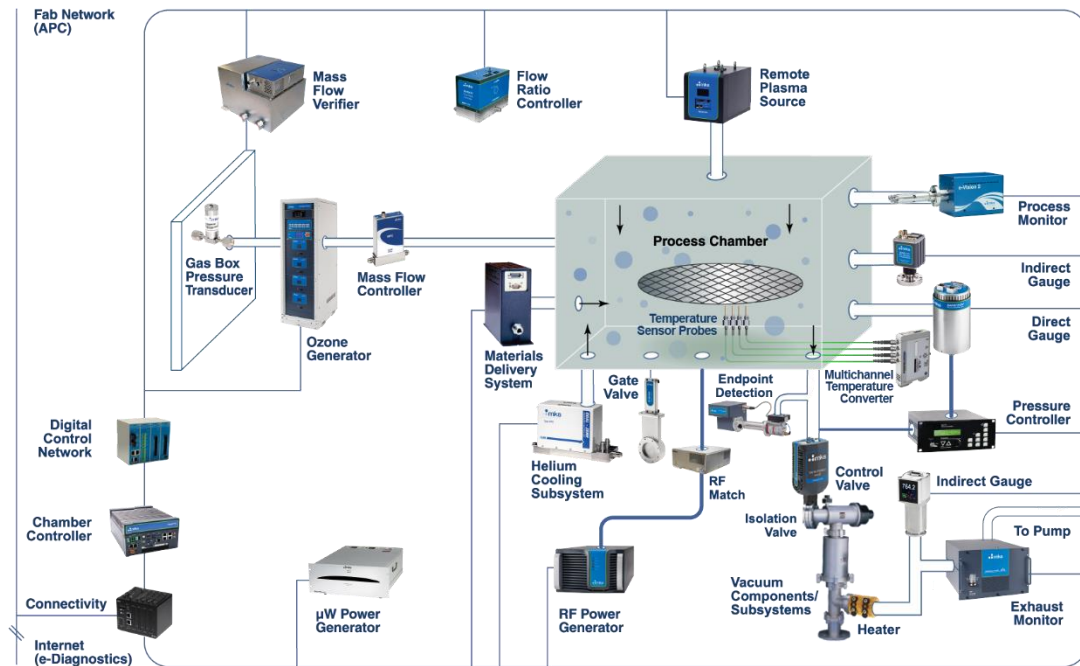
- Optics & Optical Subsystems
- Precision Motion
- Vibration Control
- Light Source Assemblies

**Addresses
>85% of
WFE⁽¹⁾**

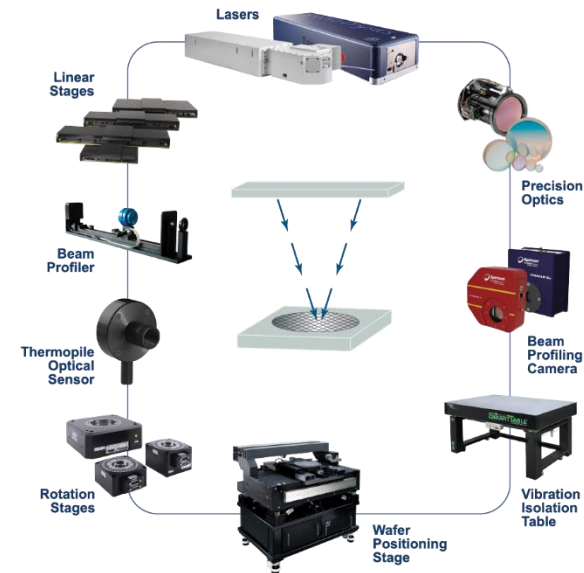
⁽¹⁾Company estimate.

