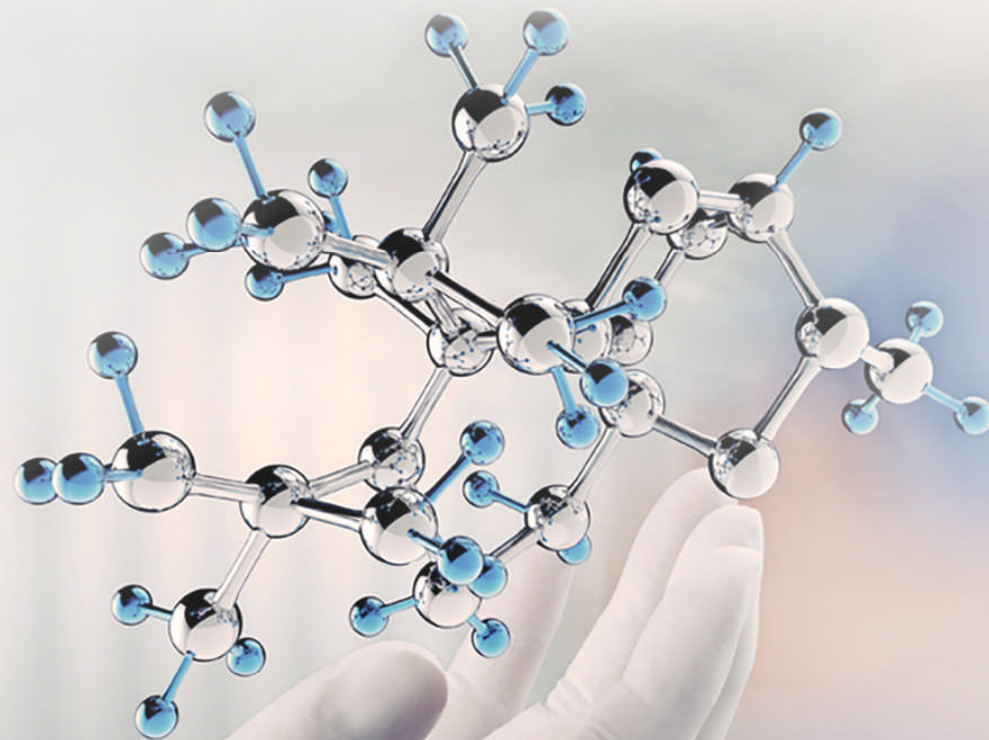




MARCH 20, 2017

2017 Analyst Meeting



SAFE HARBOR

Certain information contained in this presentation may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements involve substantial risks and uncertainties that could cause actual results to differ materially from the results expressed in, or implied by, these forward-looking statements. Statements that include such words as “anticipate,” “believe,” “estimate,” “expect,” “forecast,” “may,” “will,” “should” or the negative thereof and similar expressions as they relate to Entegris or our management are intended to identify such forward-looking statements. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. These risks include, but are not limited to, fluctuations in the market price of Entegris’ stock, Entegris’ future operating results, other acquisition and investment opportunities available to Entegris, general business and market conditions and other factors. Additional information concerning these and other risk factors may be found in previous financial press releases issued by Entegris and Entegris’ periodic public filings with the Securities and Exchange Commission, including discussions appearing under the headings “Risks Relating to our Business and Industry,” “Risks Related to Our Indebtedness,” “Manufacturing Risks,” “International Risks” and “Risks Related to Owning Our Common Stock” in Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed with the Securities and Exchange Commission on February 17, 2017, as well as other matters and important factors disclosed previously and from time to time in the filings of Entegris with the U.S. Securities and Exchange Commission. Except as required under the federal securities laws and the rules and regulations of the Securities and Exchange Commission, we undertake no obligation to update publicly any forward-looking statements contained herein.

AGENDA

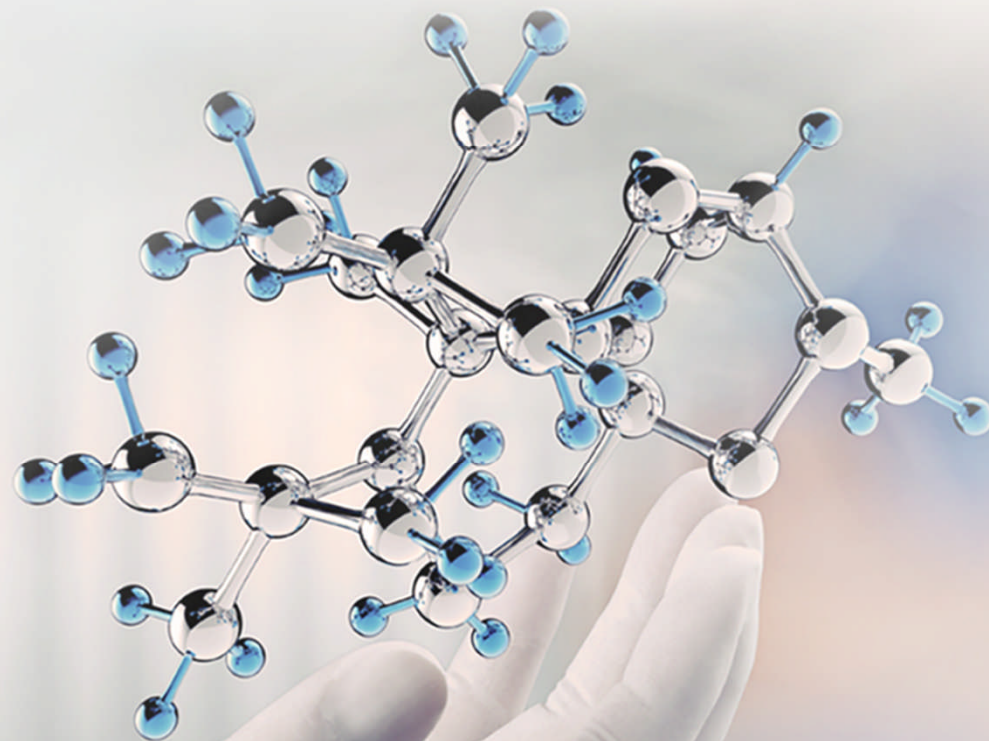
	Topic	Speaker
01	A World Class Specialty Materials Company	Bertrand Loy, President and CEO
02	Why Materials and Purity Matter More than Ever Before	Tim Hendry, Retired VP, Technology and Manufacturing Group, Director of Fab Materials at Intel
03	Delivering Growth From Our Unique Platform	Todd Edlund, EVP and Chief Operating Officer
	<i>Break</i>	
04	Microcontamination Control; Ensuring Air, Gas and Liquid Purity	Clint Haris, SVP and General Manager
05	Advanced Materials Handling; Guaranteeing Purity Throughout the Process	Bill Shaner, SVP and General Manager
06	Specialty Chemicals and Engineered Materials	Stuart Tison, SVP and General Manager
07	Growing Cash Flow and Earnings	Greg Graves, EVP and Chief Financial Officer
08	Q&A	



2017 ANALYST MEETING

A World Class Specialty Materials Company

Bertrand Loy
President and CEO



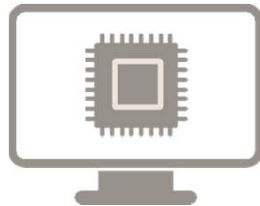
WHAT YOU SHOULD TAKE AWAY FROM TODAY'S MEETING

- Entegris is executing well with a path for continued top-line growth and bottom-line expansion
- The semiconductor industry is in a multi-year growth cycle
- Materials and materials purity/handling is a key enabler of this growth
- Entegris is well-positioned to benefit as a leading supplier of materials, filtration and advanced materials handling solutions
- We have an excellent platform on which to expand through strategic M&A

ENTEGRIS: CREATING COMPELLING LONG-TERM VALUE FOR SHAREHOLDERS



Mission Critical
Supplier



Electronic
Materials

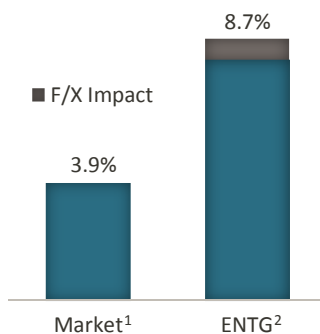


Above-Market
Growth



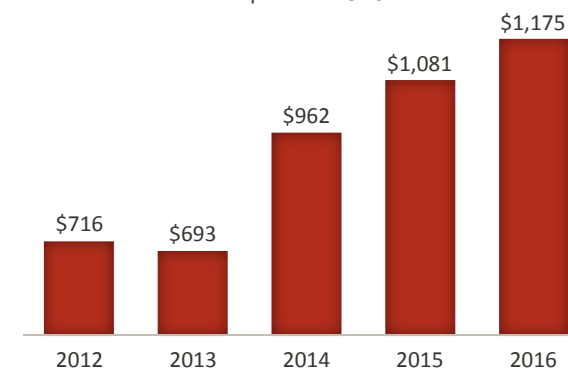
Stable, Recurring Revenue,
Strong Cash Flow and
Earnings Leverage

Entegris vs. Market Blend 2016
Relative Growth



2016 was a year
of many records

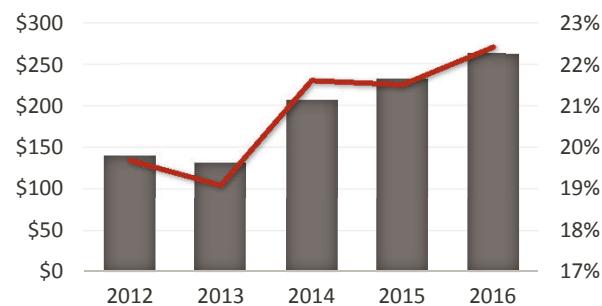
Revenue As Reported
\$ in Millions



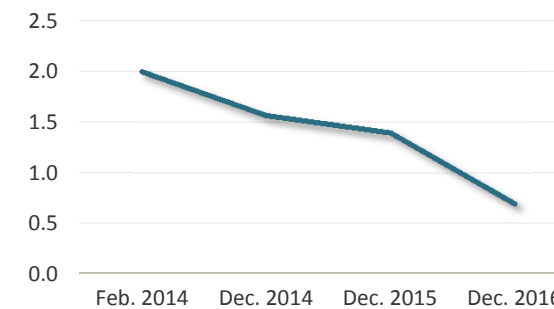
EPS²



EBITDA and EBITDA Margin²



Net Leverage
Net Debt/Adj. EBITDA

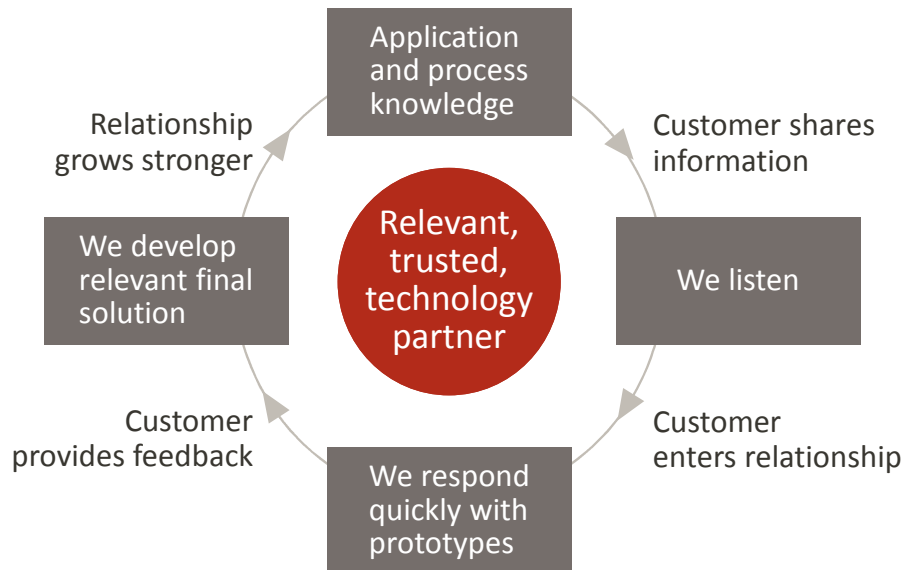


¹ Market index defined as 80% Millions of Sq. Inches of Silicon produced (MSI) and 20% Wafer Fab Equipment (WFE); Data source is Gartner (WFE) and SEMI (MSI)

² Non-GAAP

STRONG EXECUTION AND FOCUSED INVESTMENTS DRIVING PERFORMANCE

Customer Engagement Model

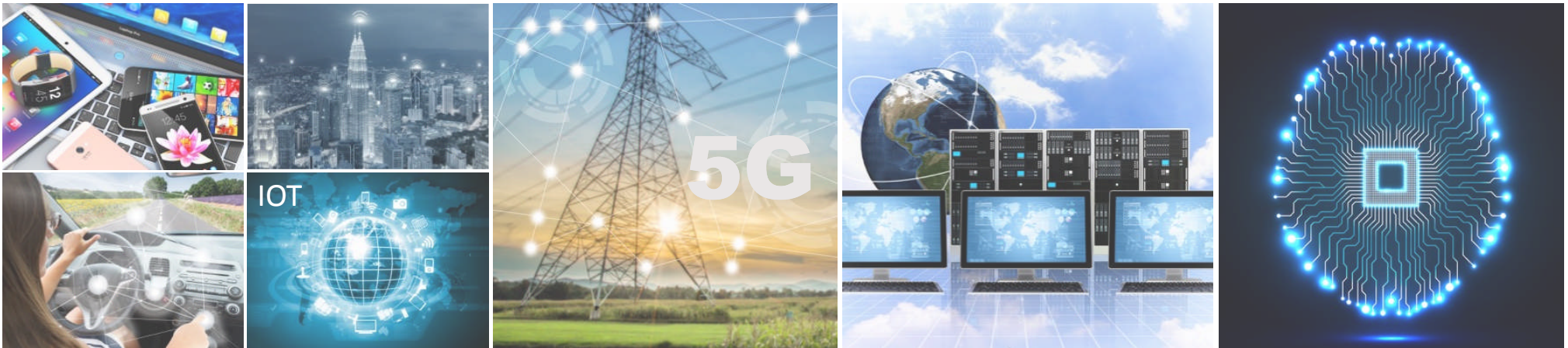


Strategic Investments



NEW DIGITAL WORLD TAKING SHAPE

Connected Devices ↔ **Fast Wireless Network** ↔ **Cloud** ↔ **AI/Machine Learning**

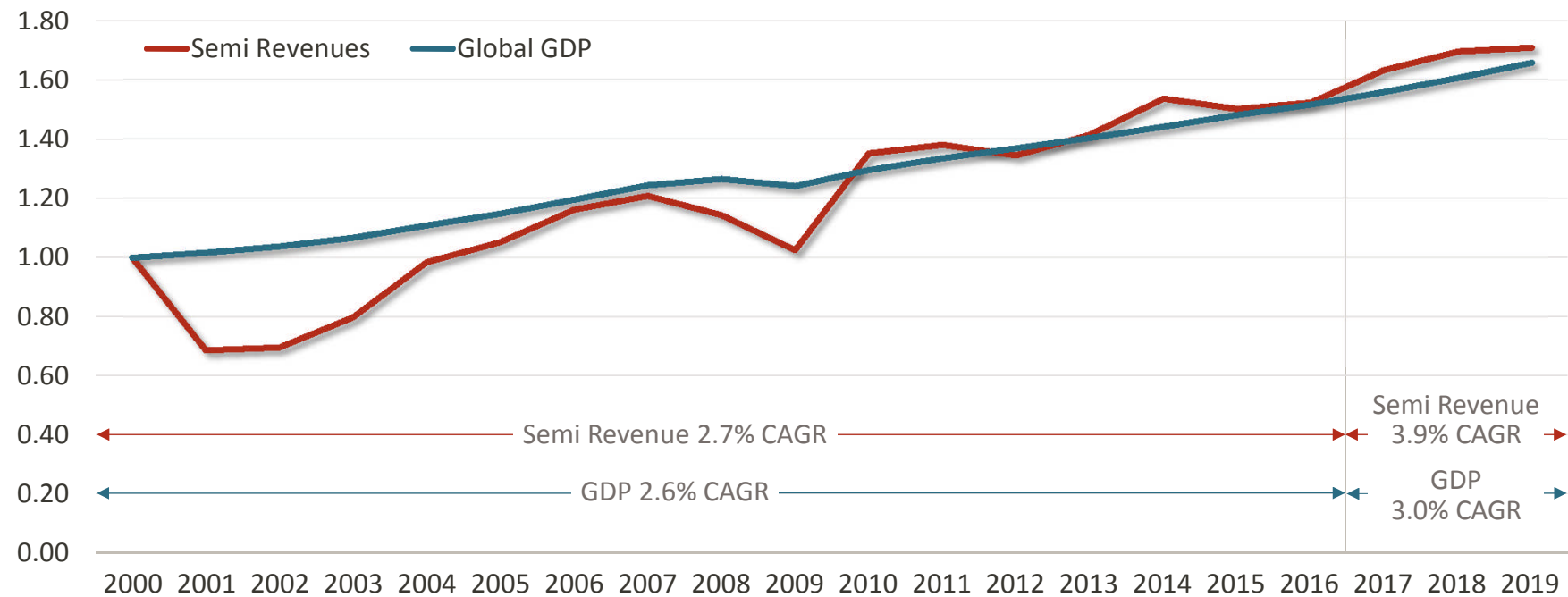


Source: IBM

SEMI INDUSTRY IS IN THE MIDST OF MULTI-YEAR GROWTH CYCLE

The semiconductor industry is becoming more correlated to Global GDP

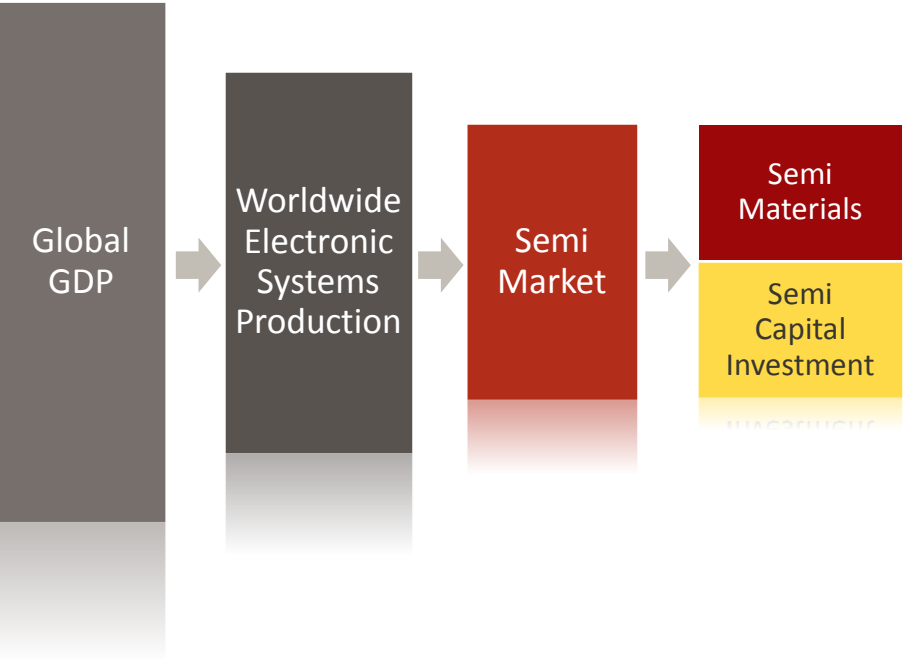
Semi Revenue vs. Global GDP



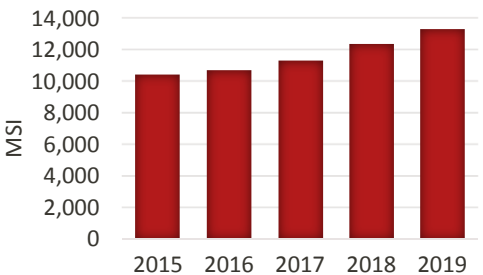
Source: Gartner, March 2017

ELECTRONIC MATERIALS ARE A MORE IMPORTANT PART OF THE INDUSTRY’S FOODCHAIN

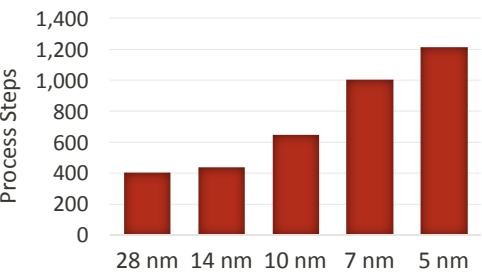
Driving Demand



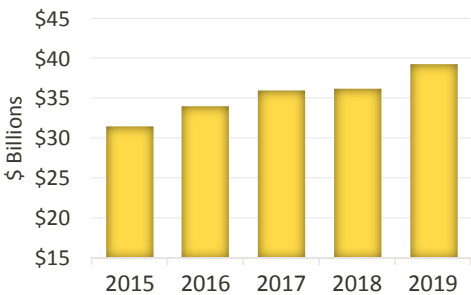
Wafer Starts Continue to Increase



More Semi Manufacturing Process Steps



Stable Wafer Fab Equipment Investment



Source: Wafer Start data – Linx Consulting, February 2017; Semi Manufacturing Process Steps – KLA-Tencor; WFE data – Gartner, February 2017

