



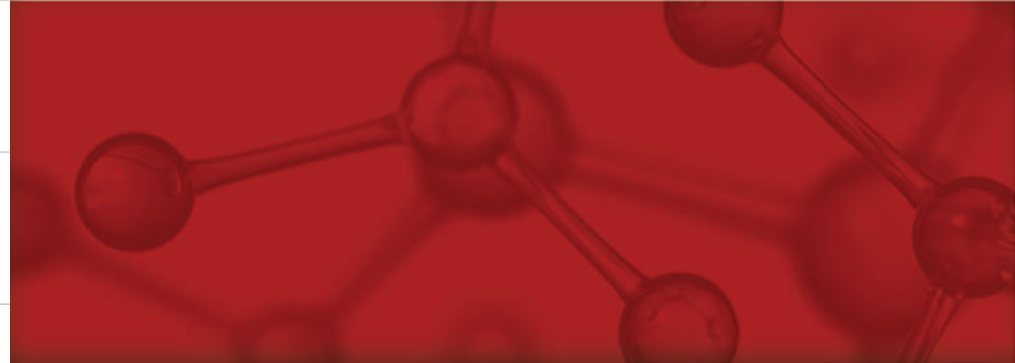
A World Class Advanced Materials Company

Investor and Analyst Day

November 17, 2020

Agenda

Topic	Speaker
1 Positioned for Growth	Bertrand Loy President and CEO
2 Differentiation and Competitive Advantage	Todd Edlund EVP and COO
3 Innovating for Growth	James A. O'Neill, Ph.D. SVP and CTO
4 Financial Strength and Flexibility	Greg Graves EVP and CFO
5 Q&A	All



Safe Harbor

This presentation contains, and management may make, forward-looking statements. The words “believe,” “expect,” “anticipate,” “intend,” “estimate,” “forecast,” “project,” “should,” “may,” “will,” “would” or the negative thereof and similar expressions are intended to identify such forward-looking statements. These forward-looking statements include statements related to future period guidance; future revenue, operating margin, non-GAAP earnings per share, return on invested capital and other financial metrics; future repayments under the Company's credit facilities; the Company's performance relative to its markets, including the drivers of such performance; market and technology trends, including the duration, scale and drivers of any growth trends; the impact, financial or otherwise, of any organizational changes; the development of new products and the success of their introductions, including revenue goals for such products; the Company's capital allocation strategy, which may be modified at any time for any reason, including share repurchases, dividends, debt repayments and potential acquisitions; the impact of the acquisitions the Company has made and commercial partnerships the Company has established; the Company's ability to execute on its strategies; and other matters. These risks and uncertainties include, but are not limited to, risks related to the Covid-19 pandemic on the global economy and financial markets, as well as on the Company, our customers and suppliers, which may impact our sales, gross margin, customer demand and our ability to supply our products to our customers; weakening of global and/or regional economic conditions, generally or specifically in the semiconductor industry, which could decrease the demand for the Company's products and solutions; the Company's ability to meet rapid demand shifts; the Company's ability to continue technological innovation and introduce new products to meet customers' rapidly changing requirements; the Company's concentrated customer base; the Company's ability to identify, complete and integrate acquisitions, joint ventures or other transactions; the Company's ability to effectively implement any organizational changes; the Company's ability to protect and enforce intellectual property rights; operational, political and legal risks of the Company's international operations; the Company's dependence on sole source and limited source suppliers; the increasing complexity of certain manufacturing processes; raw material shortages, supply constraints and price increases; changes in government regulations of the countries in which the Company operates; fluctuation of currency exchange rates; fluctuations in the market price of the Company's stock; the level of, and obligations associated with, the Company's indebtedness; and other risk factors and additional information described in the Company's filings with the Securities and Exchange Commission, including under the heading “Risks Factors” in Item 1A of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed on February 7, 2020, and in the Company's other periodic filings. The Company assumes no obligation to update any forward-looking statements or information, which speak as of their respective dates.

This presentation contains references to “EBITDA,” “Adjusted EBITDA Margin,” “Adjusted Operating Margin” and “Non-GAAP Earnings per Share” that are not presented in accordance GAAP. The non-GAAP financial measures should not be considered in isolation or as a substitute for GAAP financial measures but should instead be read in conjunction with the GAAP financial measures. Further information with respect to and reconciliations of such measures to the most directly comparable GAAP financial measure can be found attached to this presentation.

Positioned for Growth


Bertrand Loy
President and CEO



Entegris at a Glance

 **Founded**
1966

 **2020 Revenue¹**
\$1.8B

 **Headquarters**
Billerica, MA

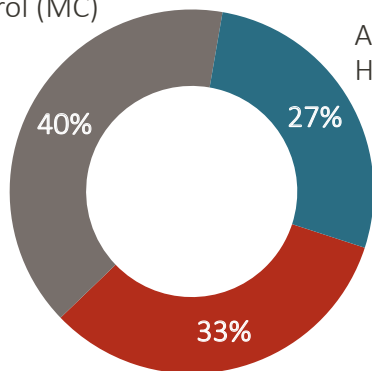
 **Employees**
5,000+

Our Mission

To help our customers improve their productivity, performance and technology by providing enhanced materials and process solutions for the most advanced manufacturing environments

Divisions²

Microcontamination Control (MC)

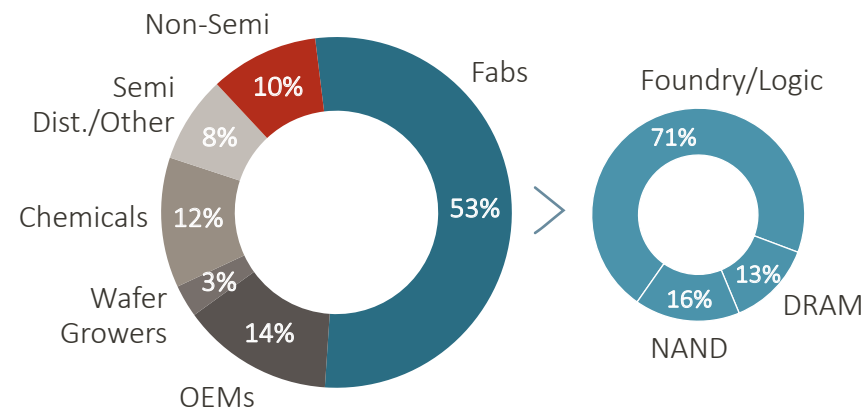


Advanced Materials Handling (AMH)

Specialty Chemicals & Engineered Materials (SCEM)

Sales by Customer Type³

90% semiconductor



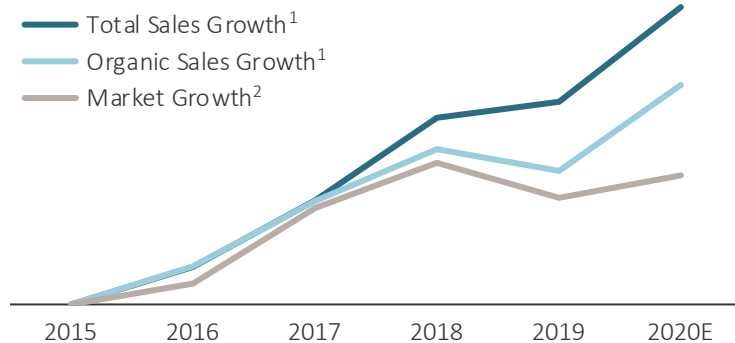
¹ Assumes midpoint of guidance for 2020 (provided on 10/22/20). ² Percentage of Entegris revenue (2020 estimate). ³ Q1-Q3 2020.

Our Platform is Differentiated and Resilient...

Recurring Revenue

~70%
UNIT DRIVEN

Sales Growth vs. Market



“Sticky” Solutions

- Products spec’d into nodes
- High switching cost
- Long product tails

Broad Product Offering

- 15,000+ products
- No single product platform >4% of sales

Diverse Customer Base

- One customer over 10% of sales
- Top 10 customers ~45% of sales
- Sell across supply chain (fabs ~50% of sales)

...and agnostic to specific technology shifts

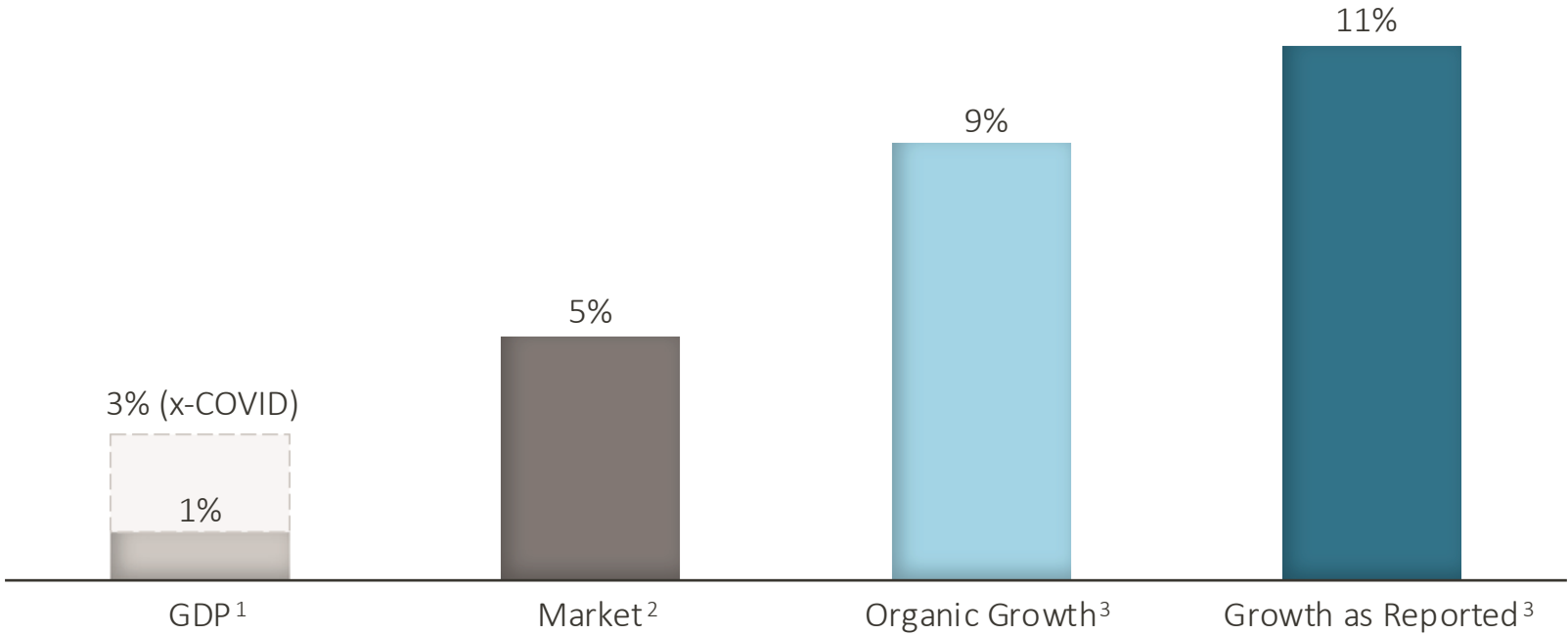
¹ Indexed – assumes midpoint of guidance for 2020 (provided on 10/22/20).

² Market is a CapEx and MSI blended index – 70% MSI and 30% CapEx.

An Exciting Growth Story...

2015-2020 CAGR

Entegris Revenue Growth vs. GDP and Industry



¹ GDP CAGR from pre-COVID-19 forecast was 3%. ² Market is a CapEx and MSI blended index – 70% MSI and 30% CapEx.

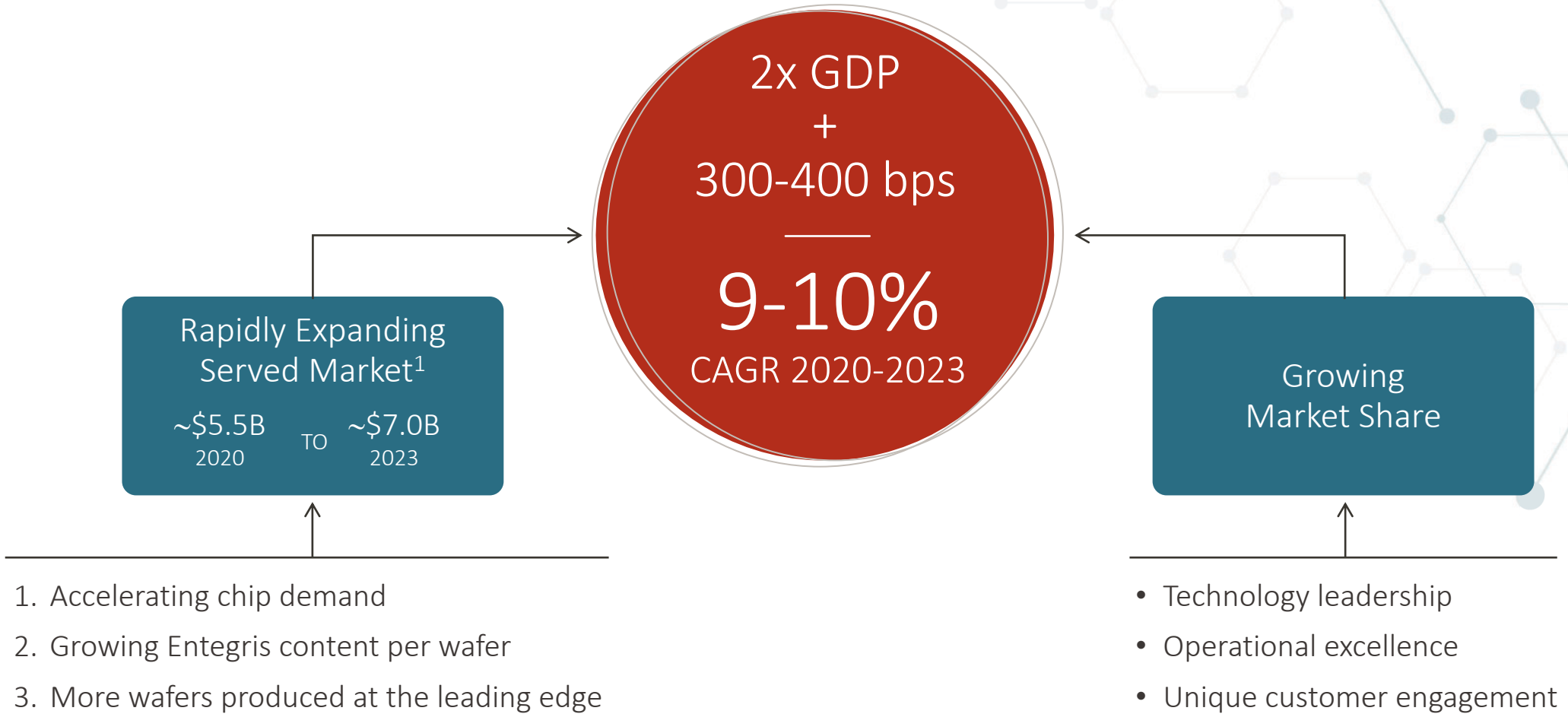
³ 2015-2020 CAGR – assumes midpoint of guidance for 2020 (provided on 10/22/20).



...With More Potential Ahead

- Our core semi markets are poised for strong secular growth
- Our value proposition is increasingly important to the semiconductor industry
- Catching new technology inflections will allow us to outgrow the market
- Maintaining our differentiation will help us gain share
- Our capital allocation choices will continue to be targeted and value enhancing

Organic Sales Growth Formula



¹ Entegris estimates.