Semiconductor Market's Critical Solutions Provider

Deposition & Etch



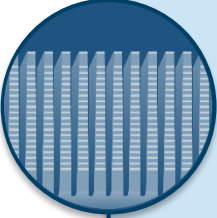
Lithography & Inspection



Leveraging Surround the Chamber[®] Portfolio to Drive Growth

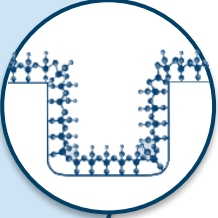
Addressing Semi Customers' Most Complex Challenges

RF Power



Enables drilling billions of holes with aspect ratios $>55:1$, perfectly straight & parallel; equivalent to hitting a target >1 mile away with a deviation of <0.5 inch


Plasma & Reactive Gas



Enables depositing thin films conformally – one atomic layer at a time, billions of atoms across with zero defects


**MKS is a Leader
in Critical
Subsystems
Vital to Future
Inflections**

Pressure Measurement



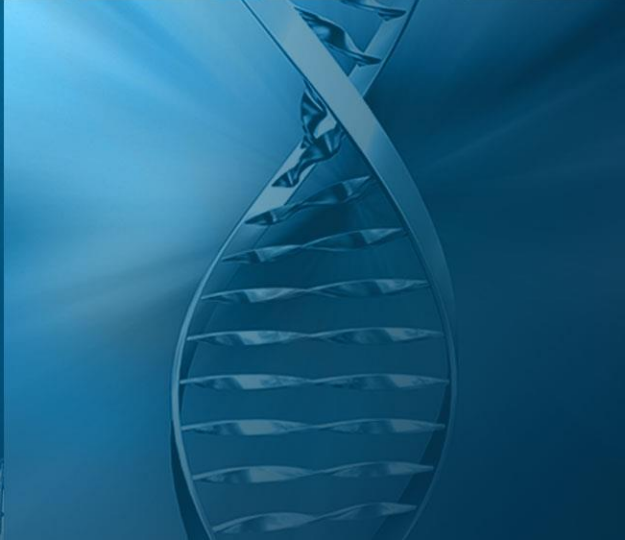
Enables unprecedented sensitivity and accuracy for pressure measurement detecting a $1/25$ of an inch movement from >0.5 mile away

Precision Optics

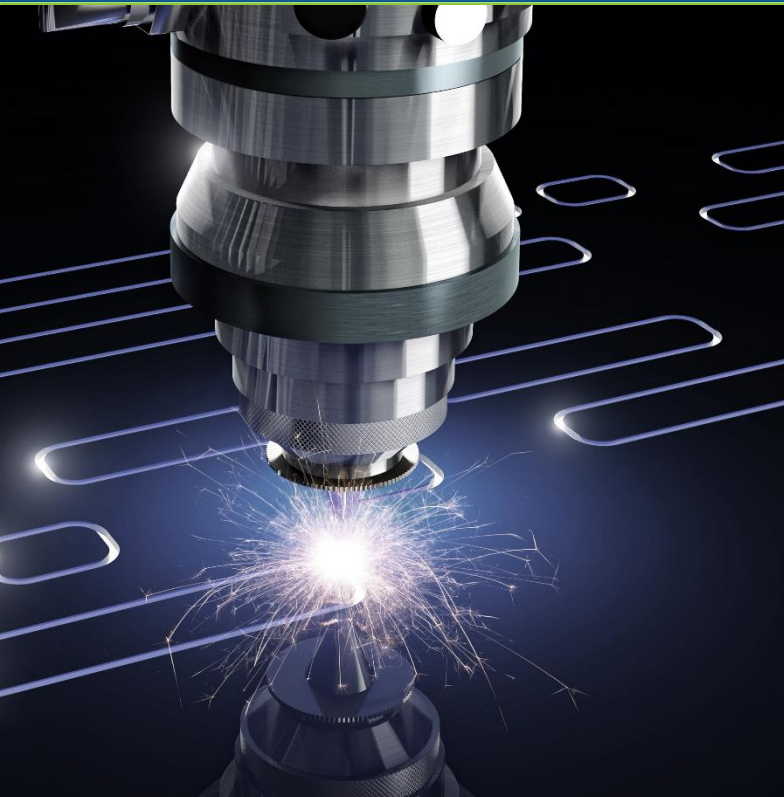


Enables focusing light to image features that are 10 atoms across (10,000x smaller than the width of a human hair)

