

Investor Day 2025

We explore atoms,
so others can explore space



Table of contents



Page 4

Atoms to action:
Our growth strategy to 2030

Hichem M'Saad
CEO



Page 44

From layers to landscape:
Opportunities and growth through
technology inflections

Vamsi Paruchuri
Corporate VP, Technology
Innovation and Market Research



Page 70

Enabling customers with Angstrom
precision through service innovation
and automation

Jason Foster
Corporate VP, Spares and
Service Business Unit, Global
Quality and Technical Training



Page 85

The art of
atomic layering

Eric Shero
Vice President and ALD
Key Product Unit Head



Page 114

Investing for growth,
delivering long-term value

Paul Verhagen
CFO





Forward-looking statements

Cautionary note regarding forward-looking statements

This presentation contains “forward-looking statements”. All verbal and written statements in ASM’s Investor Day 2025 presentations and Q&A, other than statements of historical fact, are forward-looking statements. Forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements. These risks and uncertainties include, but are not limited to, economic conditions and trends in the semiconductor industry generally and the timing of the industry cycles specifically, product demand and semiconductor equipment industry capacity, worldwide demand and manufacturing capacity utilization for semiconductors, currency fluctuations, corporate transactions, financing and liquidity matters, the success of restructurings, the timing of significant orders, market acceptance of new products, competitive factors, litigation involving intellectual property, shareholders or other issues, commercial and economic slowdown or disruption including due to natural disasters, terrorist activity, armed conflict or political instability, changes in laws including import/export regulations, changes in tax and exchange rates, epidemics, pandemics and other risks indicated in ASM’s reports and financial statements. Investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this presentation. ASM assumes no obligation nor intends to update or revise any forward-looking statements to reflect future developments or circumstances. Forward-looking statements are not guarantees of future performance, and actual results, developments and business decisions may differ materially from those envisaged by forward-looking statements.

Atoms to action: Our growth strategy to 2030

Hichem M'Saad

CEO



Key takeaways



1 Past strategic objectives

ASM delivered on its strategic objectives. Outgrew WFE market. Maintained and expanded ALD and Epi share in transition from FinFET to GAA. Grew spares and services business.

2 ALD product portfolio

Many new ALD products, including clustered multi-process applications like area selective deposition (ASD), are in production at the 2nm GAA node.

3 Upcoming technology inflections

Well positioned in ALD and Epi for upcoming technology inflections in GAA (2nd/3rd Gen & CFET) and DRAM (4F² & 3D-DRAM). AI/ML common platform to accelerate innovation and ensure manufacturing excellence.

4 Advanced packaging

Advanced packaging (AP) is another mid-term growth area. Applications in AP will benefit from chemistry innovation and interface engineering where ASM excels.

5 Scaling for growth

Scaling the company through focus on talent development, product commonality, flexible manufacturing footprint, and upgraded ERP/PLM digital foundation for improved operational efficiency.

6 Sustainability fully integrated

Sustainability fully integrated into our way of working leading to lower total cost of ownership (TCO) for our customers.

7 Target

Targeting 2030 revenue > €5.7B, operating margin >30% with free cash flow > €1B.

Note: All numbers presented throughout this presentation are adjusted numbers excluding purchase price allocation adjustment

From vision to value: Our journey since 2021

Strategic objectives

2021/2023



1

Maintain leading ALD share in logic/foundry, expand in memory

2

Increase Epi market share

3

Grow selectively in vertical furnace and PECVD niches

4

Grow spares and services business

5

Accelerate progress in sustainability

6

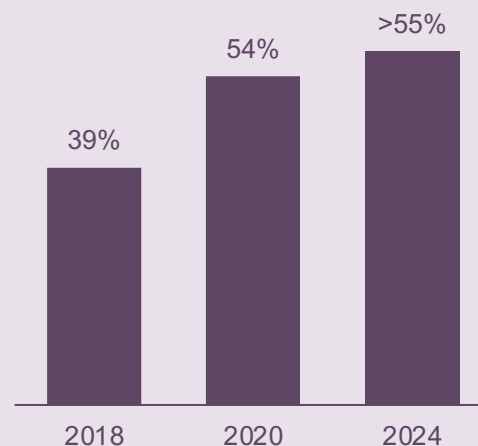
Drive continued strong financial performance

Maintain leading ALD share in logic/foundry and expand in memory

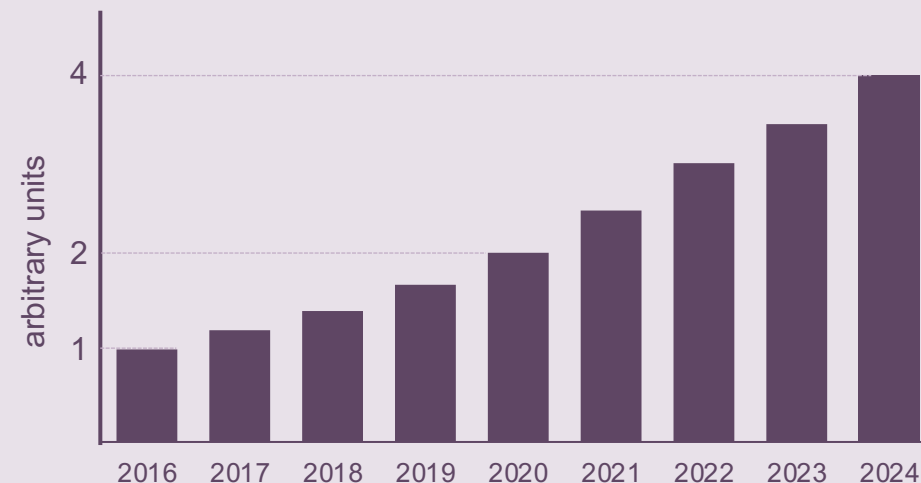


ALD market share increased to >55% in 2024

ALD market share



ALD installed base (ALD reactors)

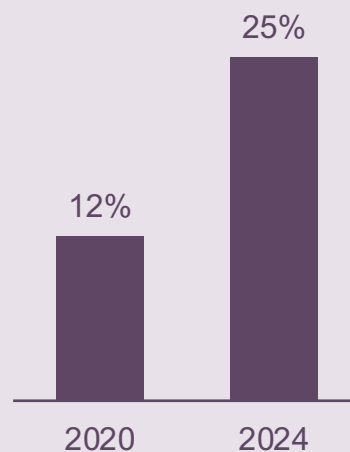


Source: ASM internal analysis and TechInsights

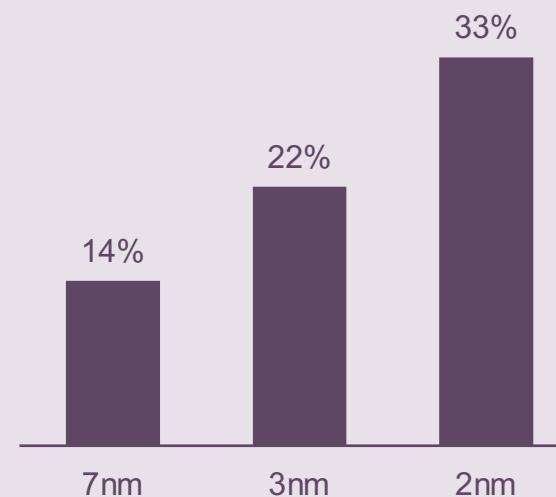


Leading-edge
Epi share
increased to
25% in 2024

Leading-edge
Epi market share



Share of ASM layers in leading-edge
logic/foundry



Source: ASM internal analysis

Grow selectively in vertical furnace (VF) and PECVD niches



Expanded VF position in power/wafer/analog

VF sales driven by new products, and, in 2022/2023, by cyclical market upturn in power/wafer/analog

ASM VF revenue
(indexed to 2020)



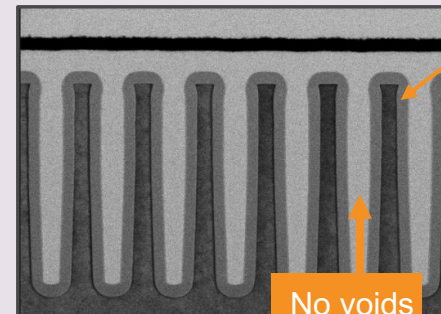
ASM PECVD revenue
(indexed to 2020)



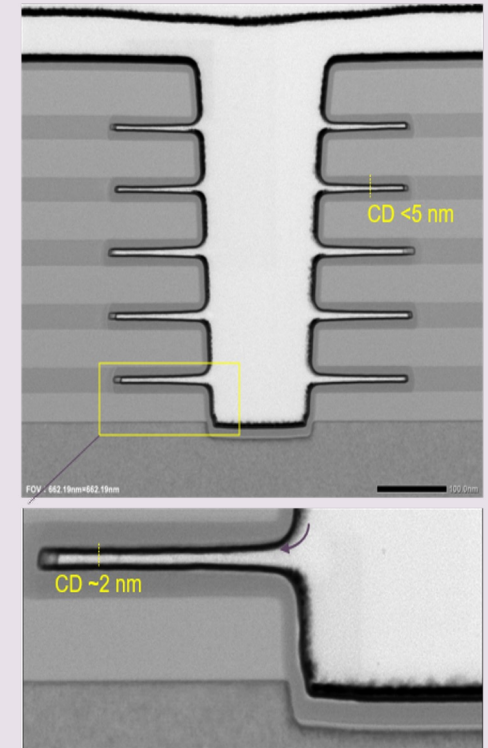
Source: ASM internal analysis

New growth opportunities in PECVD

PECVD flowable carbon



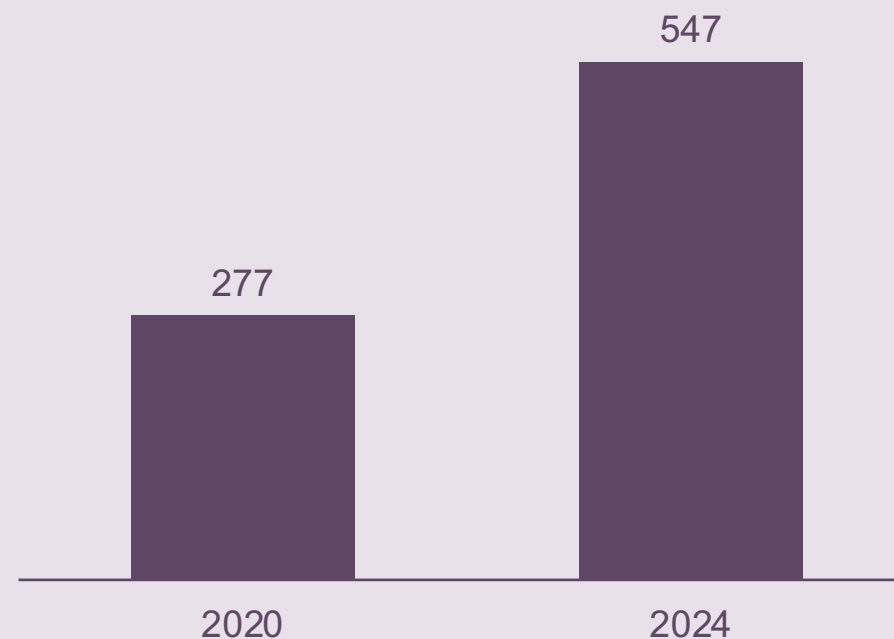
Lateral CD <5nm





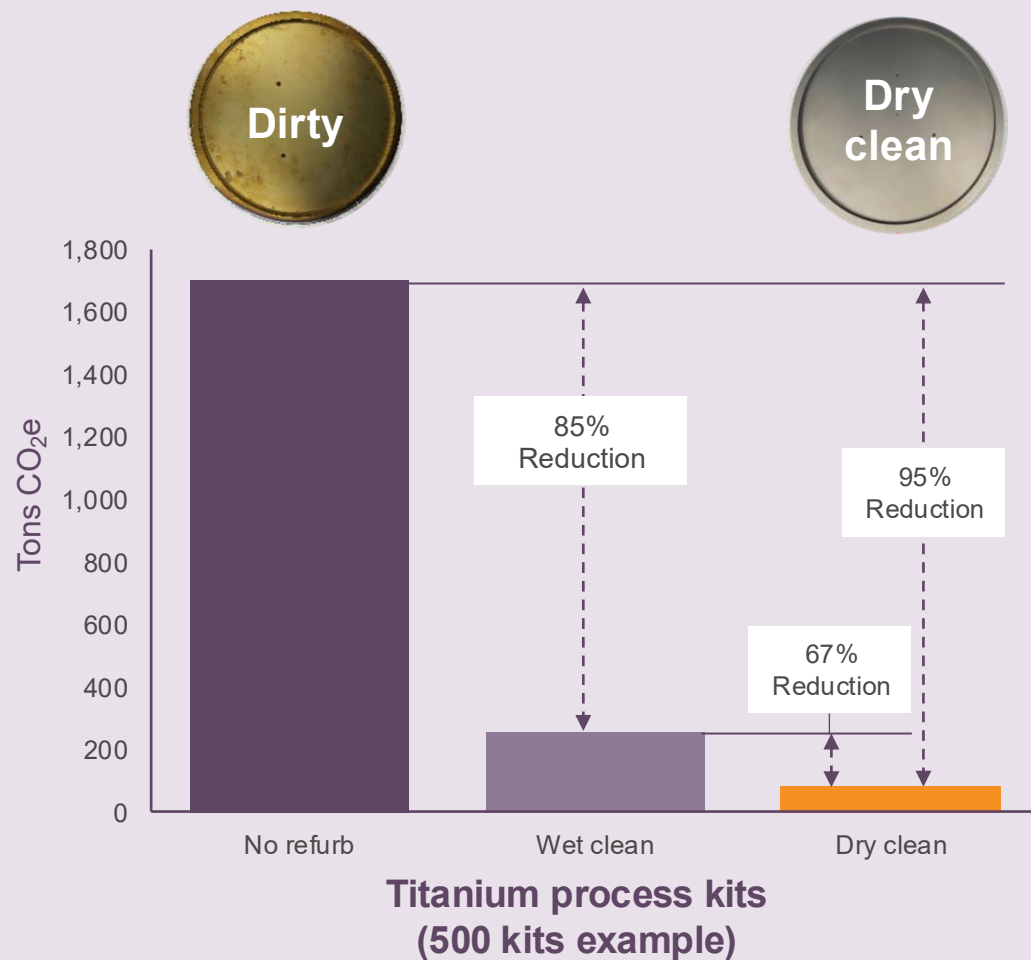
19% CAGR service revenue growth from 2020 to 2024 through successful release of Outcome-based products

Spares and Services business revenue
(€M)

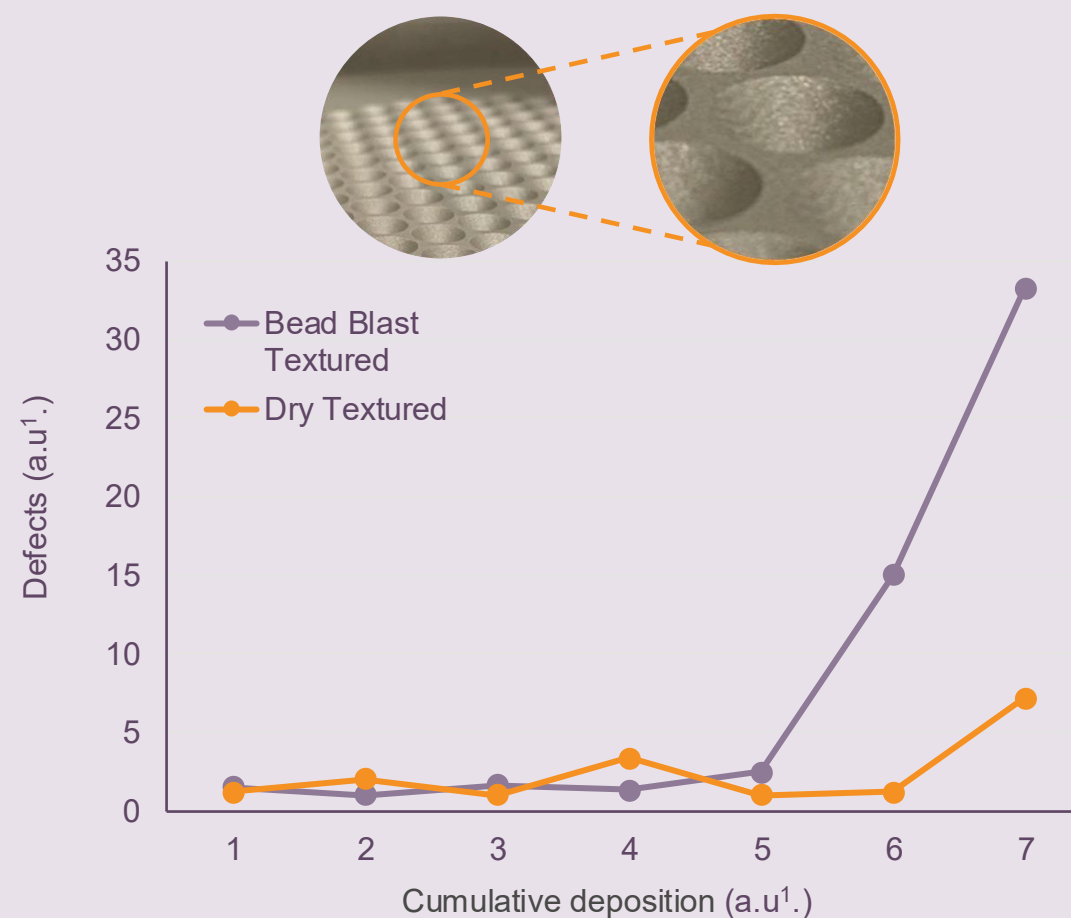




Cost reduction and sustainability



Performance enhancement and sustainability



1) Arbitrary units



Recognized leader in sustainability

CDP Climate Change and Water Security

A / A



↑ First time on A list

RE100

Best Newcomer
Award 2024

RE 100

Joined RE100 in 2023

Sustainalytics (Risk rating)

7.6

(negligible risk)



↑ Improved from 2024

TIME

TIME recognition
world's most
sustainable
companies 2025

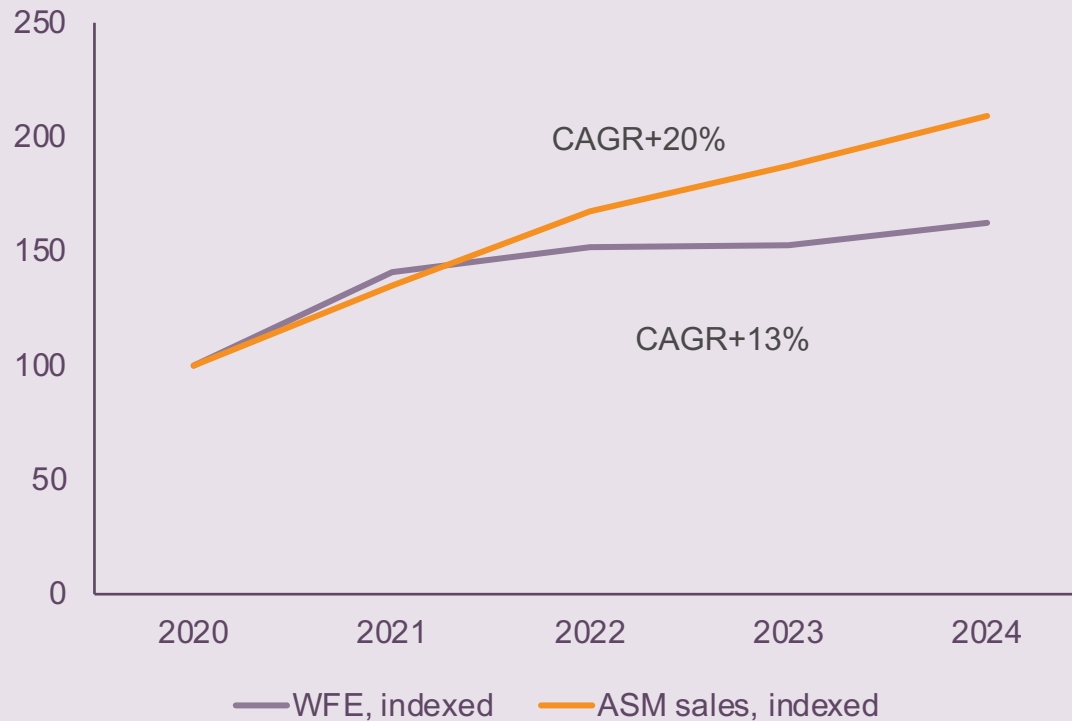
TIME

ASM featured in TIME's global ranking



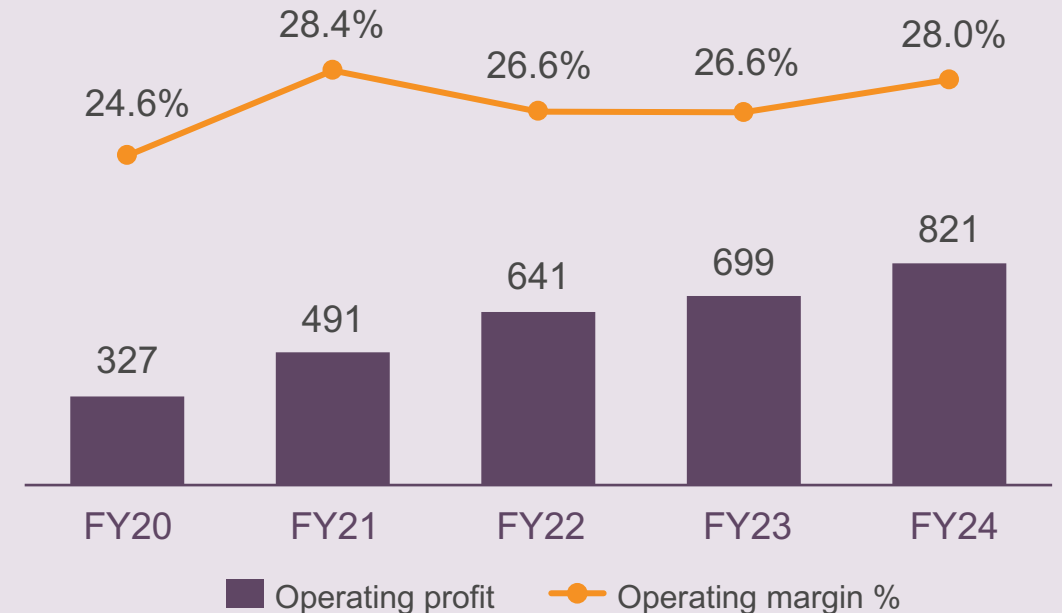
ASM equipment growth vs. WFE market growth