1

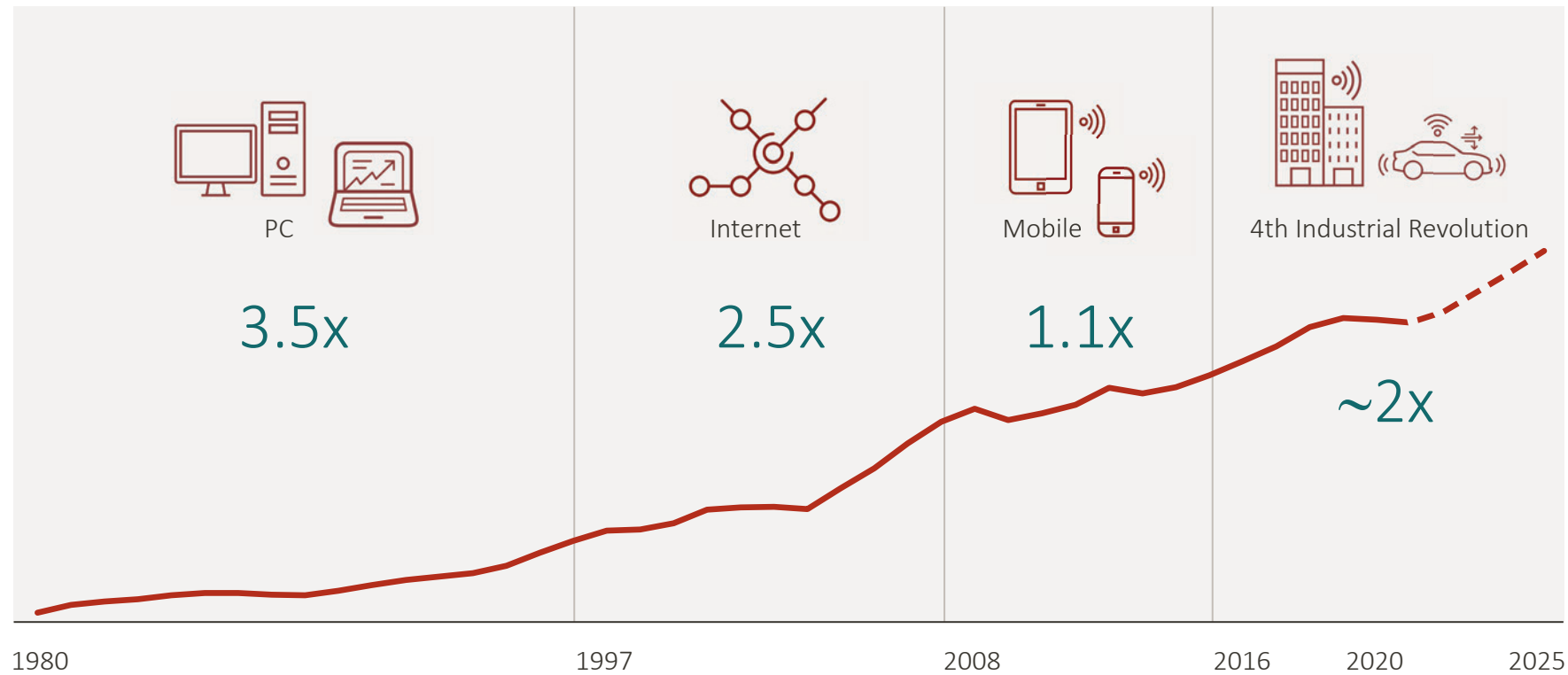
The Industry Lift



Our Rapidly Expanding Served Markets

Strong semiconductor demand to continue

Semiconductor MSI Growth¹ vs. GDP Growth²



5G



30% IC content increase
5G vs. 4G smartphone

Internet of Things



3x IoT devices in 2025 vs. 2020

Data Explosion



3x annual data creation
2025 vs. 2020

Autonomous Vehicles



50% car BOM cost will be
electronics by 2030

¹ Sources: Entegris analysis and SEMI. Three-year moving average MSI (million square inch of silicon). ² Source: World Bank.

2

SAM Expansion



Our Rapidly Expanding Served Markets

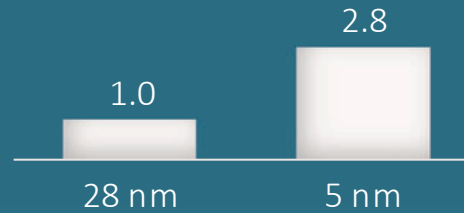
2.1 Growing materials content opportunity per wafer – SCEM

Materials science is increasingly driving the leading-edge semiconductor industry roadmap

Leading Edge Logic and Memory Materials Spending Increase

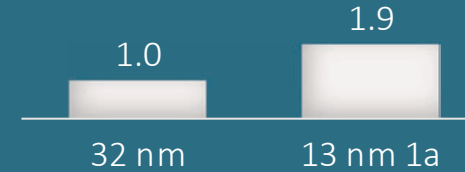
Logic Materials

Industry spend per wafer



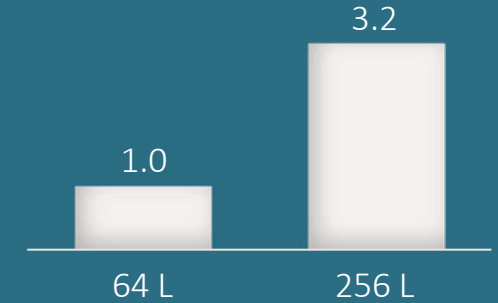
DRAM Materials

Industry spend per wafer



3D-NAND Materials

Industry spend per wafer



What customer problems are we trying to solve?

- High aspect ratio 3D architectures
- Gate all around (GAA)
- New interconnect metals for faster performance to replace W and Cu



Our solutions/opportunities

- Thinner film materials
- Selective wet etch chemicals for 3D structures
- New interconnect metals such as Co, Mo, Ru

Our customers are introducing more complex architectures and are actively searching for new materials with better electrical and structural properties to improve the performance of their devices

Sources: IC Knowledge, Entegris analysis. Represents leading edge only. Materials data has been normalized, and includes ALD and CVD precursors, implant gases, electroplating chemicals, and wet etch/clean chemicals for the per wafer materials spending analysis, products which broadly represent approximately 75% of SCEM leading-edge revenue exposure.

Our Rapidly Expanding Served Markets

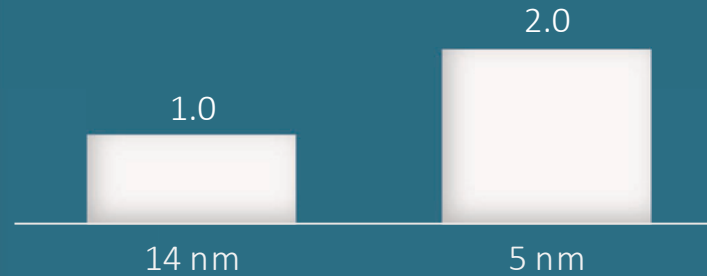
2.2 Growing filtration opportunity per wafer – MC

Our contamination control expertise is increasingly critical to yield optimization and chip reliability

Leading Edge Logic and Memory Filtration Spending Increase

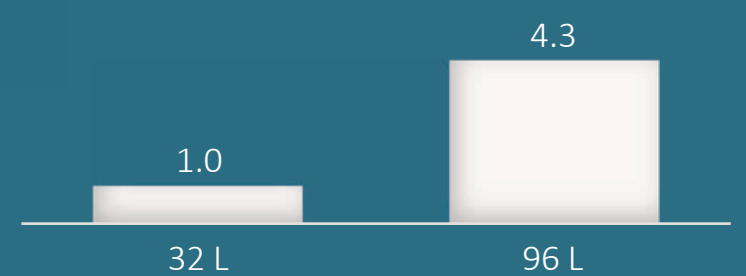
Liquid Filtration

Revenue per logic wafer



Liquid Filtration

Revenue per 3D-NAND wafer



What customer problems are we trying to solve?

- Enable further miniaturization
- Enable new metals susceptible to new contaminants
- Maximize yields and throughput
- Increase device long-term reliability

Our solutions/opportunities

- Selective removal of new classes of contaminants
- Sieving and non-sieving methods
- Tighter retention and higher flow rate

Our customers understand that greater process purity translates to a reduction of killer defects and latent defects

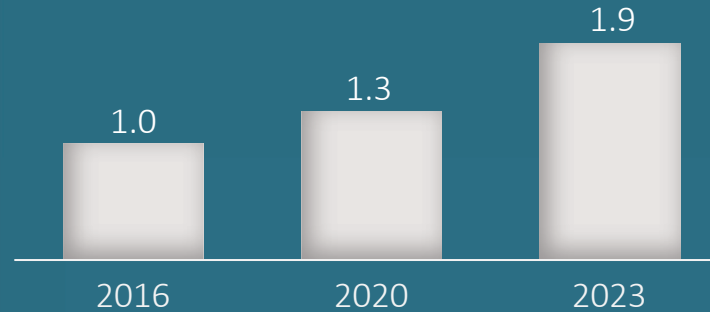
Source: Entegris analysis. Represents leading edge only. Liquid filtration data has been normalized and includes Entegris liquid filtration and purification product sales to fabs for both bulk and point-of-use applications in WEC, photolithography, and CMP, products which broadly represent approximately 60% of MC leading-edge revenue exposure.

Our Rapidly Expanding Served Markets

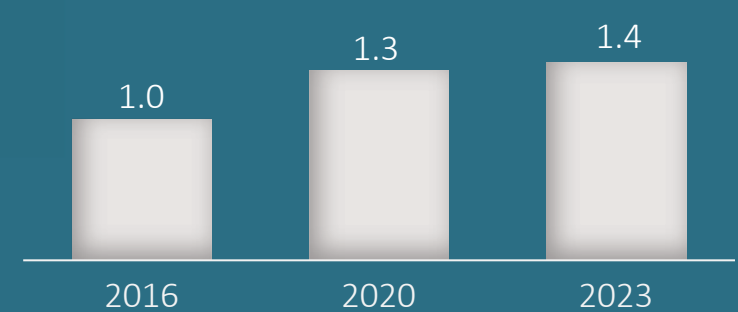
2.3 Purity requirements across the supply chain on the rise – *MC and AMH*

Our comprehensive product portfolio and intimate application knowledge set us apart to provide end-to-end solutions across industry supply lines

Annual Chemical Shipments in SEMI Industry
In gallons



Liquid Filtration Spending per Shipment
Revenue per gallon



What customer problems are we trying to solve?

- Greater purity levels required in bulk chemical manufacturing
- Greater number of chemistries subject to these increasing purity requirements
- Integrity, purity, and safety needed to be ensured during transportation and delivery through the fab



Our solutions/opportunities

- More advanced filters used in bulk chemical manufacturing
- More points of filtration across the ecosystem
- More frequent filter replacement required
- Migration away from metal and glass containers to adopt polymer-based high purity packaging solutions

Our semiconductor fab customers expect tighter control over purity and integrity of critical process chemistries from bulk manufacturing to point of dispense

Sources: Linx and Entegris. Data has been normalized, and includes photoresist and ancillaries, CMP slurry, formulated cleans (post etch and post CMP), and commodity cleans (acids, solvents, IPA, and other chemicals).

3

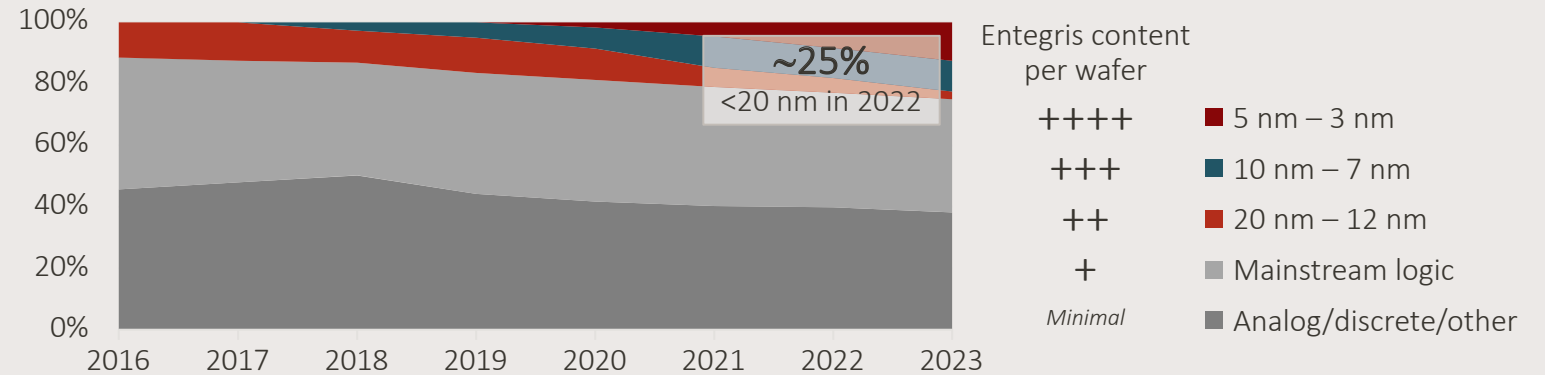
More Wafers Produced at
the Leading Edge



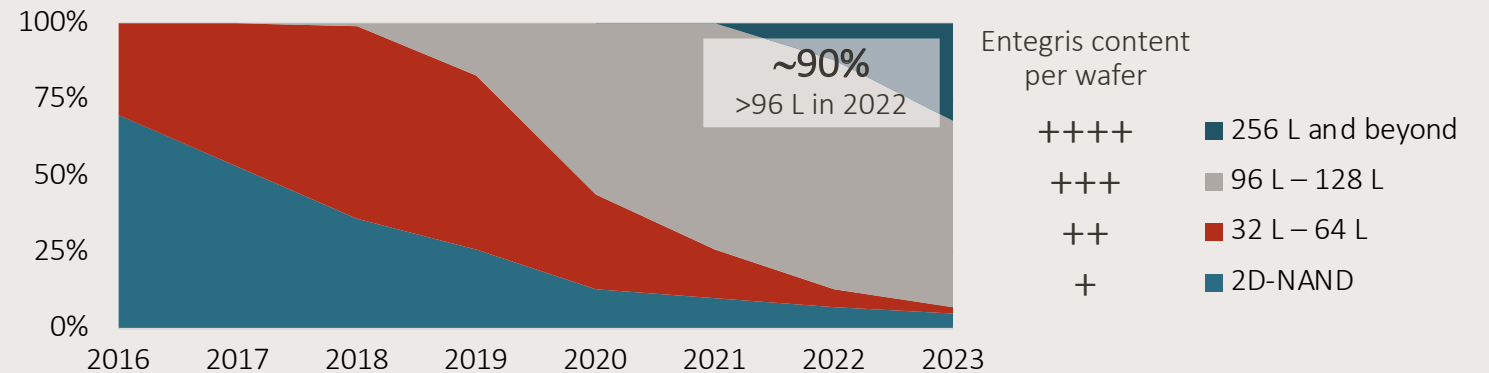
More Wafers Produced at the Leading Edge

Accelerating wafer transitions to advanced architectures where we enjoy greater content per wafer

Leading Edge Logic Capacity by Node¹



NAND Capacity by Technology²



- 5G/AI will drive migration to faster and larger computing devices
- Data explosion will drive memory to higher storage density architectures

Source: Gartner, SEMI, company reports, Entegris analysis. ¹ Percent of total non-memory industry capacity. ² Percent of total NAND industry capacity.



4

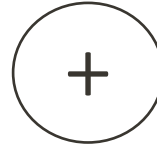
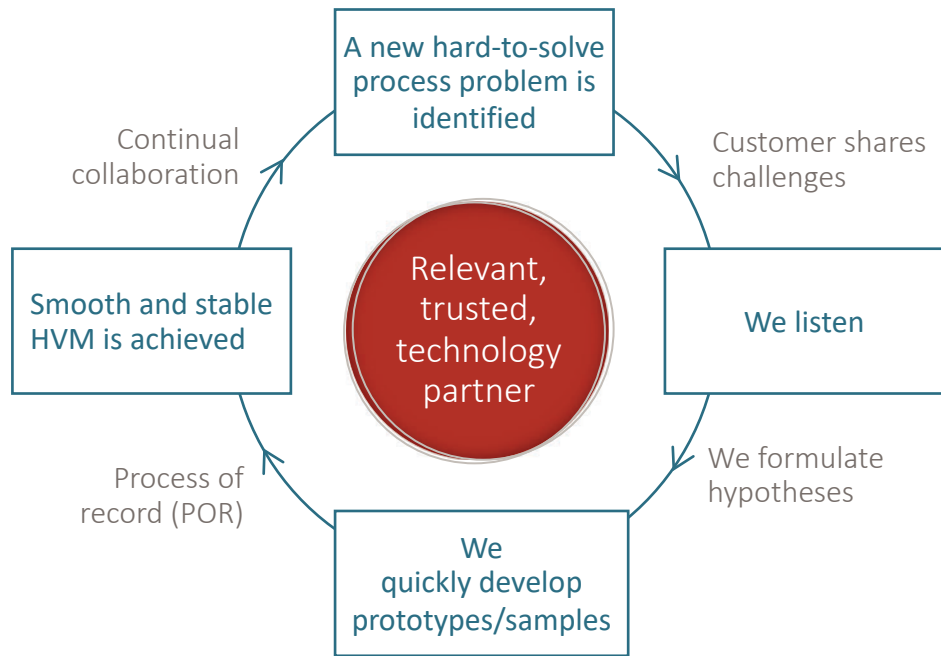
Enhancing Our Differentiation Gaining Share



Our Customer-Driven Innovation Model...