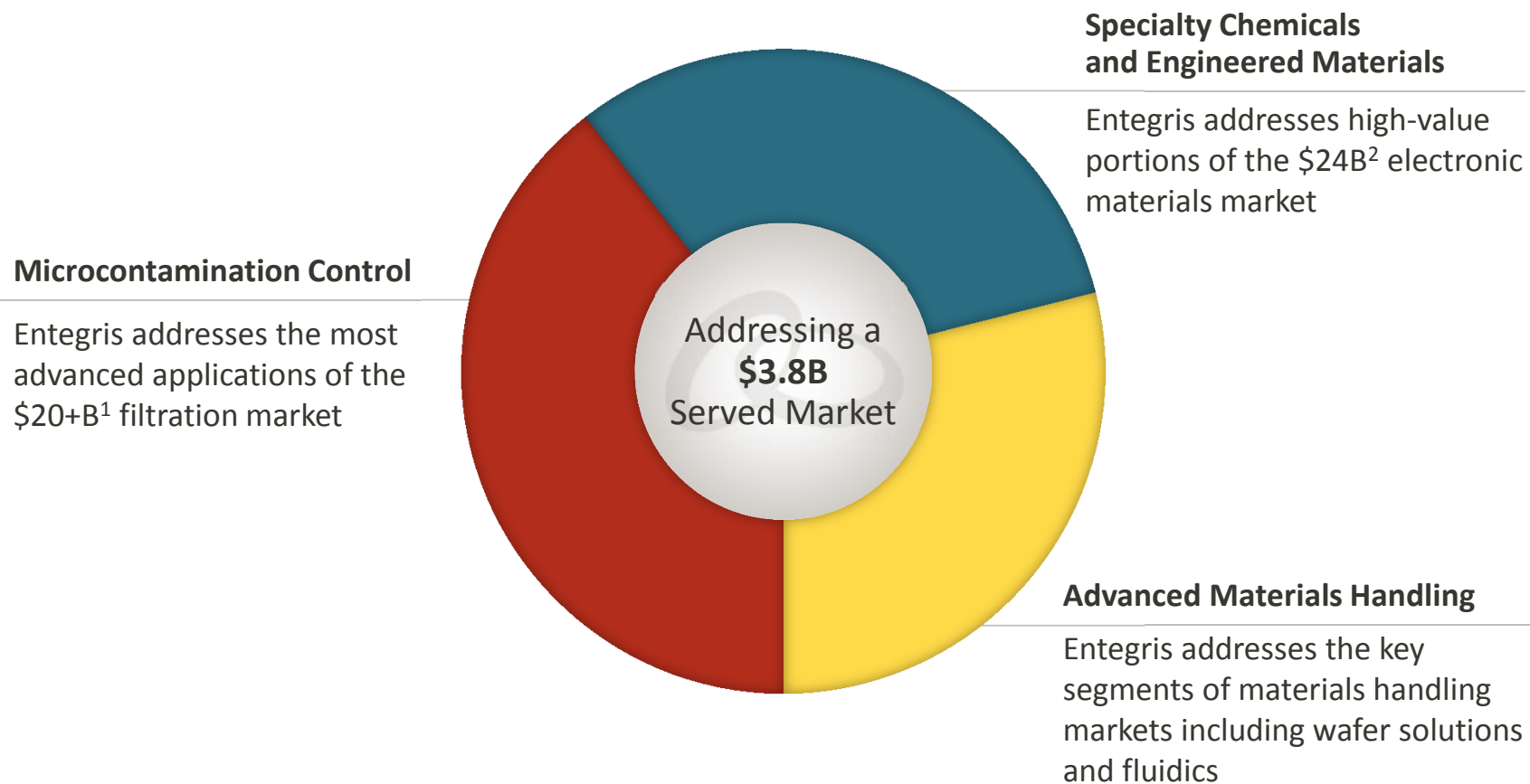
NEW MATERIALS WILL DRIVE DEVICE PERFORMANCE

- For most of its history, the semi industry has successfully used “shrink” to keep on Moore’s Law
- Continued innovation of device performance requires the use of more new materials
- Achieving targeted manufacturing yields for new technology nodes is even more critical to the leading-edge fabs, but more difficult due process complexity and materials challenges
- Purity and contamination control are increasingly important levers to achieving yields
- Entegris is focused on materials and materials innovation that are increasingly critical to enabling the industry’s roadmap



New materials and higher purity are becoming essential to the semi industry

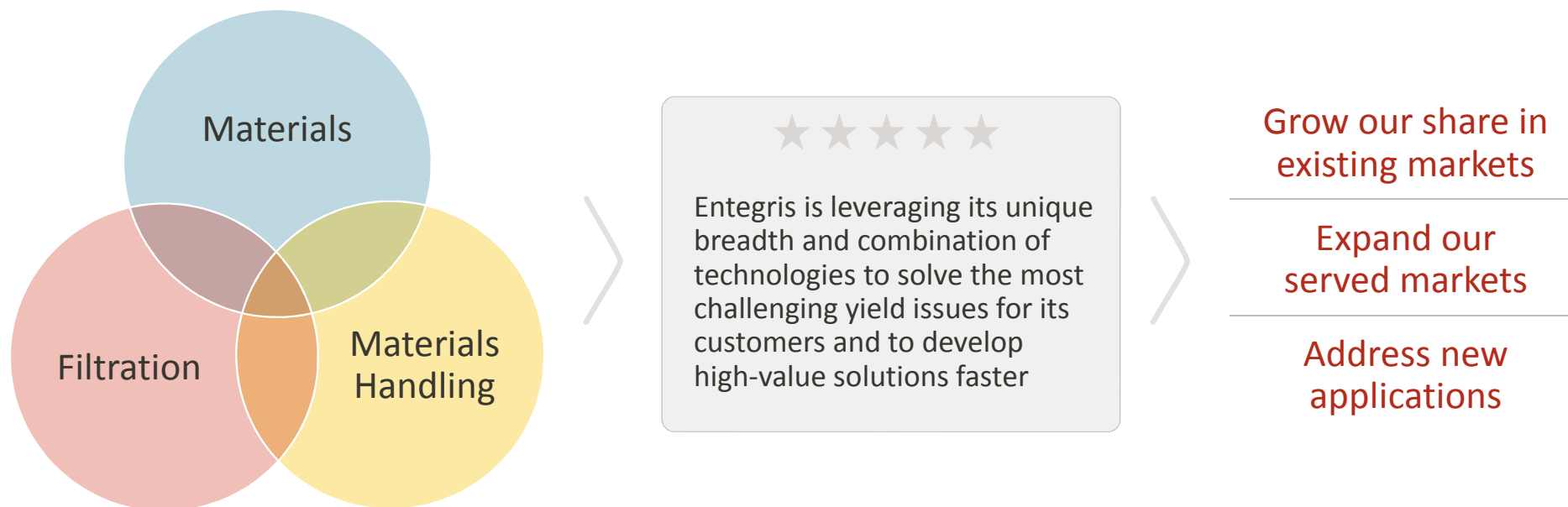
THE GLOBAL SEMI MATERIALS AND RELATED MARKETS



1 Source: Entegris estimates

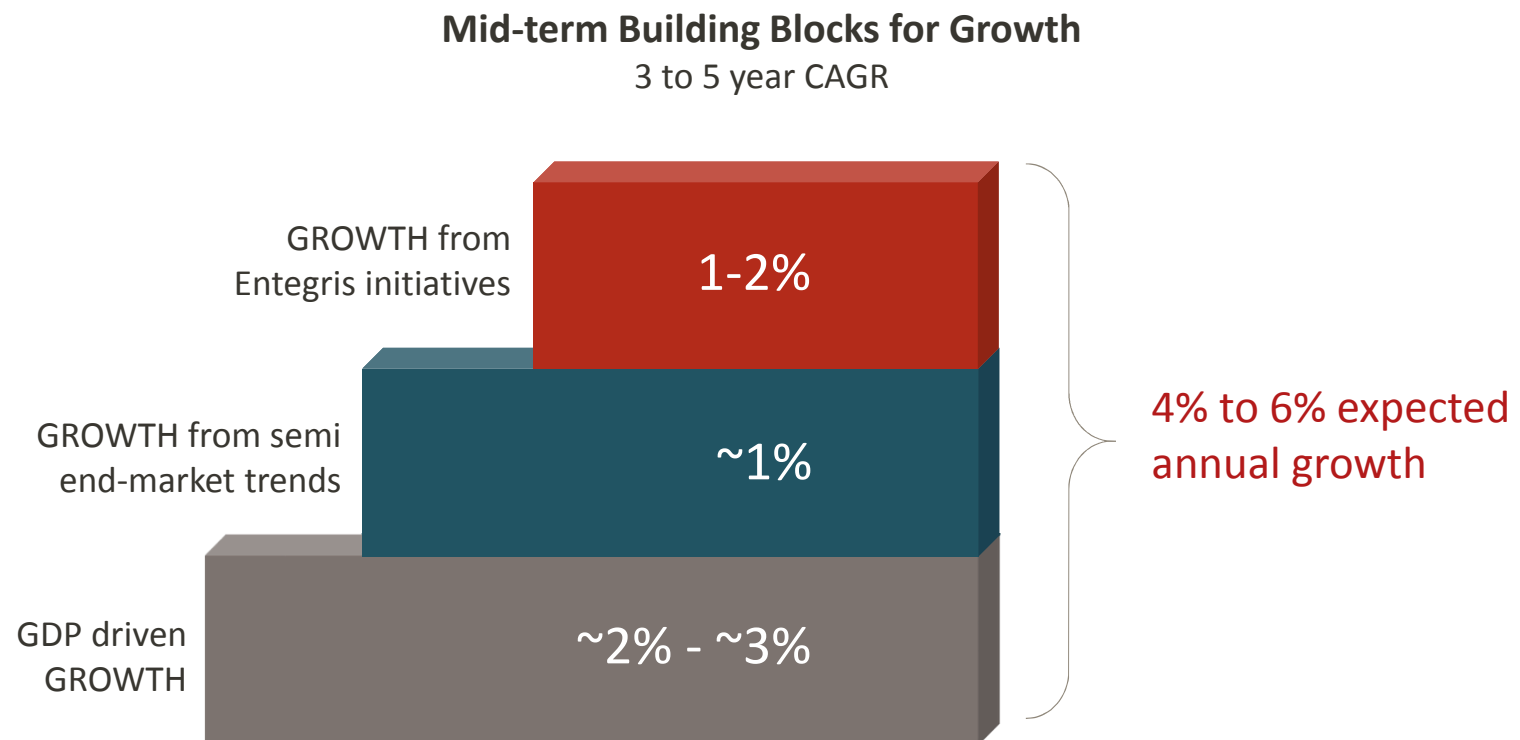
2 Source: SEMI

NEW MATERIALS REQUIRING NEW COMPREHENSIVE PROCESS SOLUTIONS



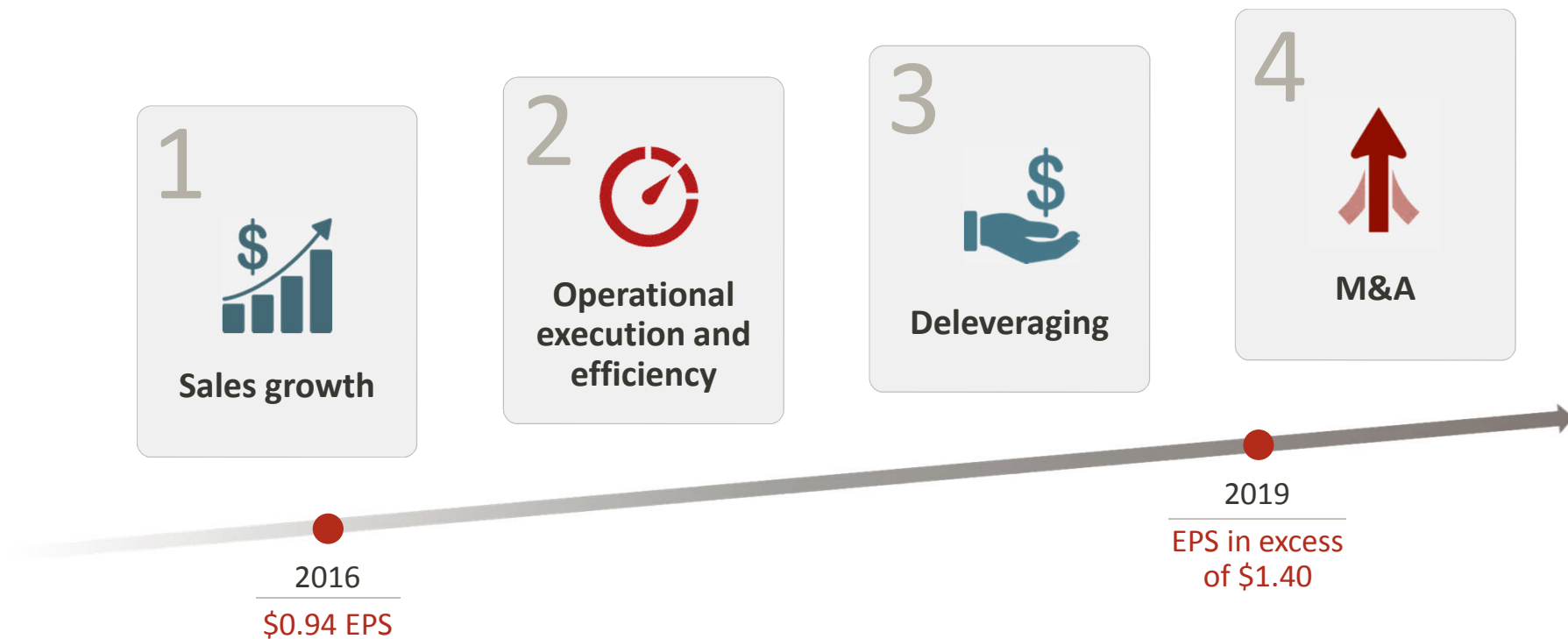
PATH TO CONTINUE TO OUTPACE MARKETS OVER NEXT THREE TO FIVE YEARS

Entegris is leveraging its technology breadth, global infrastructure and operational expertise to drive growth



EPS GROWTH FORMULA¹

Our goal is to grow profits at 2x the rate of organic growth with a path to significantly increase EPS through strategic capital allocation that leverages the Entegris platform



¹ Non-GAAP EPS

Why Materials and Purity Matter More than Ever Before

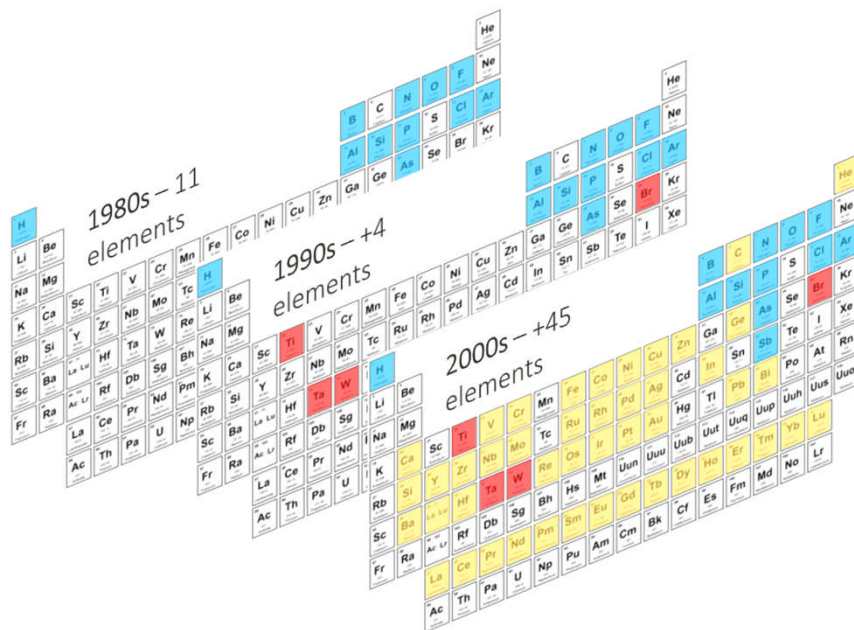
Tim Hendry

Retired Vice President
Technology and Manufacturing Group,
Director of Fab Materials at Intel



INCREASED IMPORTANCE OF SPECIALTY MATERIALS – DEVICE PERFORMANCE

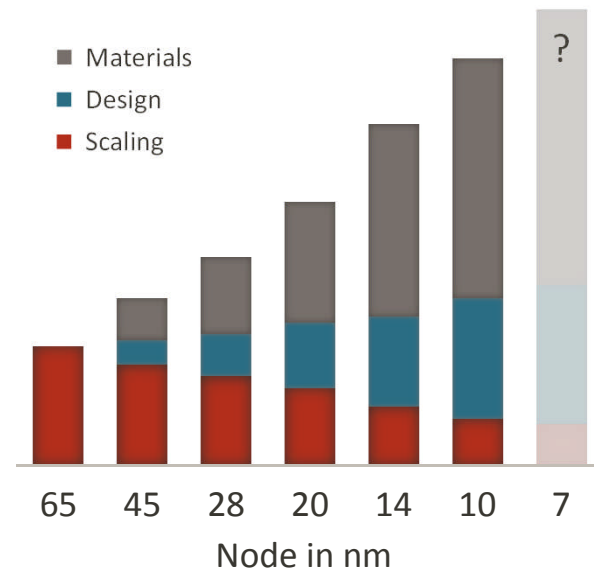
Integration of new material types is playing an increasing role in achieving device performance gains



Device Performance Drivers

Device performance and energy efficiency support emerging mobile markets and expanding data centers

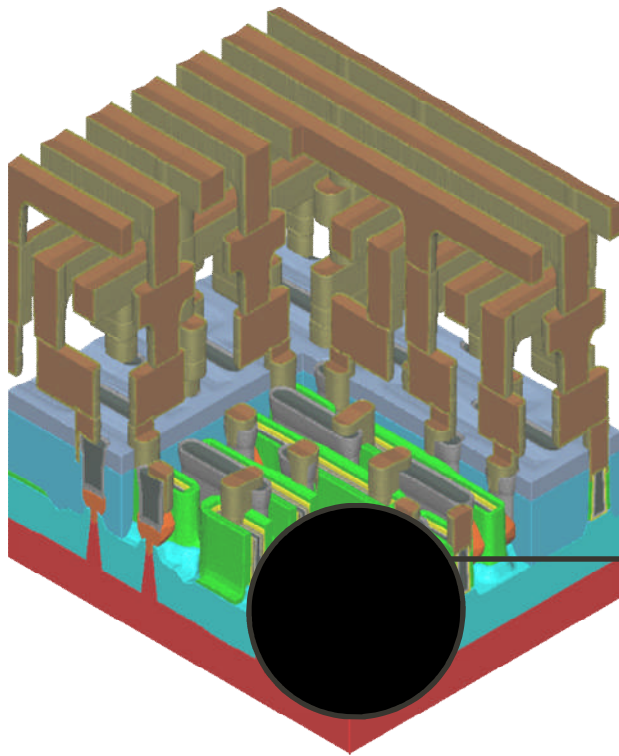
Relative Impact on Device Performance



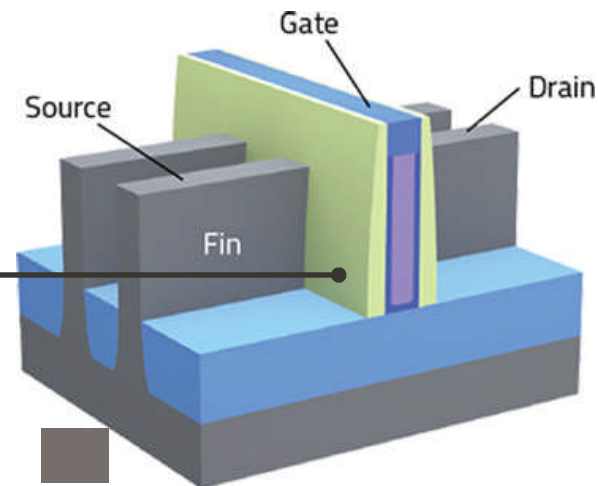
Materials are having a greater Impact on semiconductor performance

Source: Entegris estimates

DEVICE PERFORMANCE: FRONT-END PROCESSING INNOVATION



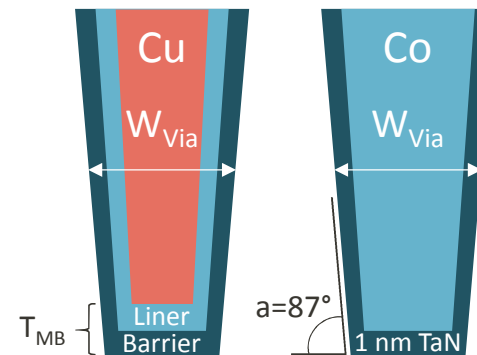
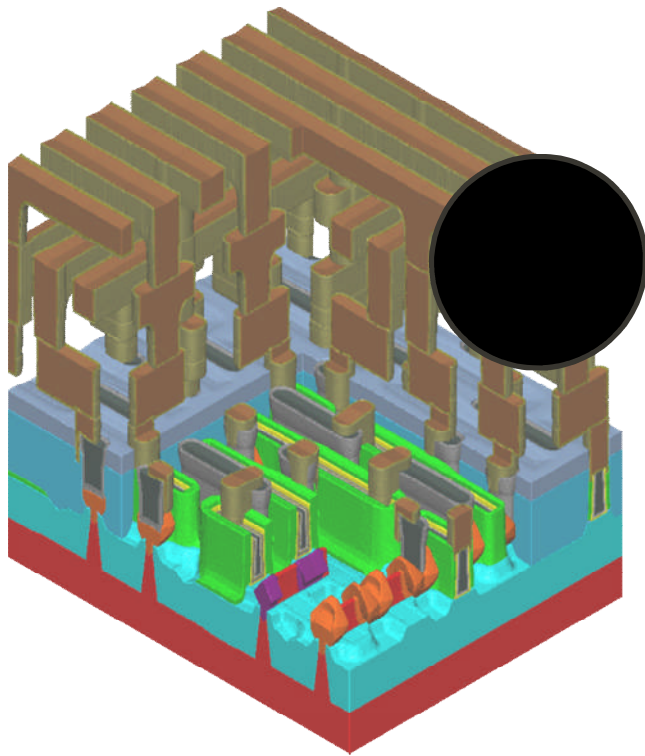
- New transistor materials increase device power efficiency
- New channel materials are needed to improve transistor speed
- New metals needed to reduce contact resistance