Leveraging
Expertise Into
Advanced
Markets



Stage is Set for Broad Adoption of Laser Manufacturing



2000 - 2010

**Advanced
Devices**

Large electronic components, less processing power, bulky design

**Mechanical
Manufacturing
Processes**

2010 - 2020

**Smartphones,
Wearables, IoT**

Very small electronic components, extremely fast processing power

**Laser
Manufacturing
Select Use Cases**

2020+

**Hyper-
Connectivity,
Miniaturization**

Extremely small form-factor, continued acceleration of processing power

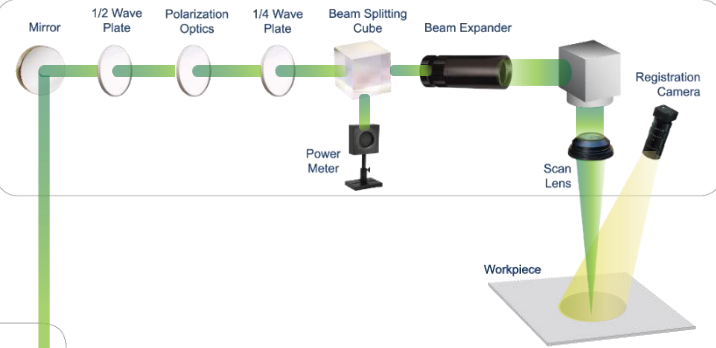
**Laser
Manufacturing
Broad Adoption**

Precision Laser Growth Opportunity in Electronics Manufacturing

Leader in Laser Solutions & Systems

Critical Solutions for Laser Processing

Beam Delivery & Conditioning



Laser Source



Motion & Positioning



Process Control



System Level Expertise



Leveraging Surround the Workpiece® Portfolio to Drive Growth

Addressing Critical Need for Precision Manufacturing

Lasers

Enable processing materials with power output as much as that of a nuclear power plant compressed into a trillionth of a second



Precision Motion & Positioning

Enable moving an object at 5 billion atoms per second but with a positional accuracy of the width of a few atoms



**Laser Systems
Integrate these
Precision
Capabilities**

Beam Delivery & Conditioning

Enable targeting of the laser beam across the length of a football field to a spot the width of a human hair



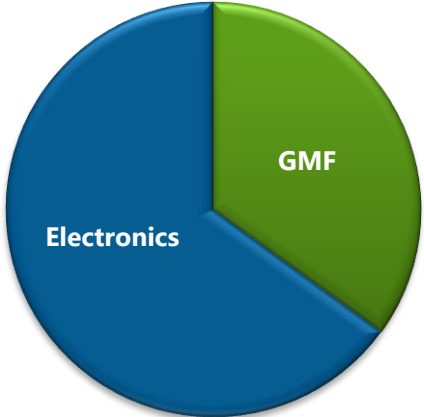
Light Measurement

Enables laser power measurement from 300 femtowatts to 120 kilowatts, equivalent to a power range from one light bulb to 100x total sunlight on earth

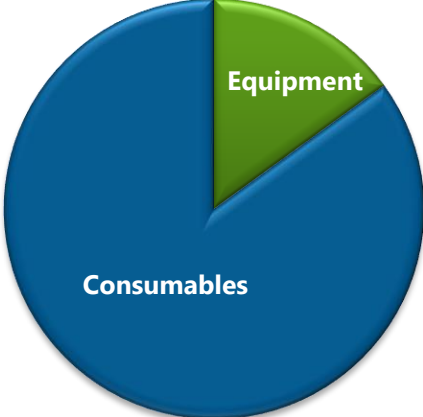


Pending Acquisition of Atotech – A Leading Chemistry Solutions Provider

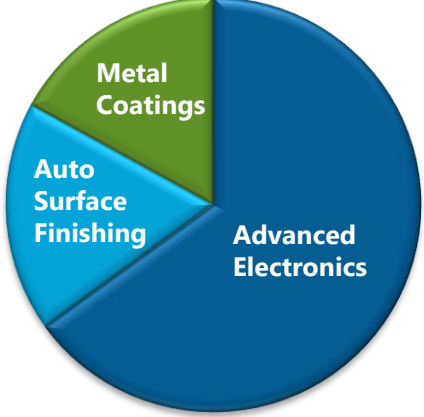
2020
Revenue Mix



2020
Revenue Stream



2020
Revenue By End Market



Electronics

- Advanced PCB, semiconductor IC packaging applications
- Equipment & consumables model creates sticky business
- Serves 28 of the top 30 PCB manufacturers⁽¹⁾

General Metal Finishing (GMF)

- Decorative & functional surface finishing applications
- Exposure to key trends such as premiumization, electrification
- Serves >6,000 customers across diverse industrial end-markets⁽¹⁾

⁽¹⁾Atotech June 2021 Investor Presentation.