Customer-driven Innovation

Our Entegris Flywheel



Our Value Proposition



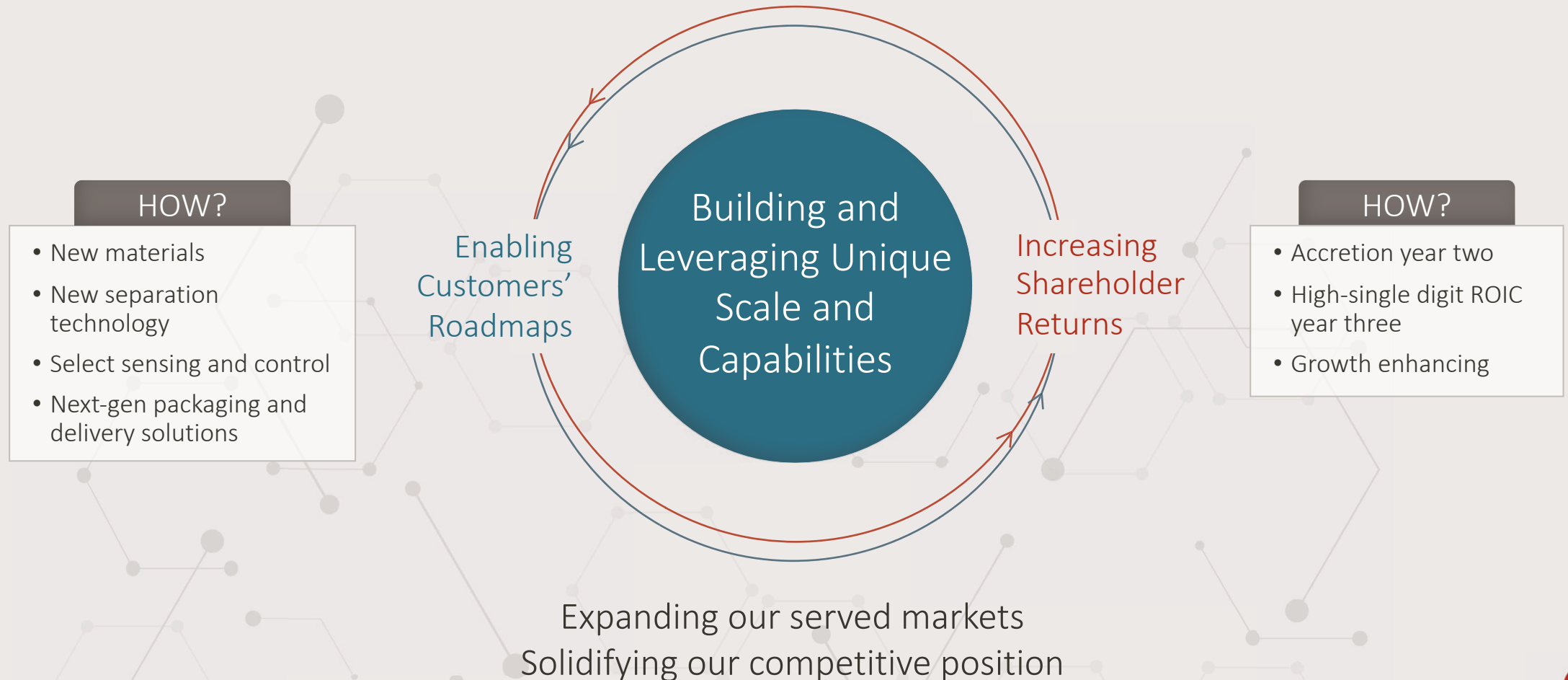
...drives shared organization purpose and competitive advantage

5

M&A Approach

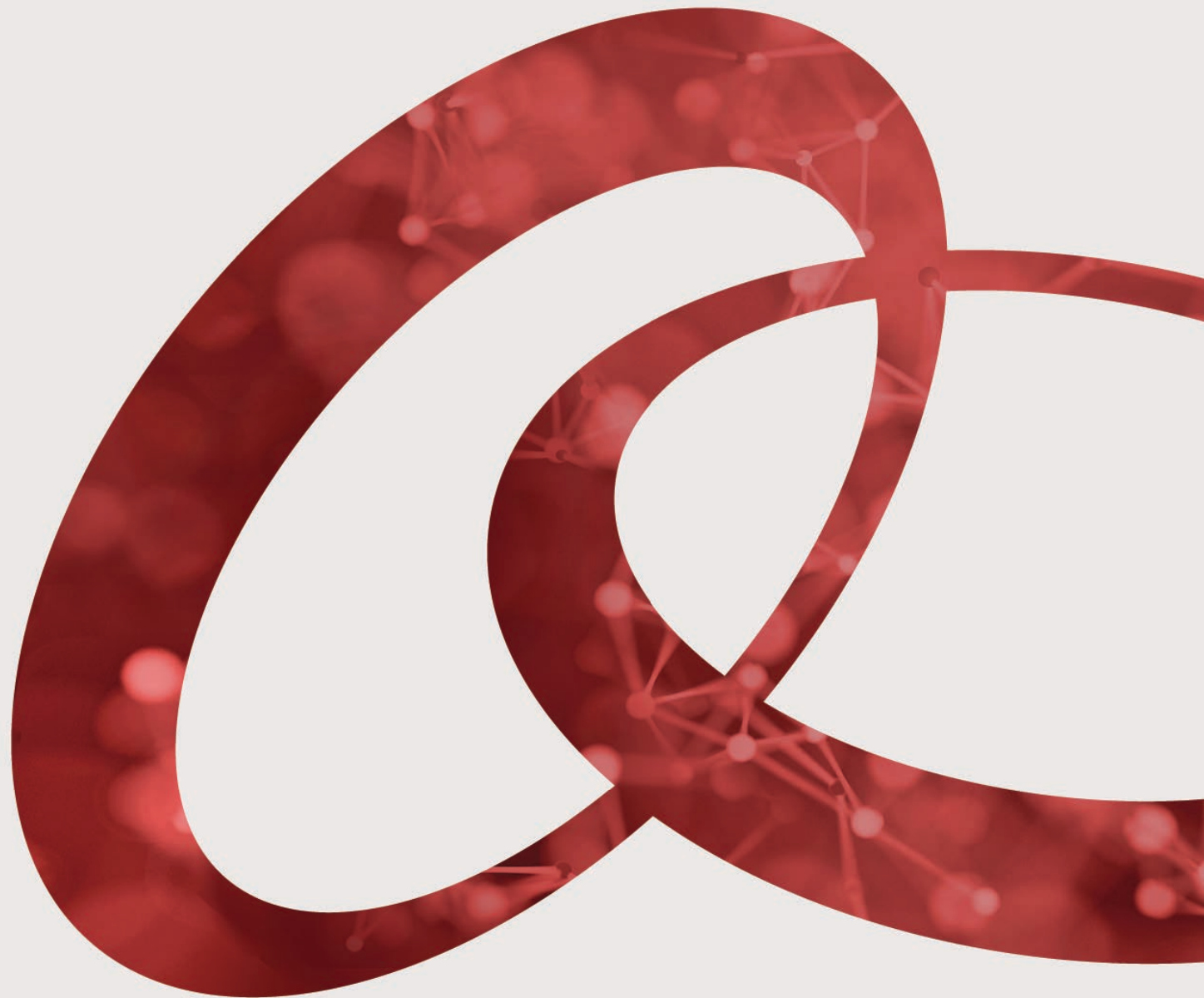


Targeted Acquisitions to Strengthen Fit and Purpose Compounding Value for our Customers and Shareholders



6

Financial Objectives



2023 Illustrative Financial Model

~\$2.4B

SALES

~20%

ROIC

\$3.75

TO

\$4.00

NON-GAAP EPS

Includes capital
allocation scenarios

7

CSR Approach



Our CSR Program



Innovation

Using our legacy of innovation to enable technologies that transform the world and have a positive impact on people throughout the global community



Safety

Ensuring safety in the workplace for our colleagues and in the products we deliver for our customers



Personal Development and Inclusion

Supporting the development and growth of our colleagues and striving to create a diverse and inclusive environment where everyone is treated with respect and dignity



Sustainability

Limiting the impact that our global operations have on the environment by reducing our consumption of energy and water and by relying on electricity produced from renewable sources

2030 Goals

1. Invest at least 55% of OpEx in R&D
2. Commit 100% of innovation portfolio to advance our customers' technology roadmaps
3. Align 100% of innovation portfolio to advance the U.N. sustainable development goals (SDG)

2030 Goals

1. Strive for an injury-free work environment at all Entegris facilities
2. Create an environment where >95% of colleagues say "Entegris is a safe place to work"
3. Achieve 100% manufacturing participation rate in proactive reporting of safety opportunities

2030 Goals

1. Invest >\$30 million in STEM scholarships and engineering internships for women and individuals from under-represented communities
2. More than 50% of the new engineers we hire will be women and/or individuals from underrepresented groups
Aim to achieve 50% diversity among board members
3. Increase participation in real-time learning opportunities and internal training hours by more than five times the hours completed in 2020

2030 Goals

1. Reduce energy consumption by more than 20% per revenue dollar
2. Achieve 100% electricity consumption generated from renewable sources, where available
3. Decrease water consumption by more than 50% per revenue dollar

What we do as a business must be inextricably linked to what we stand for as an organization—and have a lasting, positive impact on our world

0101 0100110
001001 0010010 0100
001 00101001 01
011 01001
01 1101 01 011 1

Six Reasons to Own Entegris

1. Exciting industry with secular growth
2. Accelerating exposure to key technology inflections
3. Strong competitive moats
4. Resilient business model
5. Highly cash generative
6. Disciplined capital allocation with optionality

Entegris is a value compounder



Differentiation and Competitive Advantage

Todd Edlund

Executive Vice President and
Chief Operating Officer



Entegris is a Trusted Partner for our Semiconductor Customers

Our Competitive Advantage



Technology Portfolio



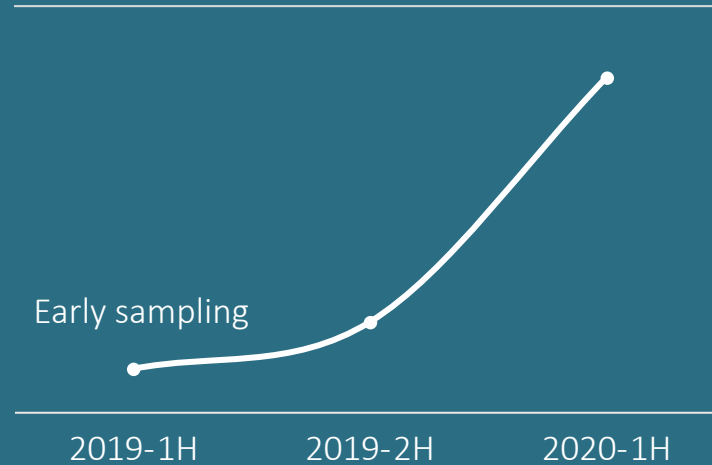
Our Advantage

Applications expertise, close collaboration with our customers, broadest technology portfolio

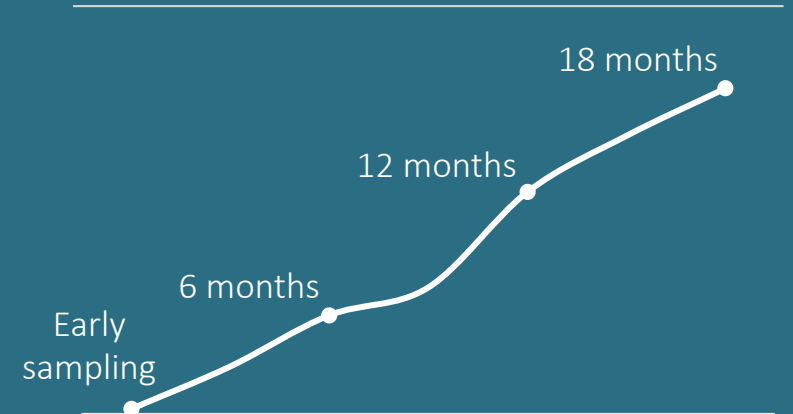
Key areas of competitive advantage:

- Significant R&D investment and IP sharing
- R&D/IP focused on advanced nodes
- Technical resources close to customers
- Trusted tech partner: concept to HVM

Torrento® 2 Filter Production Ramp



Metal Precursor Ramp (ADM)



Source: Entegris product data

Global Infrastructure



Our Advantage

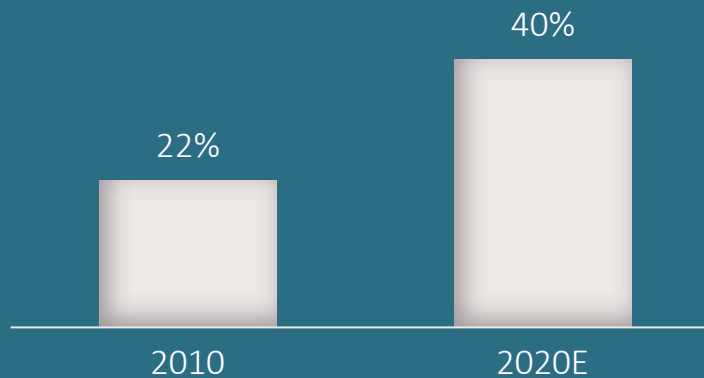
Global footprint increasingly valued in changing world

Key areas of competitive advantage:

- Key resources close to customers, local sourcing alternatives
- Continuing to build our Asia footprint – planned Taiwan Manufacturing Center
- Resilient world-class global supply chain and logistics

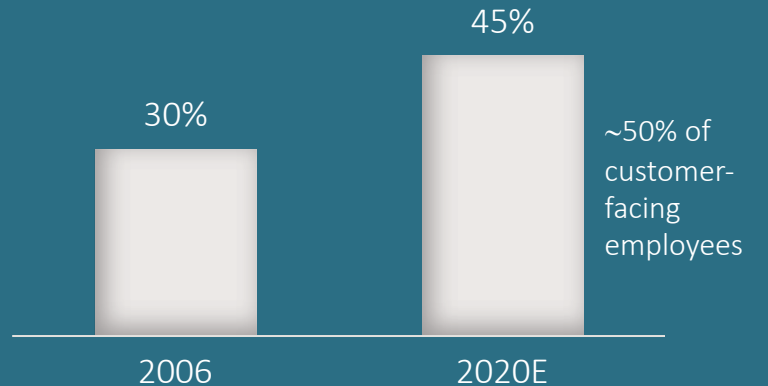
Revenue from Asia Plants

% of Global



Asia Headcount

% of Global



Source: Entegris sales and headcount data. 2020 estimate.

Operational Excellence



Our Advantage

Intense alignment to demands of our semiconductor customers

Lam Research

2020 Ramp Performance Award

Taiwan Continuous Improvement Awards
2019 Silver Award

Samsung

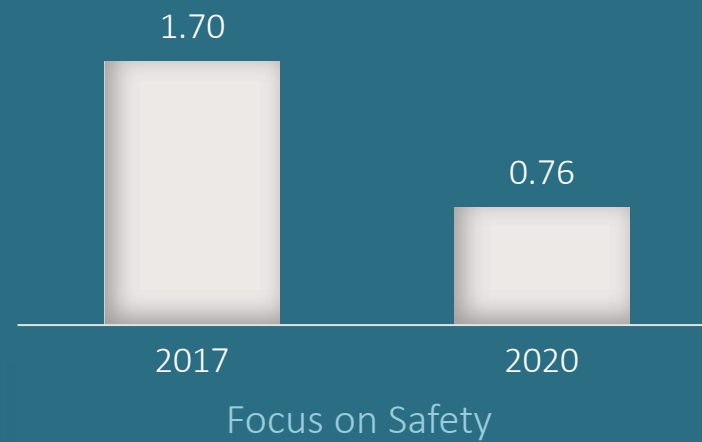
2019 Best in Value Award

Three consecutive wins!