(indexed to 2020)



Operating profit and operating margin

(€ M and %)



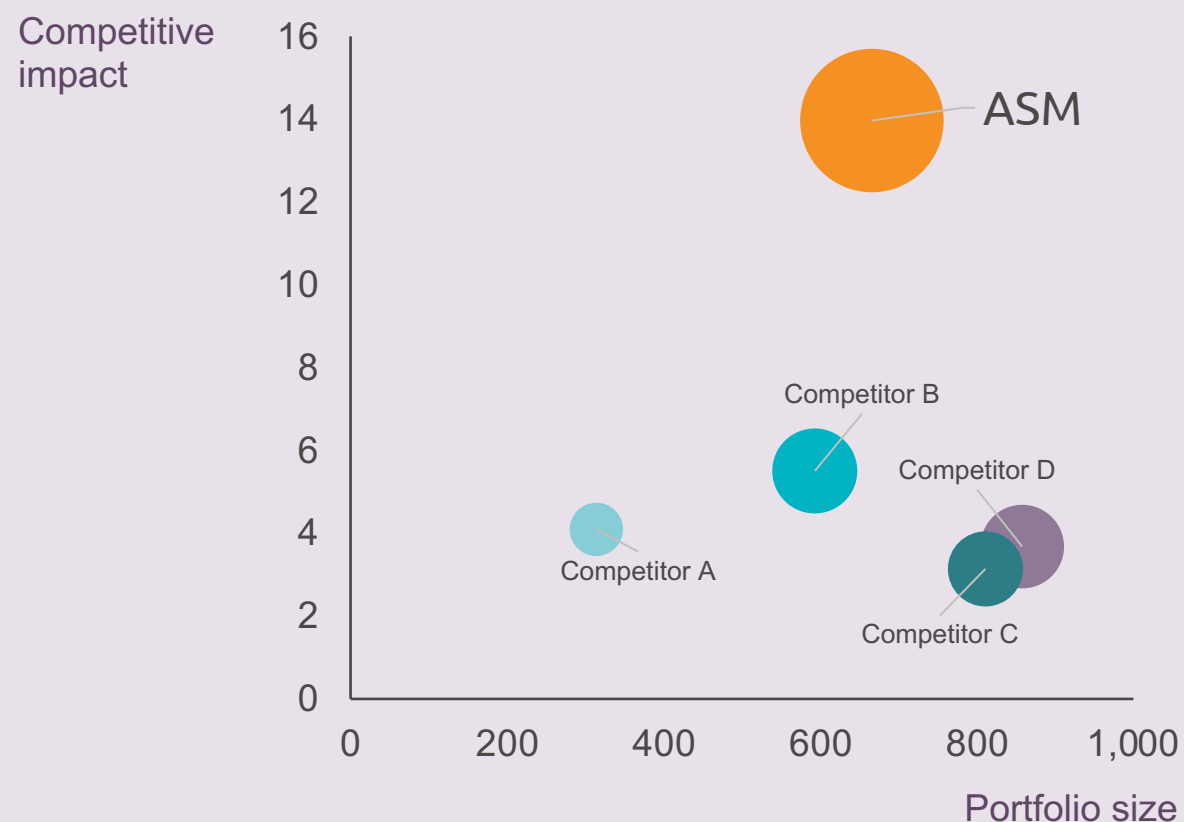
Source: WFE market data: TechInsights March 2025

Ahead in every layer

Strongest patent portfolio in ALD



Continuing the rich history of chemistry and process innovation, with a long history in ALD



Source: LexisNexis® PatentSight® (November 2024), for more information, please visit <https://www.lexisnexisip.com/resources/atomic-layer-deposition-thin-layers-are-a-big-thing/>

Strong global footprint close to all customers



Continued investment in manufacturing and innovation



Korea Dongtan 2

Grand opening Q4, 2025

Expanded manufacturing and innovation capabilities. Anchoring excellence through breakthroughs and new possibilities







Continued investment in Research & Development



US Scottsdale

Opening Q1, 2027

Bringing core research, technology development, design and engineering capabilities all under one roof







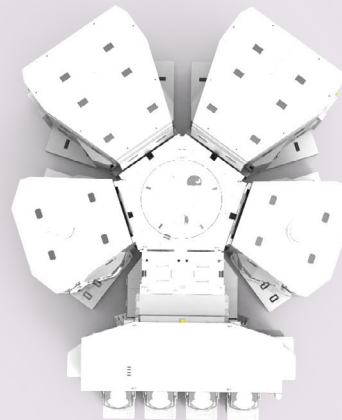
Extending our flagship XP8 platform to advanced ALD and CVD applications



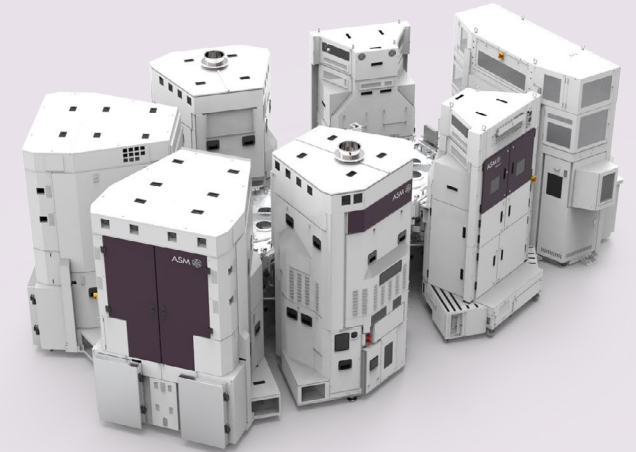
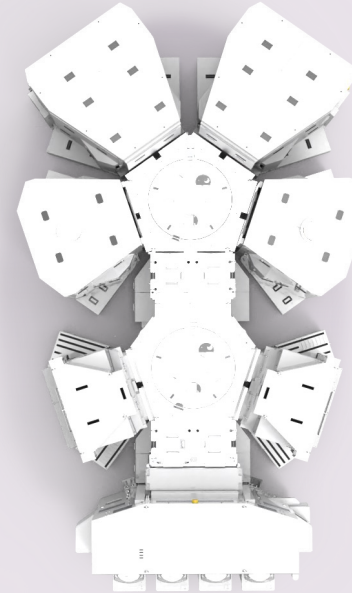
XP8E®

XP8E® common platform allows the integration of processes like surface cleans and modification, selective etch, treatments etc to enable advanced ALD and CVD applications

XP8®



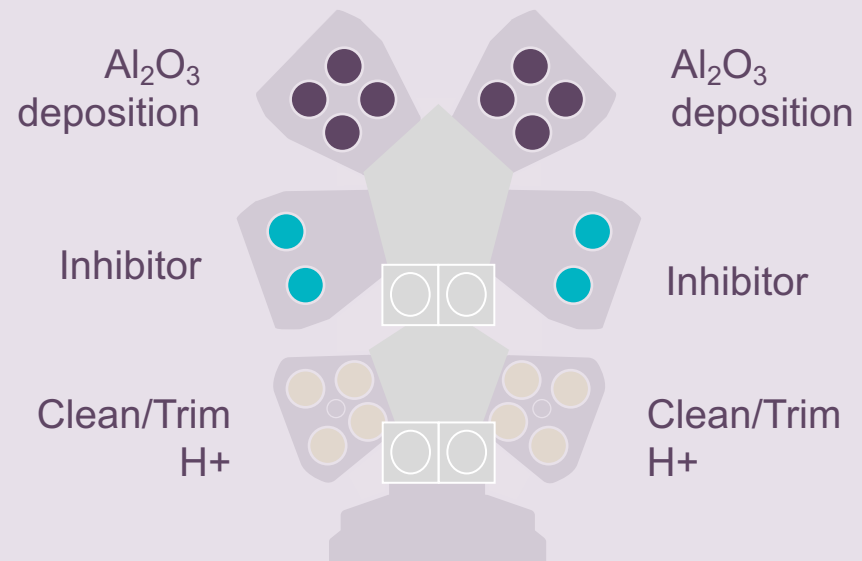
XP8E®



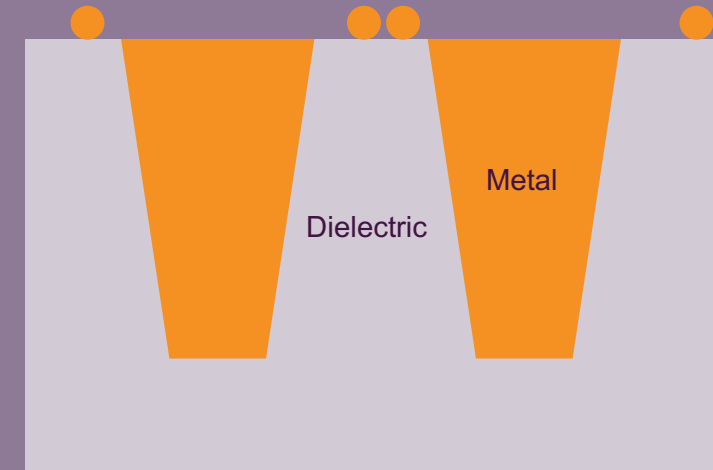


Area selective deposition: Dielectric on dielectric

XP8E®



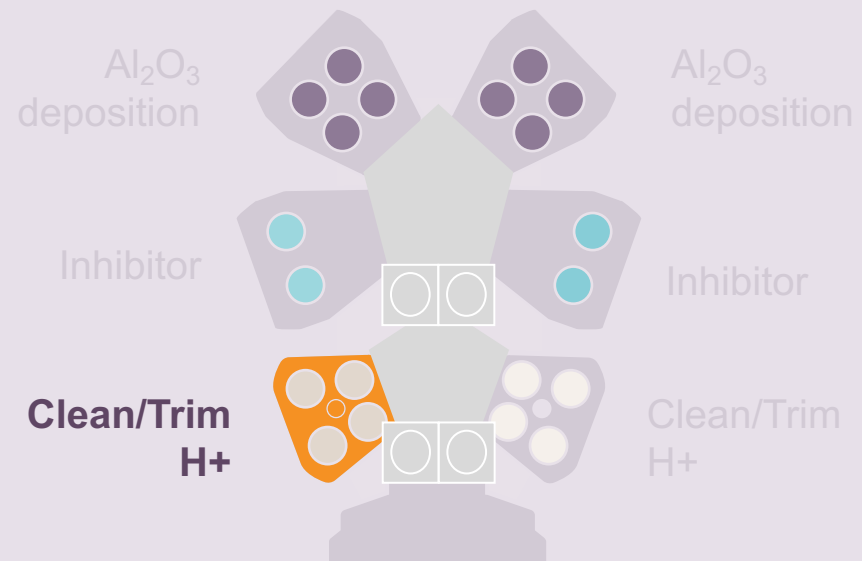
Incoming wafer





Area selective deposition: Dielectric on dielectric

XP8E®



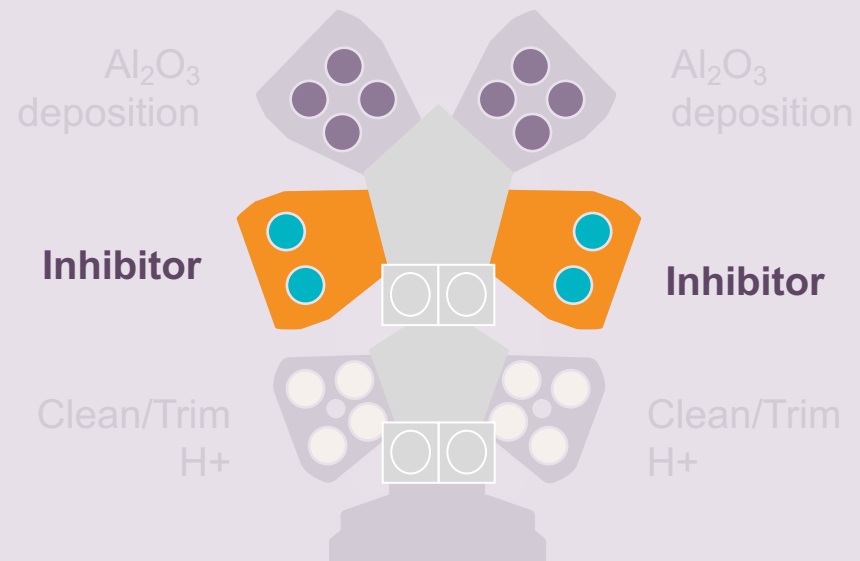
Surface
clean





Area selective deposition: Dielectric on dielectric

XP8E®



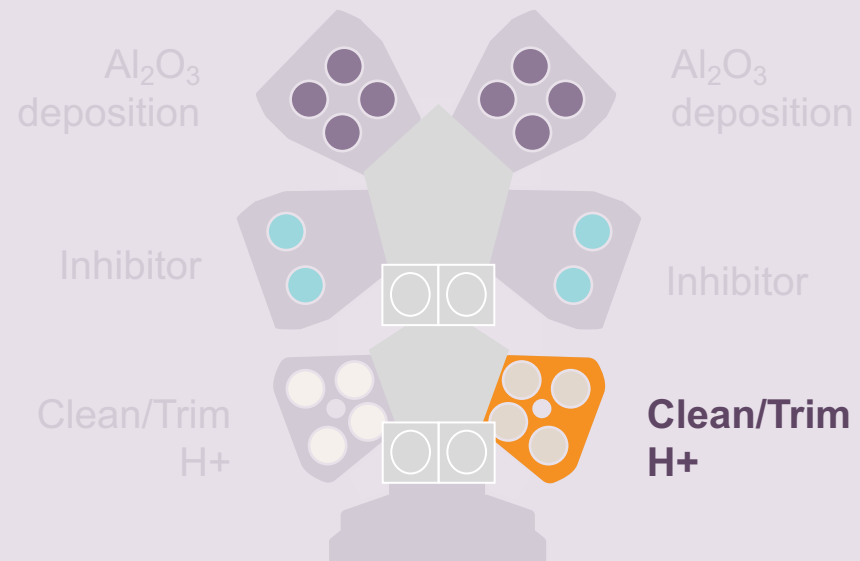
Selective deposition of ALD inhibition layer





Area selective deposition: Dielectric on dielectric

XP8E®



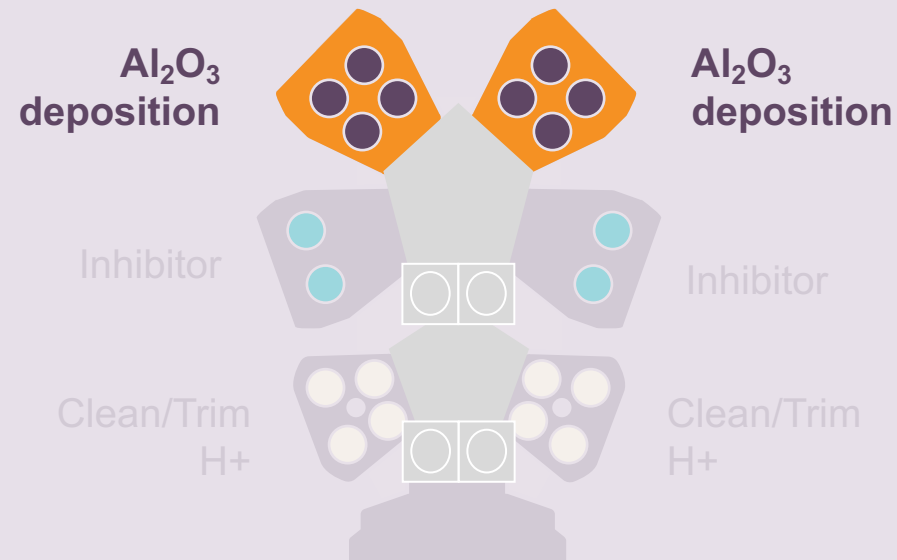
Trim





Area selective deposition: Dielectric on dielectric

XP8E®



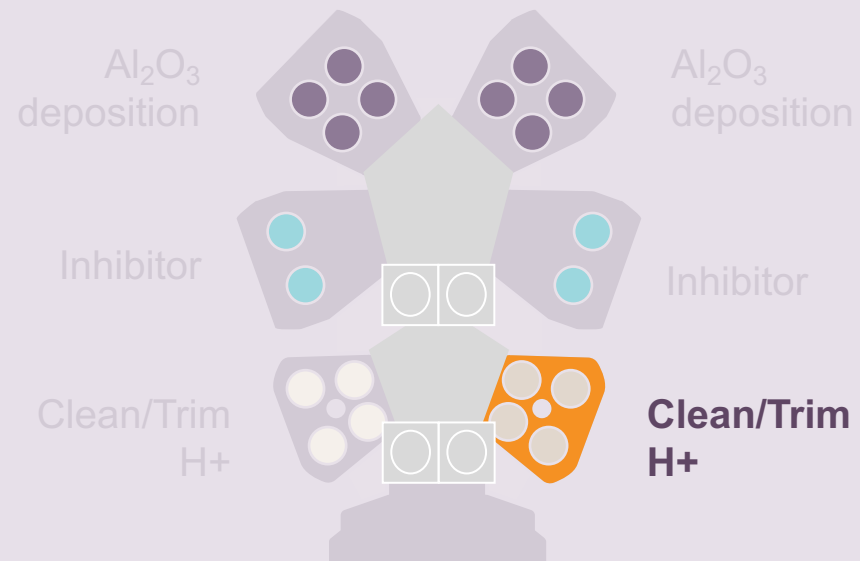
Al₂O₃ deposition



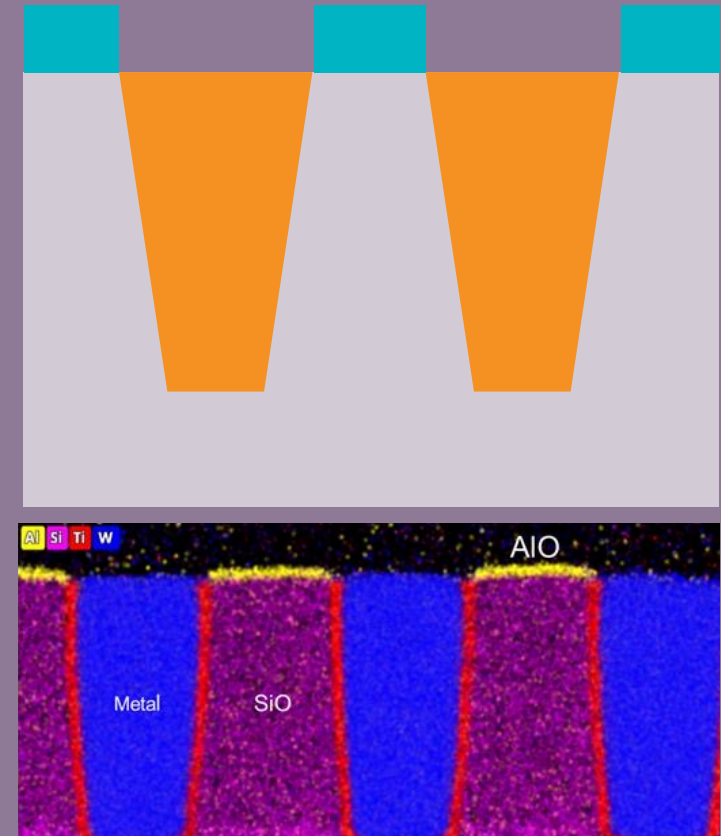


Area selective deposition: Dielectric on dielectric

XP8E®



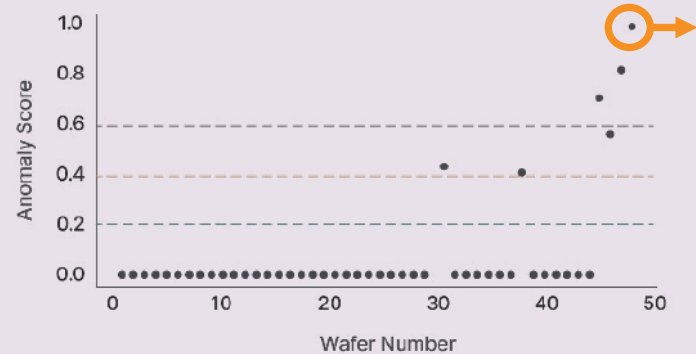
Remove
inhibition
layer



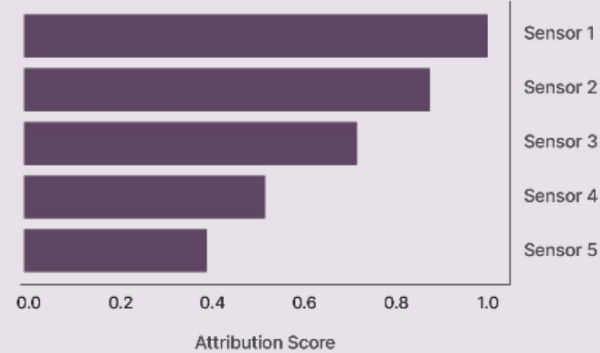


AI/ML in HVM: Anomaly detection provides insight into process performance

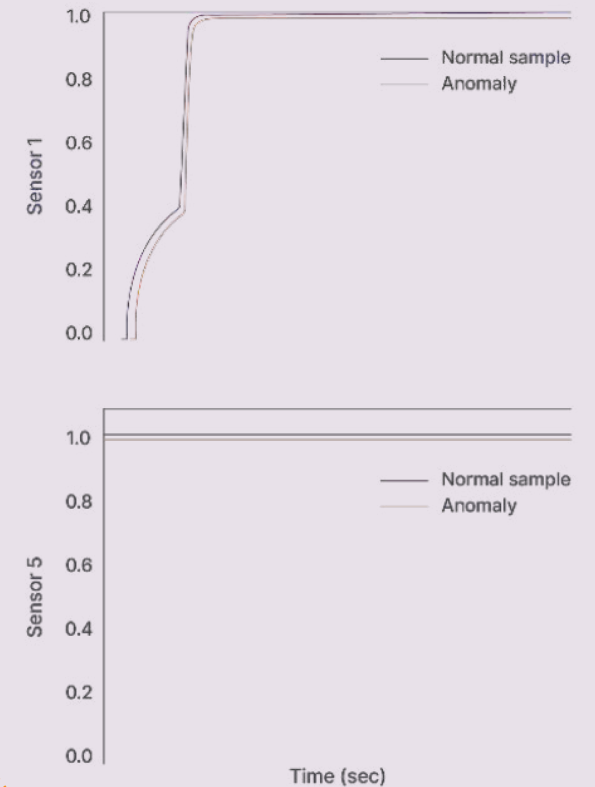
Real-time anomaly detection monitoring



Identify top 5 contributors to an anomaly



Ability to detect subtle changes in sensors





Strategic long-term partnerships with leading universities and research institutions