3D device architectures require increased conformality and selectivity for deposition processes

Source: Coventor

DEVICE PERFORMANCE: BACK-END PROCESSING INNOVATION



Other Key Metals:

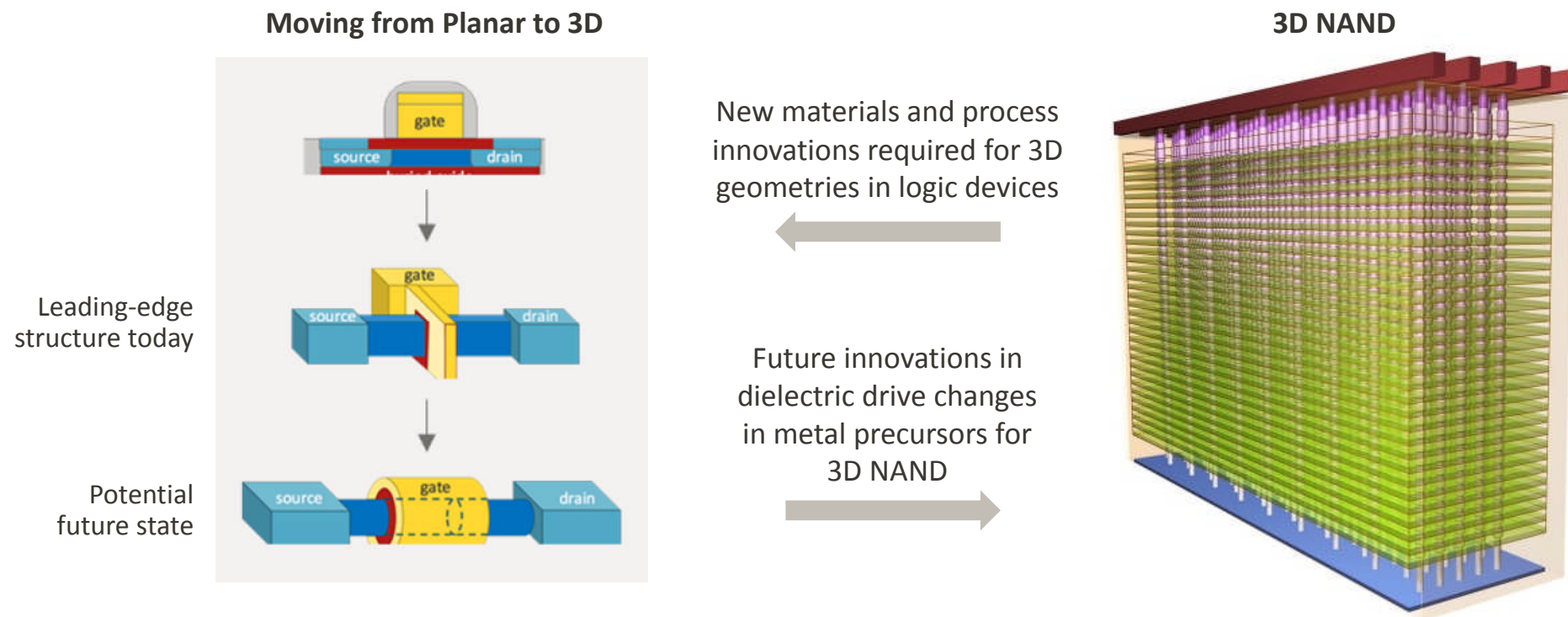
- Tantalum
- Manganese
- Ruthenium

- New dielectrics and metals required to reduce wiring signal delays
- Structural integrity of low-k materials is key challenge
- New metals required beyond Copper (liners, barriers and electroplated films) needed to accommodate smaller line dimensions

Shrinking dimensions and increasing layers make wiring delays the limiter of device performance

3D SCALING AND INTEGRATION INNOVATION

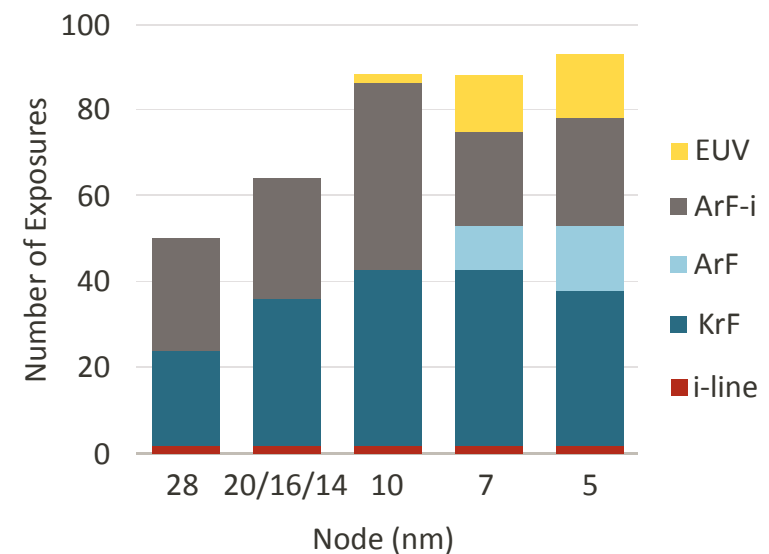
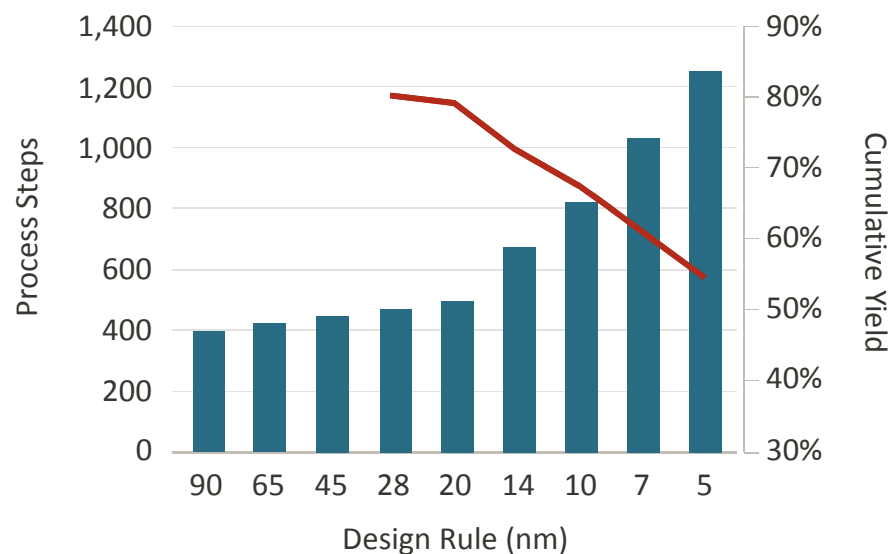
Deposition precursors are the fastest growing materials segment as industry moves from 14 nm to 10 nm and below



3D device architectures and decreased geometries require atomic scale film control (ALD and ALE)

PROCESS COMPLEXITY

Materials usage grows as number of process steps and lithography layers increases at a non-linear rate



Economics of Moore's Law: Process complexity, yield challenges, cycle time and number of mask layers must be addressed to maintain node transition schedule

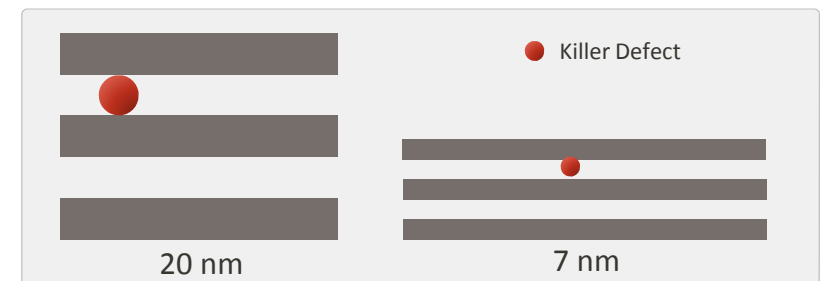
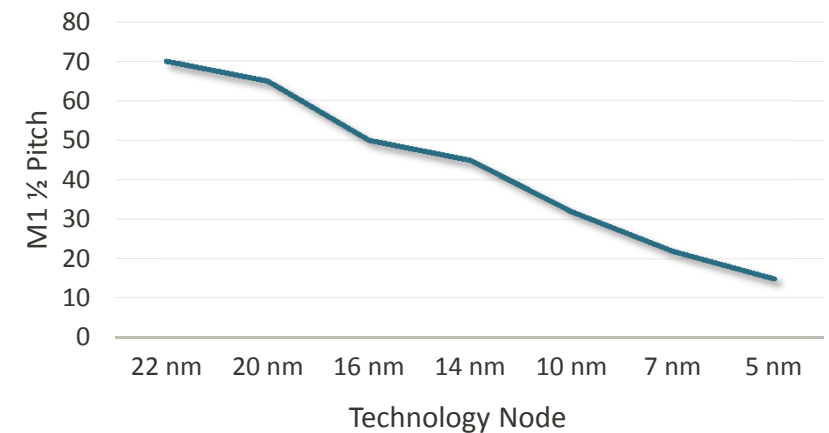
Source: Left chart – KLA-Tencor; right chart – ASML

INCREASED MATERIAL PURITY REQUIREMENTS

Purity in key process areas in the fab are measured in parts per quadrillion (PPQ)



Metal Wiring Pitch



DEFECTIVITY REDUCTION IN THE MATERIALS SUPPLY CHAIN

Need to control contamination across the entire material stream



Material enablement throughout the supply chain required to ensure chemical integrity

SUPPLY CHAIN CONSIDERATIONS FOR MATERIALS SELECTIONS

Fewer players with breadth of needed capabilities

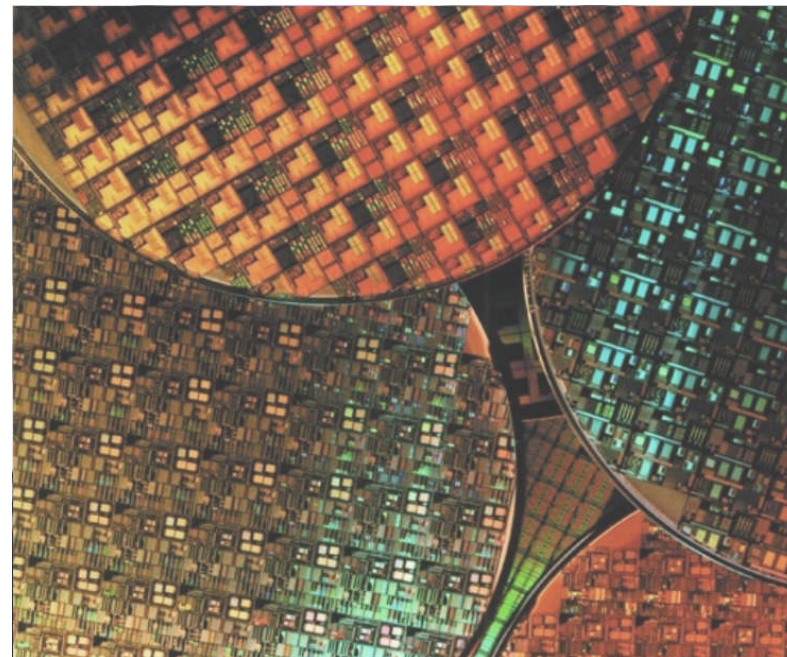
- Comprehensive set of **engineering capabilities** to bring innovative solutions to market
- **Speed of execution** to introduce new material iterations given the long process cycle times for new nodes
- **Analytical capabilities** to quickly solve problems that occur during product ramp
- Manufacturing capacity and **agility** to respond to changing requirements
- **Supply chain expertise** and relationship with sub-suppliers



Suppliers must make upfront investment and build capability to play in this industry

SUMMARY

- Materials will continue to play an increasing role in achieving device performance gains as new transistor architectures are introduced
- Process complexity will continue to be a headwind for the transition to new process nodes
- Materials and equipment suppliers that develop solutions which reduce complexity without sacrificing performance will gain market share
- A holistic systems approach integrated into the entire supply chain is needed to meet future defectivity requirements



Broadly capable materials suppliers are best positioned to support the global supply chain in the semiconductor industry

2017 ANALYST MEETING

Delivering Growth From Our Unique Platform

Todd Edlund
Executive Vice President and COO



ENTEGRIS HAS THE BROADEST PORTFOLIO OF SOLUTIONS TO THE INDUSTRY'S CHALLENGES



Specialty Chemicals and Engineered Materials (SCEM)

- SDS and VAC Based Gases (SG)
- Post Etch/CMP Cleans
- Plating and CMP Components
- Advanced Deposition Products
- Graphite Products
- Specialty Coatings



Microcontamination Control (MC)

- Liquid Filters and Purifiers
- Gas Filters/Diffusers/Purifiers
- Airborne Molecular Contamination Control Products

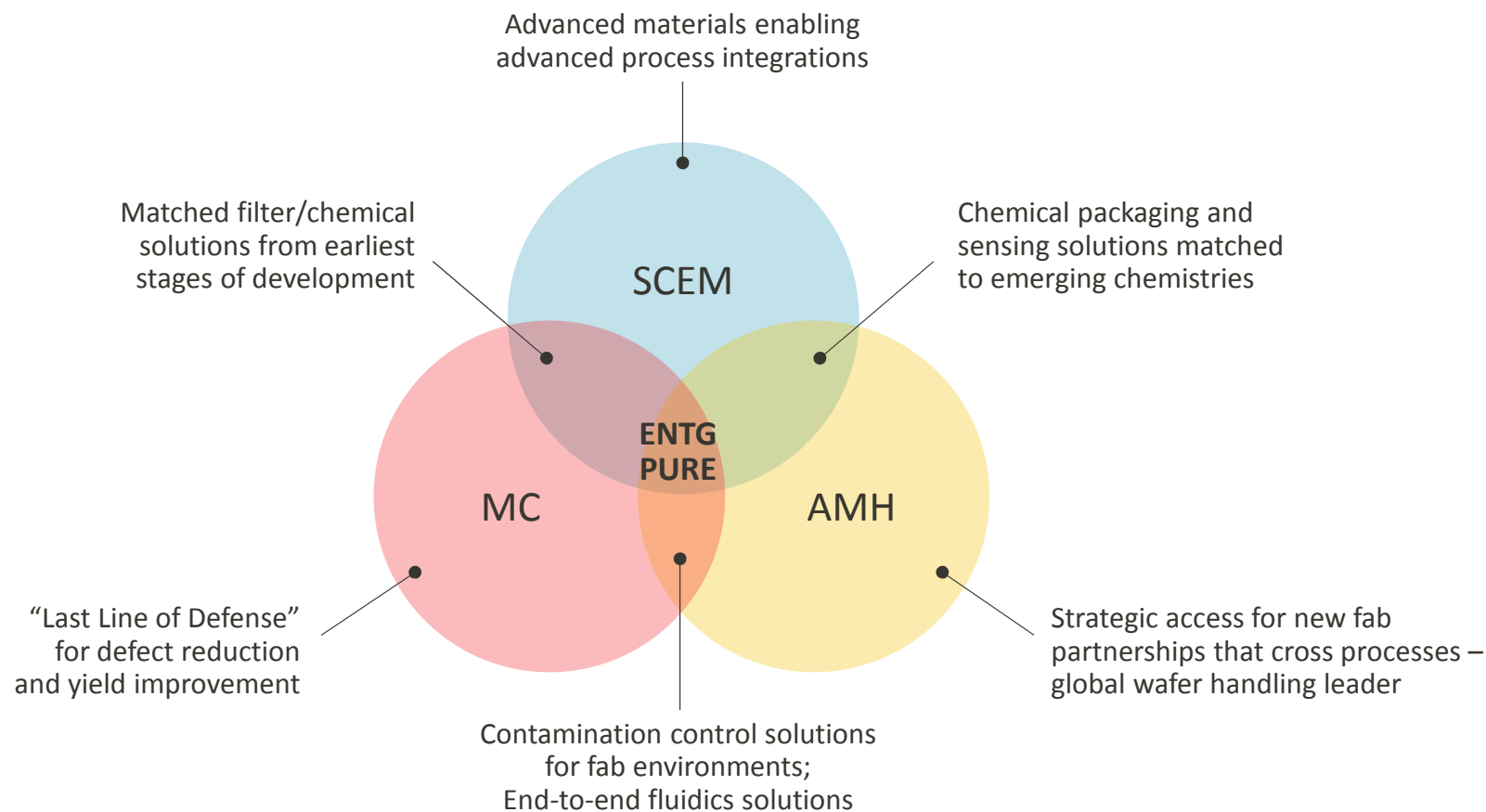


Advanced Materials Handling (AMH)

- Microenvironments
- Fluid Handling
- Sensing & Control
- Liquid Packaging

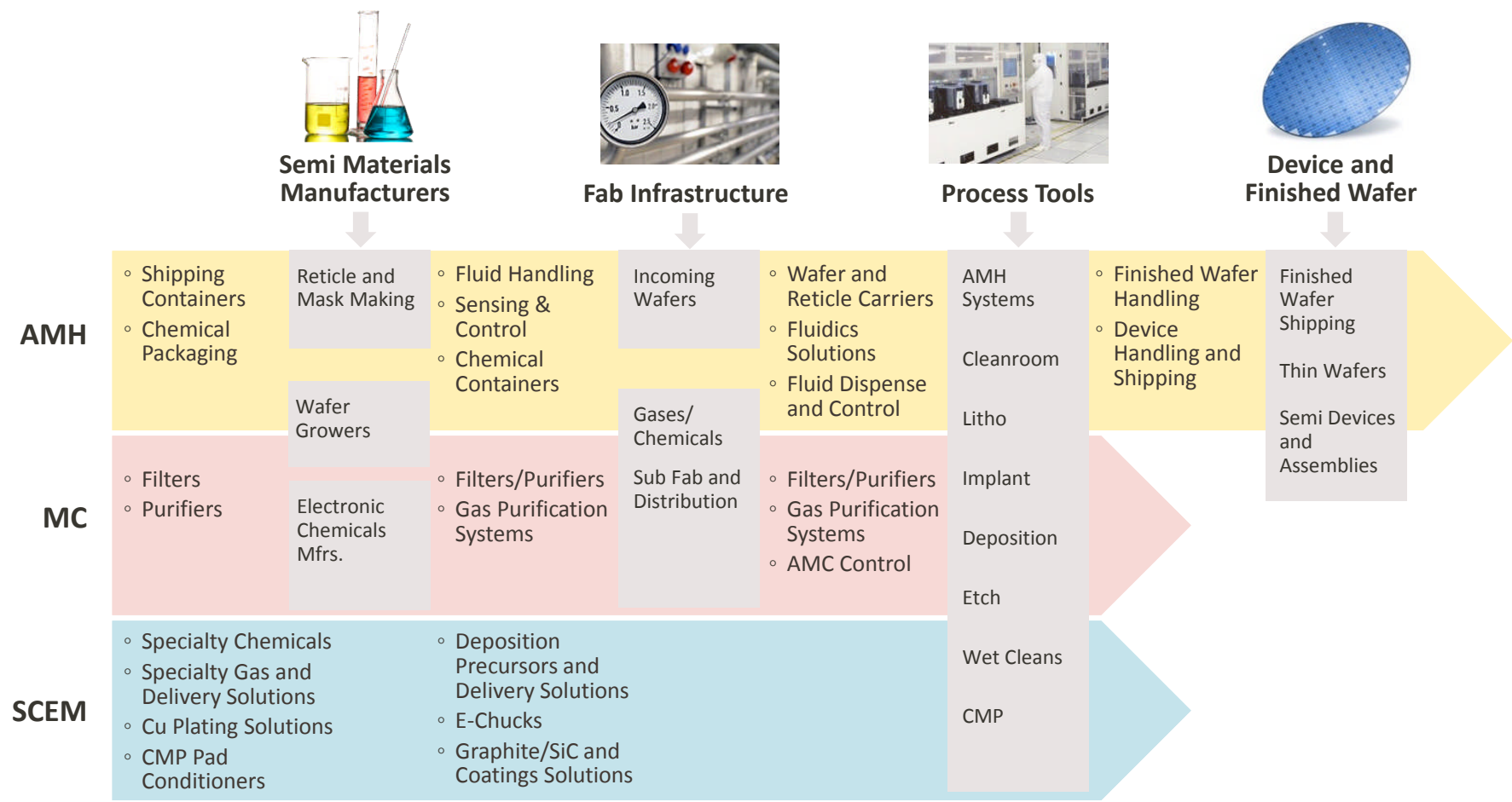
The most broadly capable materials solutions provider to our industries