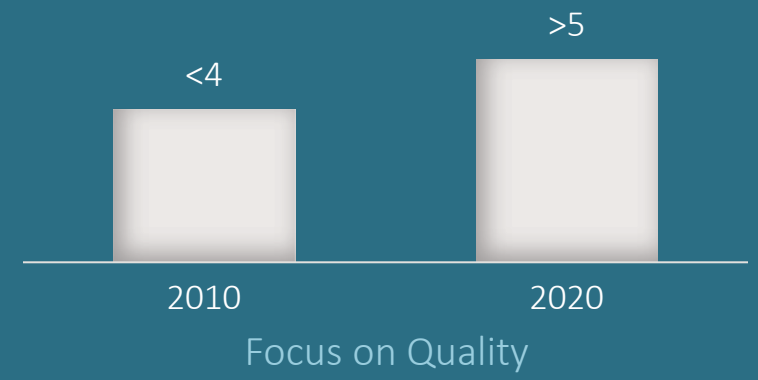
Key areas of competitive advantage:

- Global Operations and Supply Chain organization, led from Asia – maximizing portfolio of factories
- Relentless focus on quality and safety
- Our scale can influence materials development
- Automation and big data applications

Total Recordable Injury Rate¹



Sigma Level²

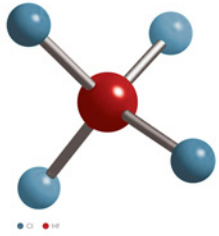


¹ 2020 is Q320 YTD. Calculation: number of employees injured per year per 100 employees. ² 2020 is Q320 YTD.

Specialty Chemicals and Engineered Materials (SCEM)

Unit-driven advanced materials – enabling complex chip designs

~95% Unit Driven



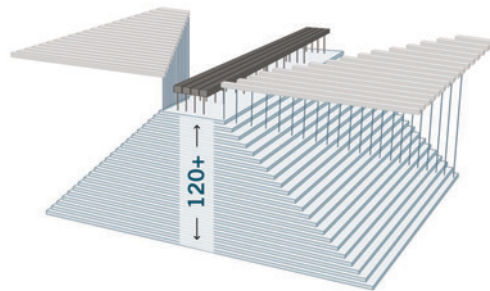
Advanced deposition materials



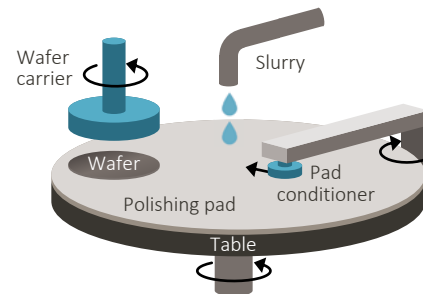
Specialty chemicals and advanced coatings



Specialty gases

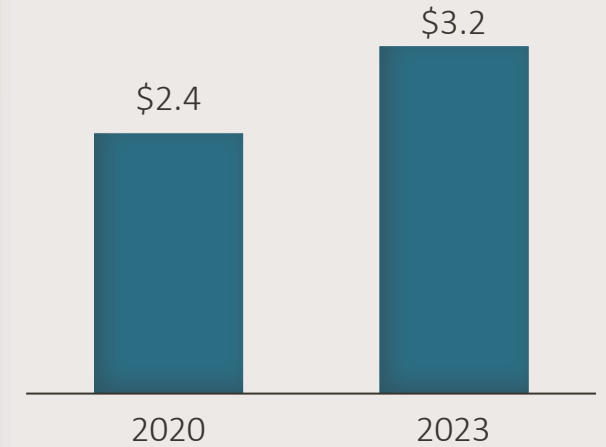


Selective etch chemistries



CMP chemistries and components

SAM¹
\$ in billions



SAM growth drivers:

- Semi growth
- Materials intensity
- Novel materials

¹ SAM includes semiconductor market only. Entegris estimates.

Specialty Chemicals and Engineered Materials (SCEM)

Unit-driven advanced materials – enabling complex chip designs

WHY WE WIN

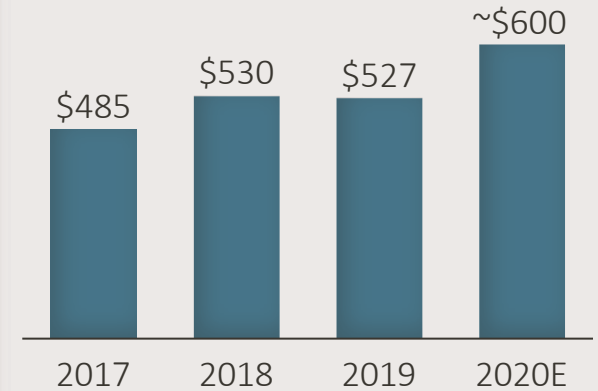
- World leader in safe gas delivery systems
- Advanced metals/solids delivery leader
- Tailored advanced cleaning and selective etch chemistries
- Chemical synthesis = vertical integration

KEY GROWTH OPPORTUNITIES

- Advanced deposition materials
- Selective etch chemistries
- Advanced coatings

2017-2020 Sales
\$ in millions

~7%
CAGR¹



Three-year outlook:

Sales growth²:

300-500 bps above market

Adj. operating margin³: 25-27%

¹ As reported 2017 to 2019. 2020E assumes midpoint of guidance for 2020 (provided on 10/22/20). ² Organic sales growth. ³ Non-GAAP adjusted measure.

Microcontamination Control (MC)

Filtration solutions that improve customers' yield, reliability, and cost

70% Unit Driven



Liquid filters and purifiers



Environmental filters

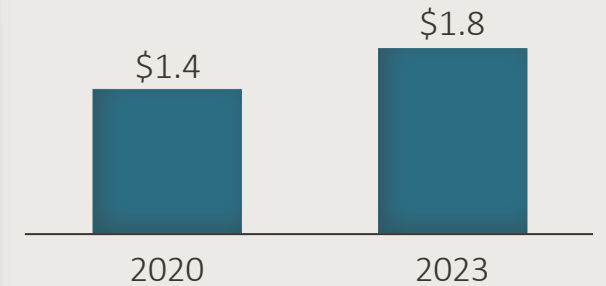
30% CapEx Driven



Gas filters and purifiers

SAM¹

\$ in billions



SAM growth drivers:

- Semi growth
- Higher purity needs
- Yield challenges

¹ SAM includes semiconductor market only. Entegris estimates.

Microcontamination Control (MC)

Filtration solutions that improve customers' yield, reliability, and cost

WHY WE WIN

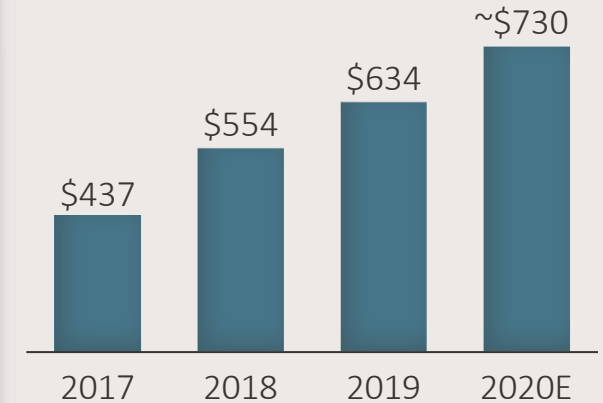
- Separation science – able to direct the roadmap
- Semiconductor focus = applications expertise
- Ability to match solutions to customer challenge and ramp quickly

KEY GROWTH OPPORTUNITIES

- Leading-edge filtration
- Bulk chemical filtration
- Bulk purification
- Non-semi markets

2017-2020 Sales
\$ in millions

~19%
CAGR¹



Three-year outlook:

Sales growth²:

300-500 bps above market

Adj. operating margin³: 34-36%

¹ As reported 2017 to 2019. 2020E assumes midpoint of guidance for 2020 (provided on 10/22/20). ² Organic sales growth. ³ Non-GAAP adjusted measure.

Advanced Materials Handling (AMH)

Solutions that improve customers' yield by protecting critical materials

50% Unit Driven



Liquid packaging



Biologics Bag
(e.g. for COVID-19 medicines)



Wafer and IC shipping



50% CapEx Driven



Wafer handling



Reticle handling

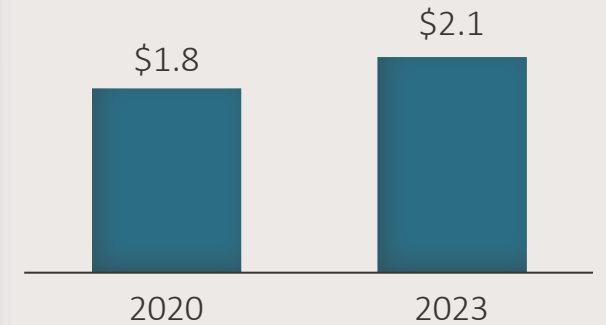


Fluid delivery



SAM¹

\$ in billions



SAM growth drivers:

- Semi growth
- Higher purity needs
- Materials consumption

¹ SAM includes semiconductor market only. Entegris estimates.

Advanced Materials Handling (AMH)

Solutions that improve customers' yield by protecting critical materials

WHY WE WIN

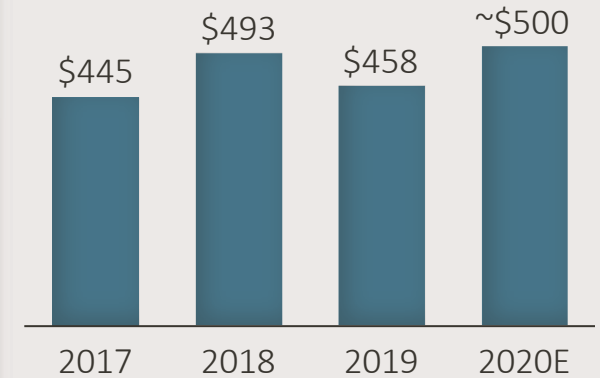
- Uniquely able to serve end-to-end chemical integrity – across divisions
- Sustained leadership in control of microenvironments
- Ability and position to guide polymer development roadmaps

KEY GROWTH OPPORTUNITIES

- Chemical packaging – capacity additions
- EUV lithography
- Environment, sustainability, and safety
- Non-semi markets

2017-2020 Sales
\$ in millions

~4%
CAGR¹



Three-year outlook:

Sales growth²:

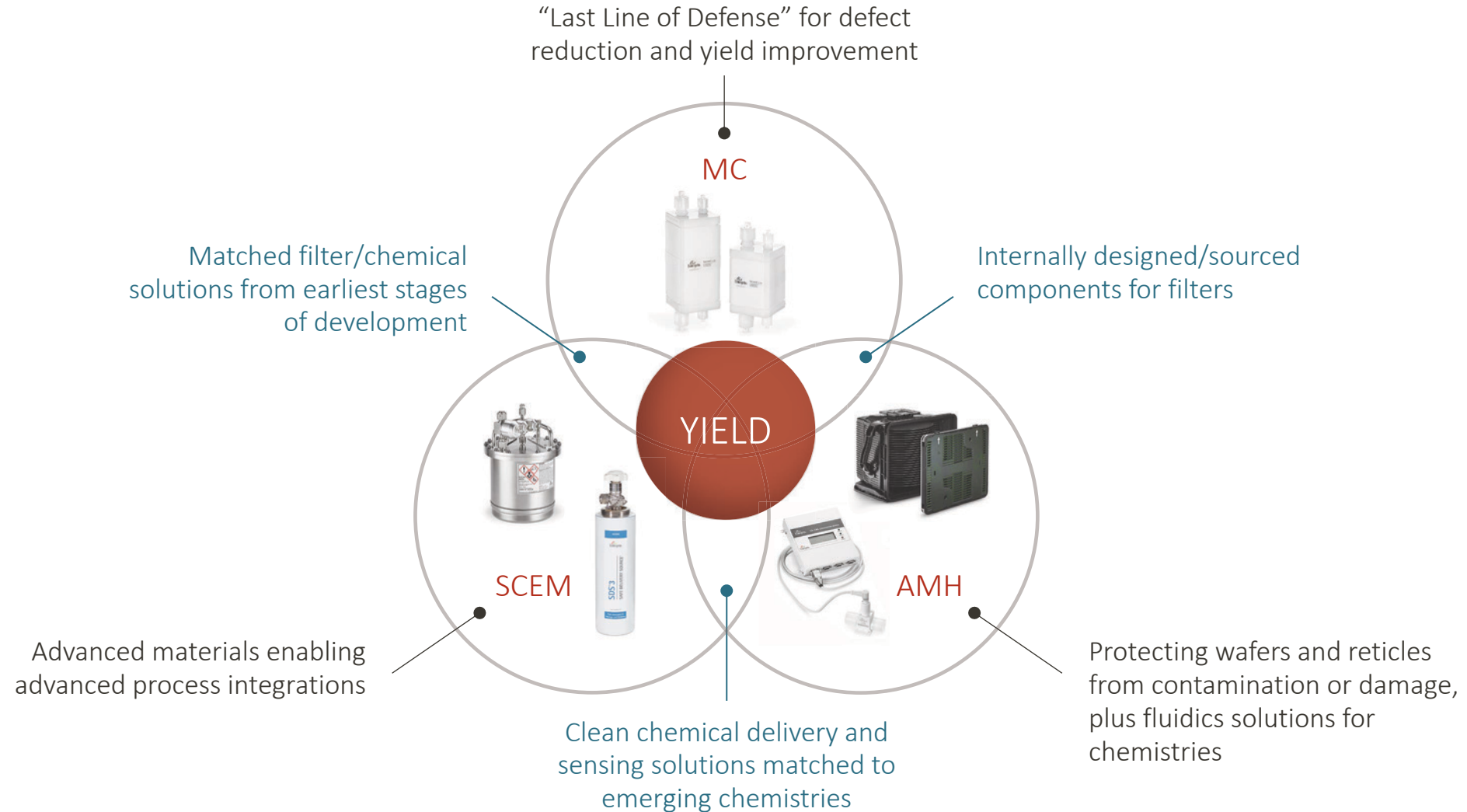
100-200 bps above market

Adj. operating margin³: 20-22%

¹ As reported 2017 to 2019. 2020E assumes midpoint of guidance for 2020 (provided on 10/22/20). ² Organic sales growth. ³ Non-GAAP adjusted measure.