Winning customer trust in HVM

Customer awards



Scaling the future: ASM's 2030 technology trajectory



Looking forward to 2030

Market

Driven by high-performance computing and memory for AI

Device scaling and DTCO

Channel Epi, dipoles for multi- V_t , new metal interconnects, contacts, and DTCO (backside power, MIMCAP) becoming key drivers

3D scaling

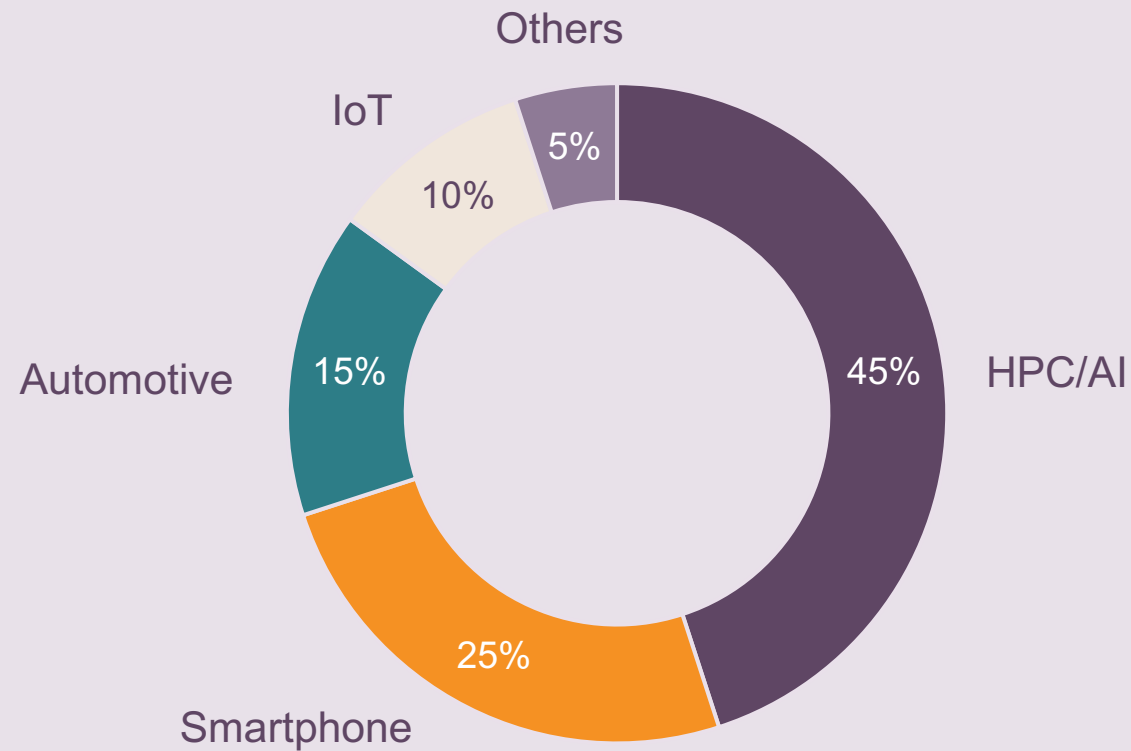
3D vertical scaling in logic (GAA in 2025, CFET in 2031) and DRAM (4F² in 2028 and 3D-DRAM in 2032+)

Advanced packaging

A key enabler and growth opportunity



Evolving technology landscape providing new growth areas

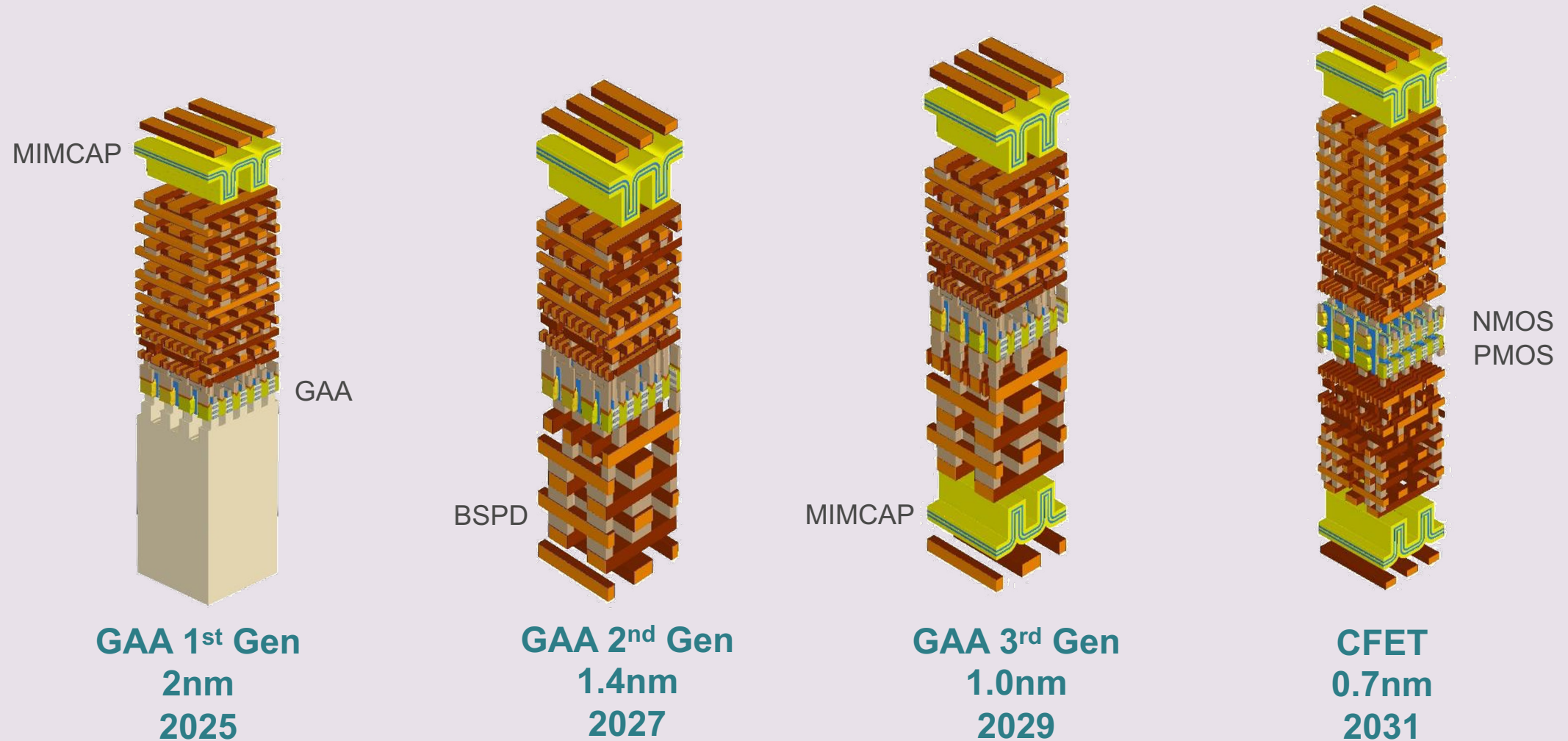


>70% of US\$1 trillion semiconductor market in 2030 driven by leading-edge logic and memory technologies

Source: TSMC North America Technology Symposium – April, 2025



Evolving technology landscape providing new growth areas





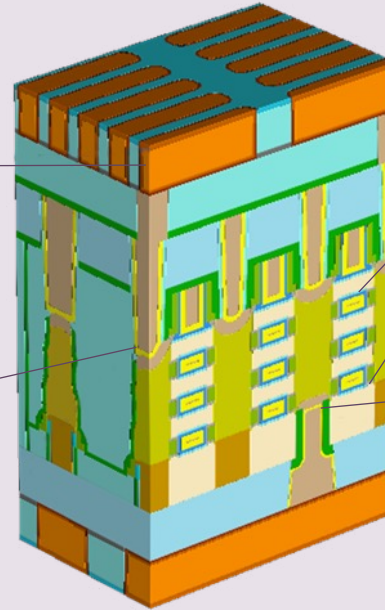
Leading position in transistor (FEOL)

BEOL

- PVD/CVD to ALD metal gapfill

Contacts

- ALD silicides
- ASD



Transistor

- High-K gate dielectric
- Dipoles
- Work function metals
- Patterning materials
- Dielectric gapfill

Backside power:

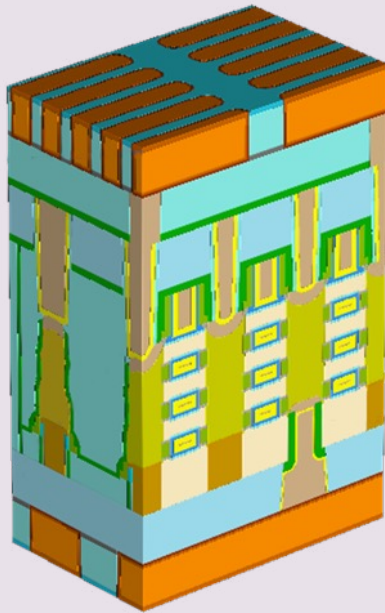
- Liners
- ALD metal gapfill

**ASM internal emulation of
GAA structure with
backside power**

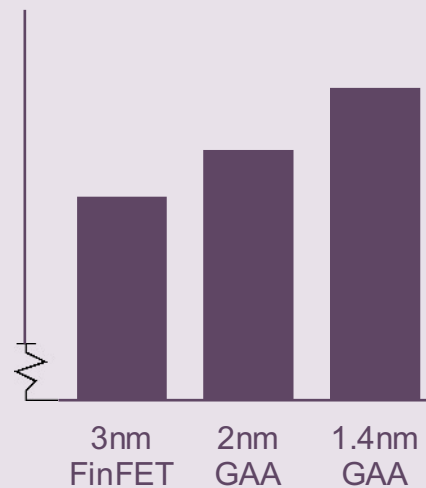
We're in the heart of every device



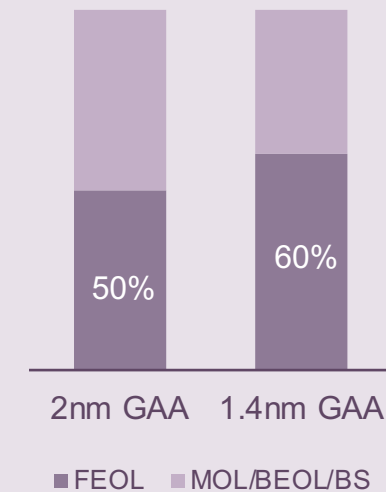
FEOL: highest number of ALD layers and growth



SW ALD layer count by node



Mix of ALD layers



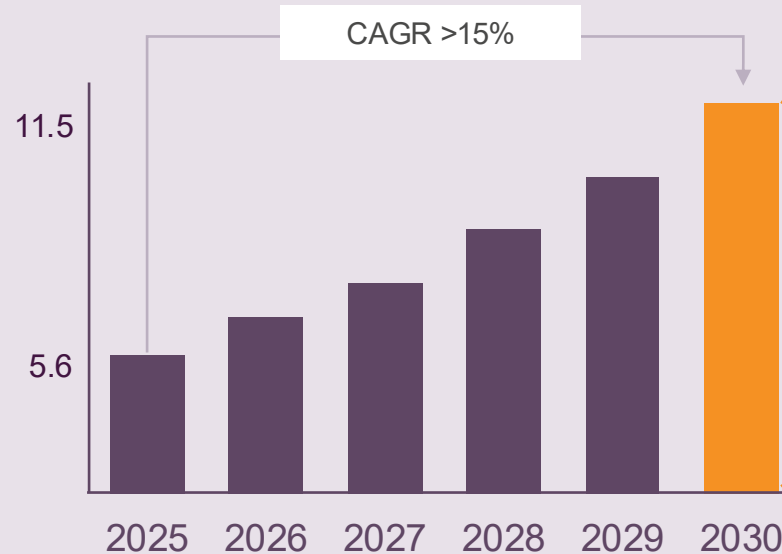
We're in the heart of every device



Advanced packaging (AP): Convergence of FE and BE processing

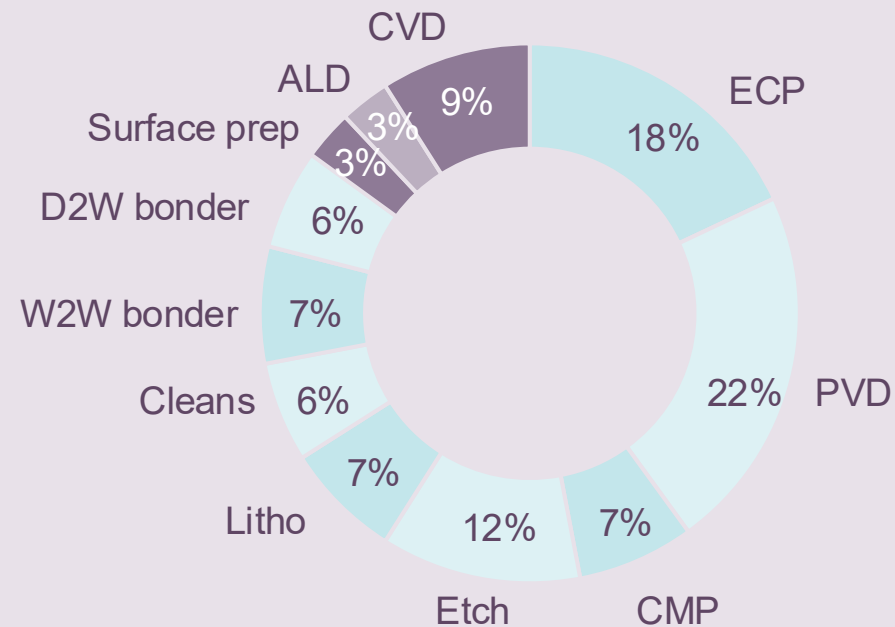
AP WFE market

(US\$B)



AP total available market (TAM) 2030

(US\$11.5B)



Double our SAM to >30% of the TAM by 2030

Source: Technights and ASM analysis

Leading ahead to what's next: The road to 2030

Growth through Innovation strategy for the next 5 years



Strategic objectives

1

Maintain leading share in ALD for logic/foundry and grow share in DRAM/HBM memory

How?

AI/ML enabled common platform coupled with novel chemistries to accelerate innovation and ensure manufacturing excellence

2

Continue to grow in Epi

How?

Capture new Epi inflections in logic/foundry and DRAM

3

Grow applications in advanced packaging market

How?

Grow organically in PECVD, ALD and surface prep, leveraging our strength in chemistry innovation and surface engineering

4

Grow high value Outcome-based services

How?

Innovate in environmentally friendly solutions while delivering greater performance and value to our customers

5

Accelerate progress in sustainability

How?

Focusing on chemical effectiveness and reduced precursor consumption

6

Drive operational excellence, flexible footprint and strong financial performance

How?

Targeting revenue >€5.7B and operating margin >30% by 2030

Key takeaways



1 Past strategic objectives

ASM delivered on its strategic objectives. Outgrew WFE market. Maintained and expanded ALD and Epi share in transition from FinFET to GAA. Grew spares and services business.

2 ALD product portfolio

Many new ALD products, including clustered multi-process applications like area selective deposition (ASD), are in production at the 2nm GAA node.

3 Upcoming technology inflections

Well positioned in ALD and Epi for upcoming technology inflections in GAA (2nd/3rd Gen & CFET) and DRAM (4F² & 3D-DRAM). AI/ML common platform to accelerate innovation and ensure manufacturing excellence.

4 Advanced packaging

Advanced packaging (AP) is another mid-term growth area. Applications in AP will benefit from chemistry innovation and interface engineering where ASM excels.

5 Scaling for growth

Scaling the company through focus on talent development, product commonality, flexible manufacturing footprint, and upgraded ERP/PLM digital foundation for improved operational efficiency.

6 Sustainability fully integrated

Sustainability fully integrated into our way of working leading to lower total cost of ownership (TCO) for our customers.

7 Target

Targeting 2030 revenue > €5.7B, operating margin >30% with free cash flow > €1B.

Note: All numbers presented throughout this presentation are adjusted numbers excluding purchase price allocation adjustment

From layers to landscape: Opportunities and growth through technology inflections

Vamsi Paruchuri

Corporate VP, Technology Innovation and
Market Research

Key takeaways



1 Secular growth trends

Secular growth trends are intact for US\$1T semiconductor market by 2030 mainly driven by AI and related leading-edge logic and DRAM technologies.

2 Technology scaling increasingly enabled by materials and vertical structures

Logic and DRAM technology scaling is increasingly dependent on materials and adoption of more complex 3D structures, necessitating more ALD and Epi processes.

3 ALD is expected to outgrow the WFE market

The market for ALD is expected to outgrow the WFE market, to a range of US\$5.1-6.1 billion by 2030¹ reflecting a CAGR of 9% to 13%.

4 The Si Epi market is expected to grow

The Si Epi market is expected to grow to a range of US\$2.5-3.2 billion by 2030¹ reflecting a CAGR of 9% to 13%.

5 ASM benefits from significant SAM increase in GAA 2nd gen and with upcoming DRAM inflections

ASM remains well-positioned to benefit from significant ALD & Epi SAM increases:

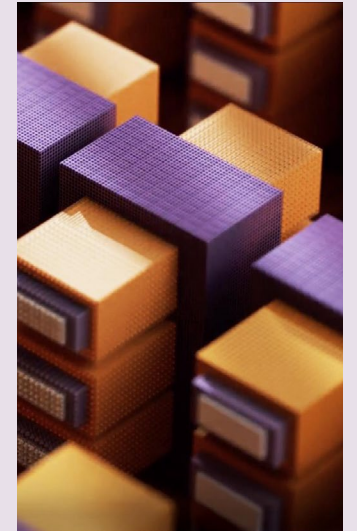
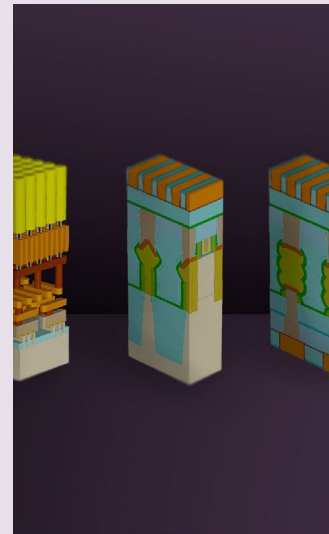
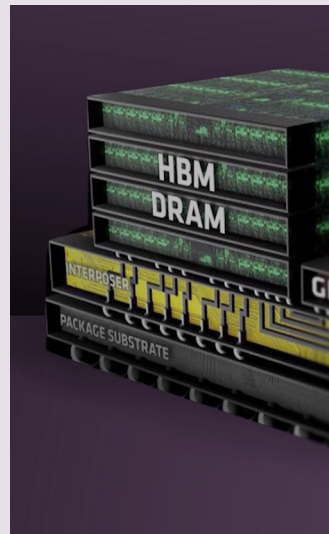
- US\$450M - 500M nodal SAM increase from GAA 2nm to GAA 1.4nm in logic/foundry
- US\$400M - 450M nodal SAM increase with DRAM cell transition from 6F² to 4F² and CMOS peri transition from planar to FinFET

6 Advanced packaging provides additional growth

Advanced packaging (AP) is another mid-term growth area. Applications in AP will benefit from chemistry innovation and interface engineering where ASM excels.