HIGHLY SYNERGISTIC DIVISIONS










Technology and roadmap partnering across divisions makes us faster

ENTEGRIS TOUCHES EVERY PART OF THE SEMICONDUCTOR ECOSYSTEM



Entegris is a uniquely capable solutions partner

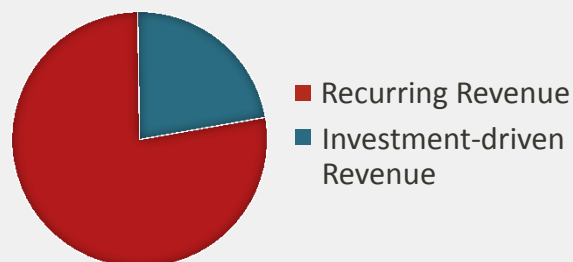
COMPETITIVE ADVANTAGE: INDUSTRY FOCUSED ON A LARGE SCALE

Selected Competitors	Liquid/gas Filtration	Advanced Cleans	Deposition Materials	Specialty Gases	Fab Environment	Specialty Materials	Wafer Handling	Fluid Handling
	●	●	●	●	●	●	●	●
	●							
		●	●	●				
					●			
 		●						
							●	
	●							●
								●

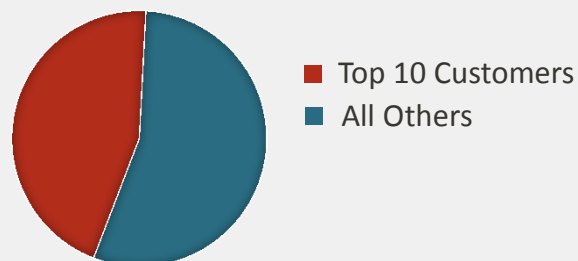
Applications knowledge spanning fab processes makes us an attractive partner

COMPELLING AND DIVERSIFIED BUSINESS MODEL

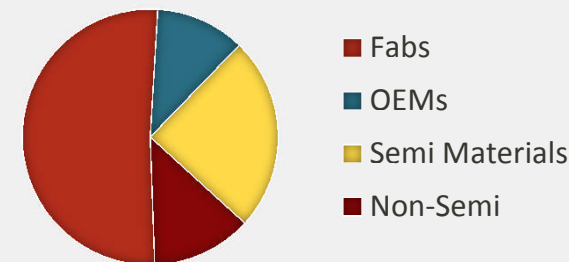
Recurring Revenue Model
2016 Revenue



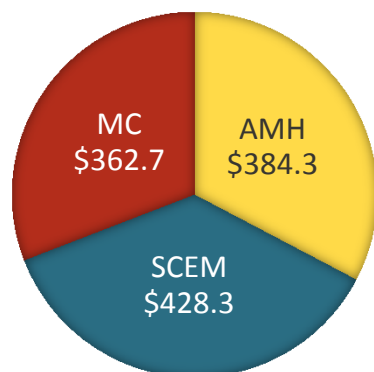
Diversified Customer Base
2016 Revenue



Unique Customer Segmentation
2016 Revenue



2016 Revenue by Division
\$ in millions



MC

- Above market growth after recent investments
- Strong differentiation driving margins

SCEM

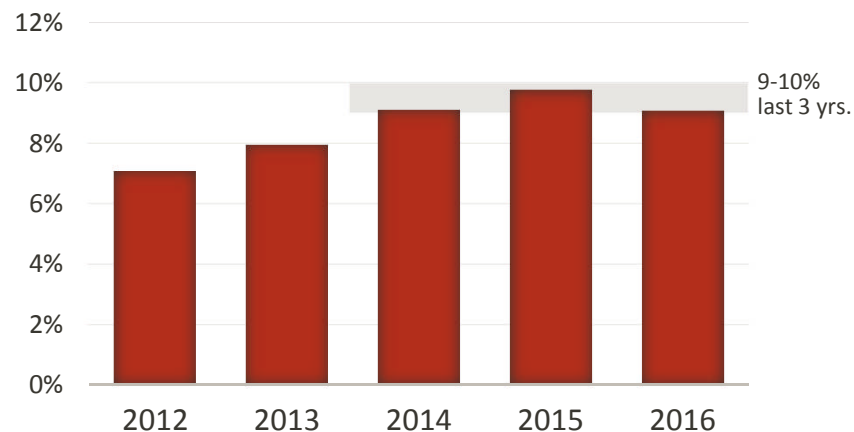
- Stable business with good market share; key emerging growth vectors
- Focused investments on rapid growth areas

AMH

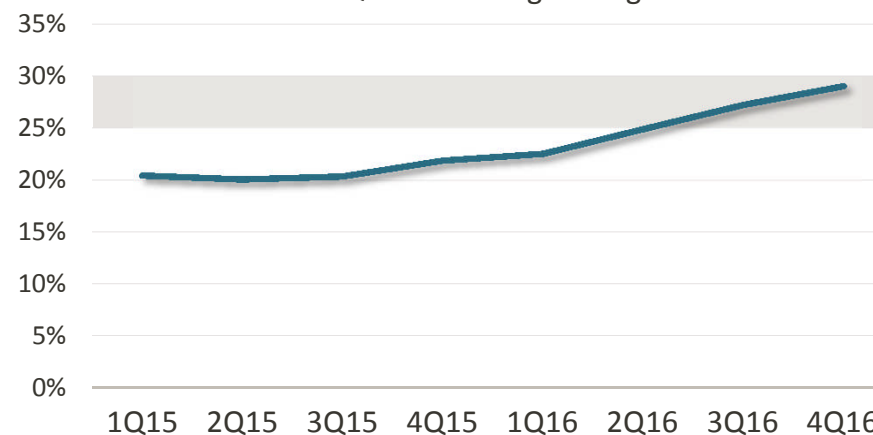
- Stable markets, more industry investment-driven than other two divisions
- Cash flow focused, and leading entry to fab projects

R&D INVESTMENT HAS HELPED DRIVE ABOVE-MARKET GROWTH

Entegris R&D as % of Sales

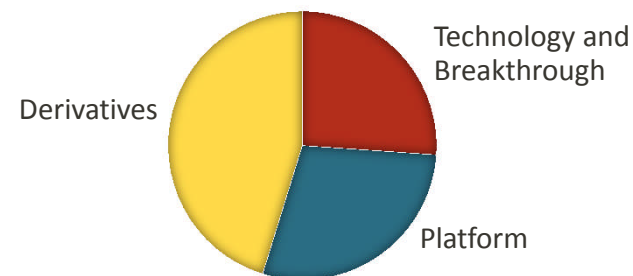


Entegris New Product Revenue as % of Total¹
4 Quarter Rolling Average



- More than 2,000 patents in place globally with healthy pipeline of new applications
- Sustained 9-10% investment level will preserve our lead, and continue product renewal

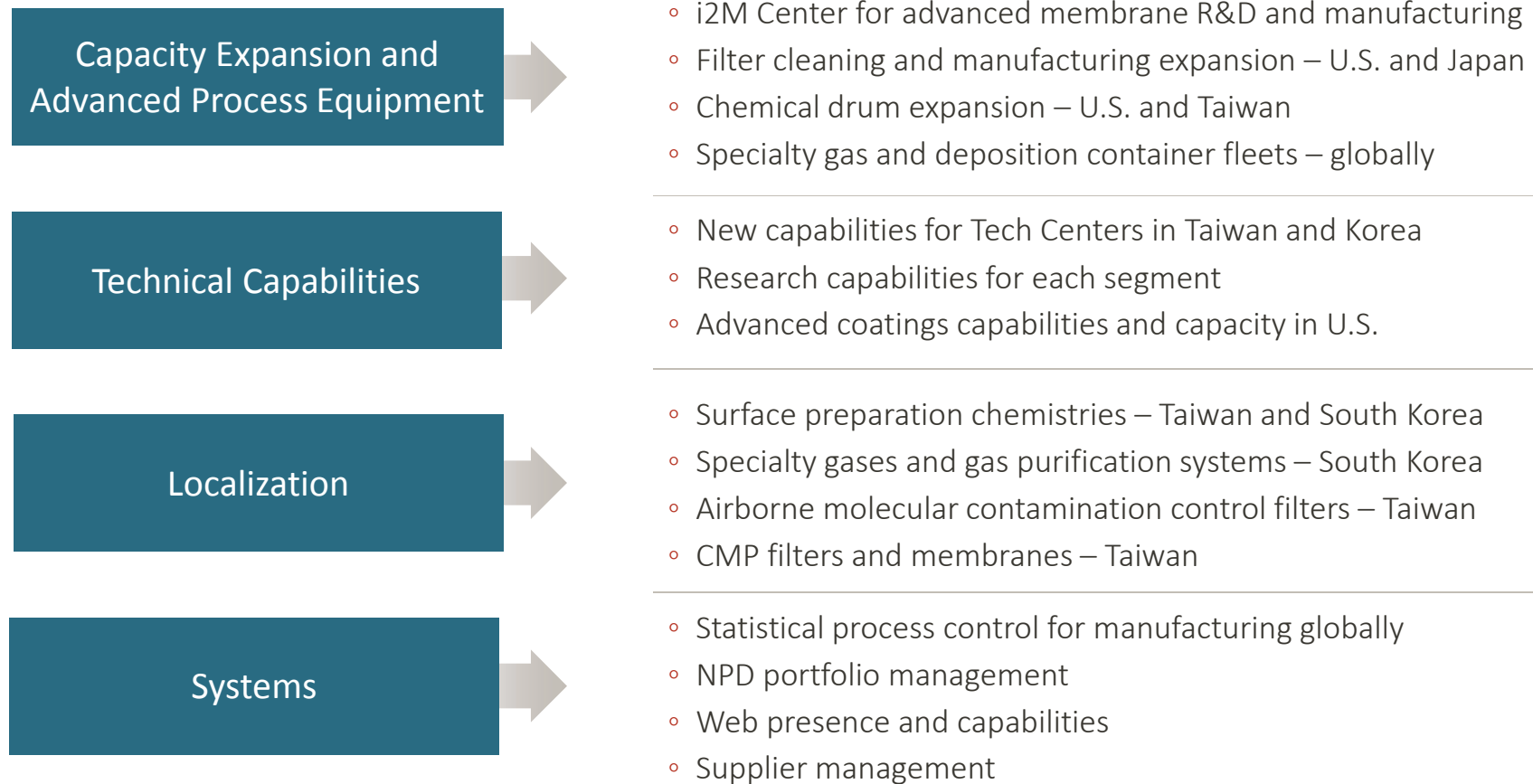
250+ Active R&D Projects



Healthy R&D pipeline driving our continued success

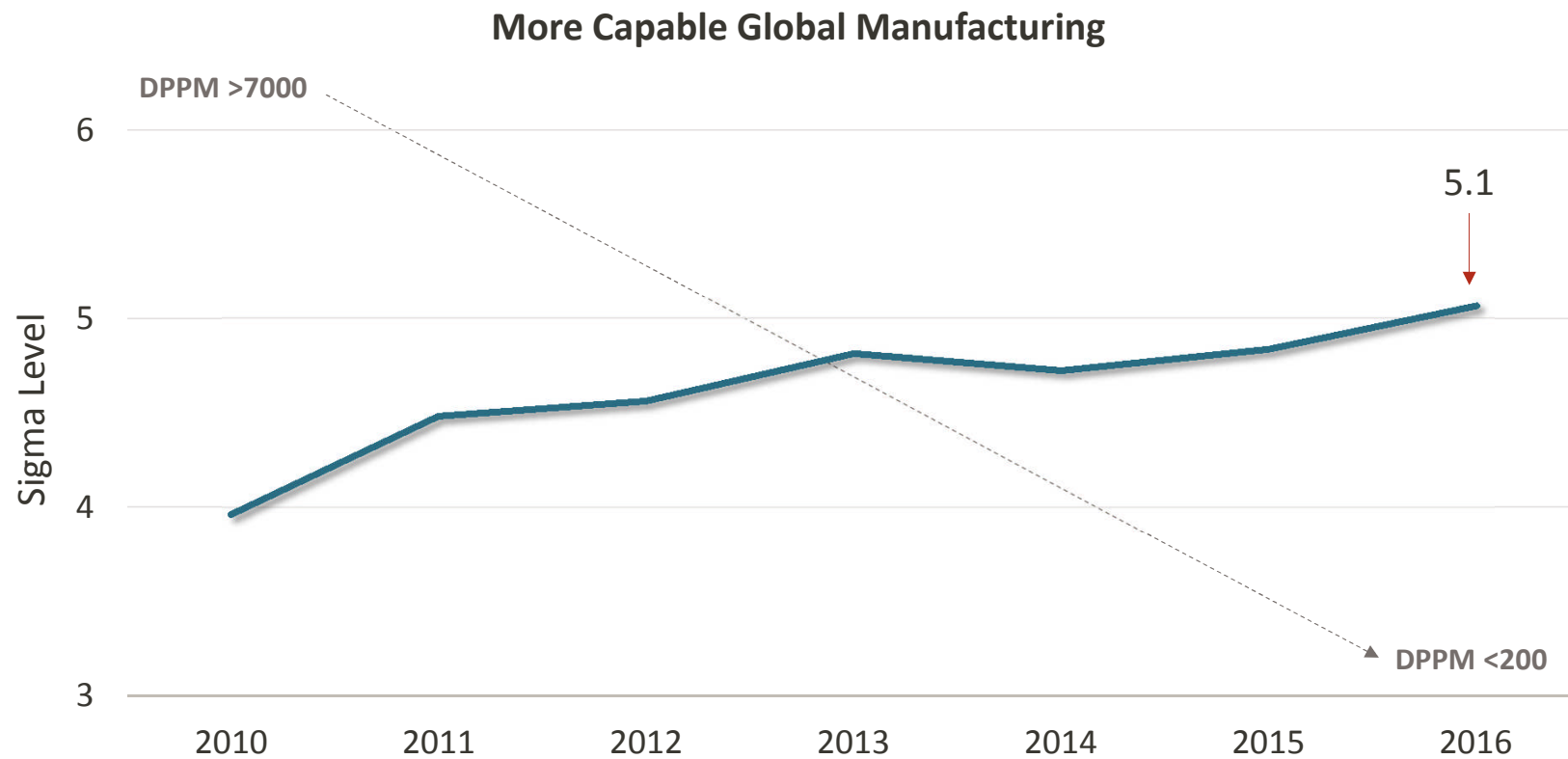
¹ Products introduced in the last three years

RECENT KEY INVESTMENTS TO CREATE AN INDUSTRY LEADER



Our industry dedication and focused investments are attracting top industry talent to Entegris

ACHIEVING WORLD-CLASS QUALITY



Leading quality results recognized by our customers – key to strengthening our partnerships

Note: Index reflects numbers of customer complaints; DPPM=defective parts per million

DRIVING ABOVE-MARKET GROWTH

Key initiatives shared at July 2016 Analyst Meeting are progressing well and are expanding our served markets and market share

Top 5 Representative Opportunities	Market Share	Next Application	SAM Expansion
Bulk photochemical filtration	●		●
Boron mixtures for implant		●	
Solid precursors for deposition		●	
Specialized coatings for key applications			●
CMP pad conditioners			●

**On track for our original expectations for \$70 million of incremental revenue by 2018,
and continued growth beyond**

GROWTH OPPORTUNITIES – WHAT IS DRIVING THE FUTURE OF OUR SEGMENTS?

Driver	MC	SCEM	AMH
Continued node shrink	Tighter filtration, new material solutions, AMC focus	New cleans solutions and materials integrations, higher purity gases	Advanced wafer solutions, cleaner fluid handling products, EUV solutions
3D NAND and Memory	More process steps = more filtration needs	New deposition materials solutions, new cleans solutions, chamber coatings	Queue time extension, litho fluid handling purity, EUV solutions
Increasing needs for purity in the supply chain	Liquid and gas purifiers for chemical suppliers and fab-matched solutions	Pure chemicals and solids delivered to wafer	Cleaner containers for chemicals, wafers and reticles
IoT and China	Growing filter needs in the market, AMC focus	Growth in demand for gases, deposition materials and cleans chemistries	Legacy node wafer handling demand, as well as advanced node fabs

The most talked about industry trends are good news for Entegris

KEY TAKEAWAYS

- Combination of three divisions makes us a unique partner to our customers
- Specialized solutions and speed of development and ramp are increasingly important
- Entegris has integrated the right capabilities and has made the right investment choices to deliver results

Unit driven, diversified business platform, outperforming a growing industry

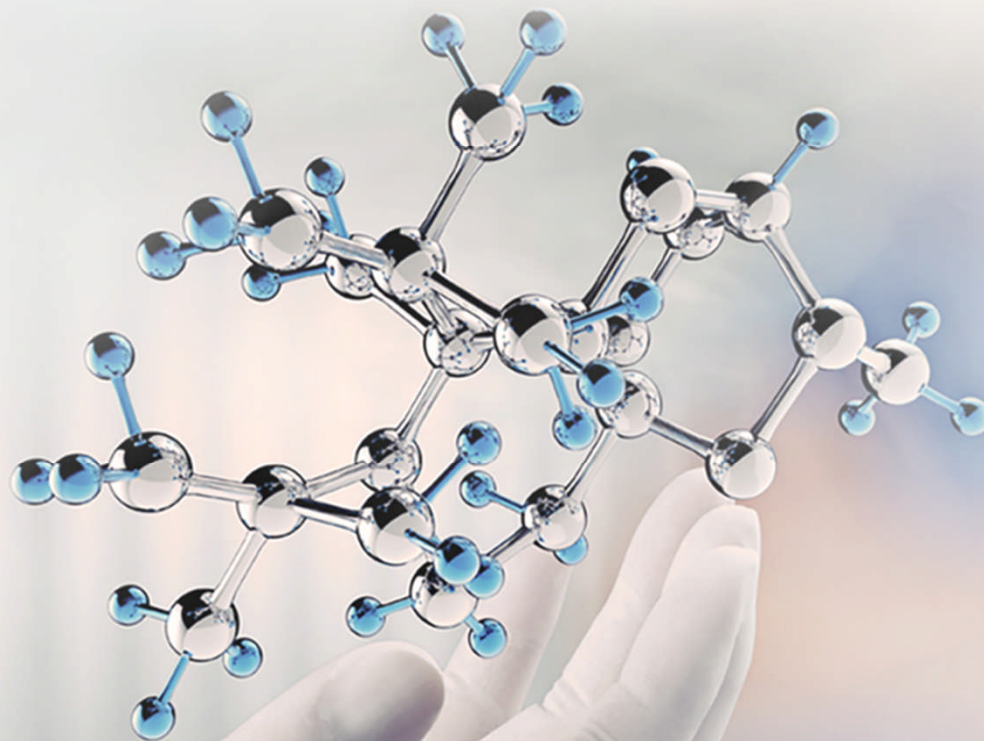


10 MINUTE BREAK

2017 ANALYST MEETING

Microcontamination Control; Ensuring Air, Gas and Liquid Purity

Clint Haris
Senior Vice President and General Manager



MICROCONTAMINATION CONTROL



Liquids

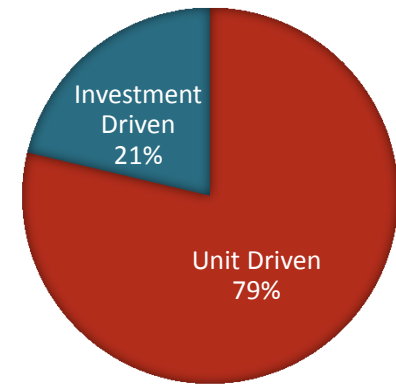


Gases



Environment

Unit Driven vs. Investment Driven

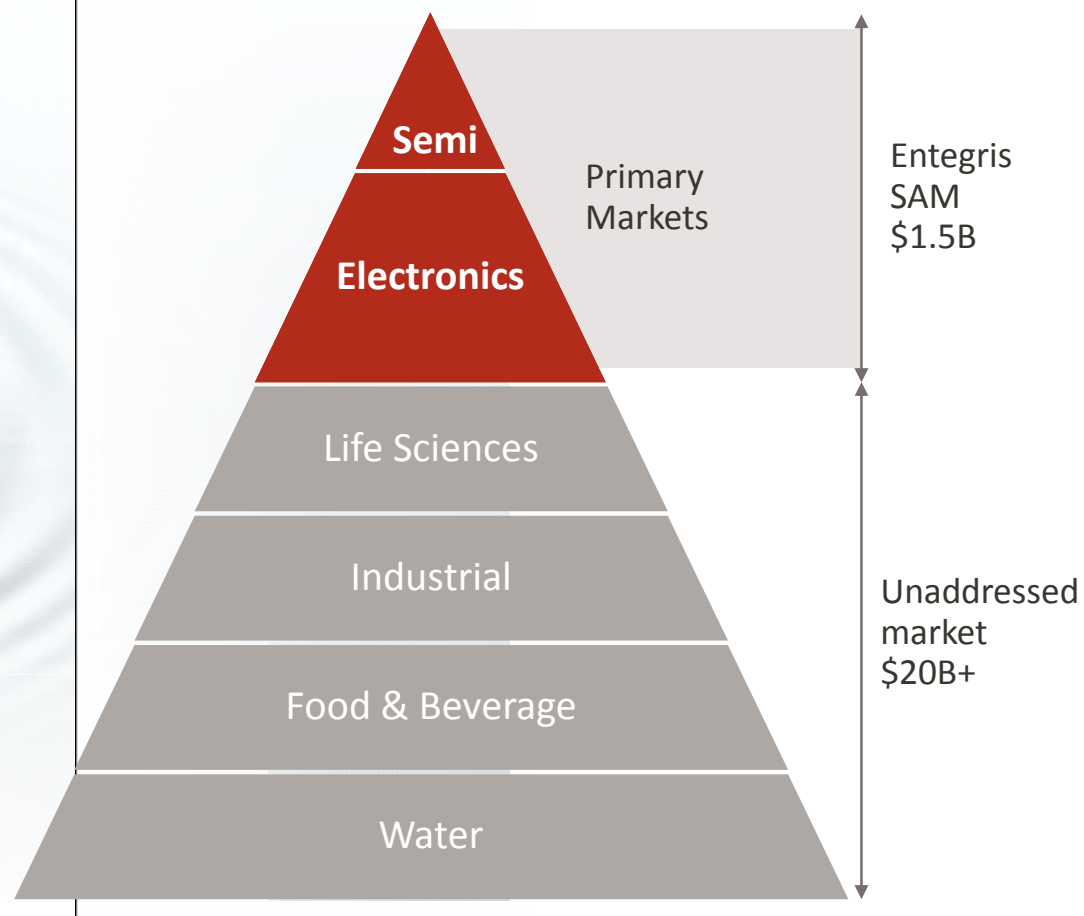


Value Proposition:

- Applications expertise
- Close alignment to customers' roadmaps
- Proprietary technologies and value proposition

FILTRATION

Focusing on the most advanced parts of a \$20+ billion dollar market



Source: Entegris estimates

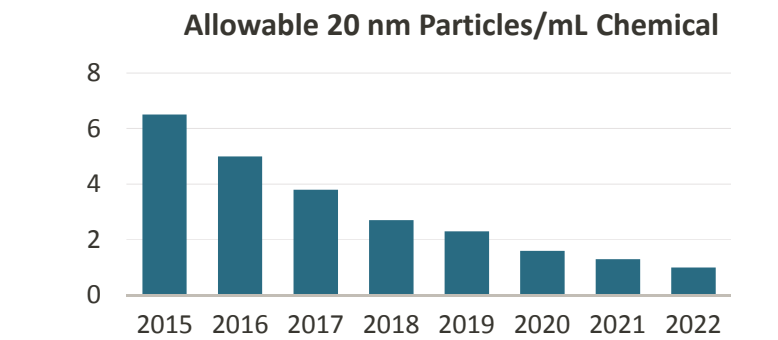
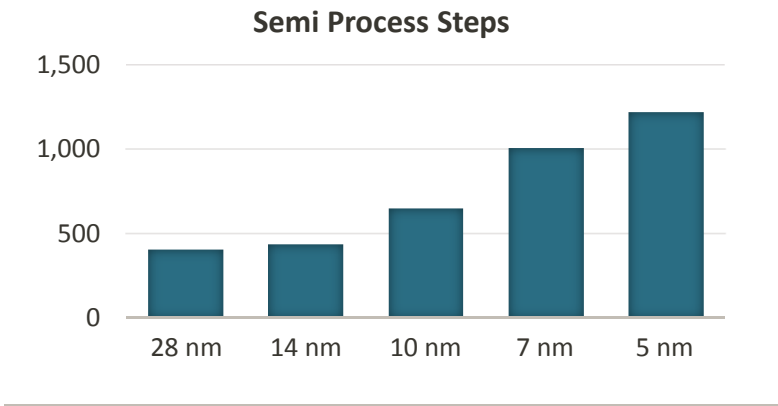
MICROCONTAMINATION CONTROL

Entegris addresses a rapidly growing \$1.5 billion global market for advanced filtration¹

Microelectronic Trends				
New Materials	Shrinking Line Widths	Multi-Step Patterning	Single Wafer Processing	EUV



Filtration Trends				
Higher Purity Chemicals Required	More Points of Filtration	More Frequent Replacement	Single Wafer Processing	Proprietary Filtration Technology



Microcontamination control poised to achieve above-market growth

¹ Entegris estimated market for advanced microelectronics, consumer electronics and selected life sciences applications; top chart source – KLA-Tencor; bottom chart source - ITRS

LIQUID FILTRATION

Solutions to ensure the purity of liquids from the point of manufacture to the point of use in the fab

Market Dynamics

- Increasing number of process steps leading to more cleaning steps and more filtration
- Advanced chemical purity requirements being driven through the supply chain
- Purification required to enable leading-edge process capability

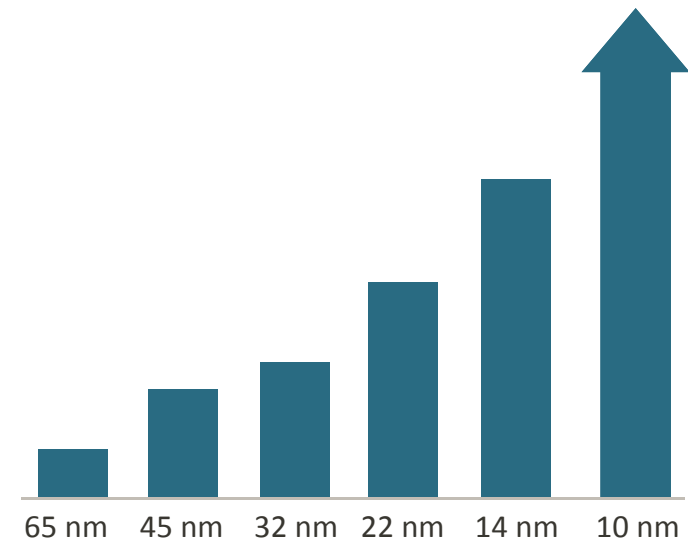
Key Applications

- Wet etch & clean, photolithography, CMP

Competitive Position

- #1 position
- Competition: Pall (Danaher), Parker Hannifin, 3M

Cleans Volume/Wafer



Entegris technology and applications knowledge provides a strong competitive advantage

Source: Intel

GAS FILTRATION

Products to remove contaminants from process gases used in the microelectronics industry

Market Dynamics

- Increasing number of etch and deposition steps driving need for more gas filters
- Higher purity requirements within process tools

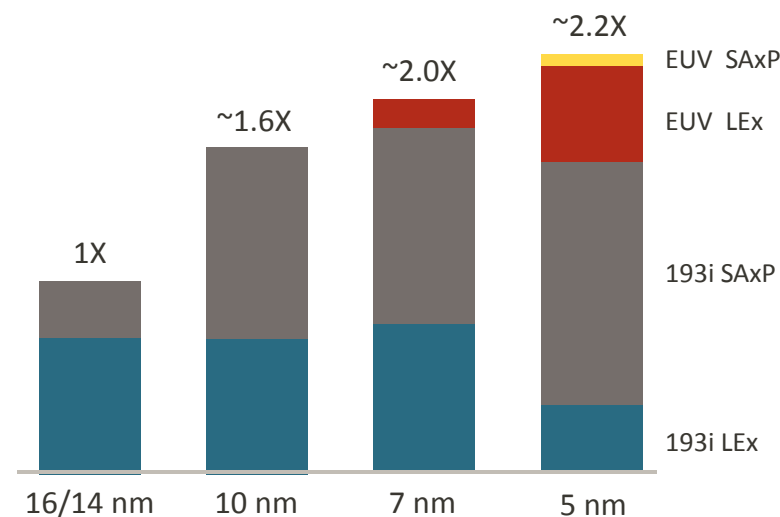
Key Applications

- Etch and Deposition

Competitive Position

- Leading position in advanced applications
- Competition: Pall (Danaher), Mott

Dep-Etch-Clean Critical Patterning Passes (Foundry/Logic)



3D NAND and shrinking linewidths driving growth

Source: Lam Research

SAxP = self aligned patterning; LEx = litho-etch-litho-etch

FAB ENVIRONMENT

Purification products that remove molecular contamination from the manufacturing environment

Market Dynamics

- Advanced nodes are sensitive to airborne molecular contaminants (AMCs) including acids/bases/organics
- EUV purity requirements

Key Applications

- Etch and Photolithography

Competitive Position

- Leader in key segments
- Competition: Camfil, Donaldson, M+W

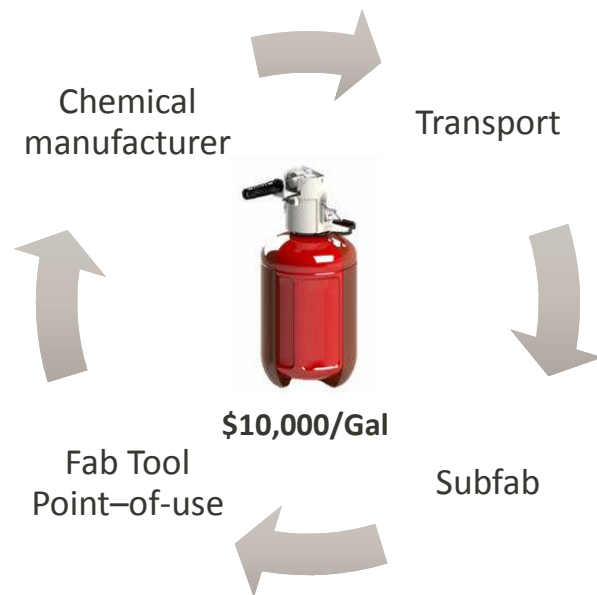
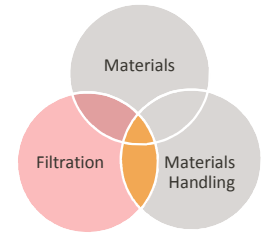


Pollution and airborne contamination outside the fab can impact the purity levels of the environment inside the fab

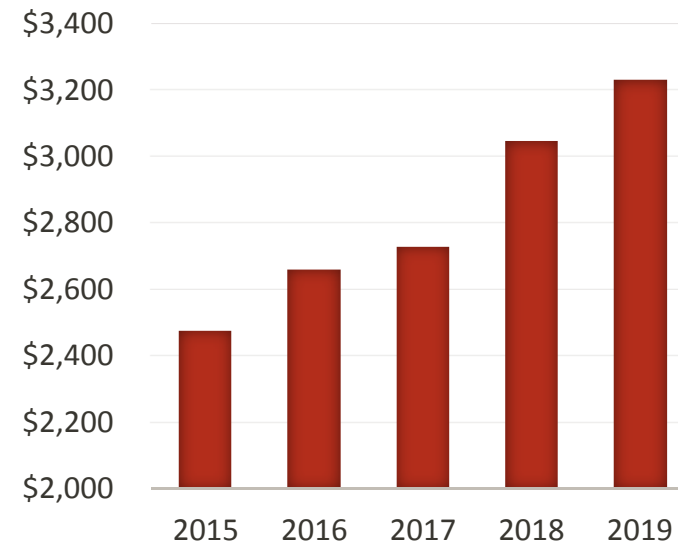
Ambient fab environmental control is increasing in importance

MICROCONTAMINATION CONTROL – ADDRESSING PURITY THROUGH THE SUPPLY CHAIN

Increased photochemical consumption and higher purity through the supply chain driving demand for photochemical filtration



Semi Photo Materials
\$ in millions

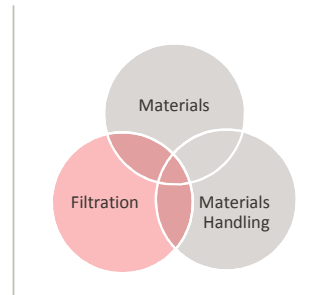


Entegris has the technology to control contamination across the fluidics stream – from production to consumption

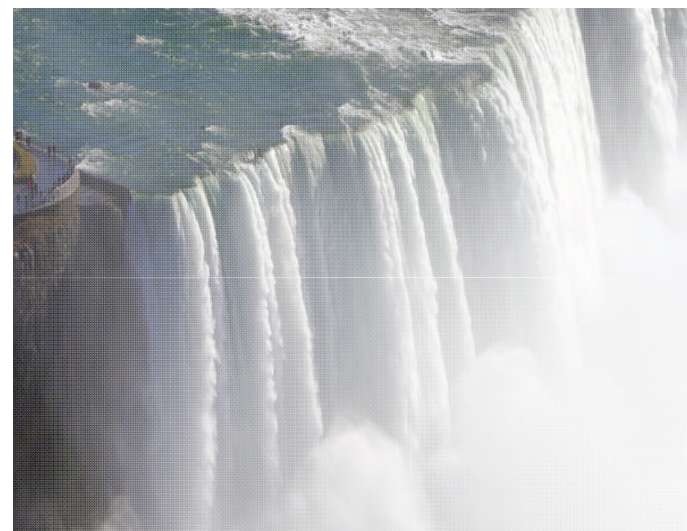
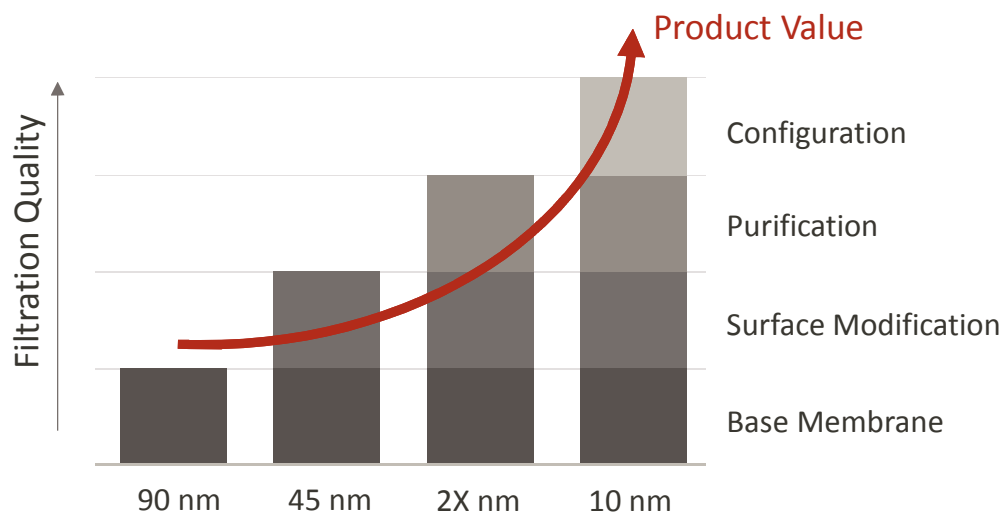
Source: Linx Consulting, September 2016

MICROCONTAMINATION CONTROL – ADDRESSING THE PURITY CHALLENGES OF SHRINK

Innovative techniques are required to remove contaminants while retaining similarly sized desirable molecules



Filtration Technology is Increasing in Complexity and Value

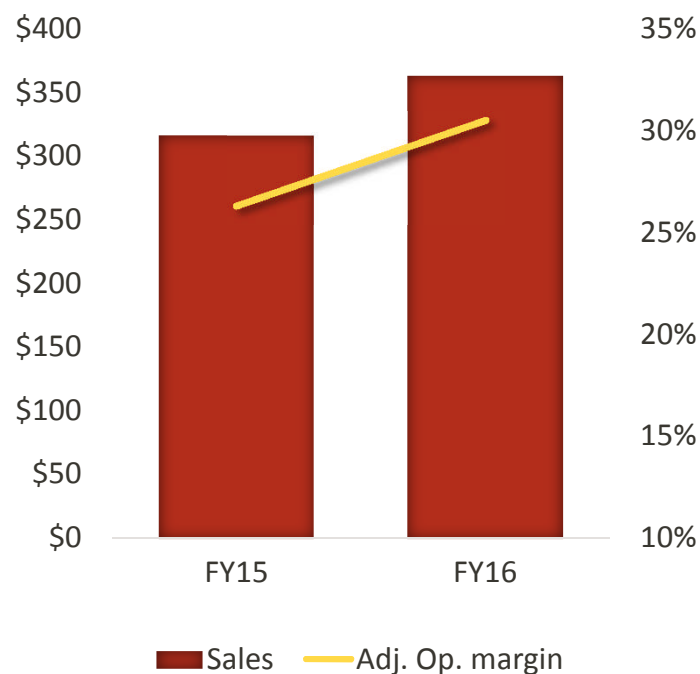


As required purity levels continue to advance, the need for selective removal of unwanted molecules becomes more challenging

A deep understanding of process chemicals is required to design purification solutions

MC – STRONG GROWTH AND PROFITABILITY

Microcontamination Control Segment



	2015	2016	3-Year Outlook
Sales Growth ¹	(2%)	15%	200 – 400 bps above Market ³ growth
Adjusted Operating Margin ²	26%	31%	33% – 35%

Key Margin Drivers

- Sales growth from margin accretive new products
- Supply chain and operational efficiencies
- Improved factory utilization

¹ 2014 Pro-forma includes full year ATMI

² Non-GAAP Adjusted measure

³ Market index defined as 79% Millions of Sq. Inches of Silicon produced (MSI) and 21% Wafer Fab Equipment (WFE); Data source is Gartner (WFE) and SEMI (MSI)

2017 ANALYST MEETING

Advanced Materials Handling; Guaranteeing Purity Throughout the Process

Bill Shaner
Senior Vice President and General Manager



ADVANCED MATERIALS HANDLING – THE TIP OF THE SPEAR



Wafer Solutions

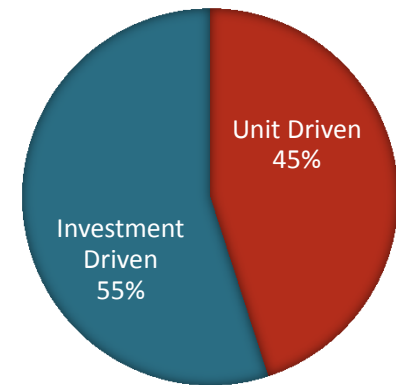


Containers



Fluidics

Unit Driven vs.
Investment Driven

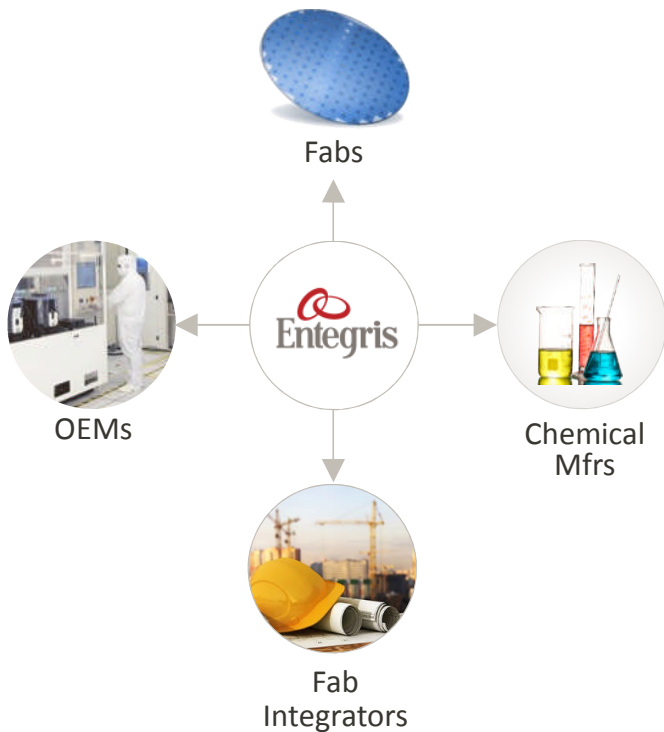


**Value
Proposition:**

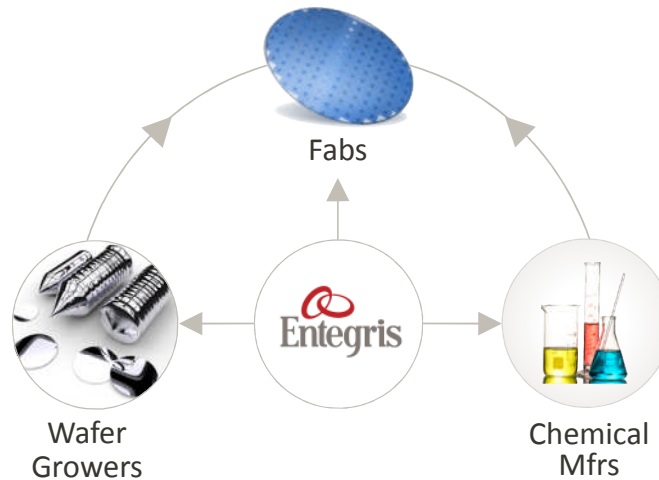
- Broad knowledge of the semiconductor supply chain and contamination challenges
- Expertise in precision molding of high-purity polymer materials
- Proprietary Technologies and leverage with MC and SCEM

SOLVING THE MOST ADVANCED PURITY REQUIREMENTS IN THE FAB AND THROUGH THE SUPPLY CHAIN

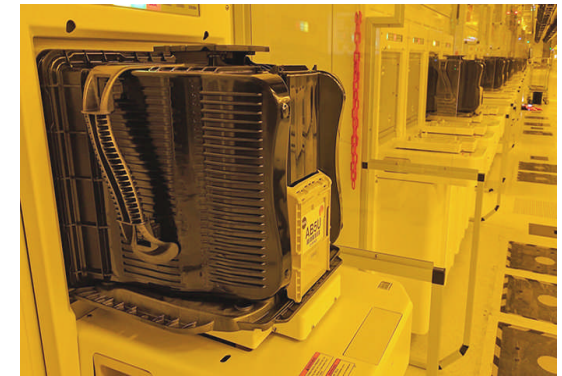
Capital Investment Supply Chain



Recurring Sales

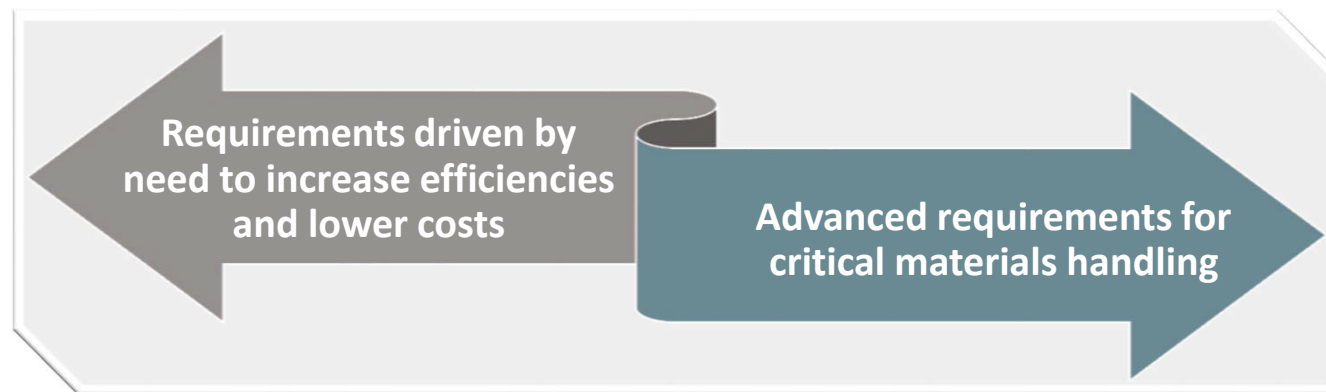


In the Fab



From the initial fab construction phase to tool installation to recurring chip production, AMH products are key to continuity throughout a life of a fab