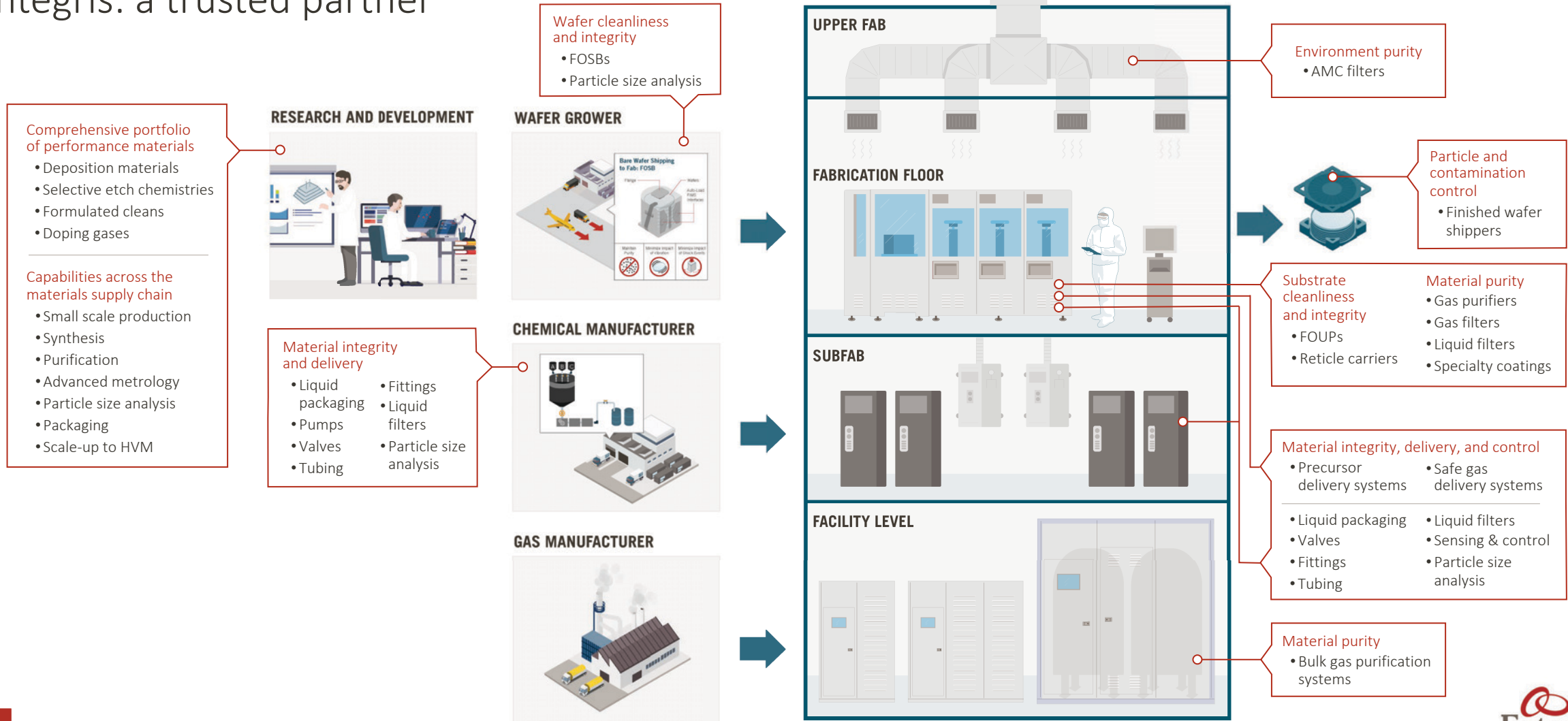
Portfolio Advantage of Three Divisions

Collaboration across divisions contributes to share gains



Mission-Critical Solutions for the Entire Manufacturing and Supply-Chain Ecosystem

Entegris: a trusted partner



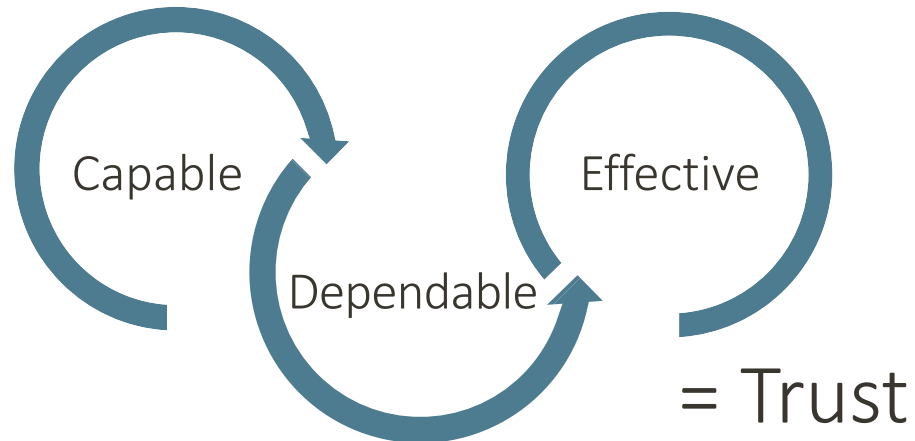
Takeaways

Entegris materials solutions + materials protection = speed to yield

We win by:

- First to the table as a solutions partner
- Executing on fast development, and ramp
- Consistent performance

Entegris has established itself as the smart choice for our customers



Innovating for Growth

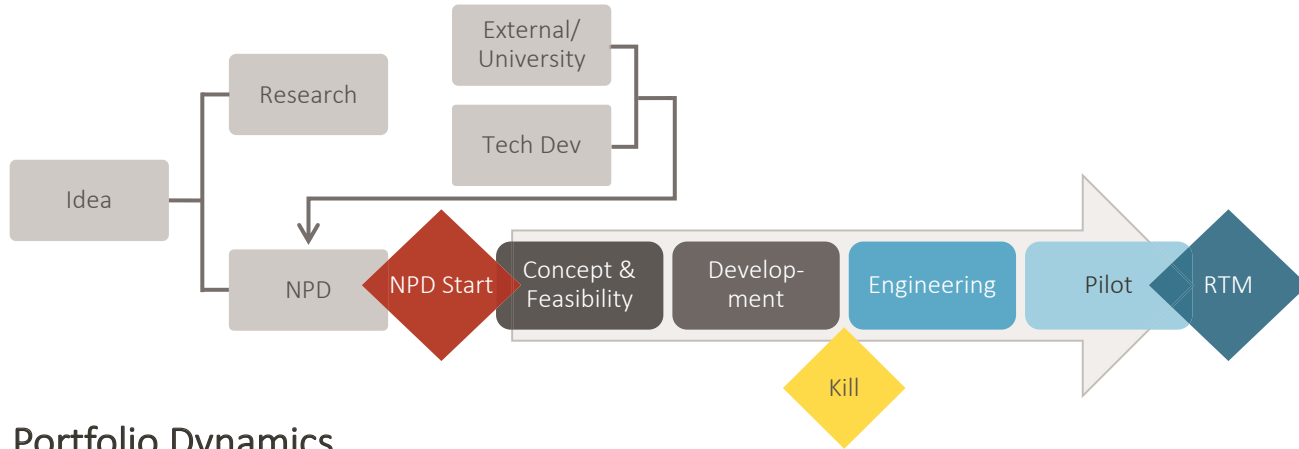
James A. O'Neill, Ph.D.

Senior Vice President and
Chief Technology Officer

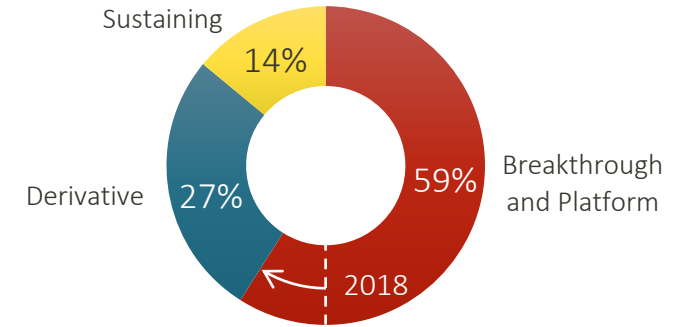


Innovating for Growth

Strong product management culture with discipline around portfolio



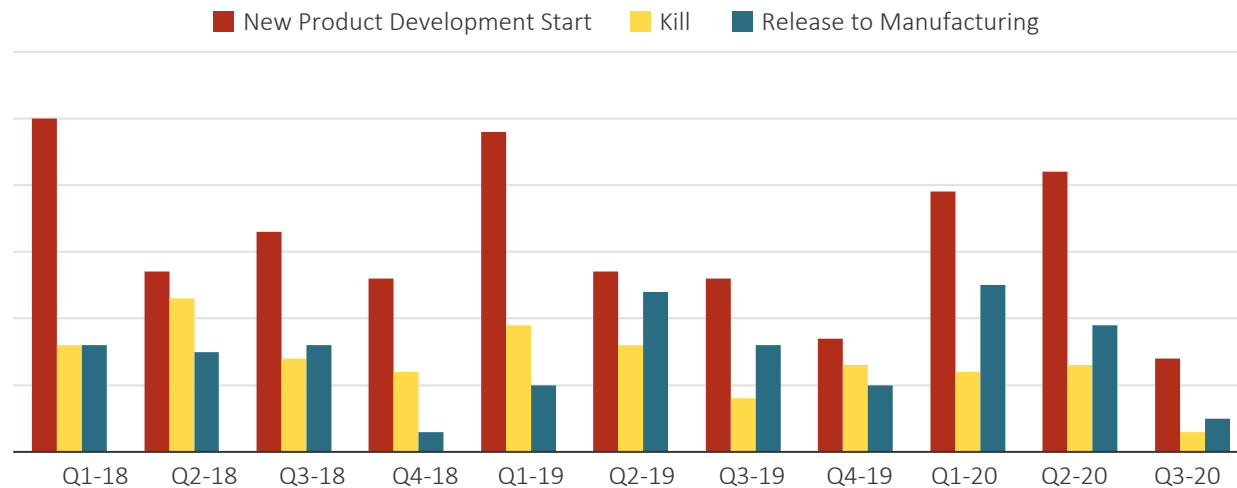
Project Spending



Future sales growth supported by real opportunities in R&D pipeline

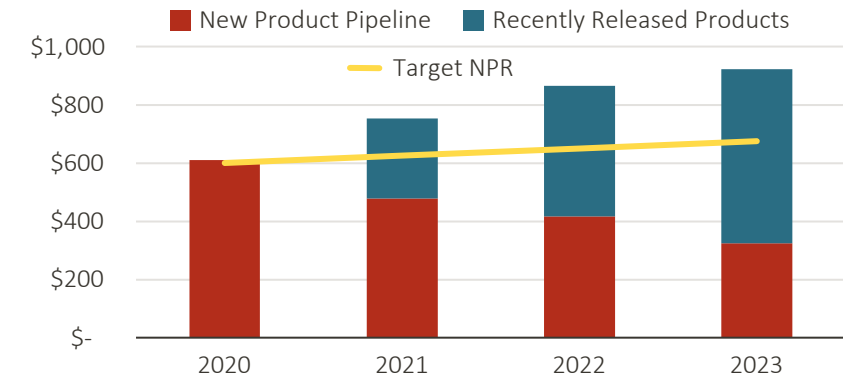
Portfolio Dynamics

Number of projects

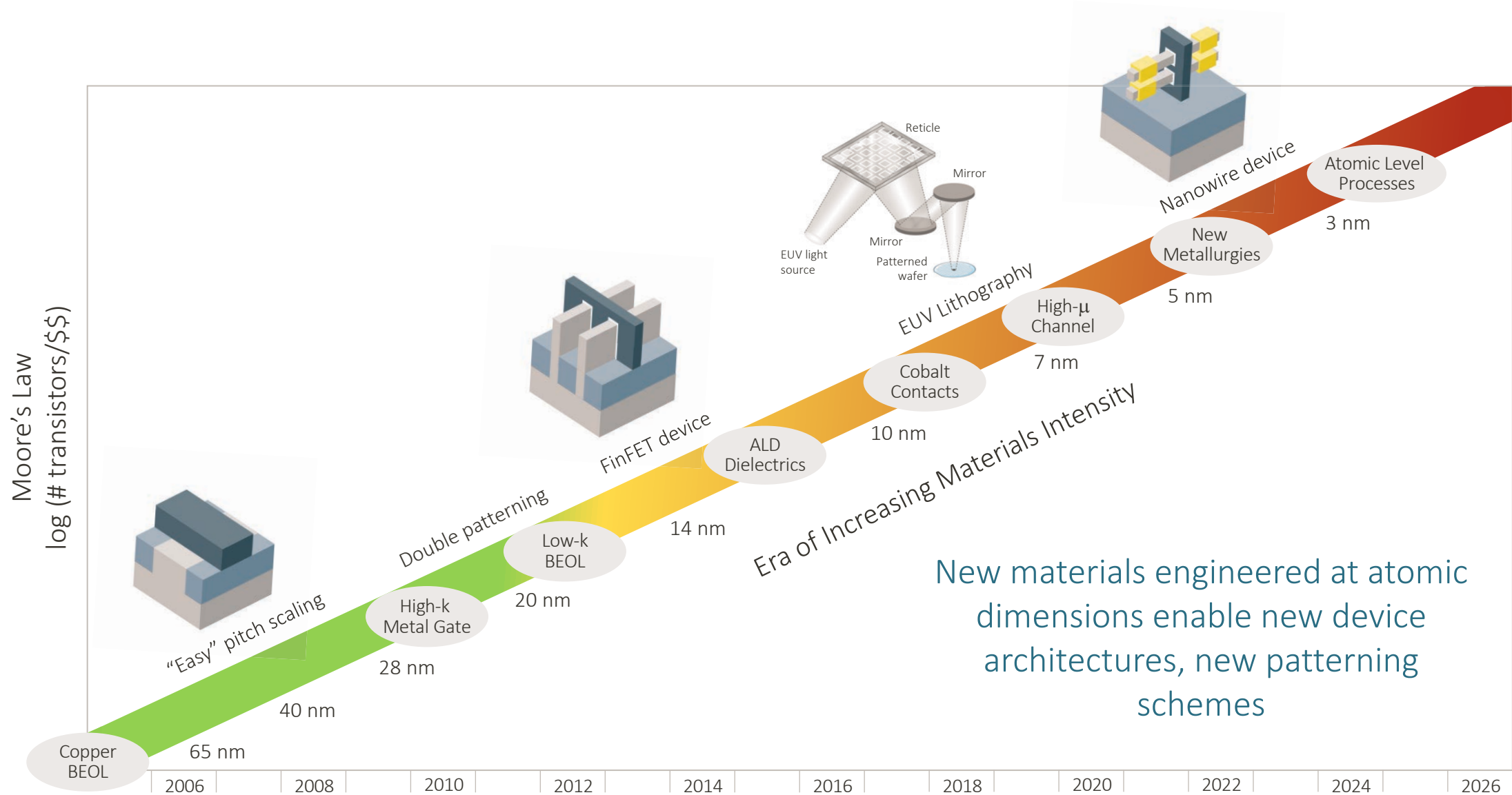


New Product Revenue (NPR)

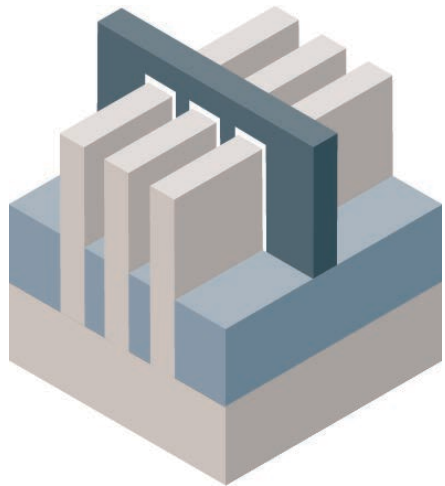
\$ in millions



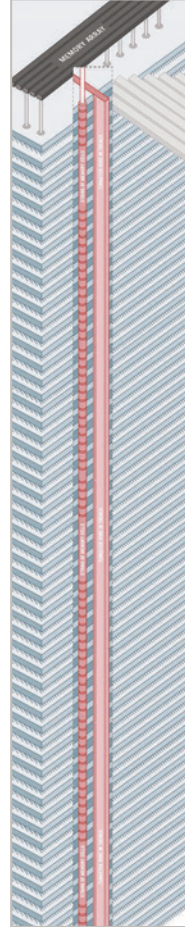
Delivering Performance: Era of Increasing Materials Intensity