Specialty Chemistry Solutions for Advanced PCBs, IC Packaging & Surface Finishing

Optimizing the Interconnect Demands an Integrated Approach

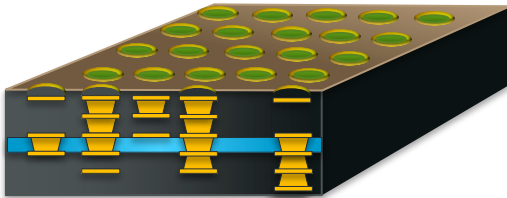
Increased device complexity driving Advanced PCB and Packaging innovation, especially in mobile devices

MKS:
Advanced PCB
via Drilling
Systems, Lasers,
Optics, Motion

Atotech
Electronics:
Process
Chemistry and
Equipment

Combination of Advanced PCB capabilities and expertise are unique and will accelerate new roadmaps

HDI PCB - THEN

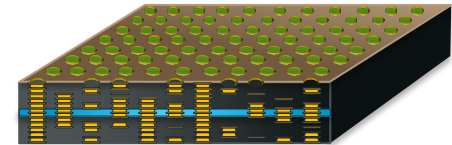


Number of vias has increased
by more than 4x from
250,000 to >1 million



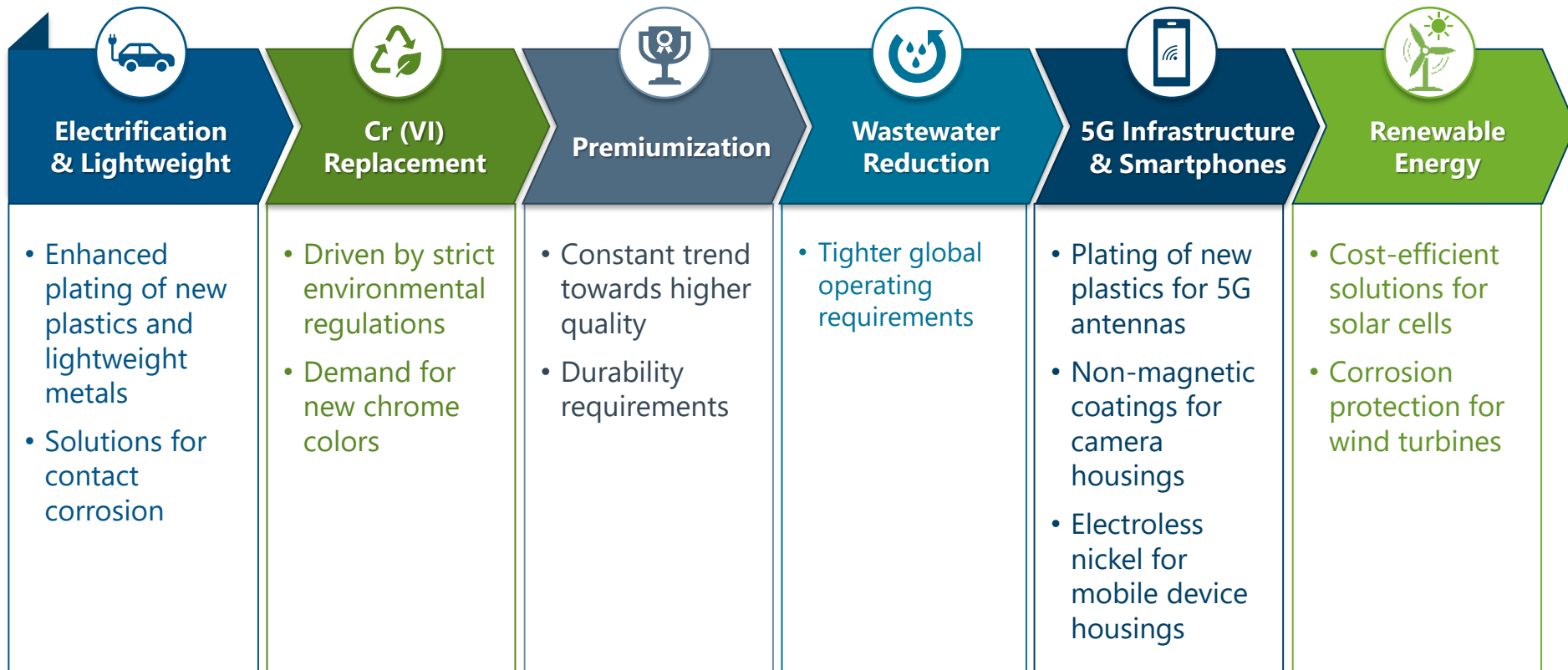
Line/space and via size has
decreased by more than 60%