COMPETING MARKET FORCES

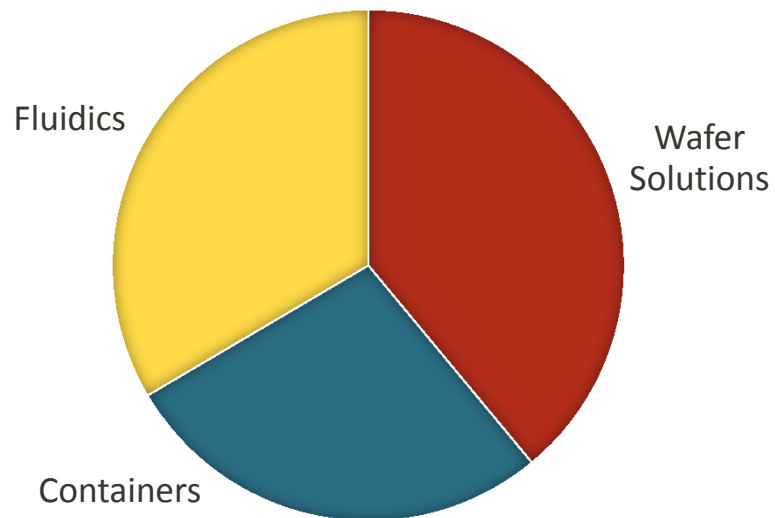


- Less technical differentiation
- Supplier and customer consolidation
- Regionalization of supply chains
- 1X Process Node
- 3D NAND
- EUV lithography
- Precision dispense and concentration control

Entegris is uniquely positioned to serve the entire range of the market – from the most advanced to the trailing edge

AMH – MARKET GROWTH DRIVERS

**AMH Addresses a \$1.1 billion
Served Available Market¹**



- Market is comprised of markets for wafer solutions, containers, and fluidics
- Growth slightly above overall market, driven by:
 - New fab construction
 - New wet tool shipments
 - Increasing number of process steps and complexity

Investment-related and unit-driven growth provide opportunities throughout the business cycle

¹ Entegris estimates for 2016

WAFER SOLUTIONS

Products that protect and transport wafers, reticles and other critical substrates from damage and contamination



Market Dynamics

- Increased impact of wafer contamination at advanced nodes – particles, moisture, metals, etc.

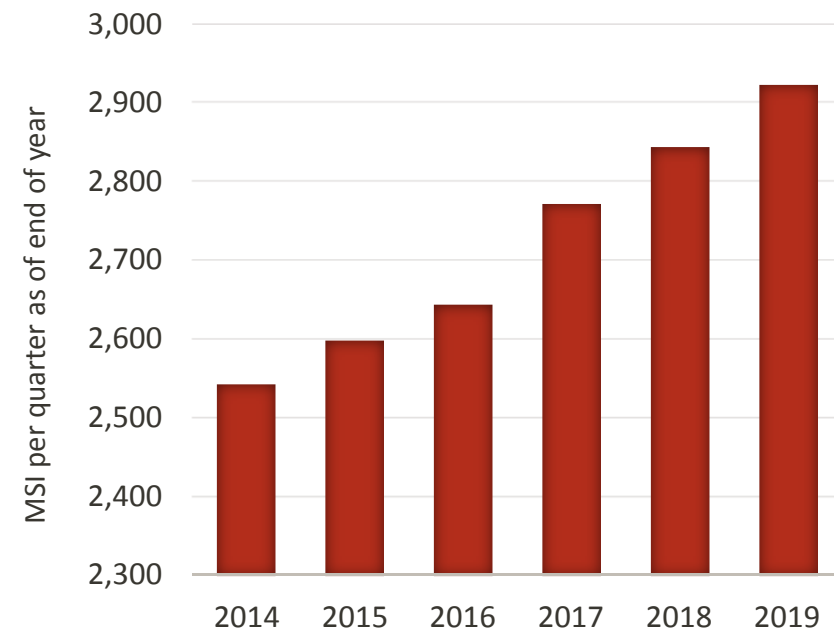
Key Applications

- In-fab and wafer shipping solutions; reticle handling

Competitive Position

- #1 position for advanced 300 mm FOUPs; leading share for shippers at legacy wafer sizes
- Competition: Shin-Etsu, Miraial

Expanding Global Fab Capacity



Source: Gartner, February 2017

CONTAINERS

Ultrapure container and dispense solutions for highest performance lithography and WEC chemicals



Market Dynamics

- Increasing chemical consumption and need for purity of high-value chemistries during transport and storage a growing concern
- Efficient use of high-value chemicals and need for safe handling

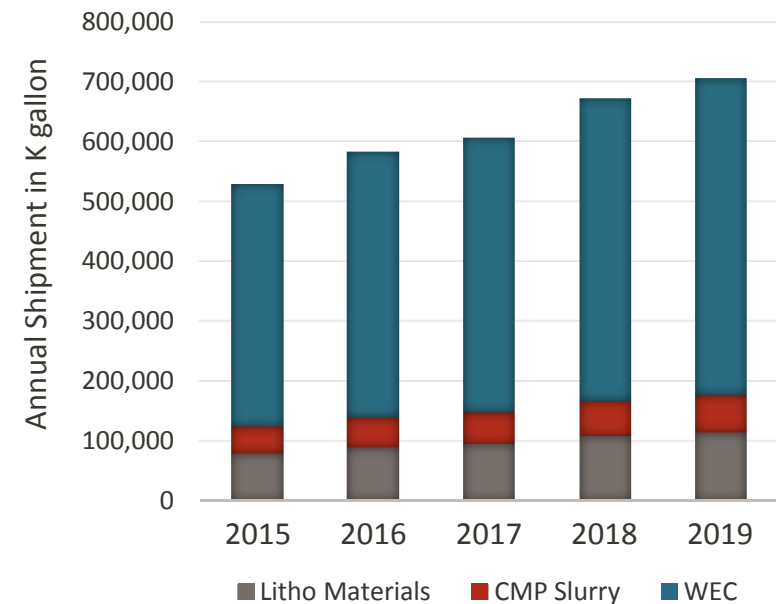
Key applications

- High-purity drums used to store and deliver liquid chemicals to the fab
- Containers for photochemical resists and coatings

Competitive Position

- Leading position for advanced solutions
- Competition: alternative packaging form

Wet Chemicals Shipment Forecast for Semiconductor Industry



Source: Linx Consulting, March 2017

FLUIDICS

Ultrapure fluid handling, measurement and control solutions



Market Dynamics

- Increasing requirements for process control, flow capacity and purity
- Increasing number of “wet” tools due to multi-patterning
- Fewer but larger fab facility projects

Key Applications

- Valves, fittings, tubing, flow controllers, sensors used in the fab infrastructure or OEM tool

Competitive Position

- Fragmented, Entegris leads at high-end
- Competition: Parker Hannifin, Saint Gobain

Intel Corp. Announces \$7 Billion Investment in Arizona Plant

Company says at a White House meeting that Chandler facility will employ 3,000

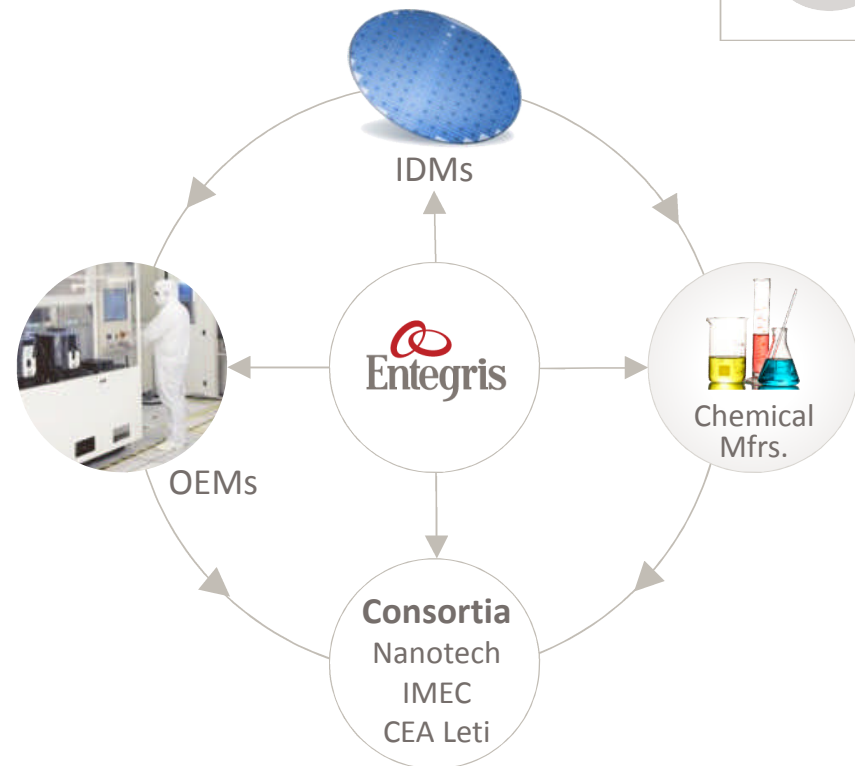
News & Analysis

TSMC Plans New Fab for 3nm

GlobalFoundries to Expand Capacities, Build a Fab in China

LEVERAGE MATERIALS DEVELOPMENT AND CONTAINER COMPATIBILITY

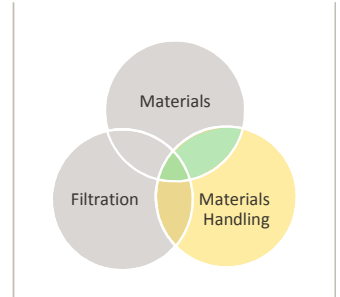
- Controlling purity of chemicals through the supply chain is more challenging
 - More types of contaminants
 - Chemical compatibility
 - Bigger containers are needed
- Entegris is working on more development projects due to its position in the industry
- By getting in early in these developments, Entegris is positioned well for high-value applications



Entegris is a solutions provider with unique knowledge and capabilities

LEVERAGING EXPERTISE INTO NEW MARKETS

To address the rapidly growing niches of \$3 billion biopharma market for single-use technology, Entegris is leveraging its expertise in high-purity polymers



- High-grade, gamma-stable fluoropolymers
- New single layer technology, and no binders, agents or adhesives
- Durable in frozen applications
- Universal material compatibility

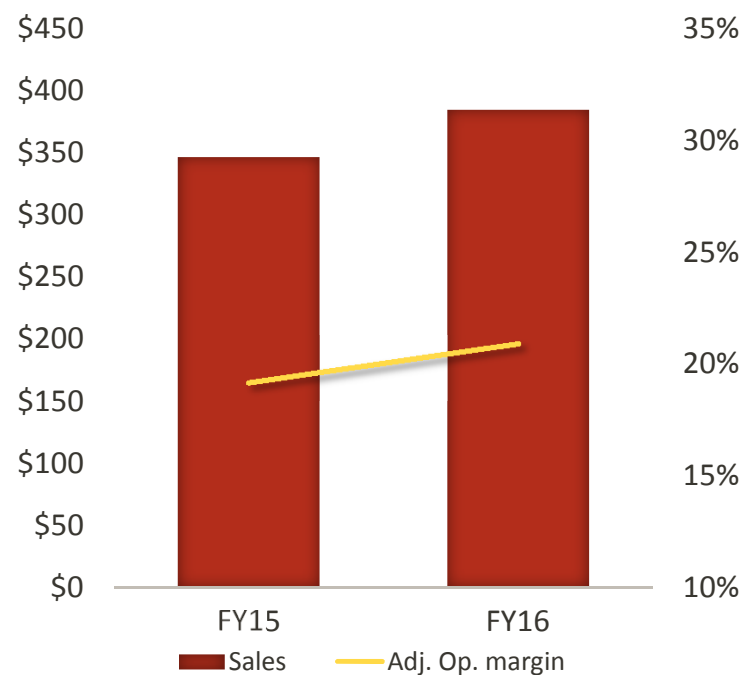


Entegris' recently launched Aramus™ new single-use bag for biologics processing offers significant improvements in purity

Entegris' film provides an increased level of security and protection compared to traditional single-use bags

AMH – STRONG GROWTH AND PROFITABILITY

Advanced Materials Handling Segment



	2015	2016	3-Year Outlook
Sales Growth ¹	(4)%	11%	Flat – 100 bps above market ³ growth
Adjusted Operating Margin ²	19%	21%	22% – 24%

Key Margin Drivers:

- Leveraging global infrastructure
- Plant efficiency initiatives
- Accretive new products

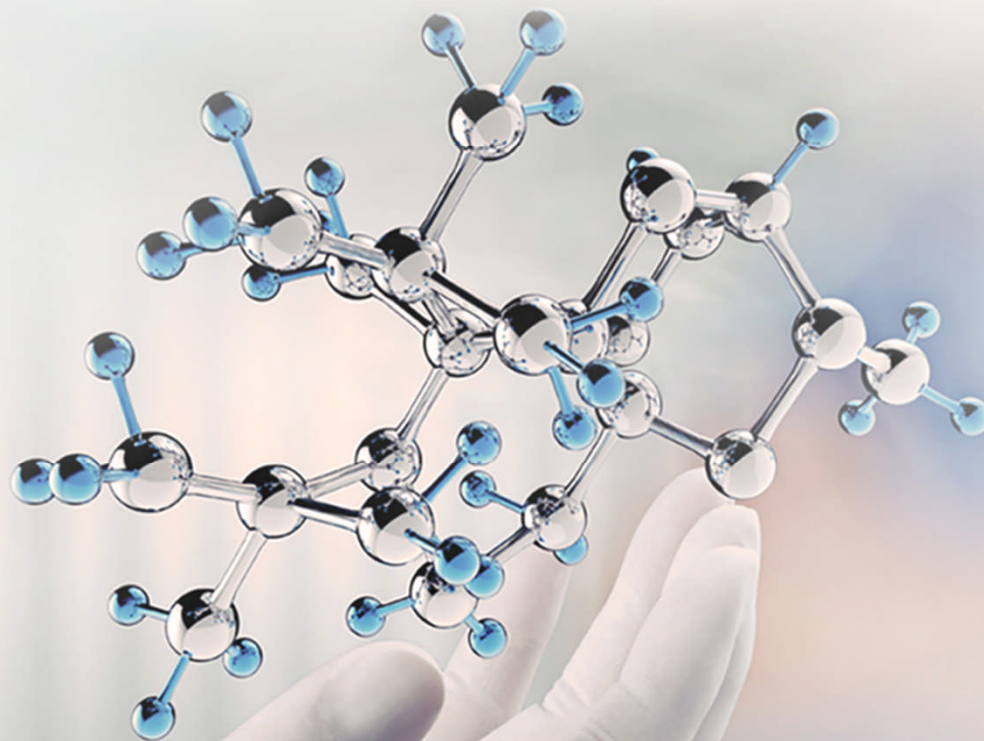
¹ 2014 Pro-forma includes full year ATMI

² Non-GAAP Adjusted measure

³ Market index defined as 45% Millions of Sq. Inches of Silicon produced (MSI) and 55% Wafer Fab Equipment (WFE); Data source is Gartner (WFE) and SEMI (MSI)

Specialty Chemicals and Engineered Materials

Stuart Tison
Senior Vice President and General Manager



SPECIALTY CHEMICALS AND ENGINEERED MATERIALS – MATERIAL THAT MATTERS



Specialty
Gas



Advanced
Deposition

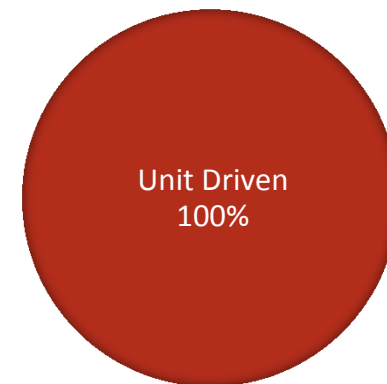


Surface Prep and
Cleaning Chemistries



Specialty
Materials

Unit Driven vs.
Investment Driven



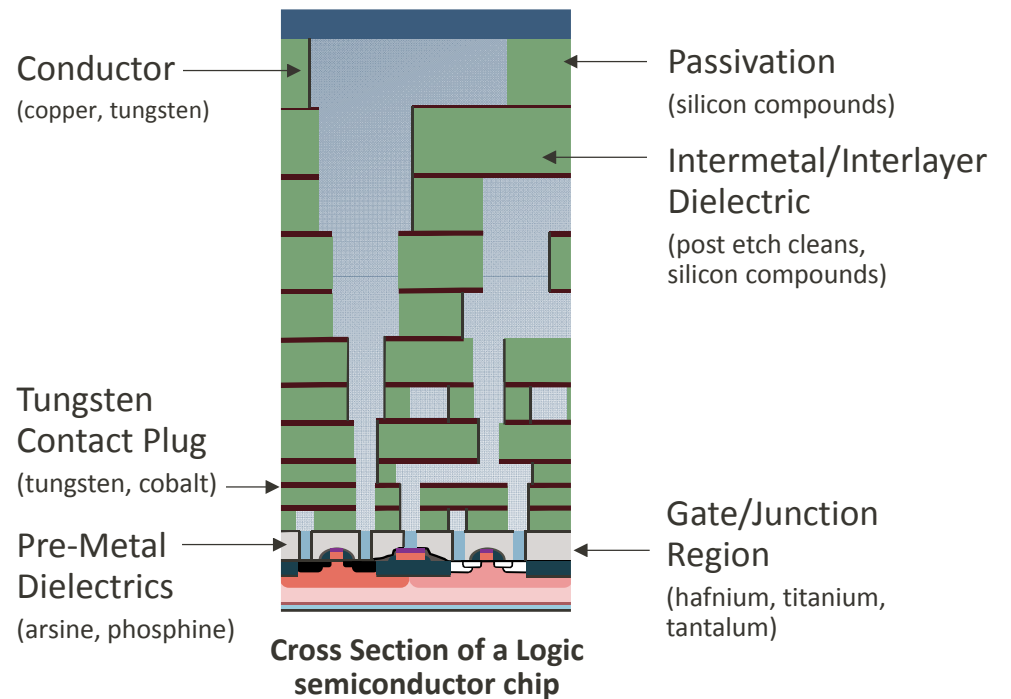
Value Proposition:

- Applications knowledge driving unique solutions
- Broad range of technologies
- High-purity delivery platforms

SPECIALTY CHEMICALS AND ENGINEERED MATERIALS – MATERIAL THAT MATTERS

- Large materials market
- Advanced materials market growing faster than industry average
 - Deposition
 - Dopants
 - Formulated cleans
 - Wet etch formulation
 - Advanced coatings

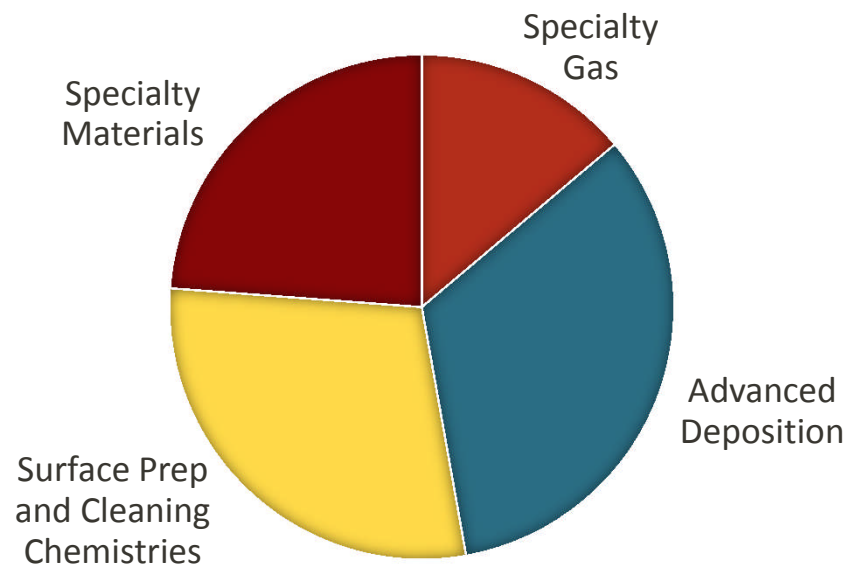
Entegris Provides Critical Materials Throughout the Entire Device