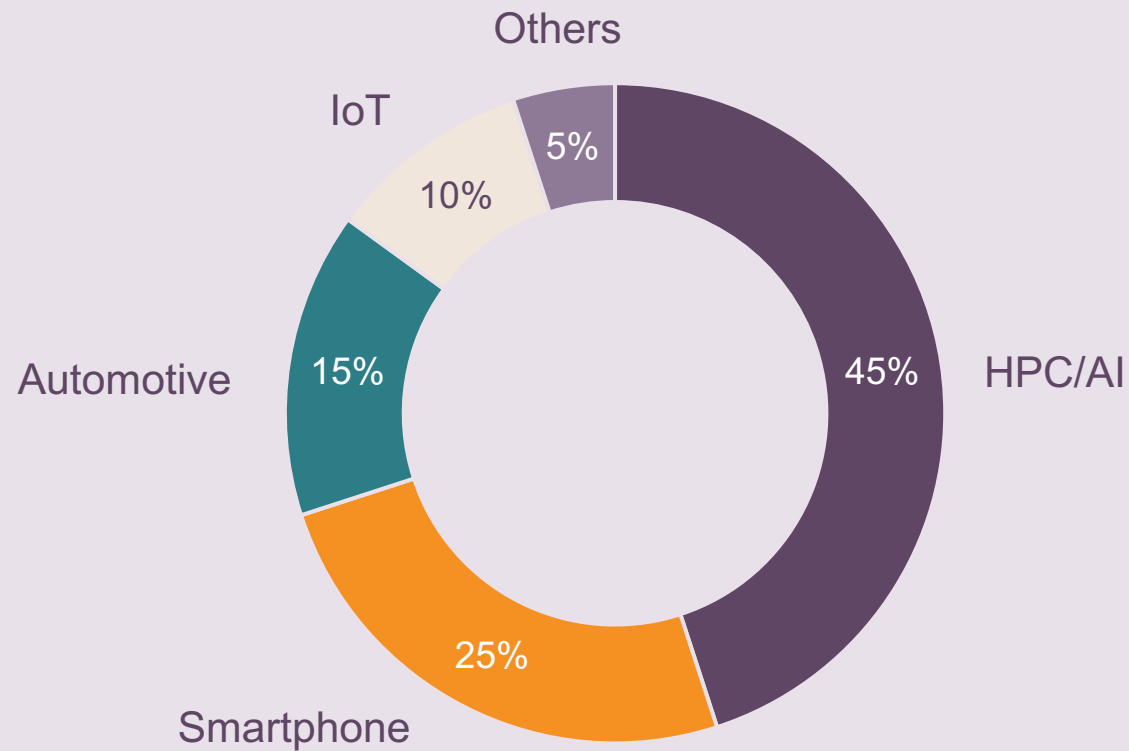
1) 2030 wafer fab equipment (WFE) investments at US\$155B

Industry, market, and technology outlook





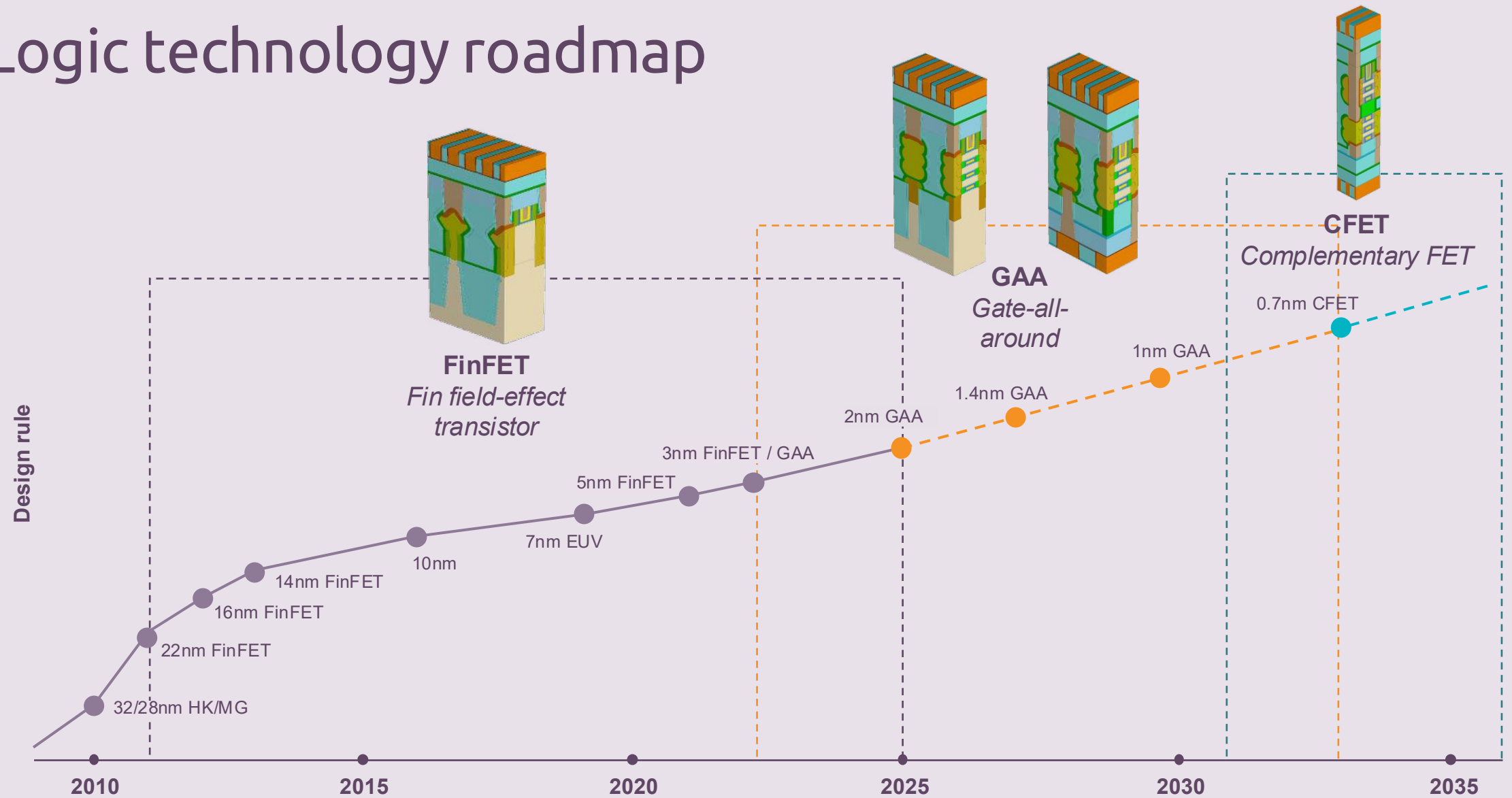
US\$1 trillion semiconductor market predominantly driven by leading-edge technology nodes



>70% of US\$1 trillion semiconductor market in 2030 driven by leading-edge logic and memory technologies

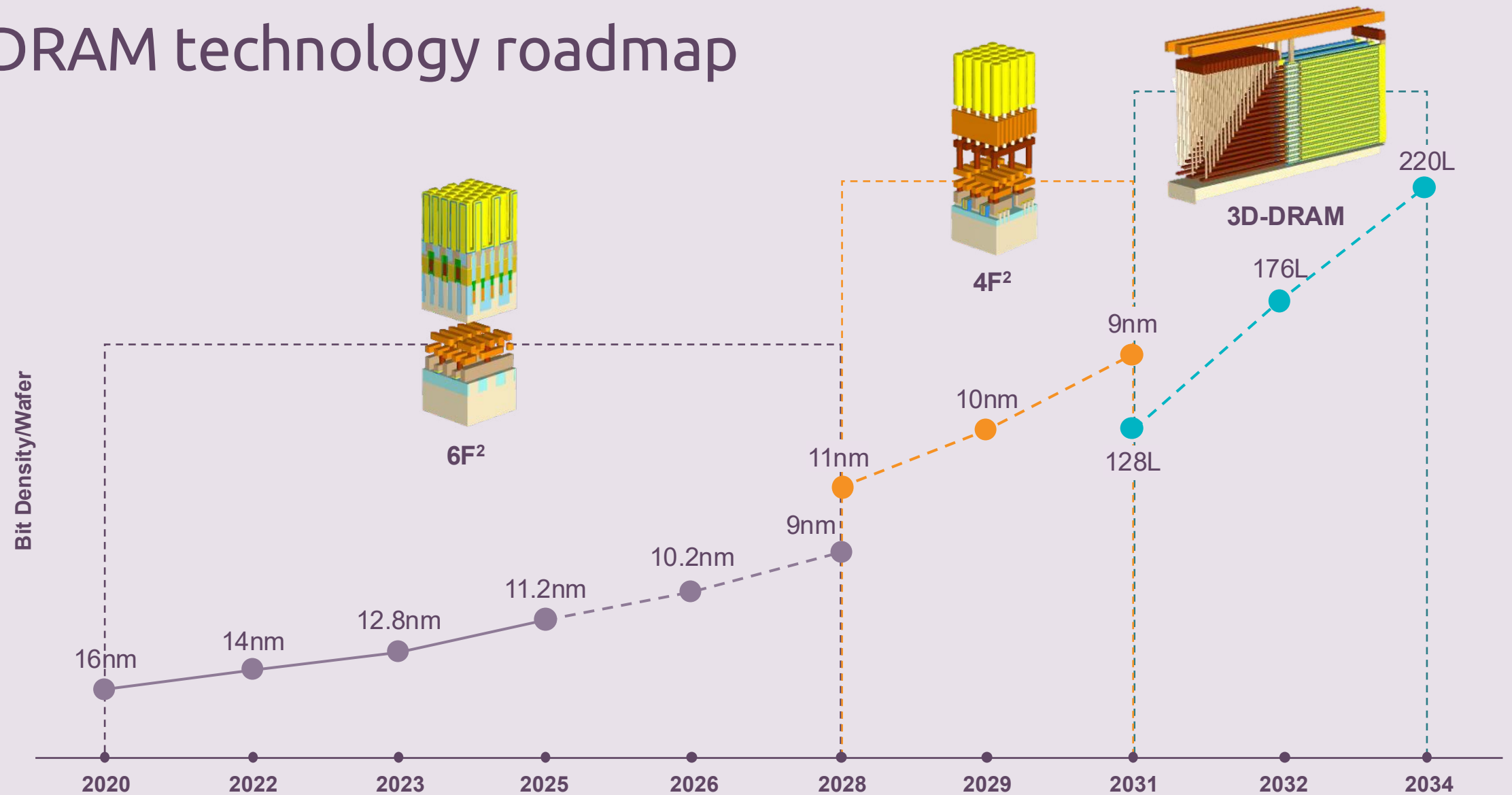
Source: TSMC North America Technology Symposium – April, 2025

Logic technology roadmap



Source: Compilation from several public sources

DRAM technology roadmap



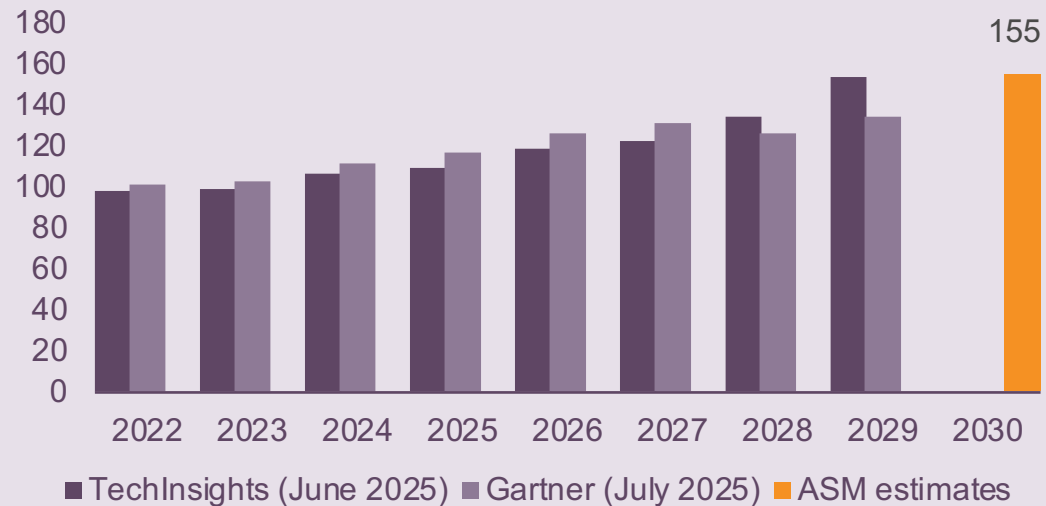
Source: Compilation from several public sources



WFE growth driven by leading-edge logic/foundry and DRAM

WFE Outlook

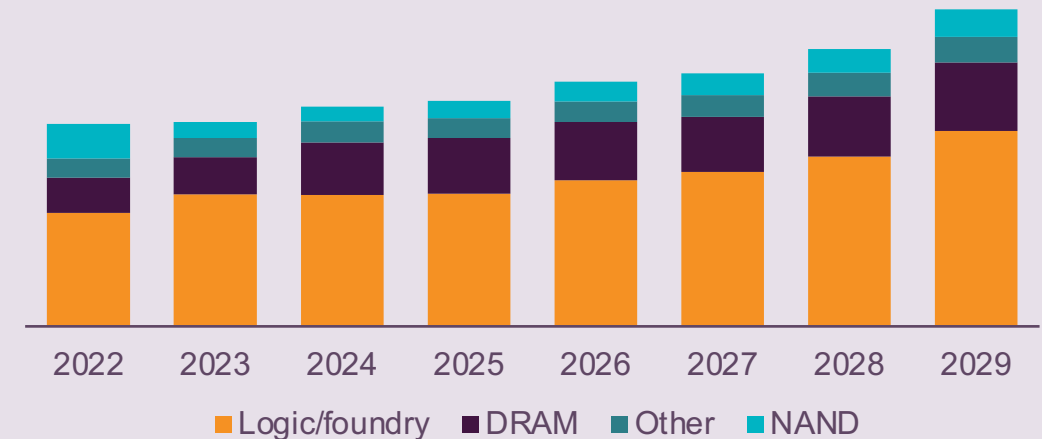
(US\$ billion)



- WFE market '24-'30 CAGR: ~6%

WFE by segment

(US\$ billion)



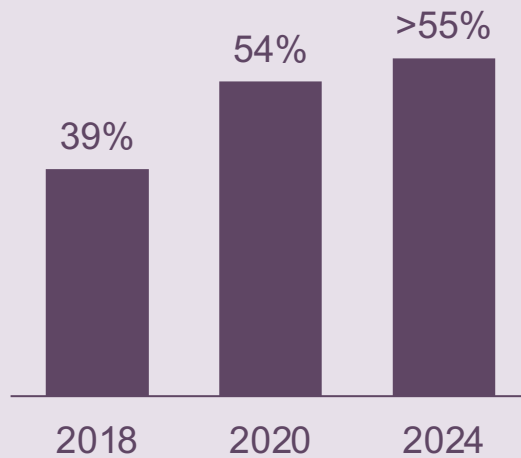
- Growth largely in leading-edge logic/foundry and DRAM
- China investments assumed to gradually normalize to around <20% of total WFE

Source: TechInsights

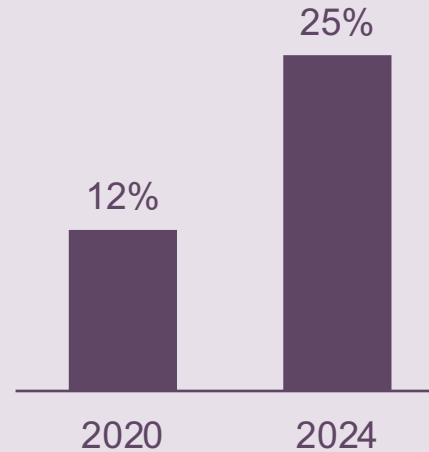
Maintained leading market share in ALD and increased share in leading-edge Epi



Single-wafer ALD market share



Leading-edge Epi market share



ALD market:

We grew our total ALD market share to >55% in 2024

We maintained our leading ALD market share in transition from FinFET to GAA

Epi market:

We grew leading-edge Epi market share from 12% in 2020 to 25% in 2024, capturing all GAA channel layers

Source: ASM internal analysis and TechInsights

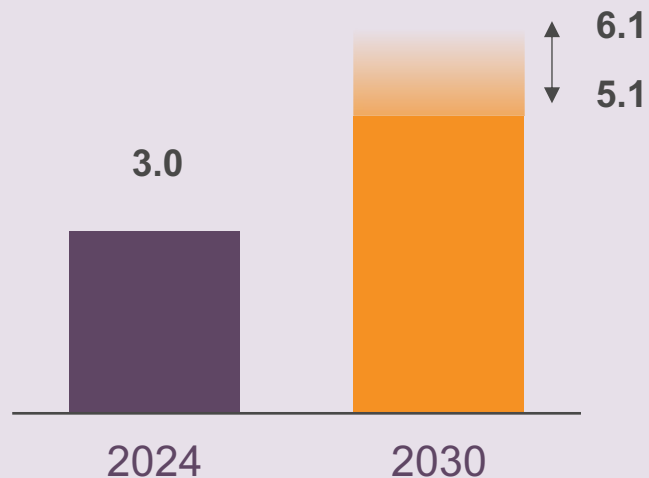
Technology inflections driving single-wafer ALD and Epi markets

Single-wafer ALD market forecasted to outgrow WFE



Single-wafer ALD market outlook

(US\$ billion)



Single-wafer ALD market:

SW ALD market '24-'30 CAGR: 9-13%

WFE CAGR: 6% (2024: US\$110B, 2030: US\$155B)

Growth drivers:

Increased number of layers in leading-edge logic/foundry and additional complexity

Increased number of layers in leading-edge DRAM, both in cell and CMOS peri

2030 outlook:

Maintain market share > 55%

- Maintain leading market share in logic/foundry
- Gain share in memory

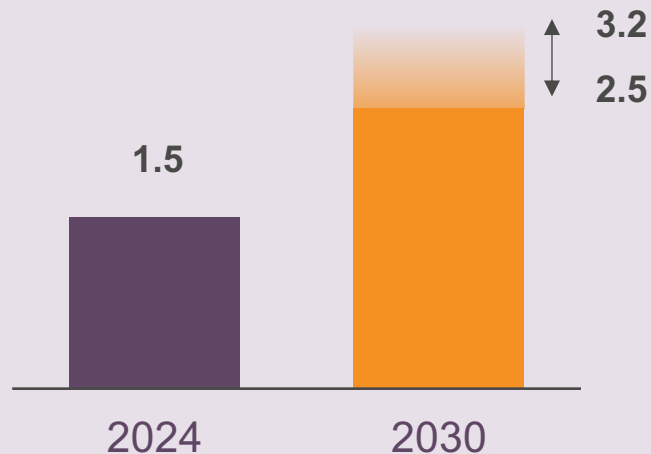
Source: Historical market data: ASM | Future market data: ASM



Epi market forecasted to outgrow WFE

Epi market outlook

(US\$ billion)



Epi market:

Epi market '24-'30 CAGR: 9%-13%

WFE CAGR: 6% (2024: US\$110B, 2030: US\$155B)

Growth drivers:

New Epi applications in next generations GAA and additional complexity

Increased number of layers in leading-edge DRAM transition from 6F² to 4F² and in CMOS peri

2030 outlook:

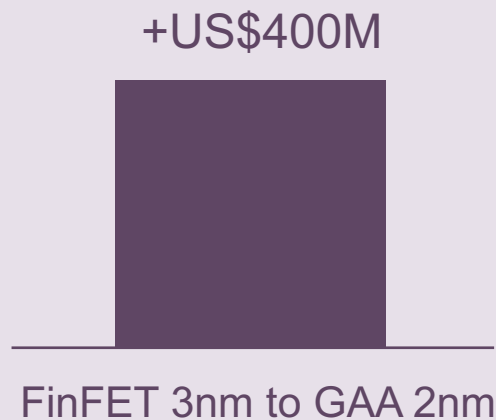
Further expand leading-edge market share

Source: Historical market data: ASM | Future market data: ASM

Continued growth in leading-edge logic/foundry



From FinFET to GAA 2nm, our ALD and Epi nodal SAM increased by US\$ 400M



2023 Investor Day: Combined ALD and Epi SAM increase from FinFET to GAA US\$ 400million per 100k WSPM

With 2nm GAA ramping in HVM, we confirm that nodal SAM increase is within range of our 2023 forecast