HDI PCB - NOW

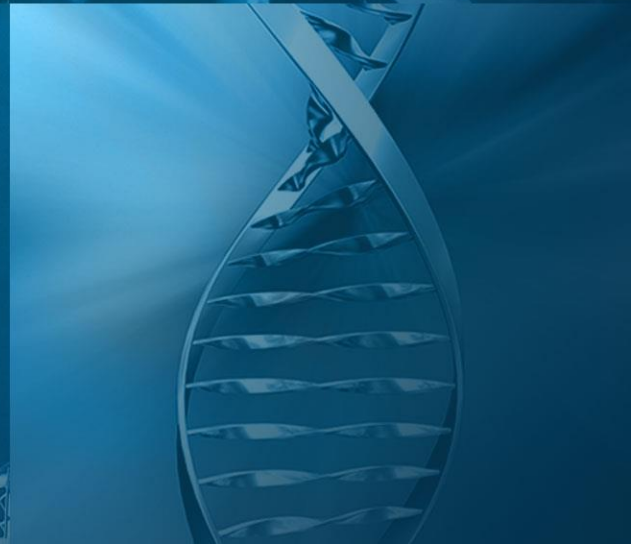


Adjacent Expertise Creates Significant Market Share Opportunities

Atotech's GMF Well-Positioned For Attractive Secular Trends



Strong
Value Creation
Track Record



Strong Operating & Financial Profile ...