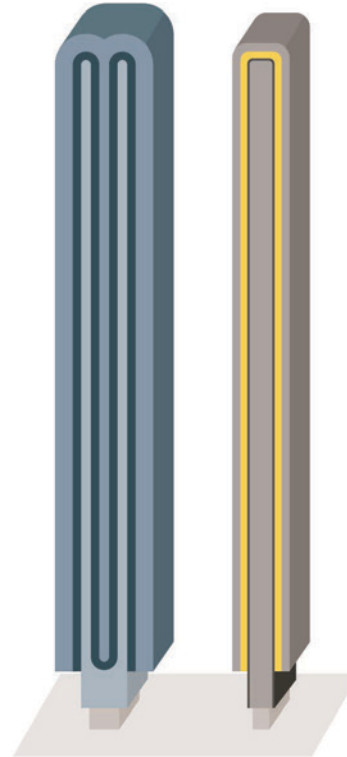
The Challenge our Customers are Facing



FinFET Logic Device



3D NAND Device



DRAM Capacitor

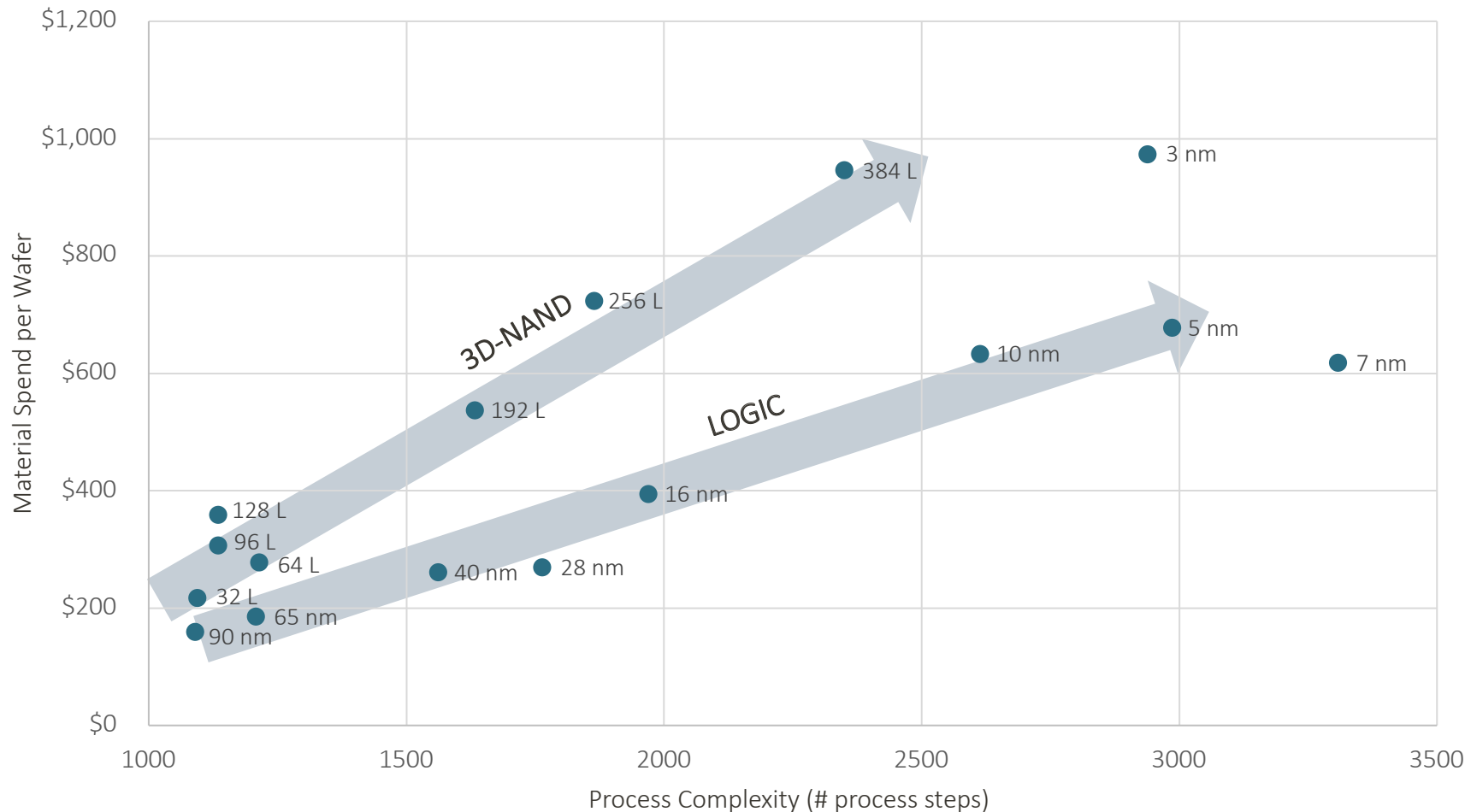
Smaller/Taller Structures Require:

- New performance materials
- Atomic scale precision and control
- PPQ level purity
- Zero defectivity

... All at the same time

Higher Performance and More Complex Chips

Advanced nodes use more materials and present greater yield challenges – both are opportunities for Entegris



3D-NAND

From 64 to 128 layers

CVD STEPS
+48%

WET STEPS
+36%

Logic

From 10 nm to 5 nm

ALD STEPS
+33%

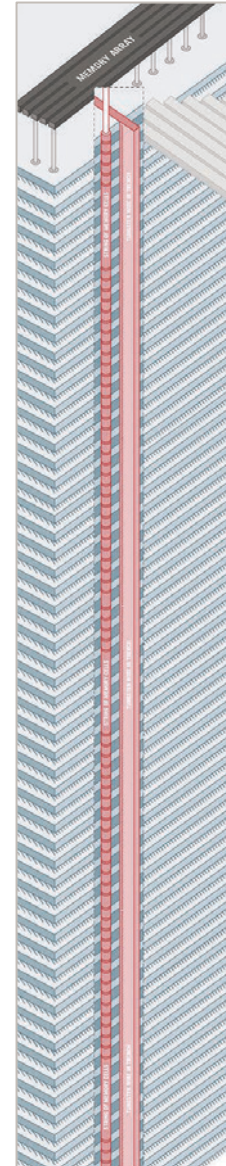
WET STEPS
+6%

Inflection 1: Vertical Integration

Key challenges

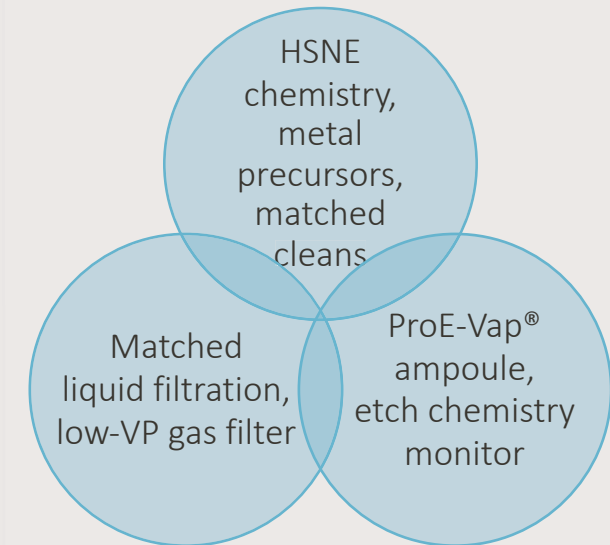
- Increasingly narrow structures (96 L → >200 L)
- Very small features (atomic-scale processing)
- Complex material stack (high etch selectivity)
- Improved resistivity (new metallurgies)
- Improved defect control (extreme conformality)

Entegris offers complete materials and yield solutions for rapidly growing memory market



3D-NAND structure

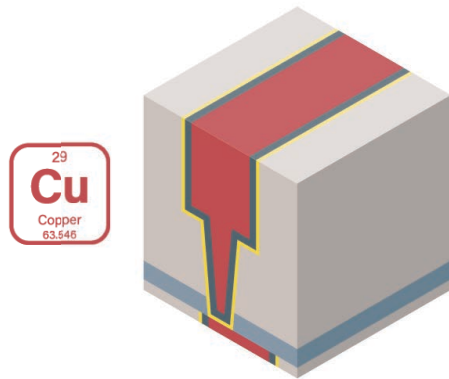
Entegris Value Proposition



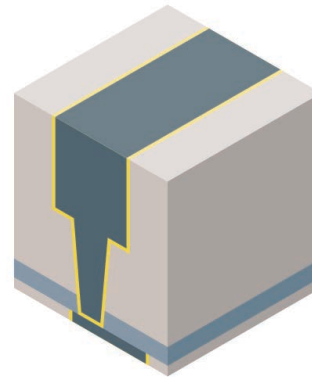
Inflection 2: Post Cu/W Interconnects

Key challenges:

- Scalable interconnects (finer patterns)
- Improved resistivity and reliability (new metals)
- Downstream integration (CMP and wet processing)
- Improved defectivity control



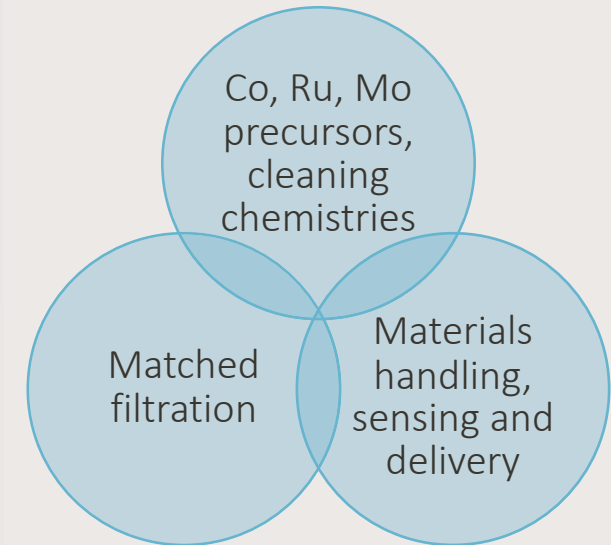
Copper interconnects require barrier layer that limits scaling



New materials required to scale advanced interconnect

Change in interconnect metal plays into Entegris portfolio of deposition, clean, filtration, and delivery

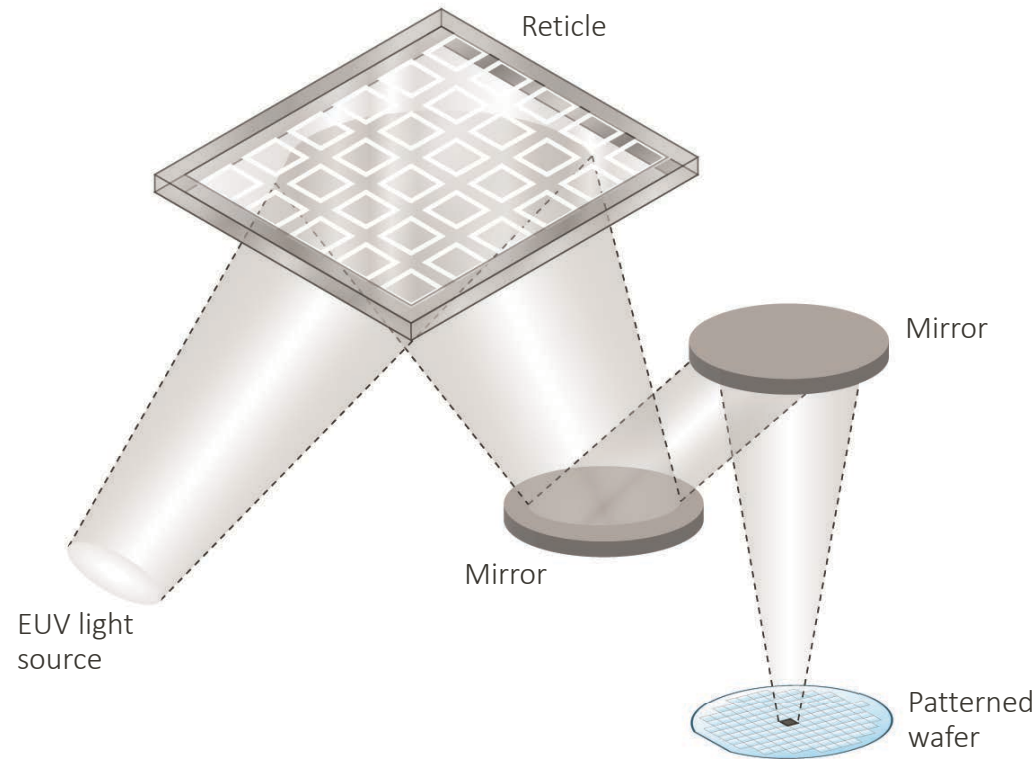
Entegris Value Proposition



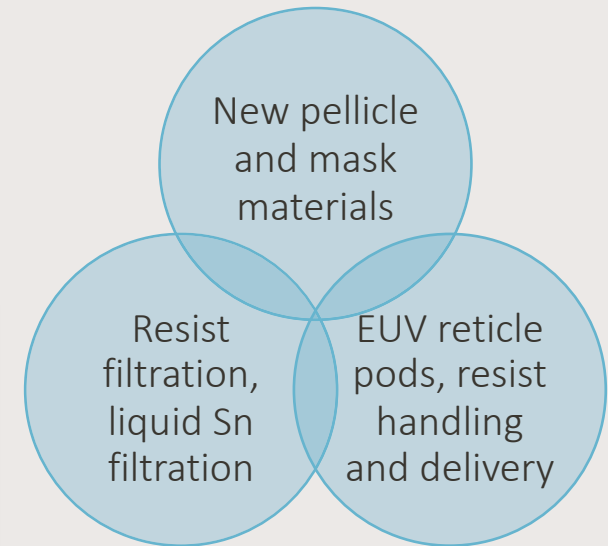
Inflection 3: Extreme Ultraviolet Lithography (EUV)

Key challenges:

- “Built-in” process variability (stochastic noise)
- New materials (resist, mask, pellicle)
- Improved defectivity control (finer patterns)



Entegris Value Proposition

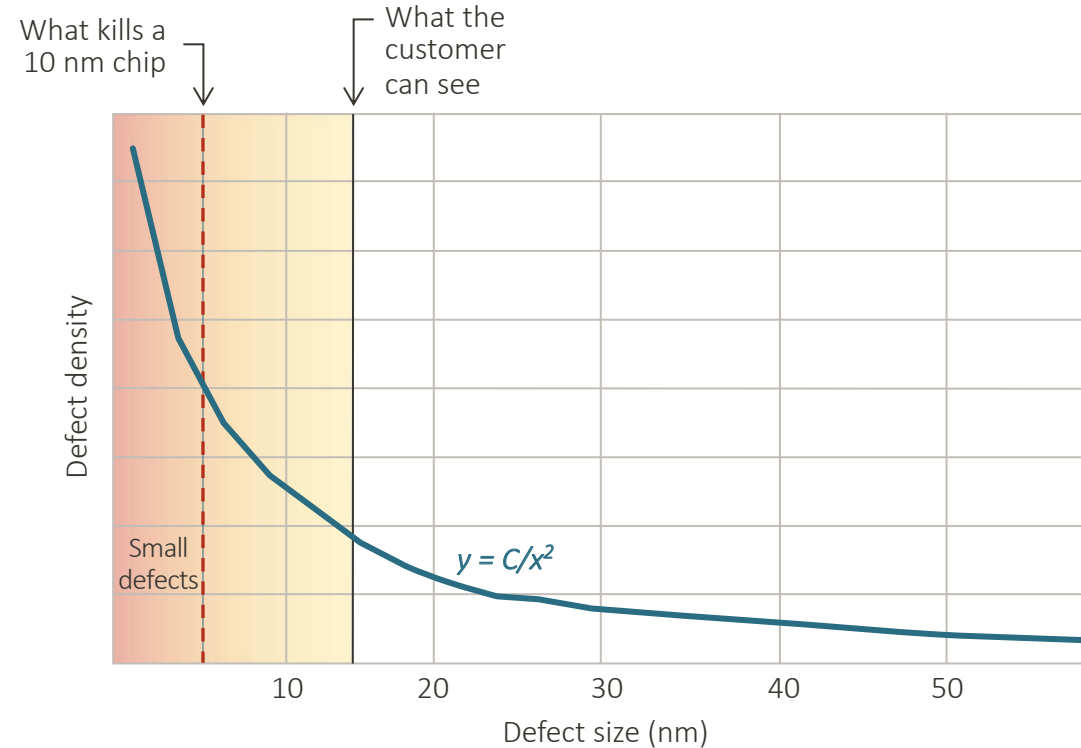


Increased EUV adoption drives new materials and defect control opportunities for Entegris

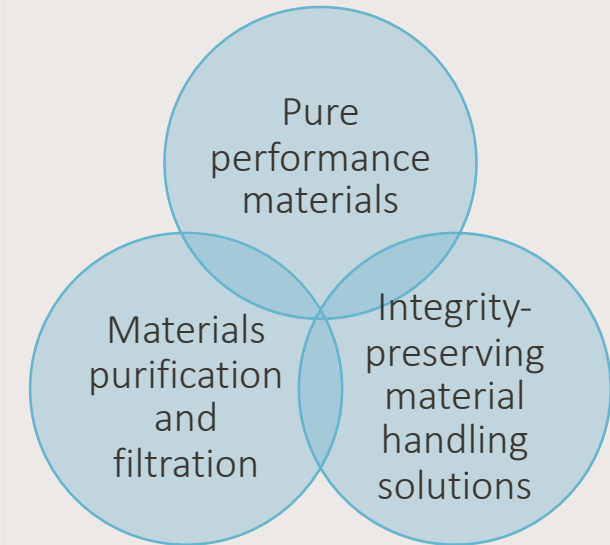
Inflection 4: Drive Toward Zero Defects

Key challenges:

- Increasing reliability requirements (automotive)
- Increasing process complexity (yield ramps)
- Undetectable defects (latent fails)
- Time-to-yield