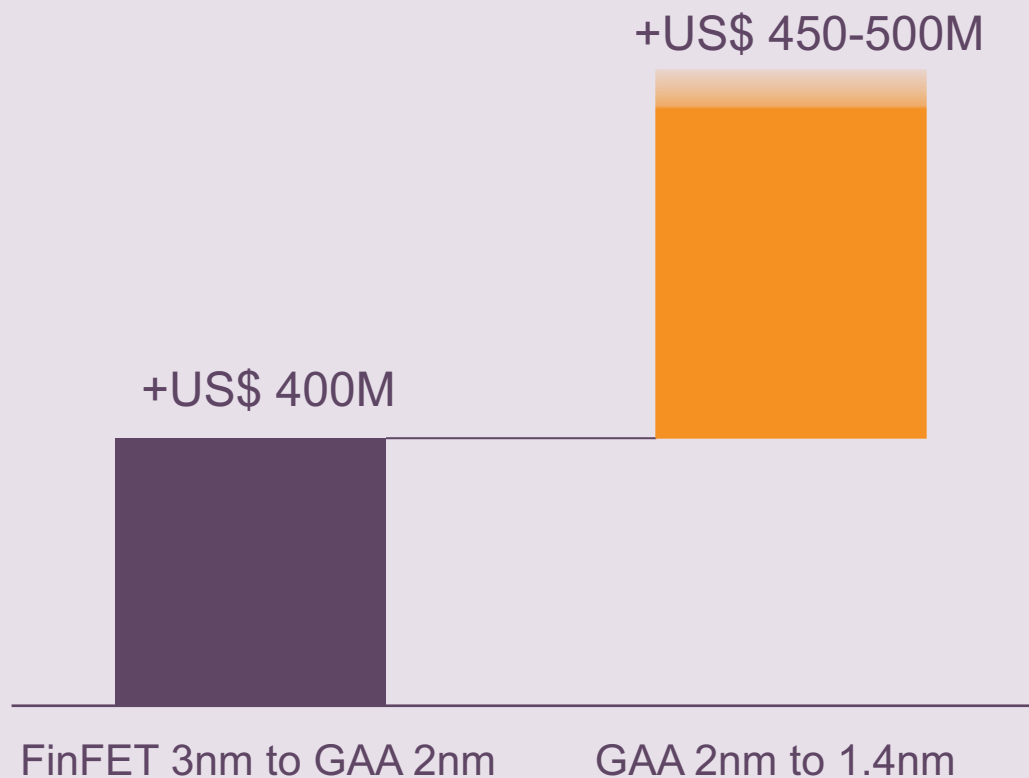
And we at least maintained share in ALD and gained share in Epi through this transition

Source: Historical market data: ASM | Future market data: ASM



Significant increase in ALD and Epi SAM with move from GAA 2nm to 1.4nm

Increased SAM for ASM by US\$ 450M to US\$ 500M per 100k wafer starts per month



Higher number of ALD and Epi layers and increased complexity

Wafer frontside :

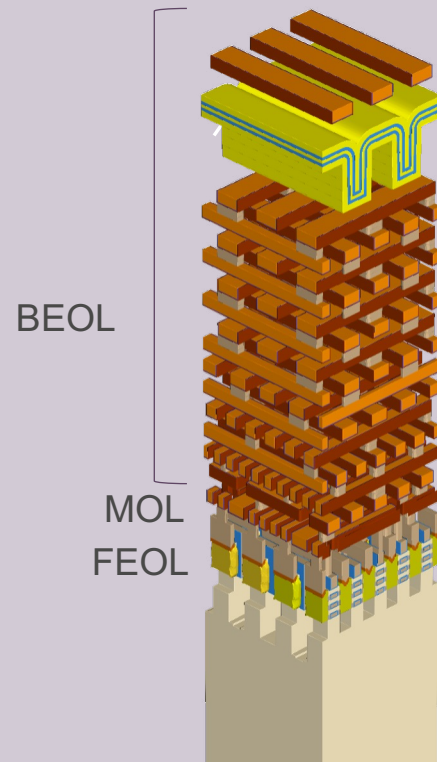
- Advanced High-k
- Additional dipoles for multi- V_t
- Work function metals
- Patterning materials
- Area selective deposition – DoD, DoM
- ALD Molybdenum
- Channel Epi
- Source/drain and contact Epi
- Dielectric gapfills

Wafer backside:

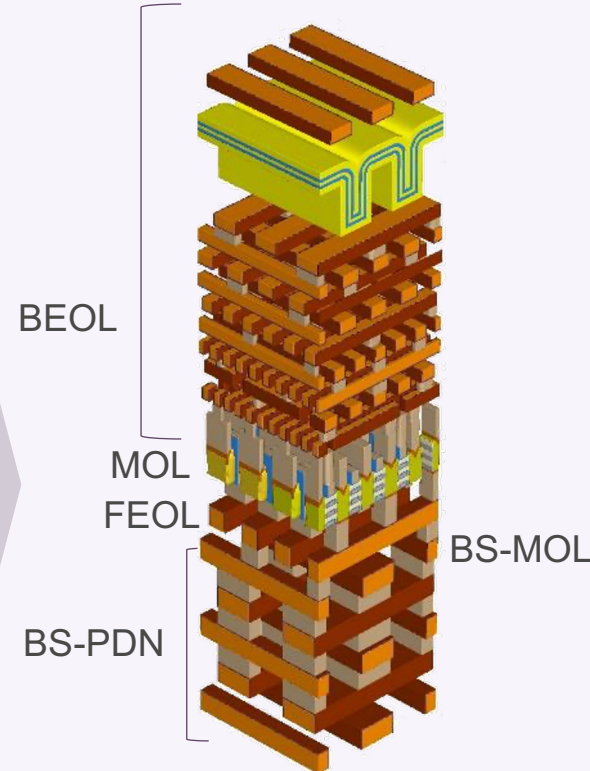
- Low temp Epi
- Dielectric liners
- ALD Molybdenum

Source: Historical market data: ASM | Future market data: ASM

GAA 2nm to GAA 1.4nm



GAA 2nm



GAA 1.4nm

GAA 2nm to 1.4nm

Increased, more complex, or new layers:

Wafer frontside :

- High(er)-k
- Dipoles for multi- V_t
- Work function metals
- Patterning materials
- Area selective deposition – DoD, DoM
- ALD Molybdenum
- Channel Epi
- Source/drain and contact Epi
- Dielectric gapfills

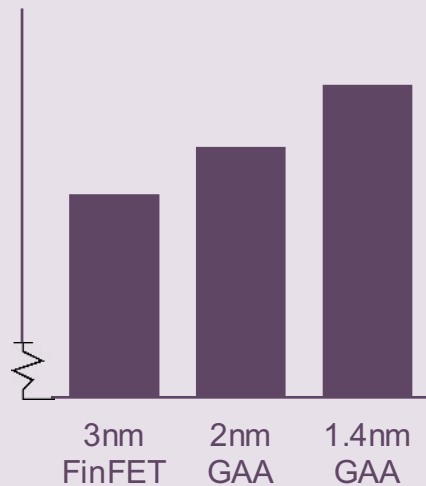
Wafer backside:

- Low temp Epi
- Dielectric liners
- ALD Molybdenum

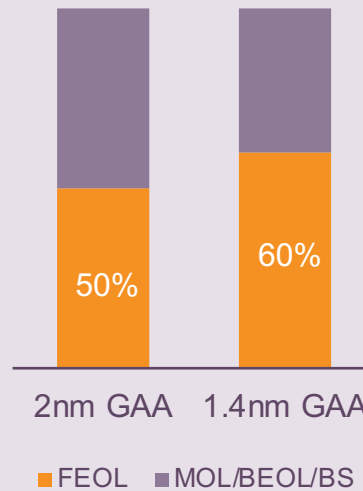


FEOL ALD layers¹ see largest growth in transition from GAA 2nm to 1.4nm

SW ALD layer count by node



Mix of ALD layers



From GAA 2nm to 1.4nm

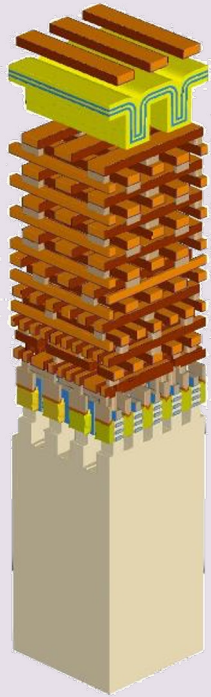
With GAA device architecture remaining similar, performance and DTCO elements drive scaling

The number of layers in FEOL around transistor continues to increase more than in MOL and BEOL

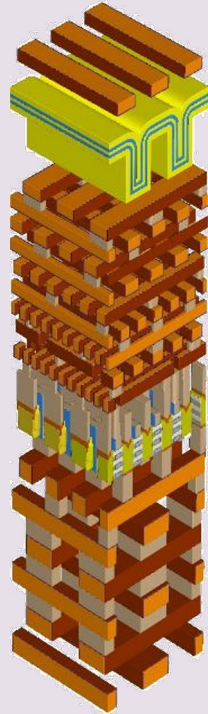
FEOL layers account for 60% of the total number of ALD layers in 1.4nm GAA

1) Weighted average of multiple customers

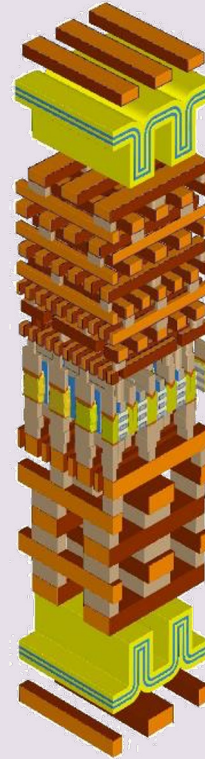
Continued growth in ALD and Epi with transition to CFET devices



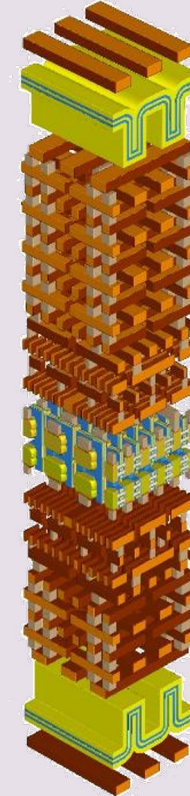
GAA 1st Gen
2nm
2025



GAA 2nd Gen
1.4nm
2027



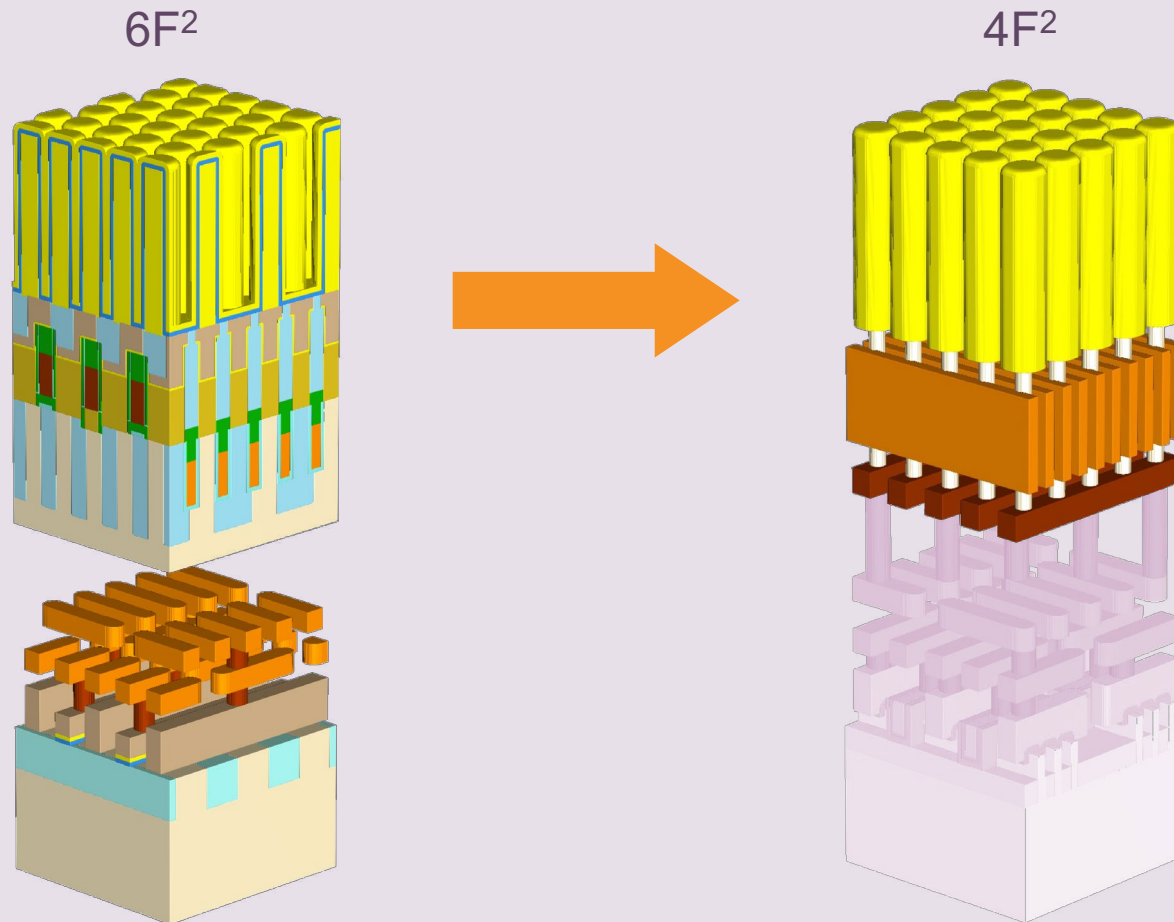
GAA 3rd Gen
1.0nm
2029



CFET
0.7nm
2031

Accelerated opportunities in leading-edge DRAM

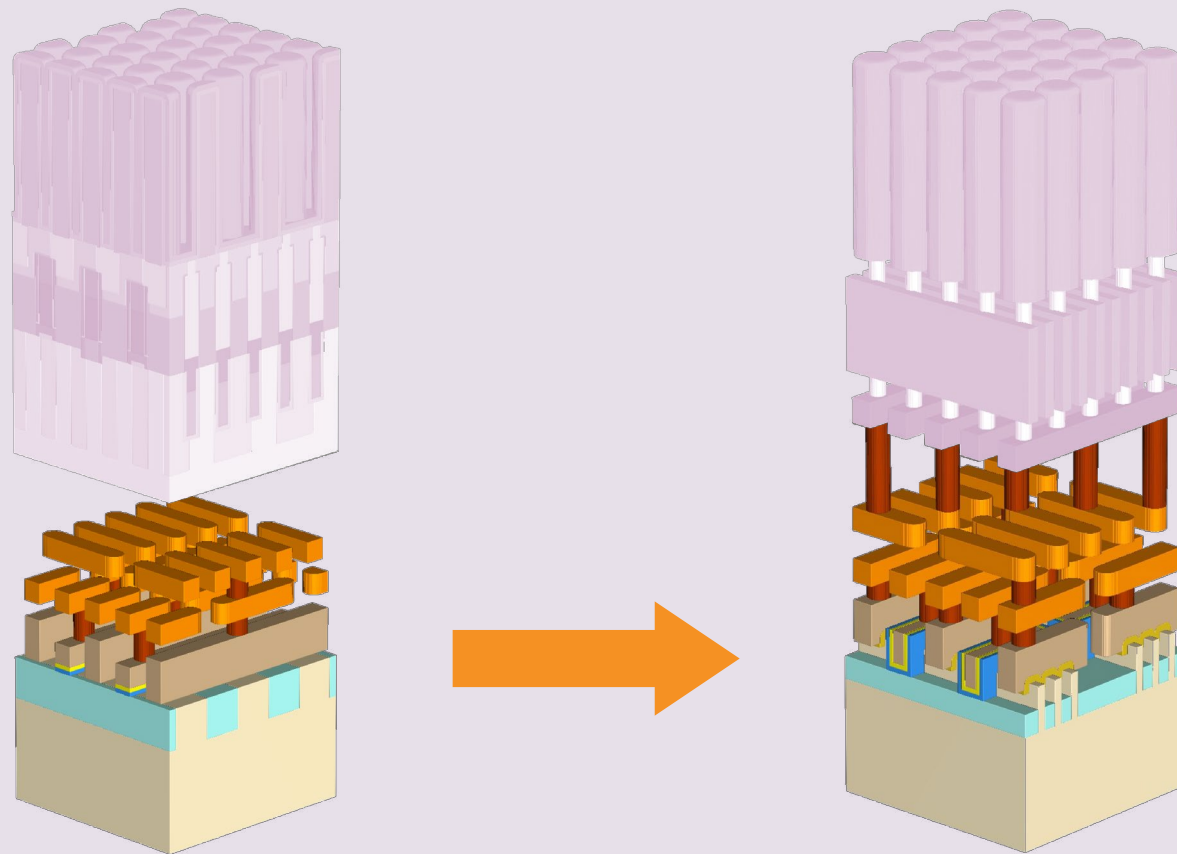
DRAM inflections: 6F² to 4F² cell



Significant increase in ALD and Epi intensity with DRAM cell transition from 6F² to 4F²

- Channel Epi
- Contact Epi
- Low temp. ALD oxides and nitrides
- ALD dielectric gapfill
- Back gate and front gate metals

DRAM inflections: CMOS peri from planar to FinFET



Planar CMOS

FinFET CMOS

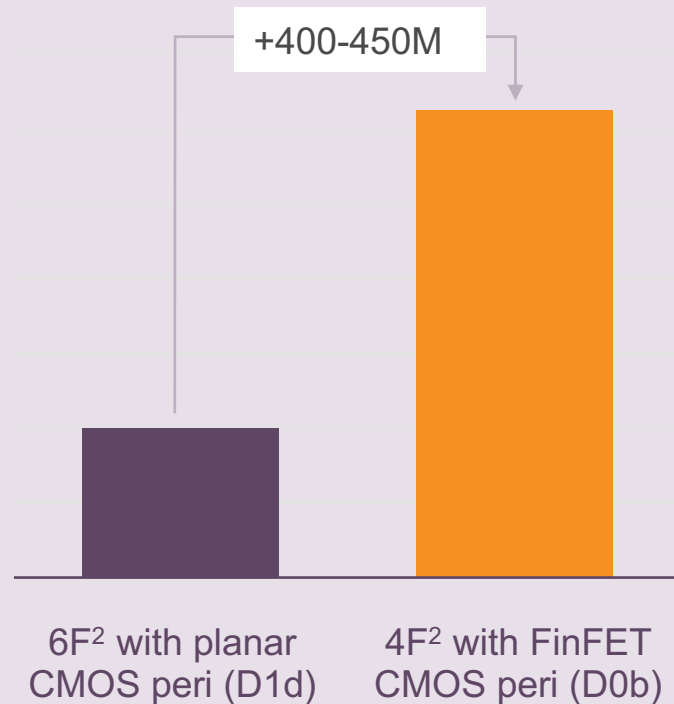
Significant increase in ALD and Epi intensity with peri transitioning from planar CMOS to FinFET CMOS peri

- ALD High-k
- ALD dipoles
- ALD work function metals
- ALD patterning materials and spacers
- Epi source/drain



Increasing DRAM SAM with 4F² and with CMOS peri transitioning from planar to FinFET

ASM ALD and Epi SAM expansion for 100k WSPM (US\$ million)



Higher number of ALD and Epi layers and increased complexity

DRAM cell transition from 6F² to 4F²:

- Channel Epi
- Contact Epi
- New ALD oxides and nitrides
- Dielectric gapfills
- Back gate and front gate

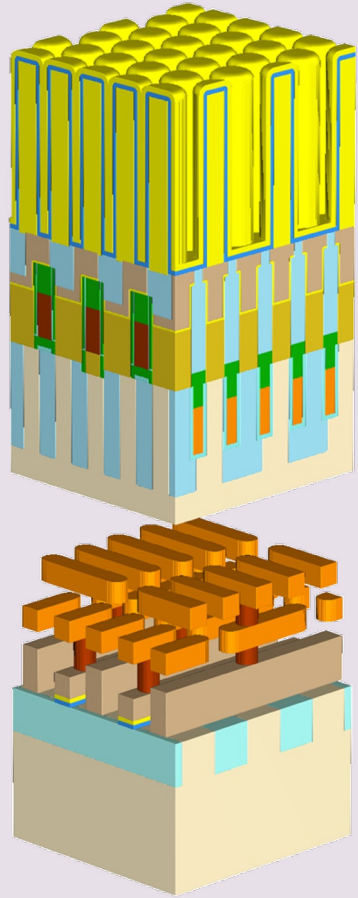
Planar CMOS to FinFET CMOS peri:

- ALD High-k
- ALD dipoles
- ALD work function metals
- ALD patterning materials and spacers
- Epi source/drain

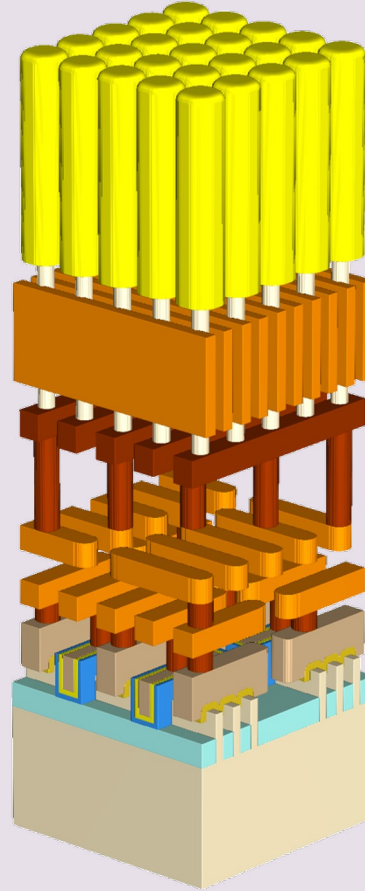
Early adoption expected to begin with D0a node and complete adoption by all leading-edge DRAM makers by D0b node