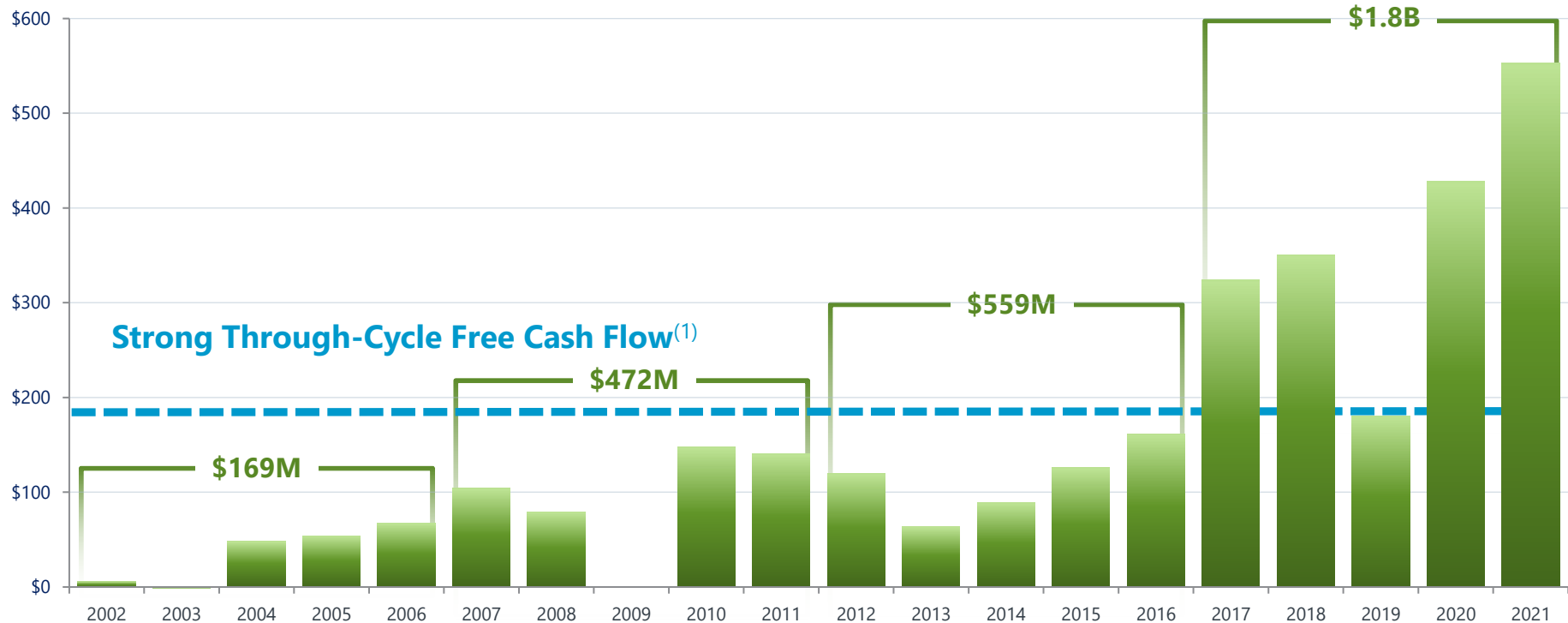
	2015	2021	2015-2021 CAGR
Total Revenue	\$0.8B	\$2.9B	+24%
<ul style="list-style-type: none"> Semiconductor Market 	\$0.6B	\$1.8B	+22%
<ul style="list-style-type: none"> Advanced Markets 	\$0.3B	\$1.1B	+29%
Leading Product Categories ⁽¹⁾	7	16	
Non-GAAP Operating Margin	20%	27%	
Non-GAAP Diluted Earnings per Share	\$2.22	\$11.38	+31%

⁽¹⁾Product categories where Company estimates it is #1 or #2 in market share.

⁽²⁾From December 31, 2015 to February 1, 2022.

MKS Stock Appreciation >330%⁽²⁾

... Drives Accelerating Free Cash Flow Generation...



⁽¹⁾Free cash flow is net cash provided by operating activities less purchases of property, plant and equipment.