SCEM supplies critical materials for expanding applications

SPECIALTY CHEMICALS AND ENGINEERED MATERIALS – MATERIAL THAT MATTERS

SCEM Addresses a \$1.2 billion Served Available Market¹



- Advanced material market is driven by:
 - Node shrink
 - 3D structures
 - Memory growth
- Market leading position
- Integrated solutions
 - Chemistries
 - Delivery
 - Purity
 - Safety

Critical materials are outpacing industry growth

¹ Entegris estimates for 2016; Specialty Gas market refers to semiconductor implant applications

SPECIALTY GAS

Products that provide advanced safety and process capabilities for hazardous gas storage and delivery in semiconductor implant/doping applications

Market Dynamics

- New applications beyond traditional beam-line implant for safe delivery of toxic gases
- Purity requirements driving innovation in gas purification, packaging, as well as analytics
- Continued efforts to improve cost-of-ownership is driving proliferation of novel gas mixtures

Application

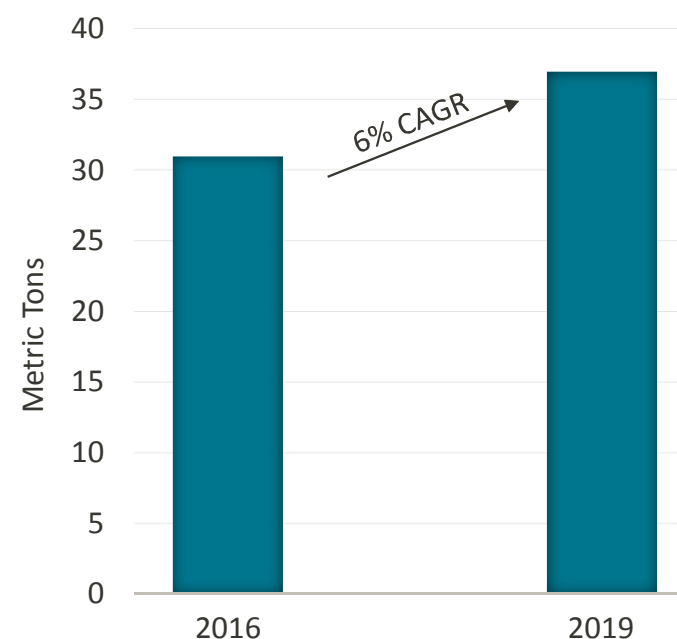
- Safe delivery of toxic gases for implant applications

Competitive Position

- #1 position for sub-atmospheric pressure delivery applications
- Competition: Praxair

Leading the industry in safe gas delivery

Dopant Usage in Semiconductor Manufacturing



Source: Linx Consulting, December 2016

ADVANCED DEPOSITION MATERIALS

Provides advanced liquid, gaseous and solid precursors and delivery systems used to form key elements of a semiconductor device

Market Dynamics

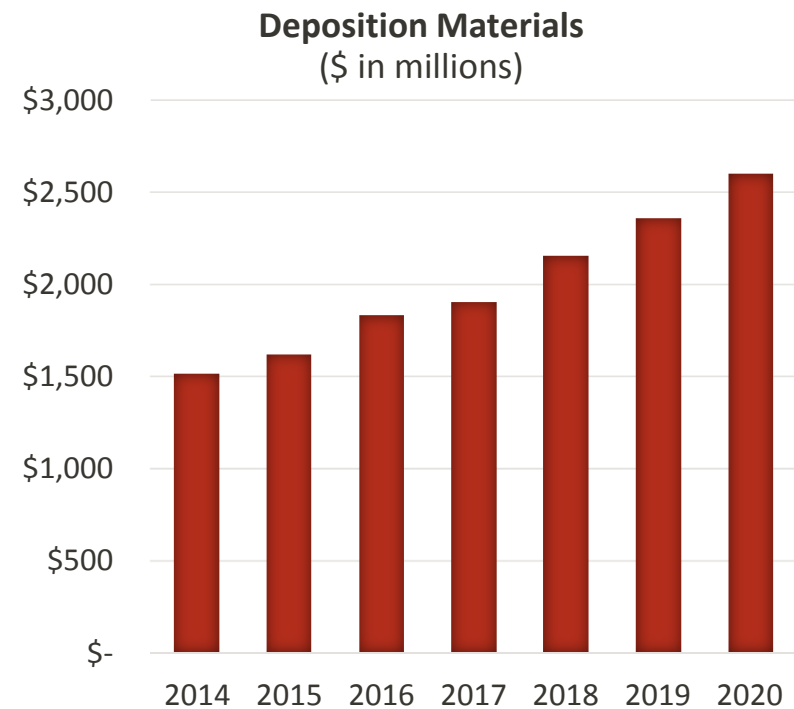
- Increased use of new materials such as AlCl₃ and Cobalt in memory and logic fabrication; driving advanced performance

Applications

- New solid precursors for logic and memory metallization
- Increased use of novel materials for 3D structure integration

Competitive Position

- #1 position for solid material delivery; #2 for advanced deposition precursors
- Competition: Versum, Praxair, Air Liquide



Leading position in fast growing solid precursors

Source: Linx Consulting, December 2016

SURFACE PREP AND CLEANING CHEMISTRIES

Provide advanced materials to prepare and integrate the surface of semiconductor wafers

Market Dynamics

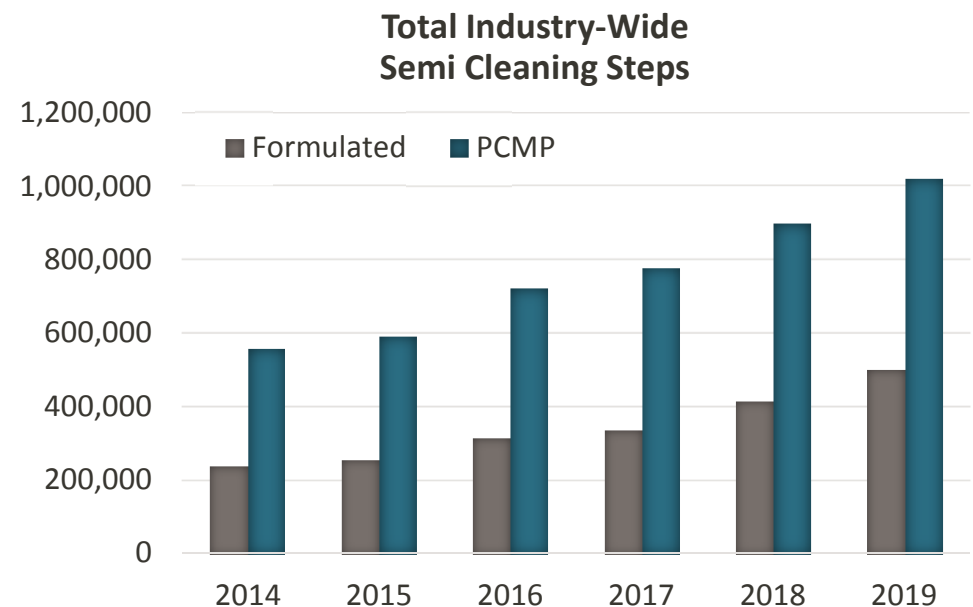
- Use of 3D structures and materials driving the increased need for formulated cleans in place of commodity chemistries
- Need for contamination removal while protecting against corrosion and structure damage

Application

- Post-CMP and post-etch cleans

Competitive Position

- #1 position for formulated clean chemistries
- Competition: Dow/DuPont, BASF



Increasing critical cleans steps and contamination challenges are driving need for advanced formulated cleaning chemistries

Source: Linx Consulting, December 2016

SPECIALTY MATERIALS

Graphite material and specialty coatings for semiconductor and high-performance industrial applications

Market Dynamics

Increasing need for high-purity materials for challenging processing conditions (corrosive gases, high temperatures, extreme material matching)

Applications

- Materials that enable high-resolution glass forming
- Coatings that control contamination in aggressive plasma chemistries

Competitive Position

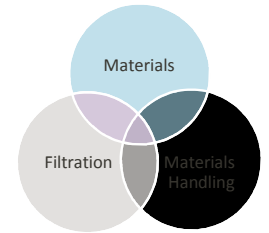
- Highly fragmented market; Entegris leads in the high-end portion of the market
- Competition: Mersen, SGL Carbon



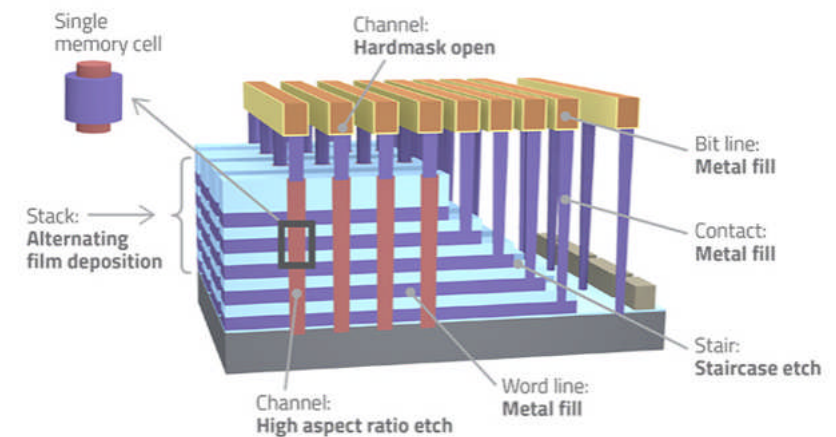
Entegris provides graphite used for molding of critical glass components for mobile computing. Improves screen clarity and throughput of molding operations.

High-purity/high-performance materials closely matched to applications

KEY TRENDS AND DRIVERS #1: 3D NAND AND STRUCTURES



- Memory stacking leads to more process steps per square inch of wafer surface
- Advanced deposition materials (titanium, cobalt, tungsten, aluminum) are required
- New advanced formulated chemistries are needed to remove contamination while preventing structural damage
- Advanced chamber coatings reduce particulates and metal contaminants



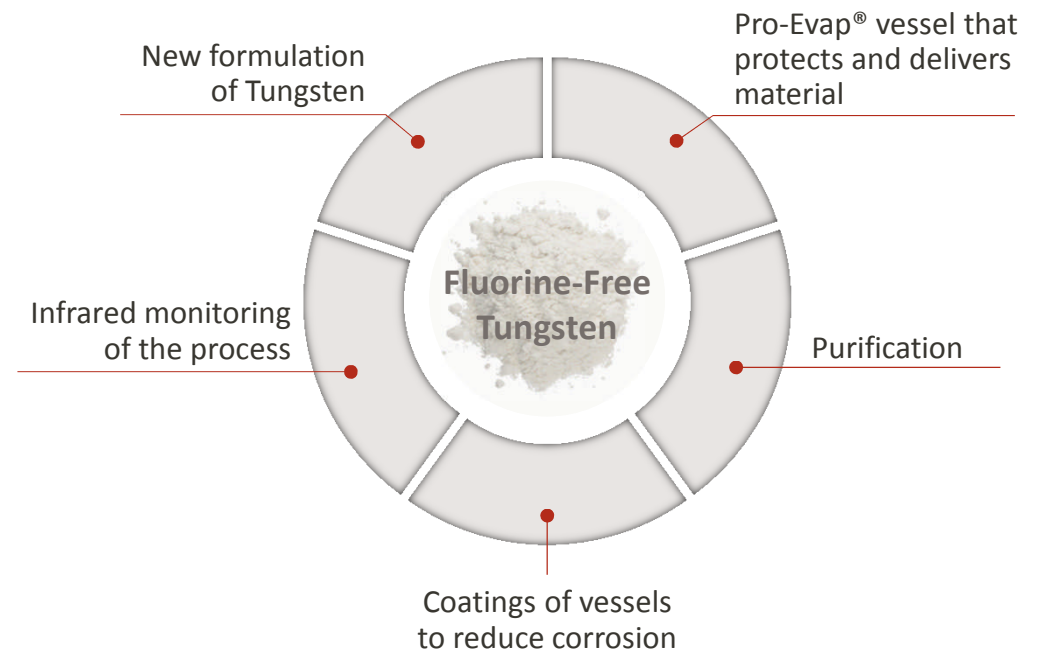
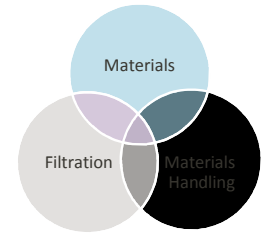
Entegris provides critical materials used for assembling of the 3D NAND structure

SCEM's materials help enable 3D NAND growth

KEY TRENDS AND DRIVERS #2: CONTINUED NODE SHRINK

High purity solid delivery

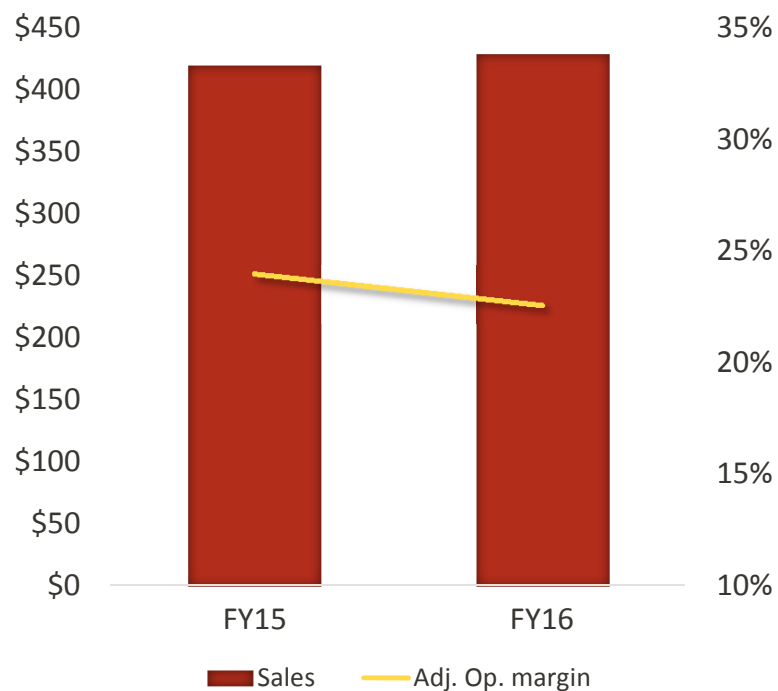
- 3D devices require new materials that can be deposited evenly through the narrow via channels or on complex 3D logic shapes
- Key metal materials need to be fluorine free, since fluorine can cause damage to the device structure
- Fluorine-free materials are often in solid form which are challenging to synthesize, purify and to deliver
- Entegris combines expertise in synthesis, purification and delivery technology to enable integration of new materials



Leading in high-purity chemical delivery all the way to the wafer

SPECIALTY CHEMICALS AND ENGINEERED MATERIALS – MATERIAL THAT MATTERS

Specialty Chemicals and Engineered Materials Segment



	2015	2016	3-Year Outlook
Sales Growth ¹	7%	2%	200 – 300 bps above market ³ growth
Adjusted Operating Margin ²	24%	23%	25% – 27%

Key Margin Drivers:

- Sales and margin growth from new products
- Supply chain and operational efficiencies
- Improved factory utilization

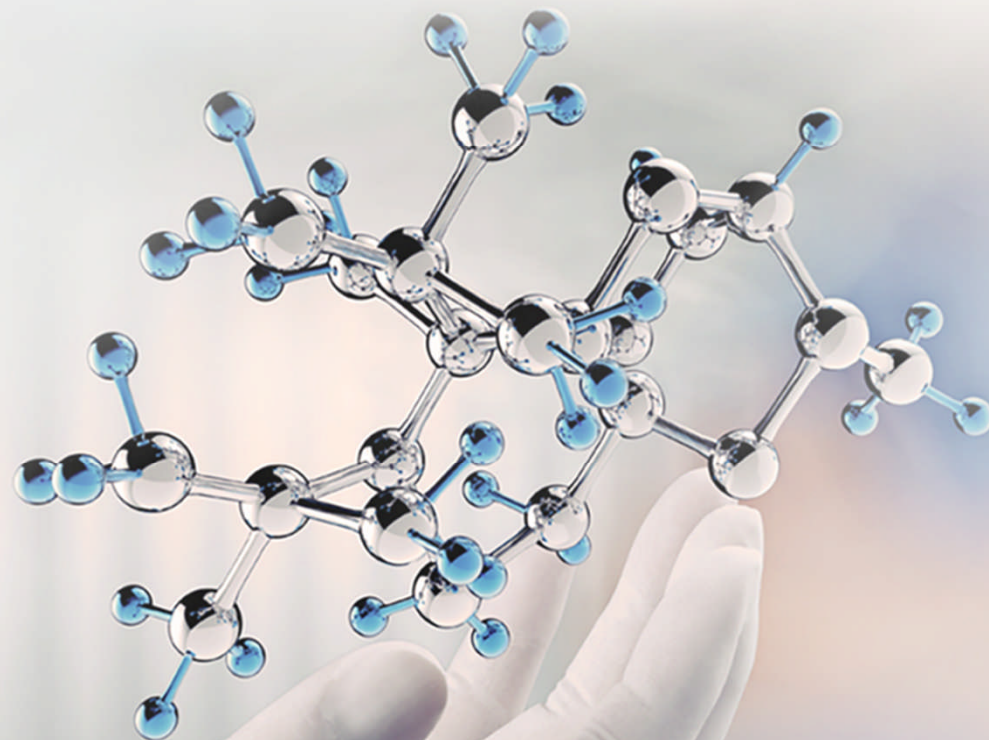
¹ 2014 Pro-forma includes full year ATMI

² Non-GAAP Adjusted measure

³ Market index defined as 100% Millions of Sq. Inches of Silicon produced (MSI); Source – SEMI

Growing Cash Flow and Earnings

Greg Graves
Executive Vice President and CFO



GOING FORWARD – CREATING VALUE FOR STAKEHOLDERS



Financial Objectives

- Growth in excess of market (100-200 bps)
- EBITDA margin expansion
- Free cash flow
- EPS growth (2x top line)



Investment Priorities




- R&D
- Internal capabilities
- Strategic acquisitions



Target Model

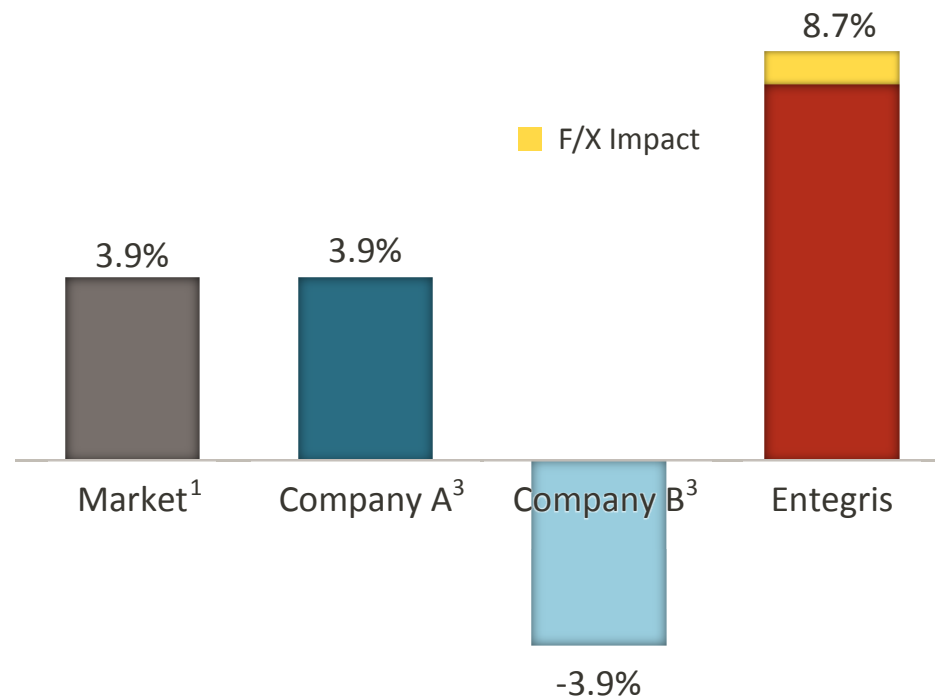
- Financial discipline
- Achieve target model

WELL POSITIONED TO CONTINUE TO PERFORM: DIVISION PORTFOLIO

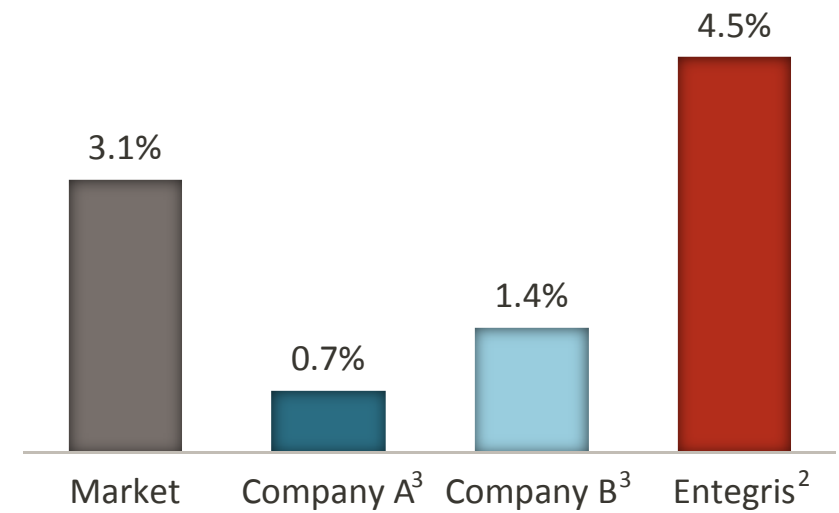
	MC	AMH	SCEM
Products	Liquid and gas filtration, environment 	Wafer solutions, fluidics, containers 	Specialty gas, advanced deposition, surface prep and cleaning chemistries, specialty materials 
Growth Profile	High growth driven by increasing contamination control requirements	Mature market; gains at advanced nodes, maintain share in 200 mm and below	Advanced materials market growing faster than overall market
Unit-Driven/ Investment Split	79% / 21%	45% / 55%	100% / 0%
Sales Growth	200 – 400 bps above market growth	Flat – 100 bps above market growth	200 – 300 bps above market growth
Investment	High investment to sustain superior growth and margins	Limited investment beyond advanced FOUPs and normal equipment replacements	Targeted investment to drive growth in deposition materials, engineered materials, and next generation gases
Portfolio Position	High-profit growth engine	Cash generation	Focus growth in specific product lines