Source: ASM internal market data, figure not to scale

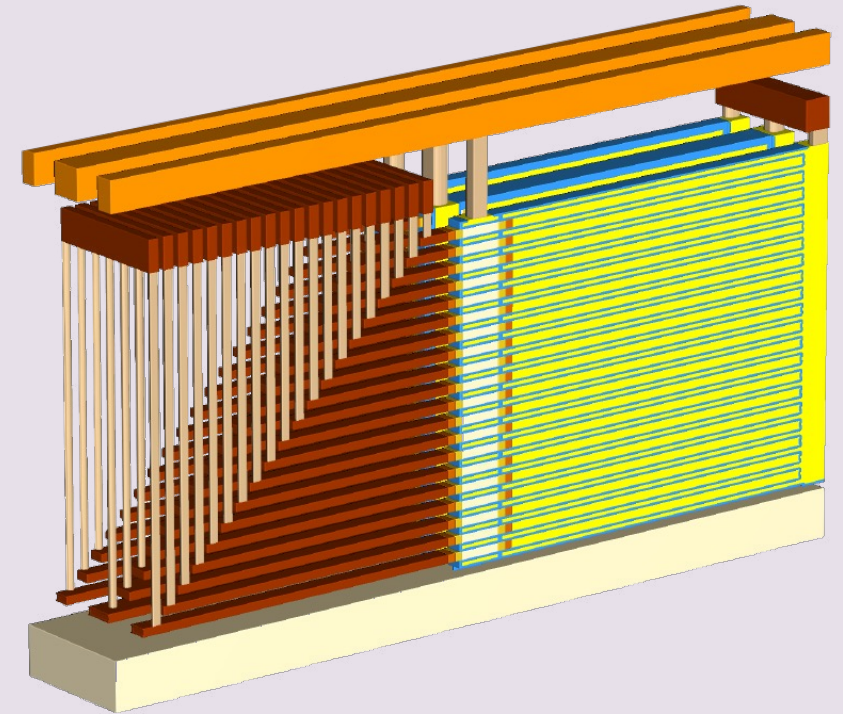
Continued growth in ALD and Epi with transition to 3D-DRAM beyond 2032



6F²



4F²



3D-DRAM

Advanced packaging

ASM products and technologies

Deposition tech
(tALD, PEALD,

process modules

Epitaxy and preclean

SIC Epi



XP8 JQCM
(300 mm)



XP8 JQCM
(300 mm)



XP4 Intrepid ES/ESA
with Previews
(300 mm)



Epsilon 2000
(200 mm)



PE208
(8"/200 mm)

Diffusion, oxidation and low-pressure chemical vapor
deposition – batch vertical furnace



SONORA
(300 mm)



A400 DUO
(200 mm)

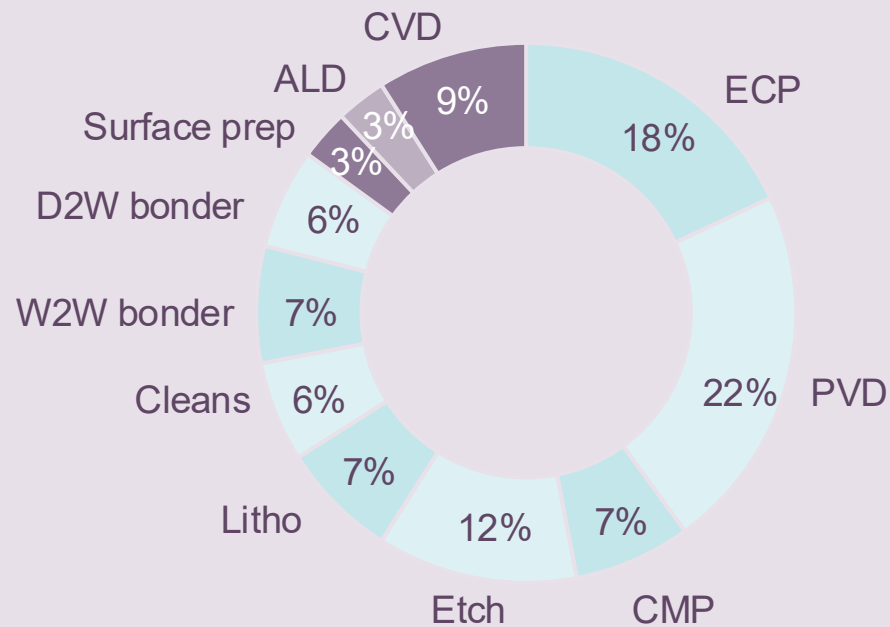
Date | ASM proprietary and confidential information | 40



Advanced packaging (AP): Another mid-term growth area

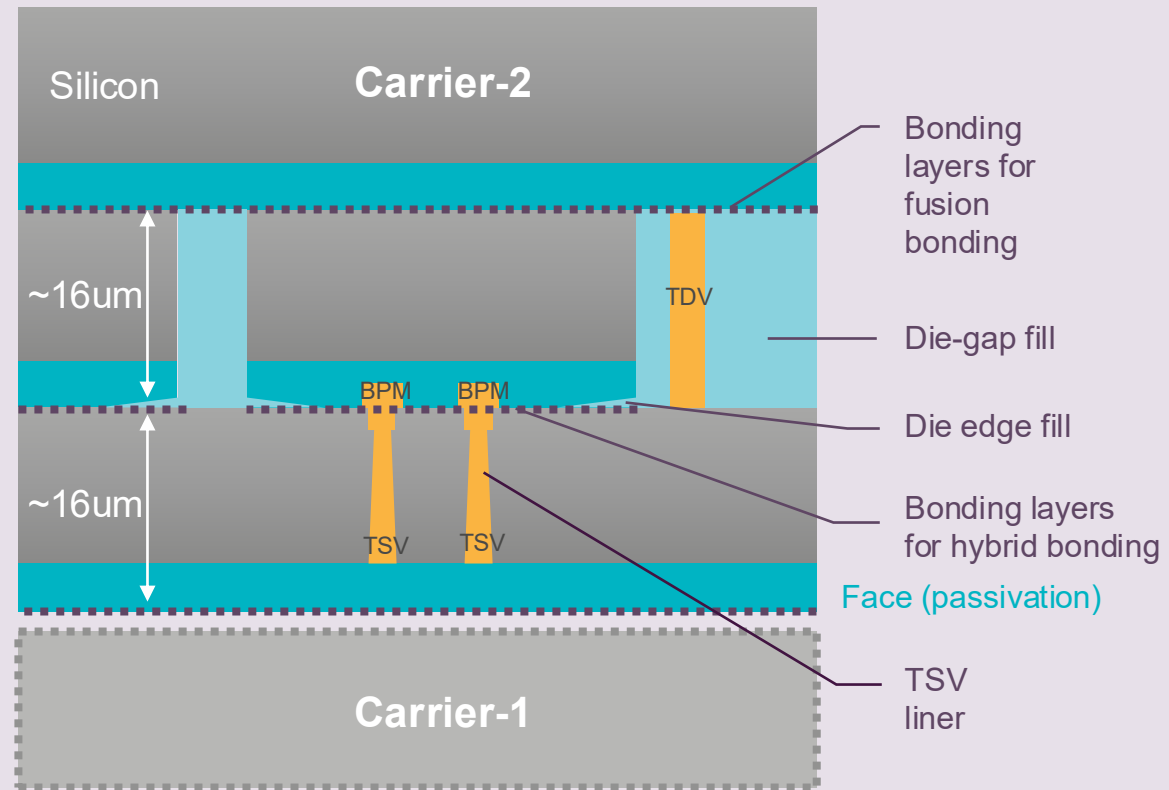
AP total available market (TAM) 2030

(US\$11.5B)



AP applications example: SoIC

(System on IC)



Double our SAM to >30% of the TAM by 2030



Key takeaways

1 Secular growth trends

Secular growth trends are intact for US\$1T semiconductor market by 2030 mainly driven by AI and related leading-edge logic and DRAM technologies.

2 Technology scaling increasingly enabled by materials and vertical structures

Logic and DRAM technology scaling is increasingly dependent on materials and adoption of more complex 3D structures, necessitating more ALD and Epi processes.

3 ALD is expected to outgrow the WFE market

The market for ALD is expected to outgrow the WFE market, to a range of US\$5.1-6.1 billion by 2030¹ reflecting a CAGR of 9% to 13%.

4 The Si Epi market is expected to grow

The Si Epi market is expected to grow to a range of US\$2.5-3.2 billion by 2030¹ reflecting a CAGR of 9% to 13%.

5 ASM benefits from significant SAM increase in GAA 2nd gen and with upcoming DRAM inflections

ASM remains well-positioned to benefit from significant ALD & Epi SAM increases:

- US\$450M - 500M nodal SAM increase from GAA 2nm to GAA 1.4nm in logic/foundry
- US\$400M - 450M nodal SAM increase with DRAM cell transition from 6F² to 4F² and CMOS peri transition from planar to FinFET

6 Advanced packaging provides additional growth

Advanced packaging (AP) is another mid-term growth area. Applications in AP will benefit from chemistry innovation and interface engineering where ASM excels.

1) 2030 wafer fab equipment (WFE) investments at US\$155B

Enabling customers with Angstrom precision through service innovation and automation

Jason Foster

Corporate VP, Spares and Service
Business Unit, Global Quality
and Technical Training



Key takeaways

1 Innovation

Innovation in our spares and service business has delivered Outcome-based solutions, creating measurable value for customers and drives growth.

2 Leverages our core competencies in chemistry

Our core competencies in chemistry and surface engineering is being applied to spares and services products to deliver Outcome-based solutions.

3 Outcome-based services

Delivers guaranteed performance such as tool availability and improved on wafer results through innovative environmentally friendly solutions.

4 New dry-cleaning Solutions

New technology that enables 10x selectivity which extends the usable part lifetime while driving sustainable manufacturing solutions.

5 Automation

To achieve Angstrom-level control in ALD and Epi requires micron-level control in part placement necessitating automation in maintenance.

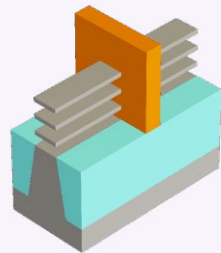


Empowering our customers with
innovative environmentally
friendly solutions that deliver
high tool availability and
better performance

Continuous innovation in spares & services required for increased precision and complexity in next tech nodes



Process complexity

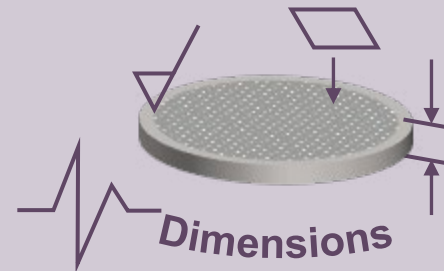


GAA

Gate-all-around

Increasingly complex semiconductor processes such as 2nm GAA

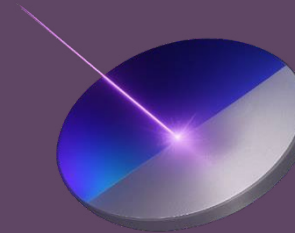
Critical process kits



Requires stringent demands on system hardware, with unprecedented precision in critical process kit components

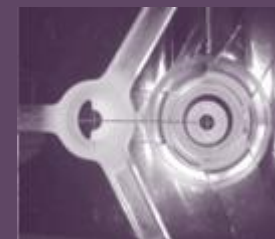
Innovative service products

Dry cleaning



Transitioning from traditional wet cleaning and sand blasting of spare parts, our dry cleaning solutions deliver superior defectivity performance, improved selectivity, and extended part life, while enhancing sustainability

Service automation



Leveraging advanced automation, we address both green-to-green efficiency and chamber-to-chamber matching, achieving micron-level part placement precision that is required for angstrom level on wafer thickness control

Spares and service: product portfolio



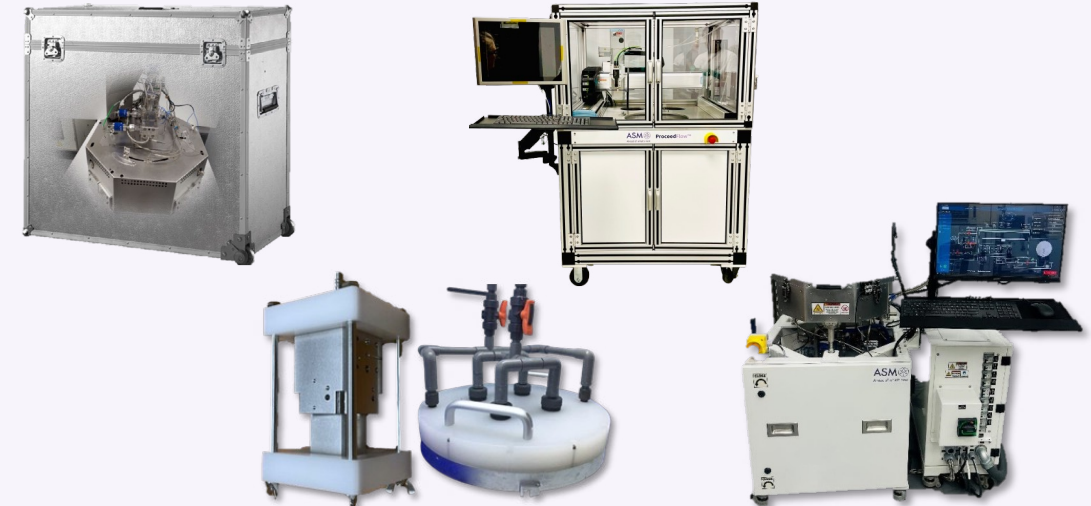
Transactional



Foundation of support

- Transactional spares (delivered on demand, available when needed)
- Standard service labor

Outcome-based



Outcome-based results

- Reduce, reuse and recycle
- Guaranteed performance:
Reduced variation, predictable output

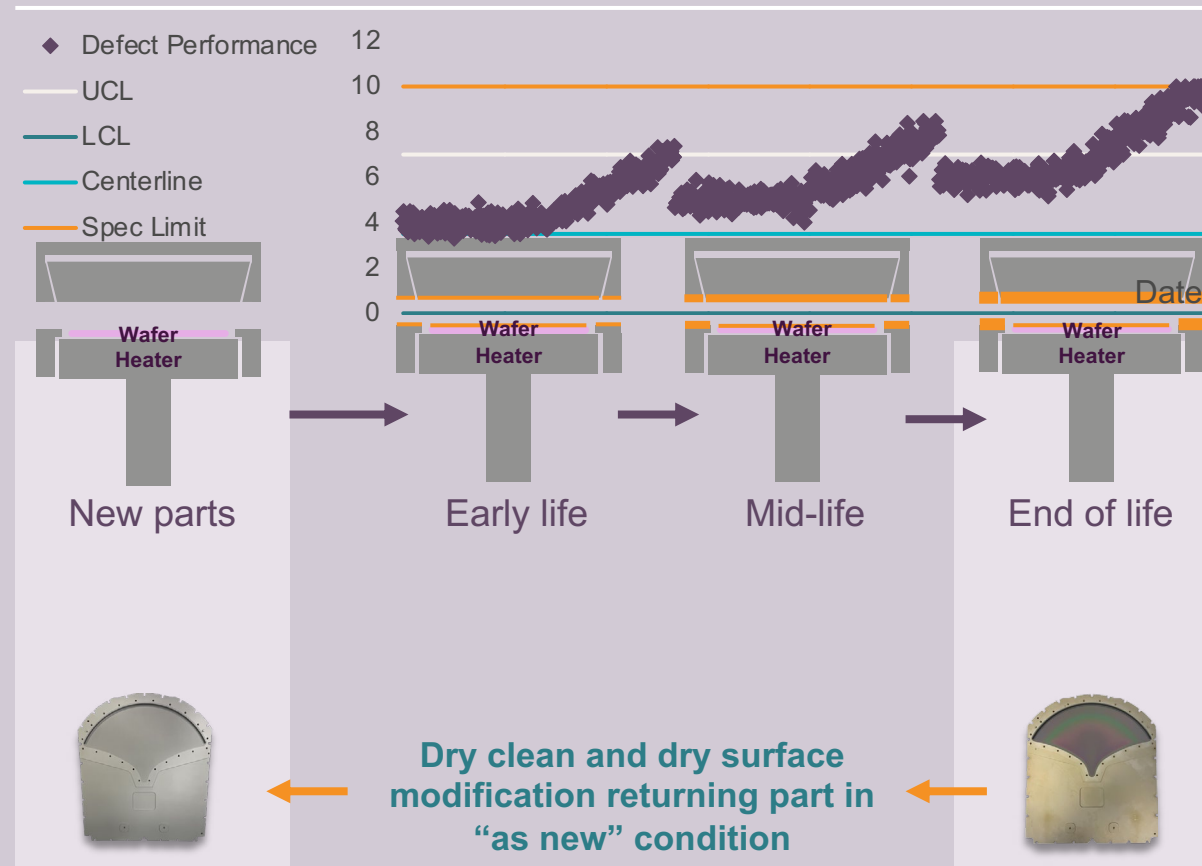
Innovation in Outcome-based services



Spares and service value creation through surface technologies

ALD film deposits on the wafer and reactor parts, eventually leading to out of spec condition

Defect count



Benefits of Outcome-based services:

Improved on-wafer performance (fewer defects)

Better availability (tool uptime)

Improved sustainability (better parts that last longer)

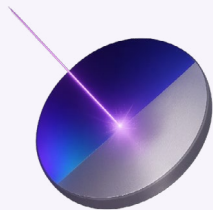
Lower cost of ownership by restoring used parts to "as new" conditions

New innovative surface technologies solutions

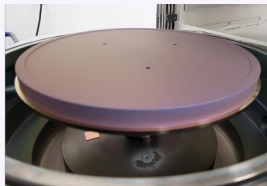


Cleaning and coatings

Dry cleaning



ALD coatings

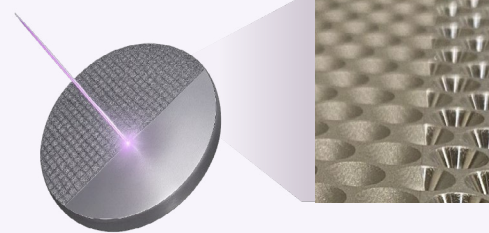


High selectivity cleans

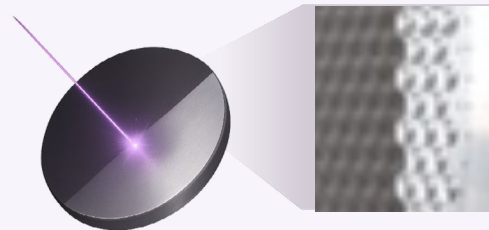
- Cleaner: dry cleaning
- Selective: ALD barrier films
- Enabling refurb and reuse

Surface modification

Adhesion control



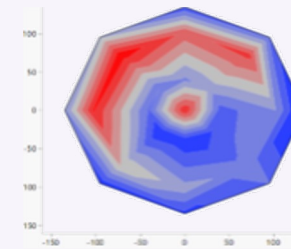
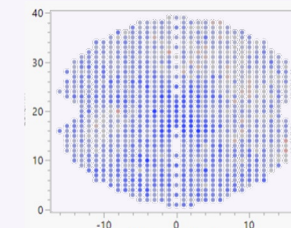
Thermal control



Adhesion and thermal control

- Reduced green-to-green
- Improved productivity

Quality control



Verify “as new” condition

- First time right
- Reduced green-to-green
- Matched kits

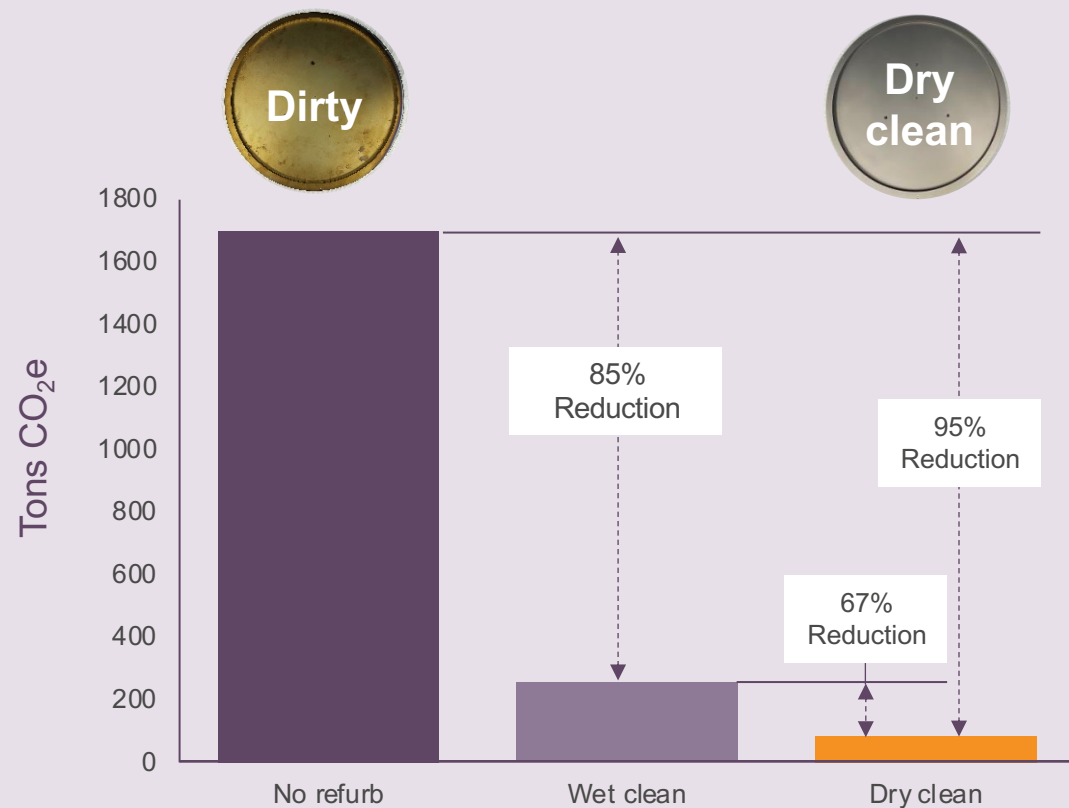
Outcomes-Based services:

Minimizing part-to-part variability, preserves process integrity, and extends component lifetime



Dry cleaning technologies offers significant business and sustainability benefits

Titanium process kits (500 kits example)



Parts cleaning

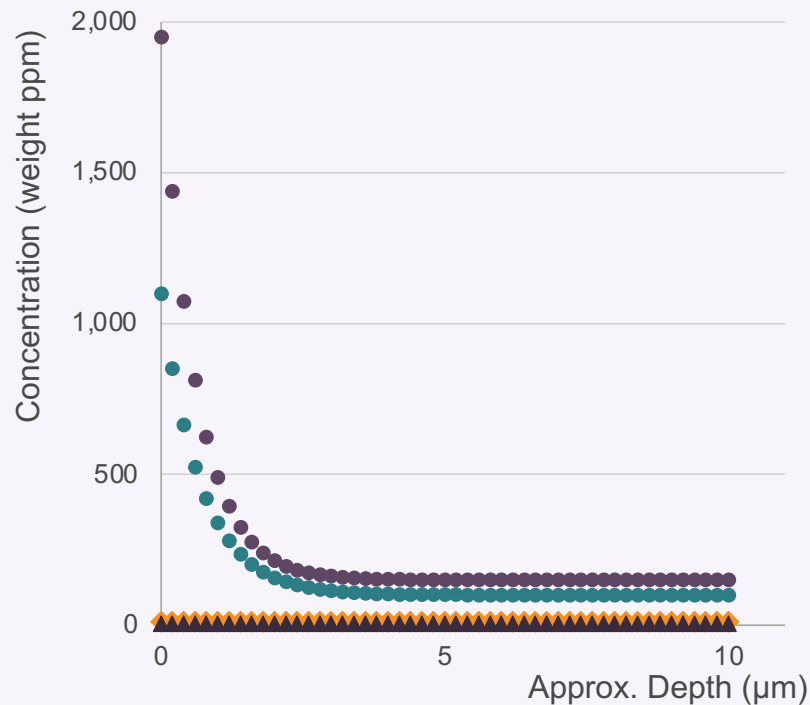
Wet etch is the standard today. Dry clean is a novel technology enabling sub-Angstrom precision that is critical to device performance and yield – in ALD *Every Monolayer Matters*

Parameter	Dry clean vs Wet clean
Substrate selectivity	10x improvement
Part lifetime	5x longer
Critical dimension control	5x improvement
Chemical usage	No highly toxic/hazardous acids used
Sustainability impact	>95% reduction
Business impact	>2x reduction in Cost of Ownership

Dry cleaning: precision and sustainability



Contamination (sodium ppm)



Current cleaning method:



Blast clean – ceramic media
Considerable byproduct

Novel cleaning method:



Dry clean – zero media
Minimal byproduct

Dry cleaning enables:

Precision selectivity = extending usable part lifetime by maintaining part critical dimensions clean after clean

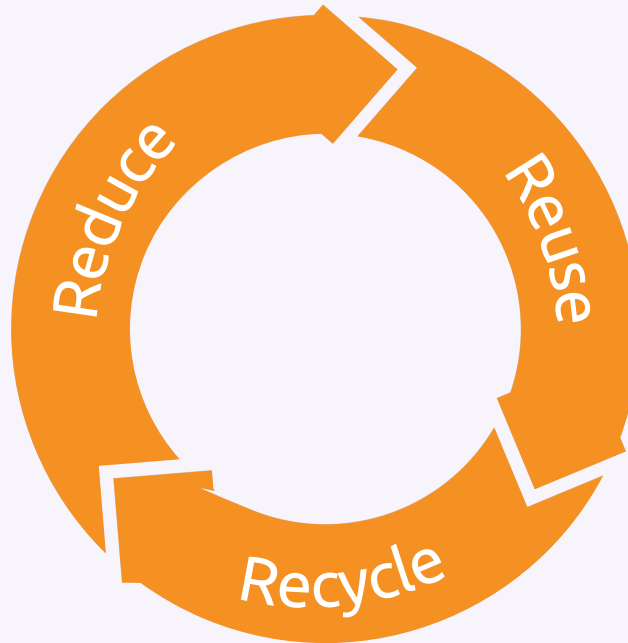
Selectivity is becoming critical as we transition to more complicated ALD films. Moving away from single element to 4, 5 or even 6 element films

Sustainable cleaning solution – no hazardous acids needed



Accelerating sustainability by reduce, reuse and recycle

- Chemicals
- DI water
- Blast media
- Bulk materials



- Parts
- Byproduct

- Parts
- Scrap
- Drop-off
- Waste

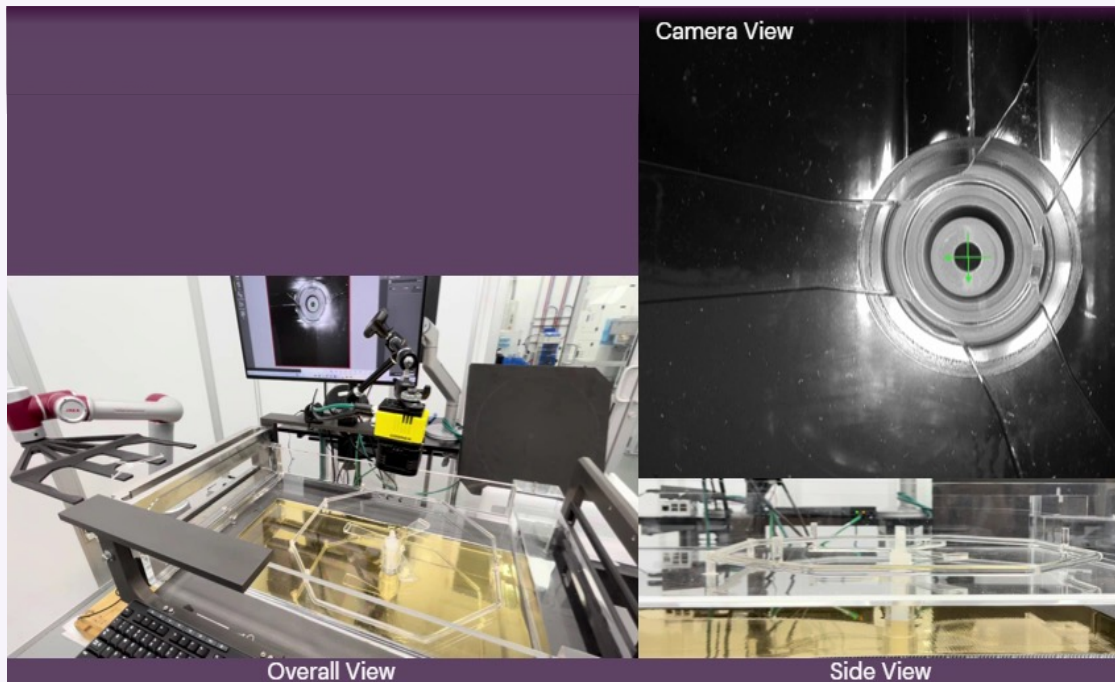
How

- Dry cleaning
- HQ coatings
- HS cleaning
- Metrology



Automation in maintenance to manage micron-level part placement control

PM-Bot system integrates a closed-loop vision system and advanced robotics



Automation in maintenance vs Manual operation

Green-to-green	25% better
First time right	50% reduction in errors
Precision	100% better precision

- Improved precision and repeatability needed for advanced technology nodes
- Accelerating overall maintenance efficiency through improved green-to-green and better first-time-right performance

Achieving micron-level part placement precision that is required for sub-Angstrom level on wafer thickness control

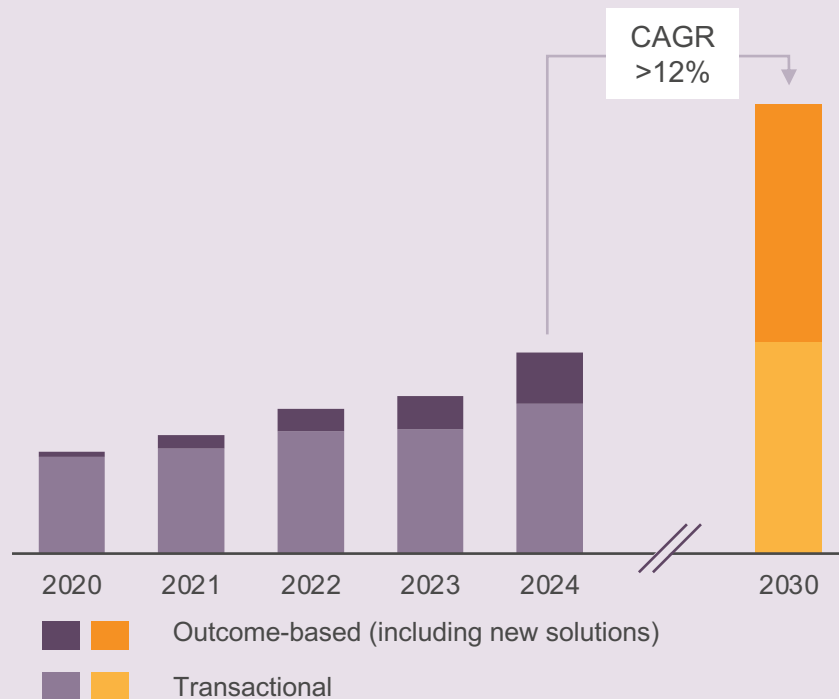
Spares and Services sales: growth driven by Outcome-based



Targeting continued growth in spares & services: >12% CAGR 2024-2030

Spares and Services revenue

(€ million)



Business growth drivers

Continued growth of our installed base – higher share of Outcome-based services on new products

>50% business coming from Outcome-based services by 2030

Key takeaways



1 Innovation

Innovation in our spares and service business has delivered Outcome-based solutions, creating measurable value for customers and drives growth.

2 Leverages our core competencies in chemistry

Our core competencies in chemistry and surface engineering is being applied to spares and services products to deliver Outcome-based solutions.

3 Outcome-based services

Delivers guaranteed performance such as tool availability and improved on wafer results through innovative environmentally friendly solutions.

4 New dry-cleaning Solutions

New technology that enables 10x selectivity which extends the usable part lifetime while driving sustainable manufacturing solutions.

5 Automation

To achieve Angstrom-level control in ALD and Epi requires micron-level control in part placement necessitating automation in maintenance.

The art of atomic layering

Eric Shero

Vice President and ALD
Key Product Unit Head



Key takeaways



1 Essential

ALD is essential technology for advanced, 3D structures.

2 Growth

Single-wafer ALD set to grow at 9-13% CAGR, outpacing WFE (6%)
Leading logic/foundry inflections and expanding in memory.

3 Legacy

Unparalleled legacy in ALD (50+ years).

4 Innovation

ASM leads ALD market and continuously innovates to stay ahead of what's next.

5 Clustering

New common platform drives enhanced clustering & productivity:
Couples surface clean and deposition solutions.

6 ALD+

ALD+ means advanced materials, chemical and technology solutions,
tackling high value problems.



3D scaling accelerating in logic and memory



Increasing device complexity

- **Increasing A/R**
(Aspect ratio)
- **Increasing SAE**
(Surface area enhancement)
- **Smaller CD**
(Critical dimension)
- **Narrowing process window**
 - Tighter thickness uniformity
 - Tighter composition control
 - Tighter electrical specifications

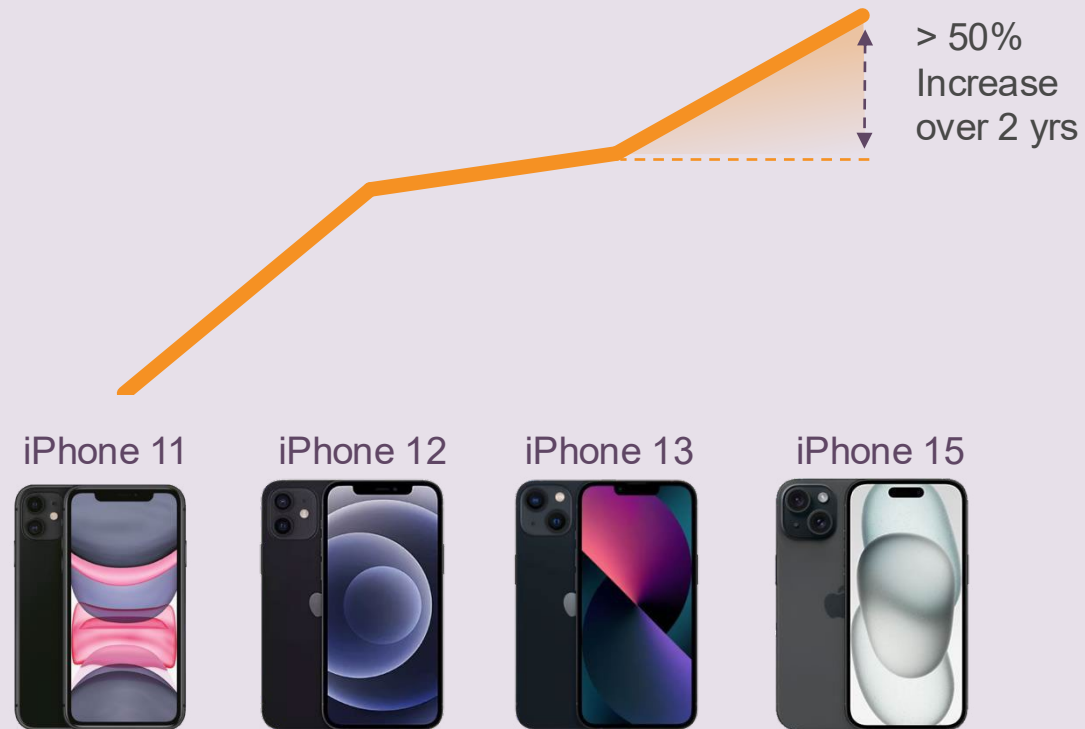
Industry moving towards ASM's ALD technology to solve scaling challenges



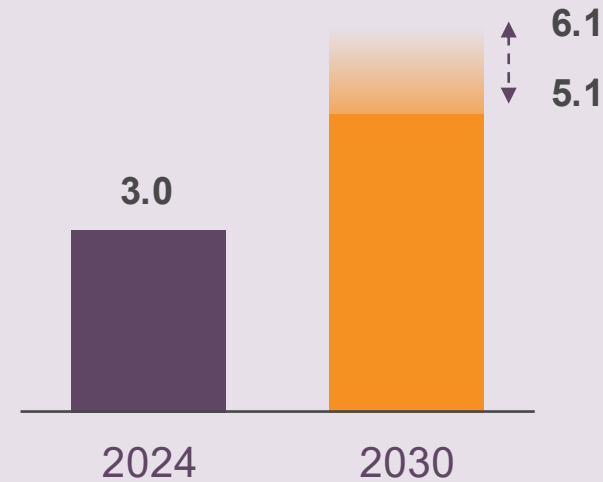
ALD adoption increasing

Increasing complexity in logic and memory boosts ALD demand

ALD layers¹ (#)



Single-wafer ALD market outlook (US\$ billion)



Single-wafer ALD market growth:

SW ALD market '24-'30 CAGR: 9-13%

WFE CAGR: 6% (2024: US\$110 billion, 2030: US\$155 billion)

1) Data sourced from ASM internal analysis and illustrative example only



Key steps in ALD cycle

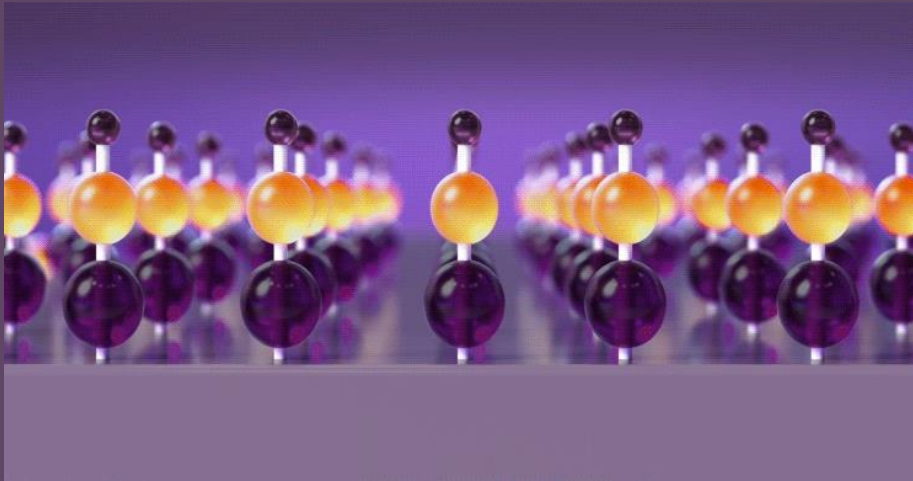
ALD is a surface-controlled, layer-by-layer process that deposits thin films one atomic layer at a time



Step 0

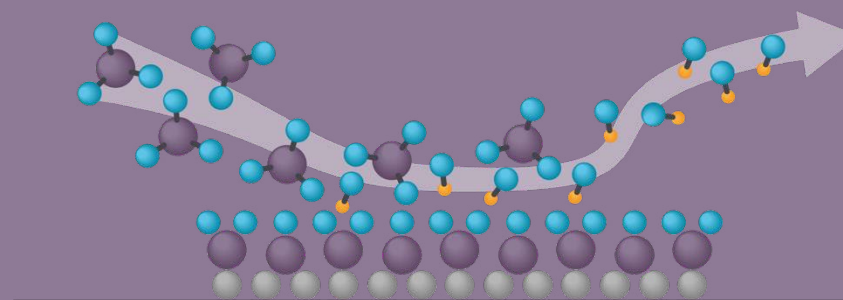
Start with a controlled surface

Key steps in ALD cycle



Precursor

By-products

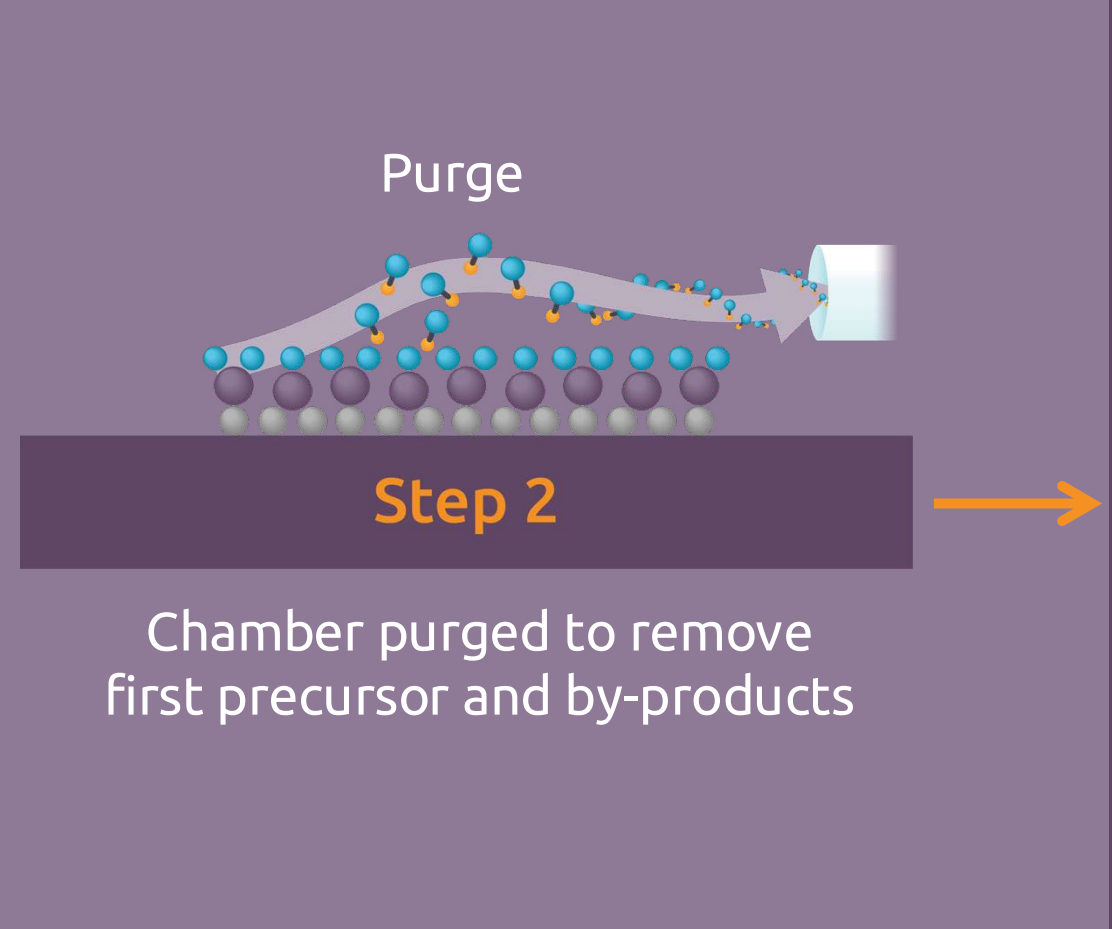
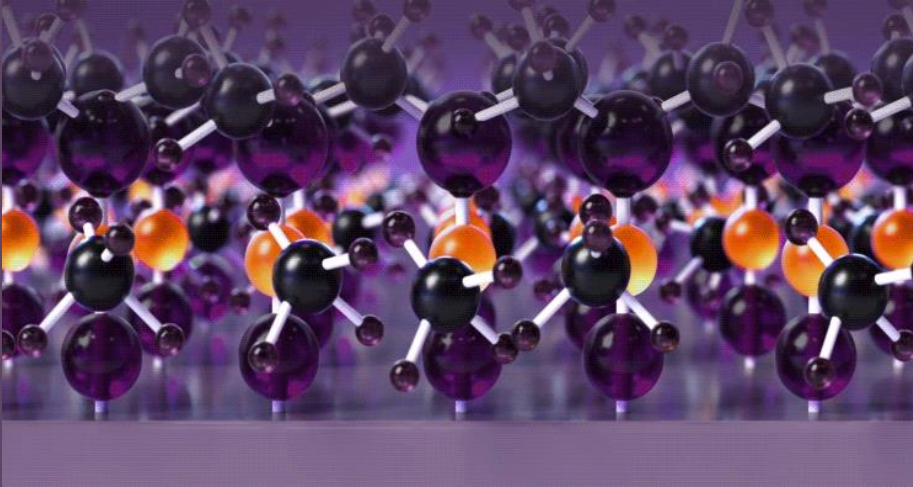