Entegris Value Proposition

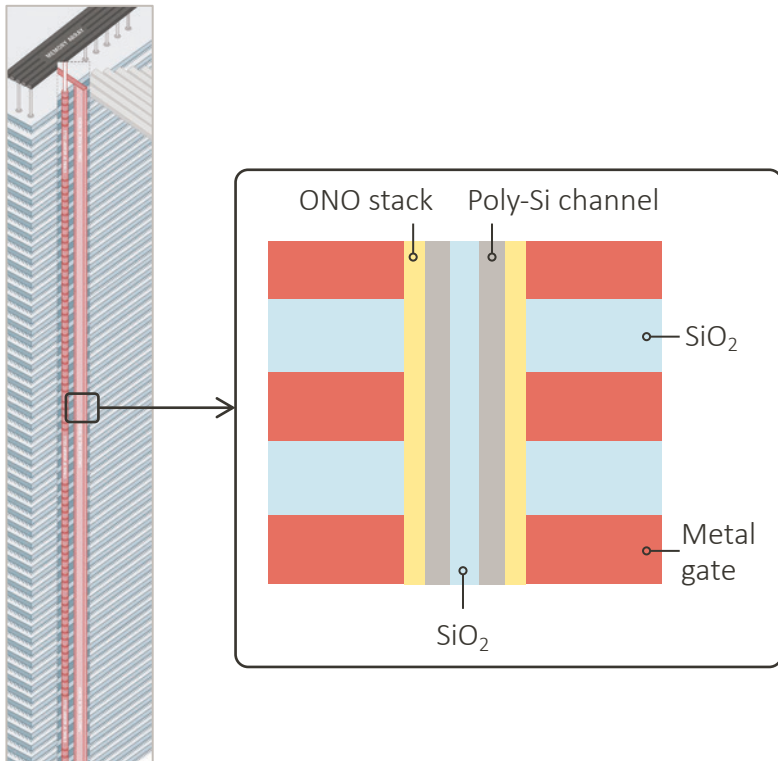
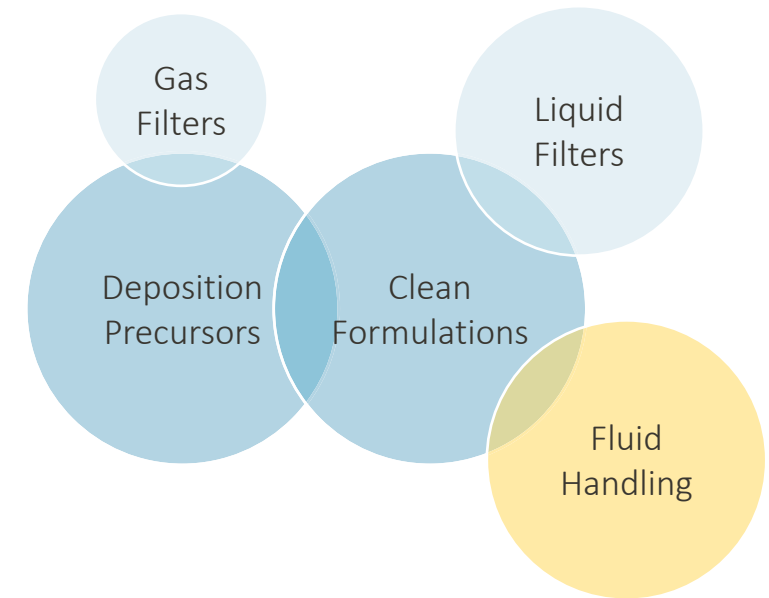


Automotive reliability requirements drive SAM growth for defect control at leading-edge and mainstream fabs

Leveraging the Whole Portfolio: New Metallurgies for 3D-NAND

Cascade of value

- Taller 3D-NAND requires more conductive metal (Mo)
- New clean formulations required to match metallurgy
- New filters required to match clean formulation



Periodic Table

1 IA 1 H Hydrogen 1.008	2 IIA 4 Li Lithium 6.94	3 IIIB 11 Na Sodium 22.99	4 IVB 19 K Potassium 39.10	5 VB 37 Rb Rubidium 85.47	6 VIB 55 Cs Cesium 132.91	7 VIIB 87 Fr Francium 223	8 VIIIB 13 B Boron 10.81	9 VIIIB 14 C Carbon 12.01	10 VIIIB 21 Sc Scandium 44.96	11 VIIIB 22 Ti Titanium 47.88	12 VIIIB 23 V Vanadium 50.94	13 VIIIB 24 Cr Chromium 51.99	14 VIIIB 25 Mn Manganese 54.94	15 VIIIB 26 Fe Iron 55.85	16 VIIIB 27 Co Cobalt 58.93	17 VIIIB 28 Ni Nickel 58.69	18 VIIIB 29 Cu Copper 63.55	19 VIIIB 30 Zn Zinc 65.38	20 VIIIB 31 Ga Gallium 69.72	21 VIIIB 32 Ge Germanium 72.64	22 VIIIB 33 As Arsenic 74.92	23 VIIIB 34 Se Selenium 78.96	24 VIIIB 35 Br Bromine 79.90	25 VIIIB 36 Kr Krypton 83.80	26 VIIIB 37 Rb Rubidium 85.47	27 VIIIB 38 Sr Strontium 87.62	28 VIIIB 39 Y Yttrium 88.91	29 VIIIB 40 Zr Zirconium 91.22	30 VIIIB 41 Nb Niobium 92.91	31 VIIIB 42 Mo Molybdenum 95.94	32 VIIIB 43 Tc Technetium 98	33 VIIIB 44 Ru Ruthenium 101.07	34 VIIIB 45 Rh Rhodium 102.91	35 VIIIB 46 Pd Palladium 106.42	36 VIIIB 47 Ag Silver 107.87	37 VIIIB 48 Cd Cadmium 112.41	38 VIIIB 49 In Indium 114.82	39 VIIIB 50 Sn Tin 118.71	40 VIIIB 51 Sb Antimony 121.76	41 VIIIB 52 Te Tellurium 127.60	42 VIIIB 53 I Iodine 126.90	43 VIIIB 54 Xe Xenon 131.29	44 VIIIB 55 Cs Cesium 132.91	45 VIIIB 56 Ba Barium 137.33	46 VIIIB 57-71 Lanthanoids	47 VIIIB 72 Hf Hafnium 178.49	48 VIIIB 73 Ta Tantalum 180.95	49 VIIIB 74 W Tungsten 183.85	50 VIIIB 75 Re Rhenium 186.21	51 VIIIB 76 Os Osmium 190.23	52 VIIIB 77 Ir Iridium 192.22	53 VIIIB 78 Pt Platinum 195.08	54 VIIIB 79 Au Gold 196.97	55 VIIIB 80 Hg Mercury 200.59	56 VIIIB 81 Tl Thallium 204.38	57 VIIIB 82 Pb Lead 207.2	58 VIIIB 83 Bi Bismuth 208.98	59 VIIIB 84 Po Polonium 209	60 VIIIB 85 At Astatine 210	61 VIIIB 86 Rn Radon 222	62 VIIIB 87 Fr Francium 223	63 VIIIB 88 Ra Radium 226	64 VIIIB 89-103 Actinoids	65 VIIIB 104 Rf Rutherfordium 261	66 VIIIB 105 Db Dubnium 262	67 VIIIB 106 Sg Seaborgium 263	68 VIIIB 107 Bh Bohrium 264	69 VIIIB 108 Hs Hassium 265	70 VIIIB 109 Mt Meitnerium 266	71 VIIIB 110 Ds Darmstadtium 267	72 VIIIB 111 Rg Roentgenium 268	73 VIIIB 112 Cn Copernicium 269	74 VIIIB 113 Nh Nihonium 269	75 VIIIB 114 Fl Flerovium 269	76 VIIIB 115 Mc Moscovium 269	77 VIIIB 116 Lv Livermorium 269	78 VIIIB 117 Ts Tennessine 269	79 VIIIB 118 Og Oganesson 269
-------------------------------------	-------------------------------------	---------------------------------------	--	---------------------------------------	---------------------------------------	---------------------------------------	--------------------------------------	---------------------------------------	---	---	--	---	--	---------------------------------------	---	---	---	---------------------------------------	--	--	--	---	--	--	---	--	---	--	--	---	--	---	---	---	--	---	--	---------------------------------------	--	---	---	---	--	--	-------------------------------------	---	--	---	---	--	---	--	--	---	--	---------------------------------------	---	---	---	--------------------------------------	---	---------------------------------------	------------------------------------	---	---	--	---	---	--	--	---	---	--	---	---	---	--	---

57 La Lanthanum 138.90547	58 Ce Cerium 140.12	59 Pr Praseodymium 140.90766	60 Nd Neodymium 144.242	61 Pm Promethium 145	62 Sm Samarium 150.36	63 Eu Europium 151.964	64 Gd Gadolinium 157.25	65 Tb Terbium 158.92535	66 Dy Dysprosium 162.500	67 Ho Holmium 164.93033	68 Er Erbium 167.259	69 Tm Thulium 168.93402	70 Yb Ytterbium 173.045	71 Lu Lutetium 174.967
89 Ac Actinium 227	90 Th Thorium 232.0377	91 Pa Protactinium 231.03688	92 U Uranium 238.02891	93 Np Neptunium 237	94 Pu Plutonium 244	95 Am Americium 243	96 Cm Curium 247	97 Bk Berkelium 247	98 Cf Californium 251	99 Es Einsteinium 252	100 Fm Fermium 257	101 Md Mendelevium 258	102 No Nobelium 259	103 Lr Lawrencium 260

So What Does it all Mean for Entegris?

Unprecedented number of process innovations create opportunities that Entegris is uniquely positioned to address



Process Innovation	Opportunity
Silicon – logic, memory	More materials
Atomic-scale processing	New precursors, selective etches, filters
Shrinking – EUV	Filters, reticle pods, clean packaging
Vertical architectures – 3D-NAND	New precursors, selective etches, filters
New device architectures	New precursors, selective etches, filters
Novel interconnects	New precursors, clean formulations, filters
Zero defects	Purifiers, filters, FOUPs, clean packaging

Financial Strength and Flexibility

Greg Graves

Executive Vice President and
Chief Financial Officer



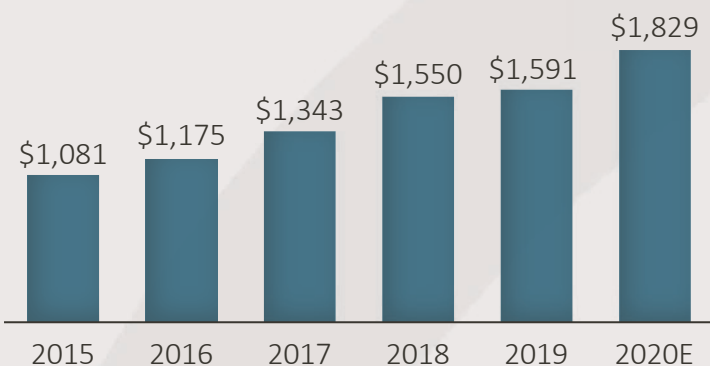
Historical Financials

Growth through cycles

2015-2020 Revenue¹

\$ in millions

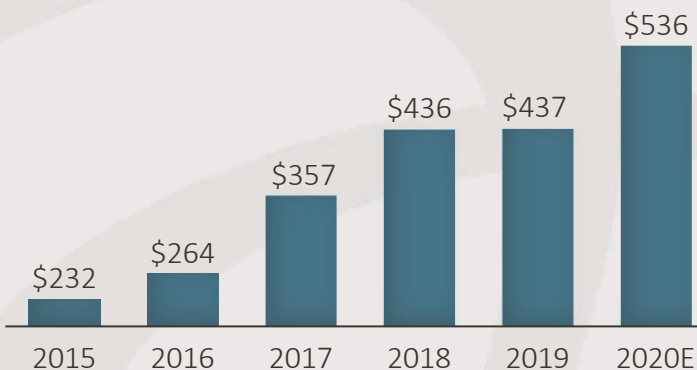
11%
CAGR



2015-2020 EBITDA²

\$ in millions

18%
CAGR



2015-2020 non-GAAP EPS

24%
CAGR

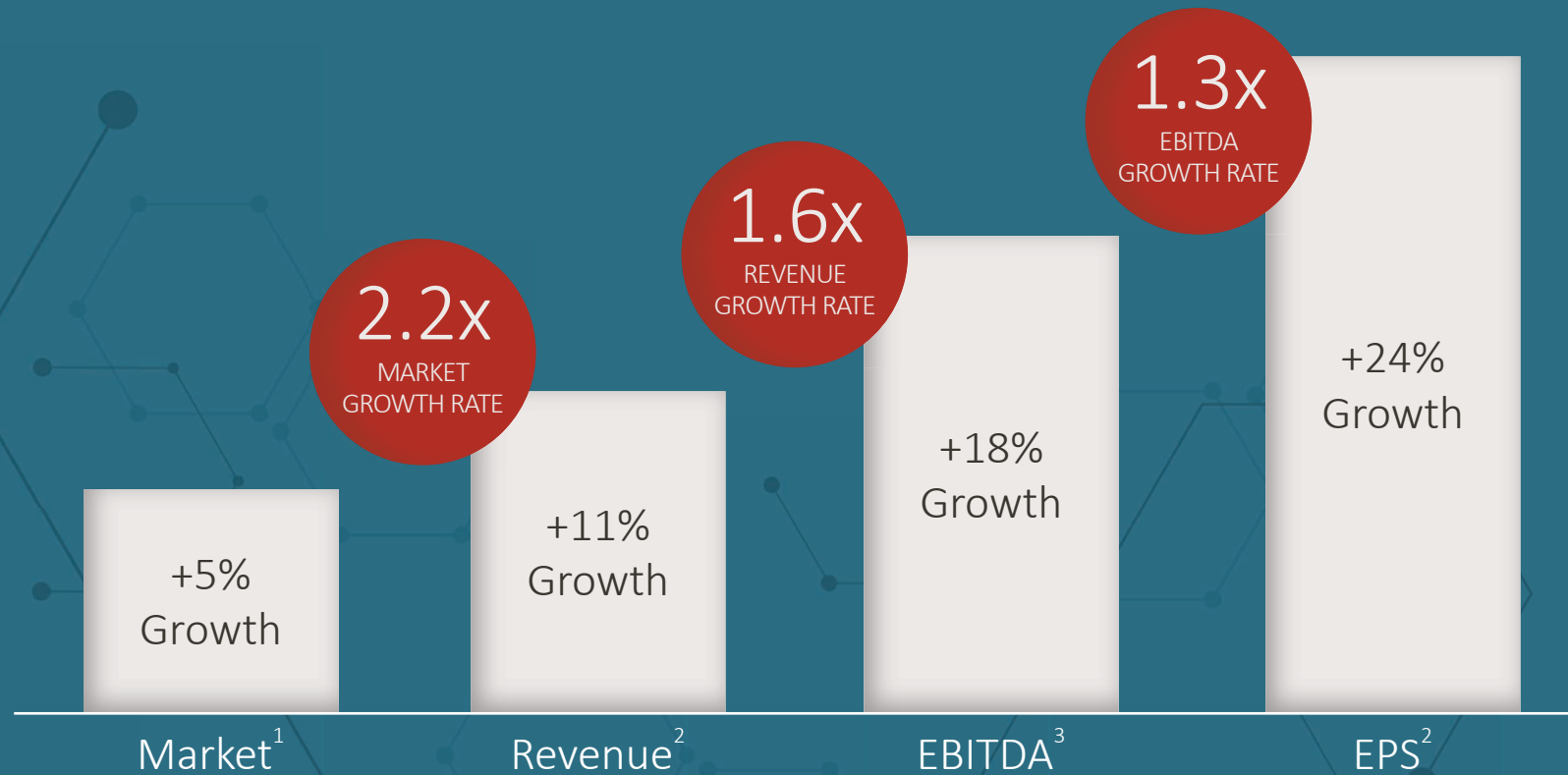


- Revenue outgrowth in excess of our 200 to 300 basis point target
 - Market growth CAGR from 2015 to 2020 estimated to be 5%
- ~40% EBITDA flow through achieved over the period

¹ 2020 – assumes midpoint of guidance for 2020 (provided on 10/22/20). ² Non-GAAP; 2020 estimate assumes Q4 EBITDA flat to Q3.

Multiplier Model

2015-2020 performance (including M&A)



¹Market is CapEx and MSI blended index – 70% MSI and 30% CapEx. ²2015–2020 CAGR – assumes midpoint of guidance for 2020 (provided on 10/22/20). ³Non-GAAP; 2020 estimate assumes Q4 EBITDA flat to Q3.