STRONG RELATIVE REVENUE GROWTH

2016 vs. 2015



2014-2016 CAGR



¹ Market index defined as 80% Millions of Sq. Inches of Silicon produced (MSI) and 20% Wafer Fab Equipment (WFE); Data source is Gartner (WFE) and SEMI (MSI)

² 2014 Entegris Revenue Pro-forma including full year ATMI

³ Fiscal year ended September

PROFIT GROWTH PATH

Illustrative model – modest growth and operating leverage lead to \$1.25+ per share by 2019

	2016 Non-GAAP As Reported		Year Three Illustrative Model
Revenue	\$1,175	5% top-line growth	\$1,360
Operating Income (EBITDA)	\$208		\$272 - \$286
Operating margin	17.7%		20% - 21%
Interest expense	(\$38)		(\$33)
Operating EPS ¹	\$0.94		\$1.25 - \$1.32
EBITDA margin ²	22.4%	3%+ margin improvement	25% - 26%

Assumptions

- GDP growth: 3%
- Semi growth in excess of GDP: 1%
- Entegris growth in excess of market: 1%

¹ EPS assumes no other income/expense, no debt reduction, no share buybacks, no M&A, 25% combined tax rate and 143 million shares outstanding

² EBITDA margin assumes \$65 million of depreciation expense

ANNUAL TARGET MODEL

	2013 Actual	2016 Actual	Annual Revenue Level ¹		
Revenue (\$ in millions)	\$693	\$1,175	\$1,200	\$1,300	\$1,400
Adjusted Operating Margin ²	15%	18%	~19%	~20%	~21%
Adjusted EBITDA Margin ²	19%	22%	~24%	~25%	~26%
Earnings Per Share ³	\$0.58	\$0.94	\$1.00+	\$1.15 - \$1.25	\$1.35 - \$1.45

Additional revenue assumes 40% incremental flow-through at EBITDA level

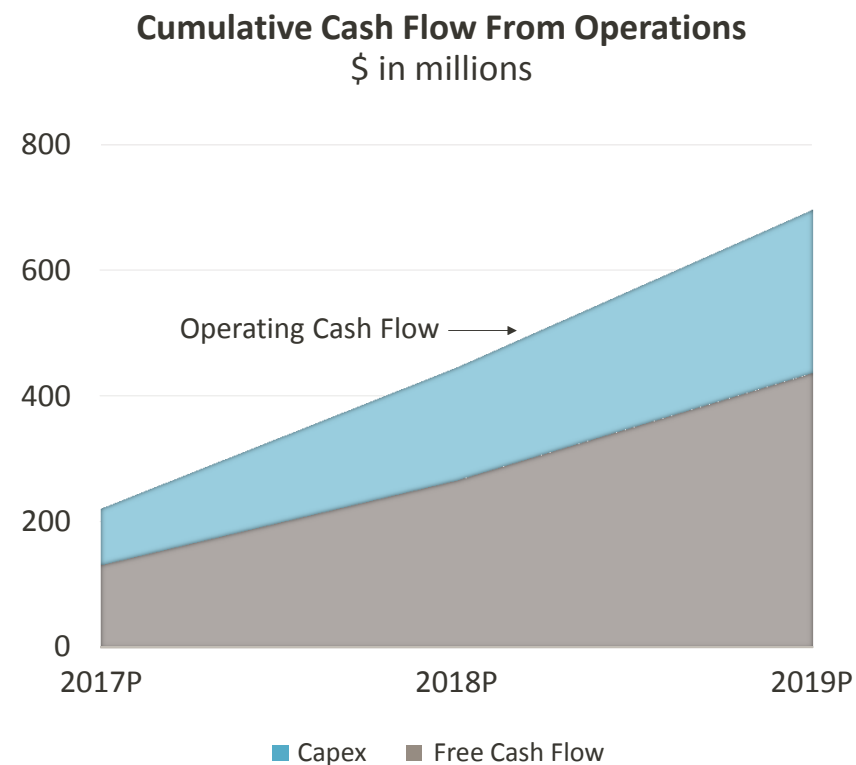
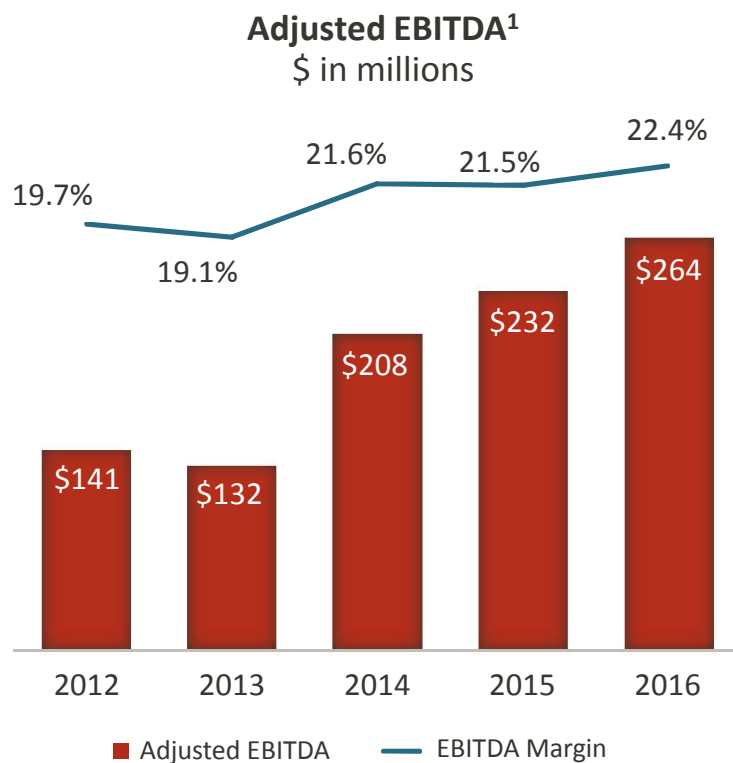
¹ Represents range of adjusted operating margin and EBITDA based on respective annual revenue levels

² Adjusted for amortization of intangible assets, one-time charges and expenses, and unrealized synergies; EBITDA assumes \$65 million of depreciation

³ Assumes interest expense of \$33 million, tax rate of 25%, and shares outstanding equal 143 million

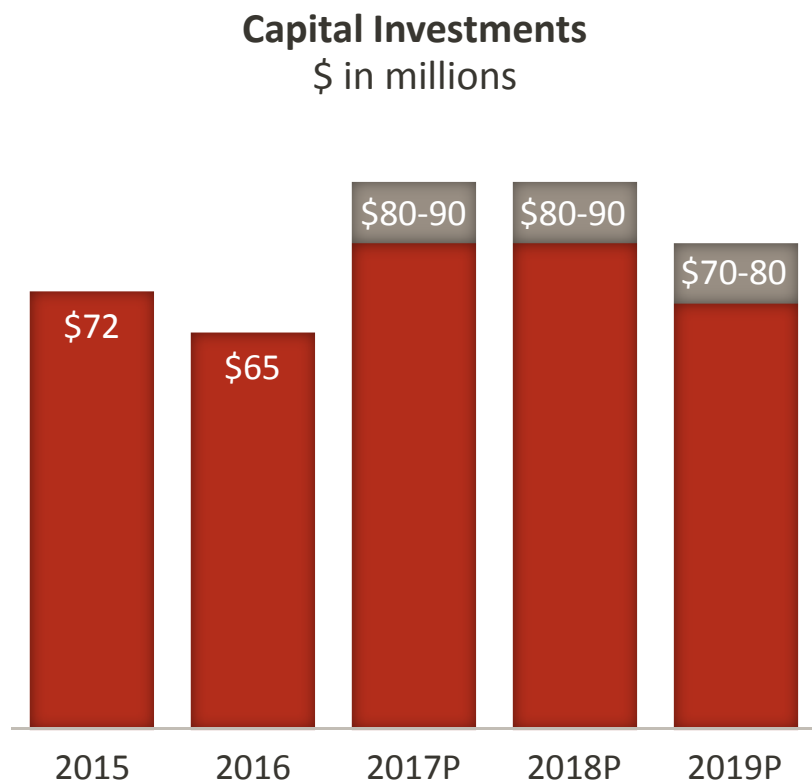
PROJECTED CASH FROM OPERATIONS AND FREE CASH FLOW

By 2019, three-year cumulative cash from operations is estimated to reach almost \$700 million



¹ EBITDA adjusted for transaction and integration expenses

INVESTING FOR THE FUTURE

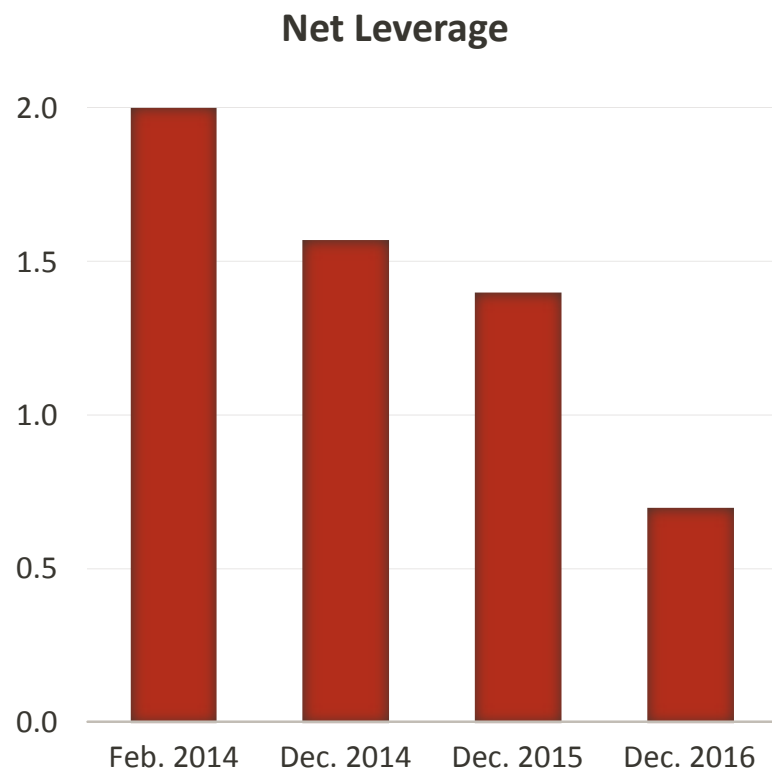


Growth-related investments include:

- New filtration membrane manufacturing capability
- Advanced deposition materials capability
- Production equipment for advanced coatings

2017 Capital Plan: \$80 – \$90 million

SOUND BALANCE SHEET WITH GROWING CASH BALANCE

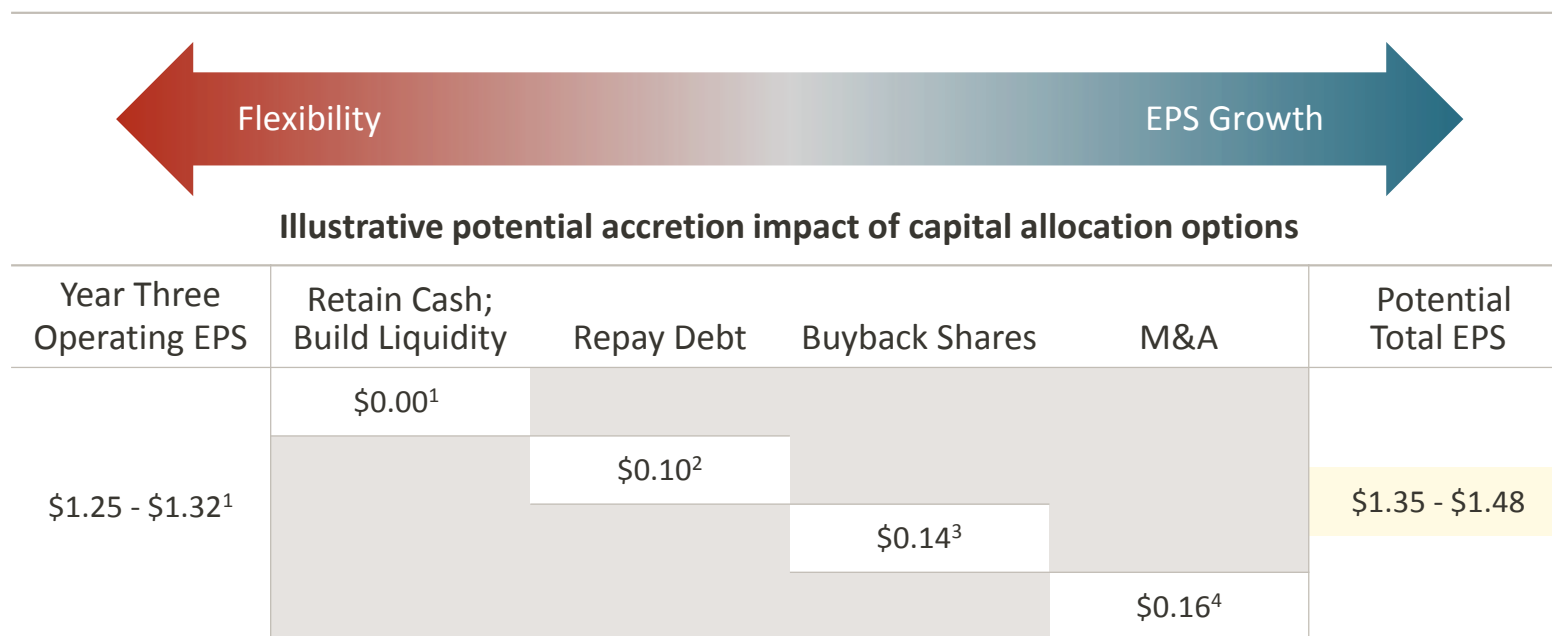


- As of 4Q16, \$406 million of cash on balance sheet
 - \$140 million in the U.S.
- Long-term debt is comprised of:
 - \$360M of HY 6% notes
 - \$234M of term debt at LIBOR plus 225 bps
- Repaid \$226 million of debt since June 2014; additional \$100M of repayment expected in next 12 months
- “Shape and Form” of debt provides maximum flexibility in all environments
- Repriced term loan March 2017

February 2014 ratio is estimate at time of announcement of transaction, which closed on April 30, 2014

CAPITAL ALLOCATION DRIVES EPS HIGHER

Balancing priorities



¹ Represents scenario for 2018 and beyond which follows target model to retain cash/build liquidity

² Represents scenario where excess domestic cash above \$50M is used for further debt reduction in 2018 and beyond

³ Represents scenario where excess domestic cash above \$50M is used to repurchase shares beginning in 2018 with no additional debt

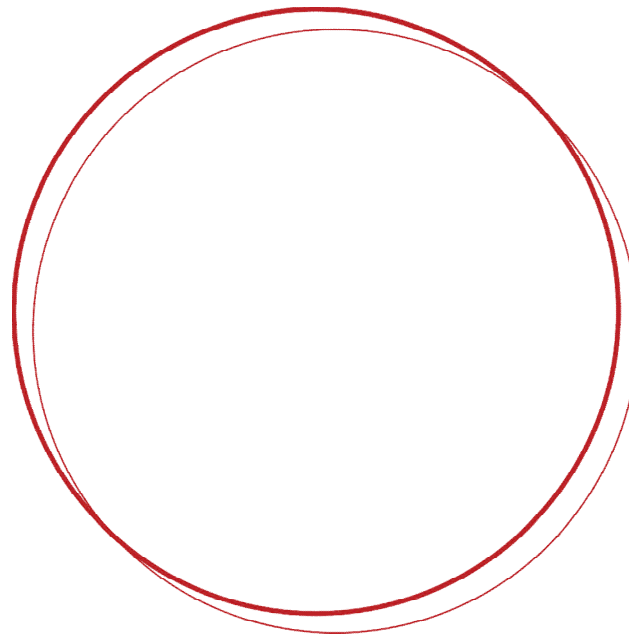
⁴ Represents scenario where excess domestic cash above \$50M is used for an M&A purchase at 10x EBITDA in 2018 with no additional debt

WHAT YOU SHOULD TAKE AWAY FROM TODAY'S MEETING

- Entegris is executing well with a path for continued top-line growth and bottom-line expansion
- The semiconductor industry is in a multi-year growth cycle
- Materials and materials purity/handling is a key enabler of this growth
- Entegris is well-positioned to benefit as a leading supplier of materials, filtration and advanced materials handling solutions
- We have an excellent platform on which to expand through strategic M&A



Q&A



APPENDIX

GAAP SEGMENT TREND DATA

	Q115	Q215	Q315	Q415	Q116	Q216	Q316	Q416
Sales								
AMH	\$ 87,529	\$ 90,847	\$ 86,483	\$ 81,567	\$ 88,298	\$ 99,686	\$ 97,460	\$ 98,840
SCEM	99,897	110,569	105,285	103,127	101,107	111,782	104,494	110,945
MC	75,947	79,293	78,485	82,092	77,619	91,584	94,738	98,717
Total Sales	<u>\$ 263,373</u>	<u>\$ 280,709</u>	<u>\$ 270,253</u>	<u>\$ 266,786</u>	<u>\$ 267,024</u>	<u>\$ 303,052</u>	<u>\$ 296,692</u>	<u>\$ 308,502</u>
Segment Profit								
AMH	\$ 19,679	\$ 20,860	\$ 15,786	\$ 10,094	\$ 18,911	\$ 22,519	\$ 15,378	\$ 16,644
SCEM	22,010	30,826	23,316	24,218	22,416	28,914	18,811	25,919
MC	19,874	20,605	21,926	20,671	18,140	28,566	31,617	31,719
Total Segment Profit	<u>\$ 61,563</u>	<u>\$ 72,291</u>	<u>\$ 61,028</u>	<u>\$ 54,983</u>	<u>\$ 59,467</u>	<u>\$ 79,999</u>	<u>\$ 65,806</u>	<u>\$ 74,282</u>

NON-GAAP SEGMENT TREND DATA

	Q115	Q215	Q315	Q415	Q116	Q216	Q316	Q416
Sales								
AMH	\$ 87,529	\$ 90,847	\$ 86,483	\$ 81,567	\$ 88,298	\$ 99,686	\$ 97,460	\$ 98,840
SCEM	99,897	110,569	105,285	103,127	101,107	111,782	104,494	110,945
MC	75,947	79,293	78,485	82,092	77,619	91,584	94,738	98,717
Total Sales	\$ 263,373	\$ 280,709	\$ 270,253	\$ 266,786	\$ 267,024	\$ 303,052	\$ 296,692	\$ 308,502
Adjusted Segment Profit								
AMH ¹	\$ 19,679	\$ 20,860	\$ 15,786	\$ 10,094	\$ 18,911	\$ 22,519	\$ 22,173	\$ 16,644
SCEM ²	22,010	30,826	23,316	24,218	22,416	28,914	19,510	25,919
MC ³	19,874	20,605	21,926	20,671	18,140	28,566	32,354	31,719
Total Adj. Segment Profit	\$ 61,563	\$ 72,291	\$ 61,028	\$ 54,983	\$ 59,467	\$ 79,999	\$ 74,037	\$ 74,282

1 Adjusted segment profit for AMH for Q316 excludes charges for impairment of equipment and severance related to organizational realignment of \$5,826 and \$969, respectively.

2 Adjusted segment profit for SCEM for Q316 excludes charges for severance related to organizational realignment of \$699.

3 Adjusted segment profit for MC for Q316 excludes charges for severance related to organizational realignment of \$737.

MARKET DATA

WFE

		1Q16	2Q16	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	2014	2015	2016	2017	2018	2019	2020
Gartner	WFE (\$M)	6,902	8,562	8,969	9,601	8,970	8,596	9,147	9,265	31,916	31,485	34,033	35,979	36,241	39,273	37,250
	Q/Q	-2.90%	24.10%	4.80%	7.00%	-6.60%	-4.20%	6.40%	1.30%		-1.35%	8.10%	5.70%	0.70%	8.40%	-5.10%

MSI

		1Q16	2Q16	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	2014	2015	2016	2017	2018	2019	2020
Linx	MSI	2,538	2,706	2,730	2,764	2,696	2,810	2,924	2,879	10,098	10,435	10,738	11,309	12,372	13,312	13,259
	Q/Q	1.40%	6.60%	0.90%	1.20%	-2.50%	4.20%	4.10%	-1.50%		3.34%	2.90%	5.30%	9.40%	7.60%	-0.40%
	Industry	0.50%	10.10%	1.70%	2.40%	-3.30%	2.50%	4.50%	-1.00%			3.90%	5.40%	7.70%	7.80%	-1.30%

Historical
2 Yr CAGR
3.3%

Projected
3 Yr CAGR
4.9%

3.1%

7.4%

Source: Gartner estimates for WFE as of February 2017; Linx Consulting estimates for MSI as of February 2017