2019 "Trough" Greater than any "Peak" in MKS History through 2016

... Creating Balance Sheet Optionality

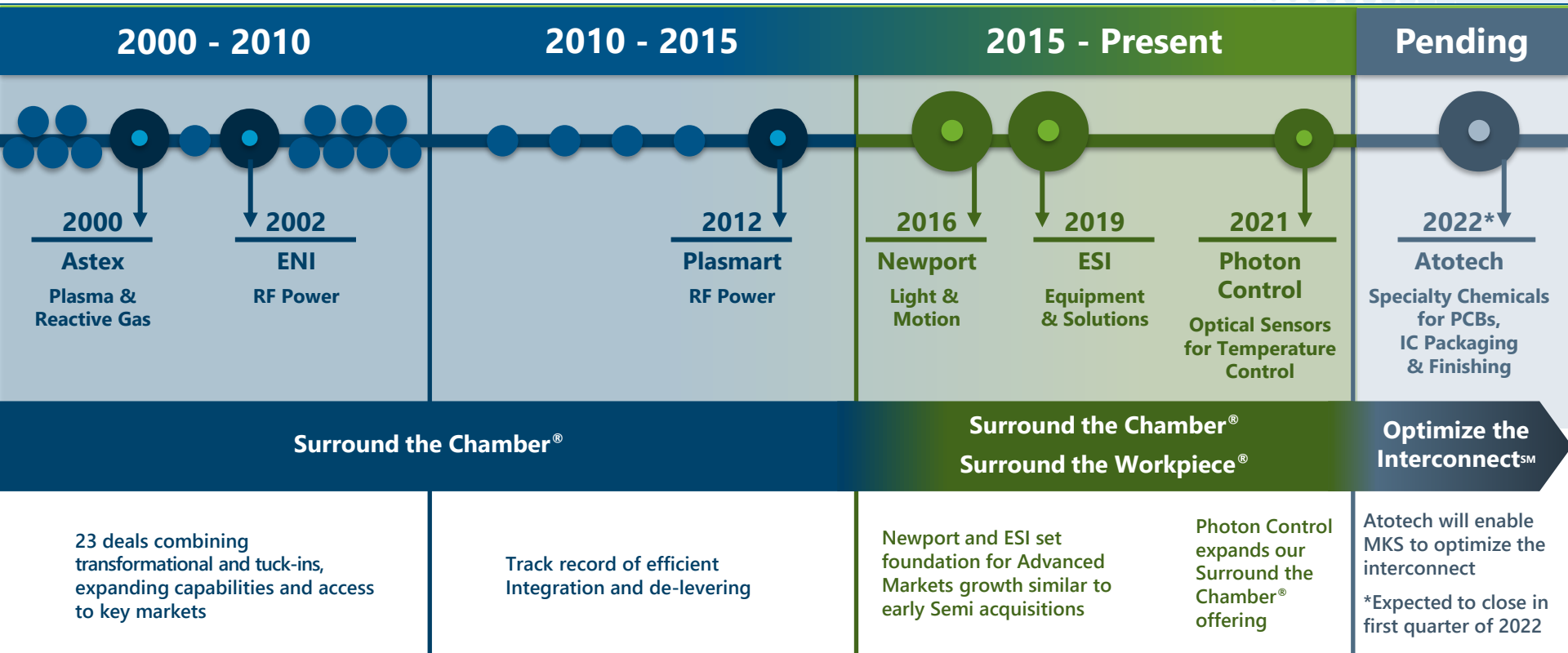
\$3.2 Billion Allocated Over Last 5 Years⁽¹⁾



⁽¹⁾Capital deployment from 2017-2021.

75%+ of Capital Reinvested in Growth Initiatives

M&A is Core to MKS Growth Strategy



Significant Opportunities to Further Extend Technology and Market Position

Positioned for the Age of Miniaturization & Complexity

Growth Drivers



- A leading critical subsystem provider in Semi Market
- Advanced Markets poised to capitalize on growing need for laser-based processing
- Strategic acquisitions accelerate growth and broaden capabilities

Financial Execution



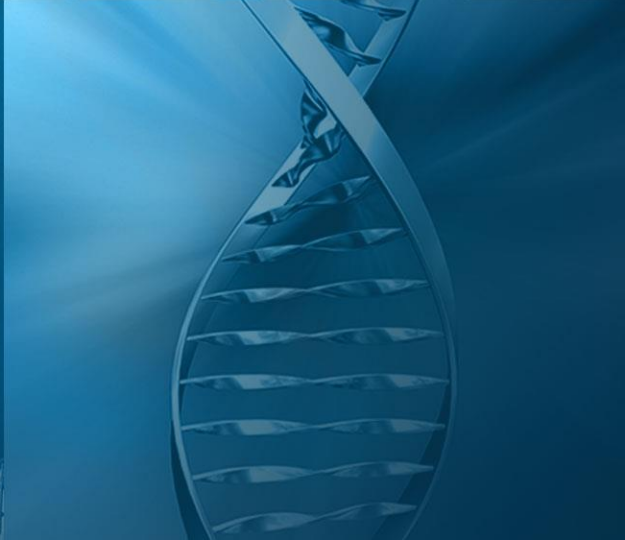
- Delivered on promised synergies
- Culture of continuous cost improvement
- Consistent track record of de-levering post acquisitions

Value Creation



- Strong through-cycle free cash flow provides balance sheet optionality
- Attractive long-term earnings growth outlook
- End-market diversity and execution underpin strong financial returns