Entegris Capital Allocation Principles

Capital allocation priorities

1

Investments in R&D and CAPEX

- ER&D target:
Trending to 9% of sales
- CapEx target:
7% to 8% of sales

2

Value Accretive Acquisitions

- Intend to be a consolidator
- Targets:
Core semiconductor and other adjacent markets

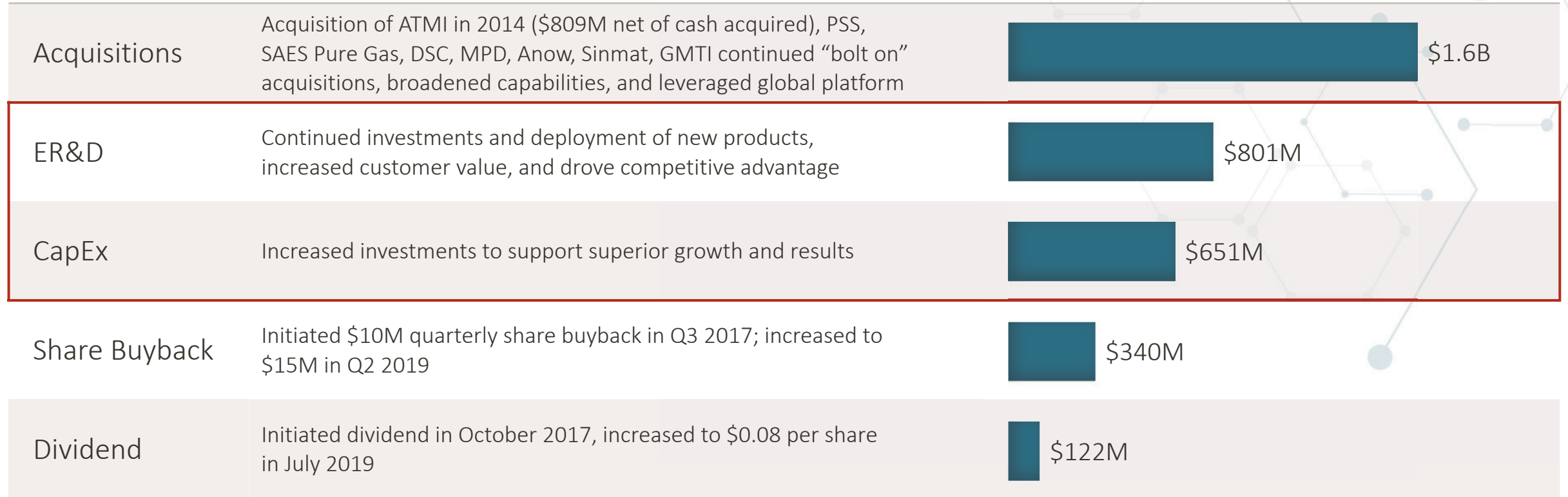
3

Return of Capital: Dividends and Share Buybacks

- 60% target payout of annual free cash flow
- Dividend target:
Ongoing dividend with incremental increases as free cash flow warrants
- Share buybacks:
Approximately \$15 million per quarter, plus opportunistic buybacks when appropriate

Thoughtful and Balanced Capital Allocation

More than \$4.0 billion allocated over the past six years¹



¹ Reflects 2013-Q3 2020 capital allocations. Debt repayments included in total, but not in table.

Disciplined and Value Accretive M&A

		Strategic		
		Unit vs. Capex	Core Semi	Adjacent Markets
2014	 ATMI*	Unit	✓	
2017	TRINZIK	Unit	✓	
2018	 Particle Sizing Systems Building solutions one particle at a time.	CapEx	✓	
2018	 SAES Pure Gas The Technology of Pure Gas	CapEx	✓	
2019	 Digital Specialty Chemicals DSC	Unit	✓	✓
2019	 MPD Chemicals	Unit	✓	✓
2019	 ANOW	Unit	✓	✓
2020	 SINMAT INNOVATIVE CMP SOLUTIONS	Unit	✓	✓
2020	 Global MEASUREMENT TECHNOLOGIES INC.	CapEx	✓	

Estimated M&A Contribution to 2020 Results¹

Incremental sales: ~\$700M

Incremental EPS: ~\$0.60

¹ Estimated 2020 impact for acquisitions made since 2014.

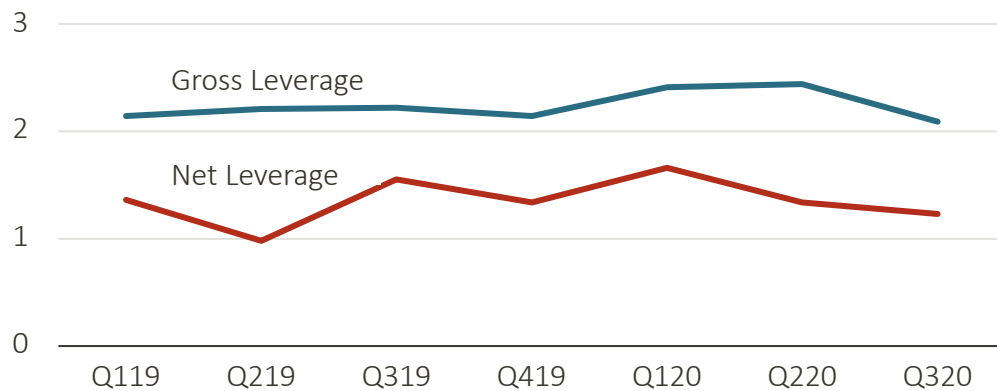
Capital Structure

Conservative and flexible – with optionality

Capital Structure Targets

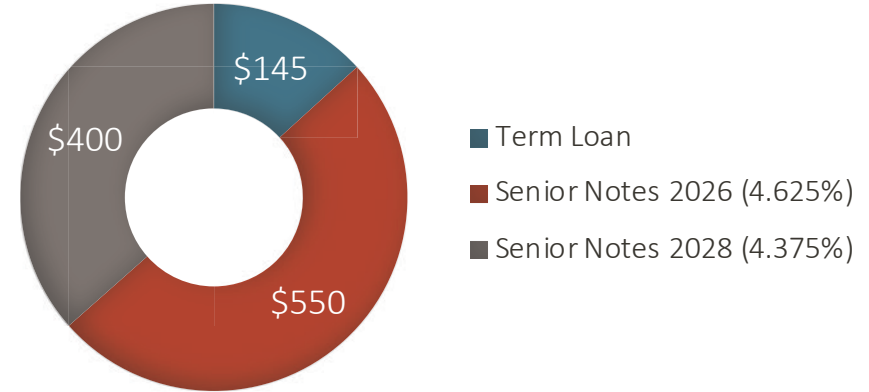
- Minimum cash balance of approximately \$200 million (globally)
- Maintaining debt rating of Ba1 or better
- Max gross leverage: 3.75x (for right M&A)

Leverage Ratios¹



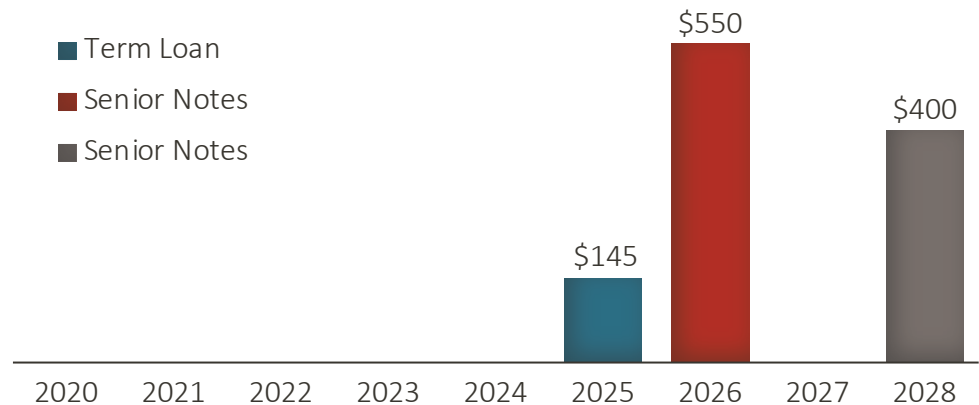
Total Debt: ~\$1,095M¹

\$ in millions



Debt Maturity Schedule

\$ in millions



¹ As of Q3 2020.

Increase Focus on Productivity

Continuous innovation mindset

How?

- Standardize | simplify | centralize | automate
- Greater use of shared services

Where?

- SG&A, supply chain, and manufacturing
- Functional organizations and core processes

Why?

- Increase scalability of business model
- Achieve and maintain attractive EBITDA levels (>30%)
- Protect ER&D investments critical to value proposition



Annual Target Model

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

External Target Model¹

Revenue (\$ in millions)	\$1,800	\$2,000	\$2,200	\$2,400	\$2,600
Adjusted operating margin ²	~24%	~25%	~26%	~27%	~28%
Adjusted EBITDA margin ²	~29%	~30%	~31%	~32%	~33%
Non-GAAP EPS ³	>\$2.35	>\$2.75	>\$3.15	>\$3.55	>\$4.00

¹ Represents sensitivity of adjusted operating margin, adjusted EBITDA margin and non-GAAP EPS to various hypothetical annual revenue levels. ² Adjusted for amortization of intangible assets, one-time charges and expenses; EBITDA input to external target model assumes depreciation at ~5% of revenue. ³ External target model assumes interest expense of \$50 million, tax rate of 18%, and shares outstanding equal 136 million.

Organic Profit Growth Path

Illustrative model

Organic growth and operating leverage lead to EPS of >\$3.55 by 2023

	2020 Estimate ¹		Year Three Illustrative Model ²
Revenue	\$1.83B	10% top-line growth	\$2.4B
Adj. operating margin ³	~25%		~27%
Adj. EBITDA margin ³	~29%	300 bps improvement	~32% ⁴
Non-GAAP EPS	\$2.47		>\$3.55 ⁵
ROIC ⁶	~16%		~20%

Assumptions:

2x

Semi growth in excess of GDP

3-4%

Entegris' growth in excess of market

¹ Assumes midpoint of guidance for 2020 (provided on 10/22/20). ² Represents sensitivity of adjusted operating margin, adjusted EBITDA margin and non-GAAP EPS assuming an approximately 10% increase in annual revenue to \$2.4 billion.

³ Adjusted for amortization of intangible assets, one-time charges and expenses. ⁴ Assumes ~5% of revenue for depreciation expense. ⁵ Assumes interest expense of \$50 million, tax rate of 18%, and shares outstanding equal 136 million.

⁶ ROIC definition: adjusted NOPAT/(invested capital – cash).

Capital Allocation Scenarios¹

	Potential Incremental EPS Impact
Share Repurchase 2x leverage	~\$0.10
M&A – Small 2x leverage	~\$0.25
M&A – transformational 3.5x leverage	~\$0.50

¹ Represents scenarios (during 2021 to 2023) where excess domestic cash above \$125M and additional leverage is used for share repurchase and/or acquisitions starting in 2021.

Six Reasons to Own Entegris

1. Exciting industry with secular growth
2. Accelerating exposure to key technology inflections
3. Strong competitive moats
4. Resilient business model
5. Highly cash generative
6. Disciplined capital allocation with optionality

Entegris is a value compounder



Appendix



Reconciliation of GAAP Net Income to Adjusted Operating Income and Adjusted EBITDA

\$ in thousands

	December 31, 2015	December 31, 2016	December 31, 2017	December 31, 2018	December 31, 2019
Net sales	\$1,081,121	\$1,175,270	\$1,342,532	\$1,550,497	\$1,591,066
Net income	\$80,296	\$97,147	\$85,066	\$240,755	\$254,860
Net income – as a % of net sales	7.4%	8.2%	6.3%	15.6%	16.0%
Adjustments to net income:					
Equity in net loss of affiliate	1,687	—	—	—	—
Income tax expense	10,202	22,852	99,665	13,677	63,189
Interest expense, net	38,238	36,528	31,628	30,255	42,310
Other (income) expense, net	(12,355)	(991)	25,458	8,002	(121,081)
GAAP - Operating income	118,068	155,536	241,817	292,689	239,278
Operating margin - as a % of net sales	10.9%	13.2%	18.0%	18.9%	15.0%
Charge for fair value write-up of acquired inventory sold	—	—	—	6,868	7,544
Deal and transaction costs	—	—	—	5,121	26,164
Integration costs	12,667	—	—	3,237	9,932
Severance and restructuring costs	—	2,405	2,700	460	12,494
Impairment of equipment and intangibles	—	5,826	10,400	—	—
Loss on sale of subsidiary	—	—	—	466	—
Amortization of intangible assets	47,349	44,263	44,023	62,152	66,428
Adjusted operating income	178,084	208,030	298,940	370,993	361,840
Adjusted operating margin - as a % of net sales	16.5%	17.7%	22.3%	23.9%	22.7%
Depreciation	54,305	55,623	58,208	65,116	74,975
Adjusted EBITDA	\$232,389	\$236,653	\$357,148	\$436,109	\$436,815
Adjusted EBITDA – as a % of net sales	21.5	22.4	26.6	28.1	27.5

Reconciliation of GAAP Net Income and Diluted Earnings per Common Share to Non-GAAP Net Income and Diluted Non-GAAP Earnings per Common Share

\$ in thousands, except per share data

	December 31, 2015	December 31, 2016	December 31, 2017	December 31, 2018	December 31, 2019
GAAP net income	\$80,296	\$97,147	\$85,066	\$240,755	\$254,860
Adjustments to net income:					
Charge for fair value write-up of inventory acquired	—	—	—	6,868	7,544
Deal and transaction costs	—	—	—	5,121	26,575
Integration costs	12,667	—	—	3,237	9,932
Severance and restructuring costs	—	2,405	2,700	460	12,494
Loss on debt extinguishment and modification	—	—	20,687	2,319	1,980
Net gain on impairment/sale of short-term investment or equity investment	(1,449)	(156)	—	—	—
Loss on sale of subsidiary	—	—	—	466	—
Impairment of equipment and intangibles	—	5,826	13,200	—	—
Versum termination fee, net	—	—	—	—	(122,000)
Amortization of intangible assets	47,349	44,263	44,023	62,152	66,428
Tax effect of legal entity restructuring	—	—	—	(34,478)	9,398
Tax effect of adjustments to net income and discrete items ¹	(8,248)	(16,637)	(26,046)	(17,812)	(3,124)
Tax effect of Tax Cuts and Jobs Act	—	—	66,713	683	—
Non-GAAP net income	\$120,615	\$132,848	\$206,343	\$269,771	\$264,087
Diluted earnings per common share	\$0.57	\$0.68	\$0.59	\$1.69	\$1.87
Effect of adjustments to net income	\$0.29	\$0.25	\$0.85	\$0.20	\$0.07
Diluted non-GAAP earnings per common share	\$0.85	\$0.94	\$1.44	\$1.89	\$1.93
Weighted average diluted shares outstanding	141,121	142,050	143,518	142,610	136,568

¹ The tax effect of pre-tax adjustments to net income was calculated using the applicable marginal tax rate during the respective years.

Reconciliation of GAAP Net Income to Adjusted Operating Margin, Adjusted EBITDA and Adjusted EBITDA Margin

\$ in millions	
	December 31, 2020E ¹
Net sales	\$1,829
Net income	\$286
Net income – as a % of net sales	16%
Adjustments to net income:	
Income tax expense	59
Interest expense, net	48
Other (income) expense, net	(4)
GAAP - Operating income	389
Operating margin - as a % of net sales	21%
Charge for fair value write-up of acquired inventory sold	1
Deal and transaction costs	3
Integration costs	3
Severance and restructuring costs	4
Amortization of intangible assets	53
Adjusted operating income	453
Adjusted operating margin - as a % of net sales	25%
Depreciation	83
Adjusted EBITDA	\$536
Adjusted EBITDA – as a % of net sales	29%

¹ 2020- assumes midpoint of guidance for 2020 (provided on 10/22/2020).

Reconciliation of GAAP Diluted Earnings per Share to Non-GAAP Diluted Earnings per Share

	December 31, 2020E ¹
Diluted earnings per common share	\$2.11
Adjustments to net income:	
Charge for fair value write-up of inventory acquired	0.00
Deal and transaction costs	0.02
Integration costs	0.02
Severance and restructuring costs	0.03
Loss on debt extinguishment	0.02
Amortization of intangible assets	0.38
Tax effect of adjustments to net income and discrete items ¹	(0.11)
Diluted non-GAAP earnings per common share	\$2.47

¹ 2020- assumes midpoint of guidance for 2020 (provided on 10/22/2020).



Thank you!