Appendix – GAAP to Non-GAAP Reconciliations



Appendix – GAAP to Non-GAAP Reconciliations

(in millions, except per share data)	2015	2021
Revenue	813.5	2,949.6
Income from operations	\$ 156.6	\$ 698.9
Sale of previously written-down inventory (1)	(2.1)	—
Inventory charge related to exit of product groups (Note 2)	0.5	—
Acquisition and integration costs (Note 3)	—	29.8
Restructuring and other (Note 5)	2.1	11.1
Amortization of intangible assets	6.8	55.3
Non-GAAP income from operations	<u>\$ 163.9</u>	<u>\$ 795.1</u>
Non-GAAP operating margin	20.1%	27.0%
Net income	\$ 122.3	\$ 551.4
Sale of previously written-down inventory (1)	(2.1)	—
Inventory charge related to exit of product groups (Note 2)	0.5	—
Acquisition and integration costs (Note 3)	—	29.8
Amortization of debt issuance costs (Note 4)	—	1.2
Restructuring and other (Note 5)	2.1	11.1
Amortization of intangible assets	6.8	55.3
Release of tax reserves (Note 6)	(7.7)	—
Currency hedge loss (Note 7)	—	6.9
Windfall tax benefit on stock-based compensation (Note 8)	—	(4.6)
Withholding tax related to Brexit (Note 9)	—	3.2
Tax effect of Non-GAAP adjustments (Note 10)	(2.8)	(20.6)
Non-GAAP net earnings	<u>\$ 119.1</u>	<u>\$ 633.7</u>
Non-GAAP net earnings per diluted share	<u>\$ 2.22</u>	<u>\$ 11.38</u>
Weighted average diluted shares outstanding	53.6	55.7

Appendix – GAAP to Non-GAAP Reconciliations

(in millions)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Net cash provided by operating activities	\$ 20.1	\$ 13.8	\$ (0.2)	\$ 66.4	\$ 64.2	\$ 78.2	\$ 119.1	\$ 92.7	\$ 4.9	\$ 163.5	\$ 156.0	\$ 137.2	\$ 76.1	\$ 101.9	\$ 138.3	\$ 180.1	\$ 355.2	\$ 413.8	\$ 244.5	\$ 513.0	\$ 640.0
Purchases of property, plant and equipment	14.6	7.9	6.3	18.3	10.3	10.7	15.1	13.5	4.2	15.8	15.6	17.7	12.4	13.2	12.4	19.1	31.3	62.9	63.9	85.0	87.0
Free cash flow	\$ 5.5	\$ 5.9	\$ (6.5)	\$ 48.1	\$ 53.9	\$ 67.5	\$ 104.0	\$ 79.3	\$ 0.7	\$ 147.7	\$ 140.5	\$ 119.5	\$ 63.7	\$ 88.7	\$ 125.9	\$ 161.0	\$ 323.9	\$ 350.8	\$ 180.6	\$ 428.0	\$ 553.0

Appendix – GAAP to Non-GAAP Reconciliations



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.

Note 1: We recorded a credit in cost of sales related to the sale of excess and obsolete inventory previously written down to net realizable value.

Note 2: We recorded an inventory charge related to the exit of certain product groups.

Note 3: Acquisition and integration costs during the twelve months ended December 31, 2021 related to our acquisition of Photon Control, our pending acquisition of Atotech and our proposed acquisition of Coherent, Inc.

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 (each credit agreement, as defined in our Annual Report on Form 10-K for the year ended December 31, 2021, as filed with the SEC on February 28, 2022).

Note 5: Restructuring and other costs during the twelve months ended December 31, 2021 related to severance costs from a global cost saving initiative, costs related to the pending closure of two facilities in Europe, movement of certain products to low cost regions and duplicate facility costs attributed to entering into new facility leases. Restructuring and other costs during the twelve months ended December 31, 2015 included charges related to the outsourcing and consolidation of a international manufacturing operations.

Note 6: We recorded reserve releases related to the settlement of audits and expiration of the statute of limitations.

Note 7: During the twelve months ended December 31, 2021, we recorded a fair-value loss from Canadian dollar contracts related to hedge currency fluctuations in connection with the funding of our acquisition of Photon Control, which was consummated on July 15, 2021. This loss was partially offset by a fair-value gain from Euro contracts related to hedge currency fluctuations in connection with the funding of our pending acquisition of Atotech.

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

Note 9: We recorded additional withholding taxes on inter-company 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.