Step 1

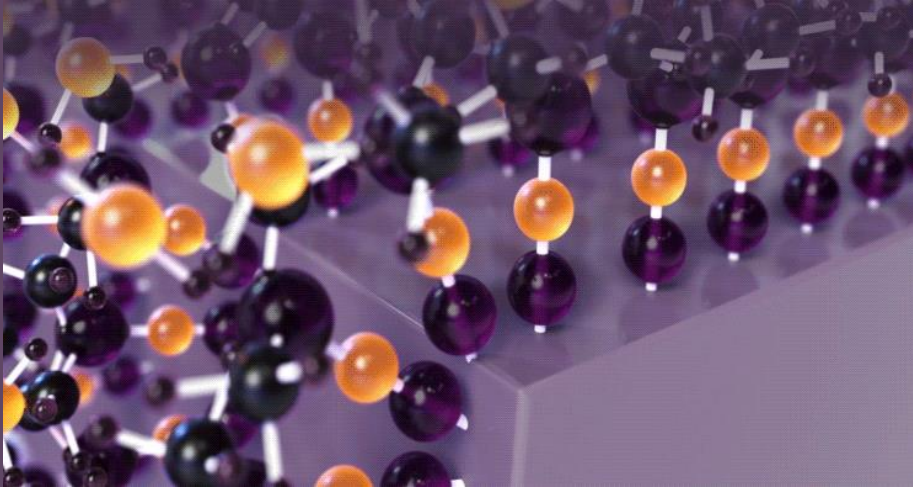


Expose substrate to first precursor “pulse”
Precursor reacts with surface species
and attaches

Key steps in ALD cycle

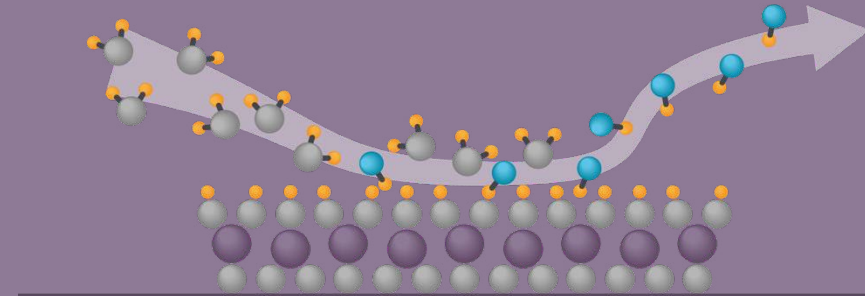


Key steps in ALD cycle



Co-reactants

By-products

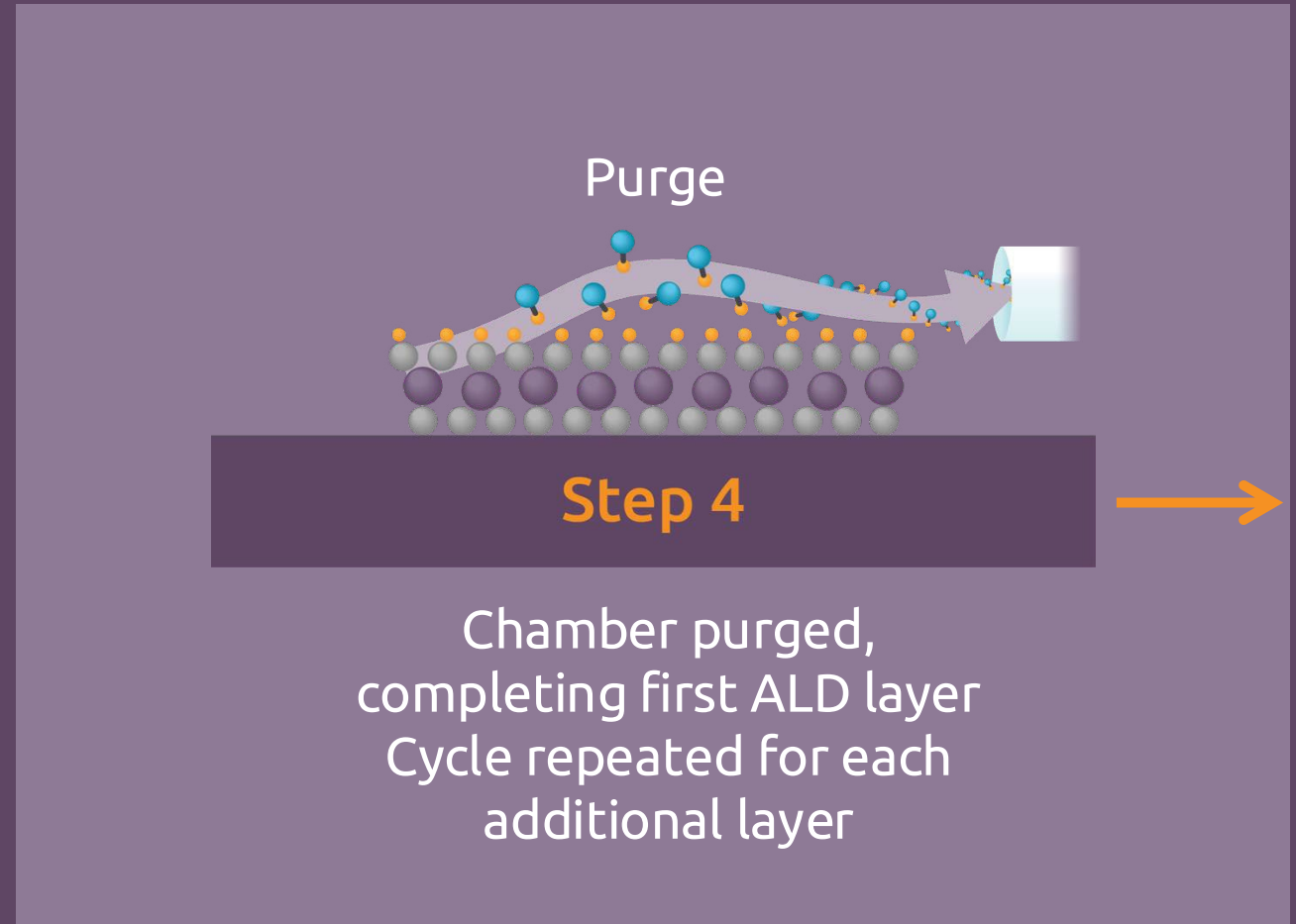
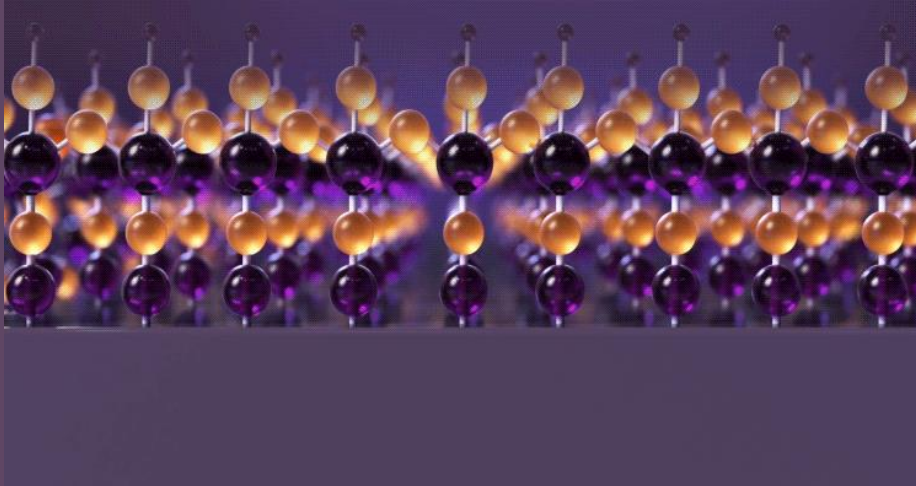


Step 3

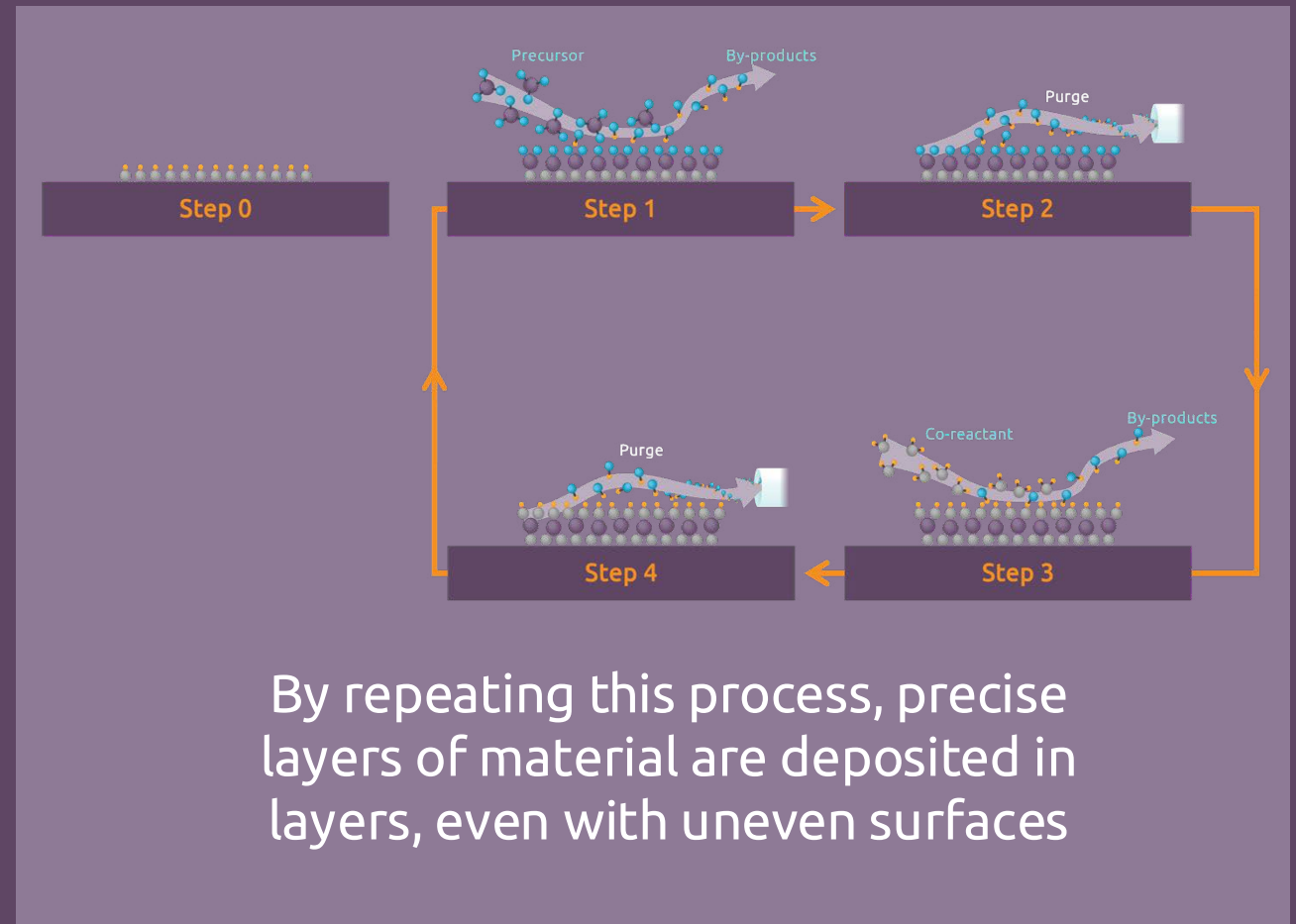
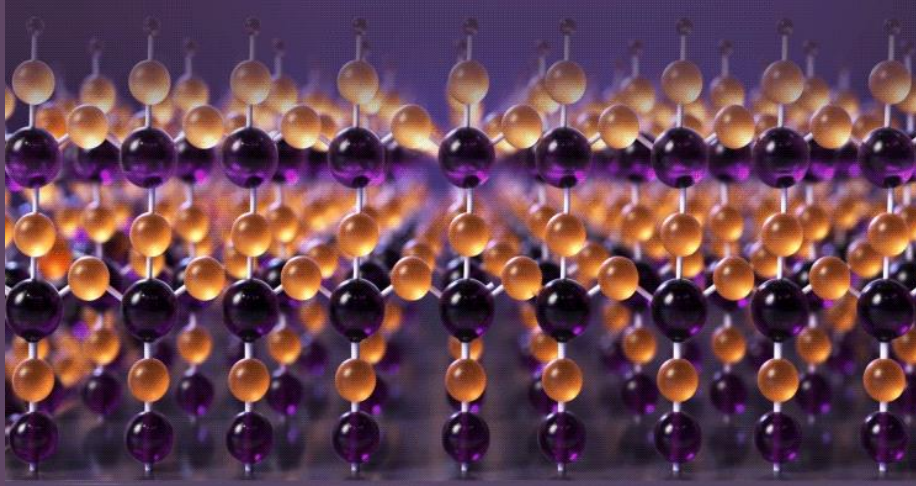


Expose substrate to second precursor (co-reactant) “pulse” to convert surface; often enhanced with plasma energy

Key steps in ALD cycle



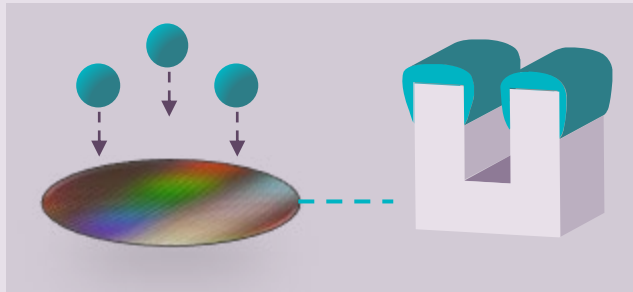
Key steps in ALD cycle



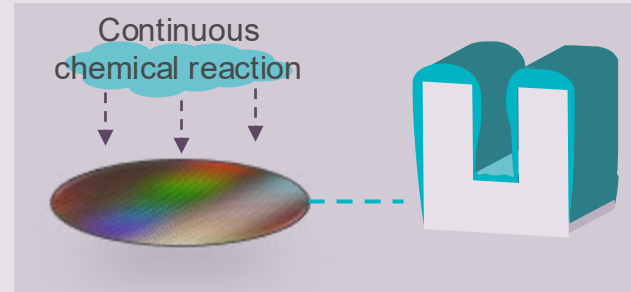
ALD geared for a 3D world



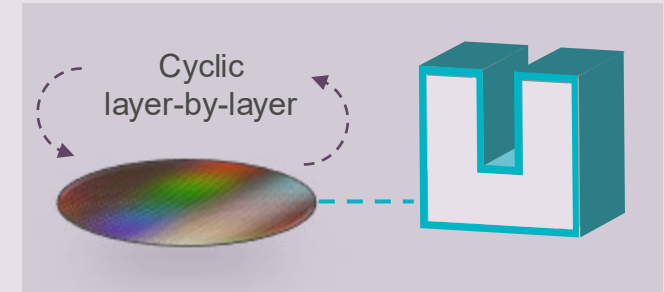
Physical Vapor Deposition (PVD)



Chemical Vapor Deposition (CVD)



Atomic Layer Deposition (ALD)



Mechanism

Physical transfer of material (sputtering)

Chemical reaction of gases

Sequential, self-limiting surface reactions

Directionality

Highly directional: Line-of-sight

Less directional than PVD

Non-directional, conformal deposition

Film growth

Unabated (no surface reaction control)

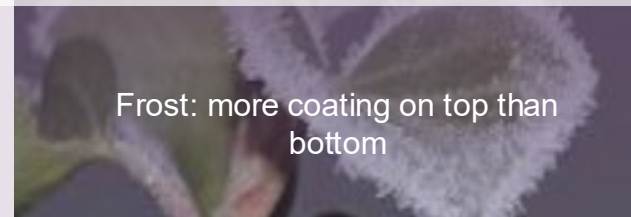
Unabated (Continuous growth on surface)

Abated (layer-by-layer precision)

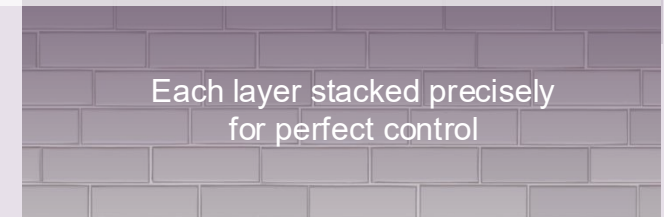
Travels straight and coats what it hits



Frost: more coating on top than bottom



Each layer stacked precisely for perfect control



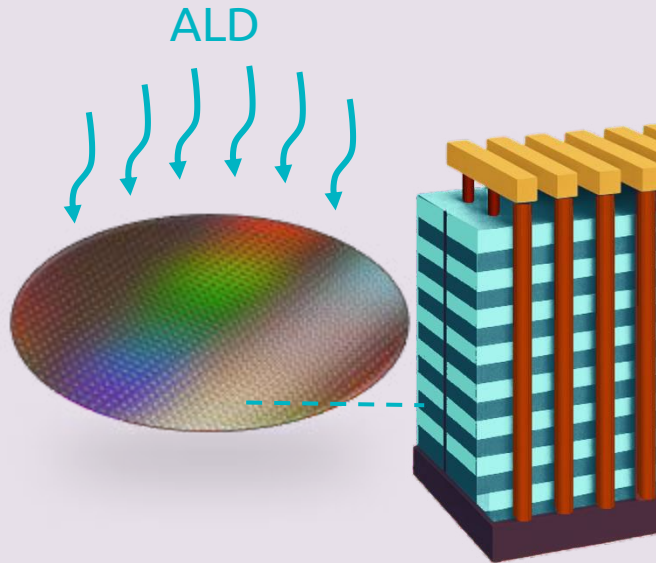
ALD's precise, uniform and conformal coating makes it ideal for next-gen devices



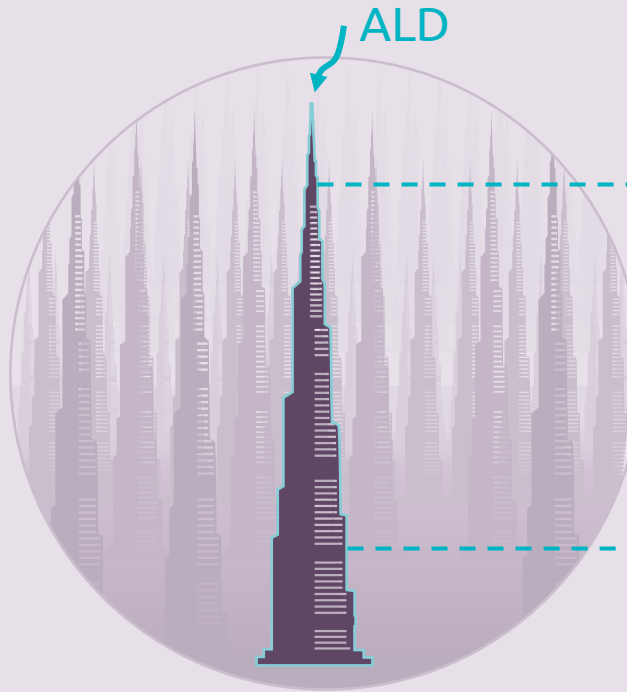
Coating Dubai with precision finer than human hair

Uniformity of ALD film across wafer and over high A/R structures ~ coating city packed with Burj Khalifa towers with a 5mm layer thickness with precision to within width of a human hair!

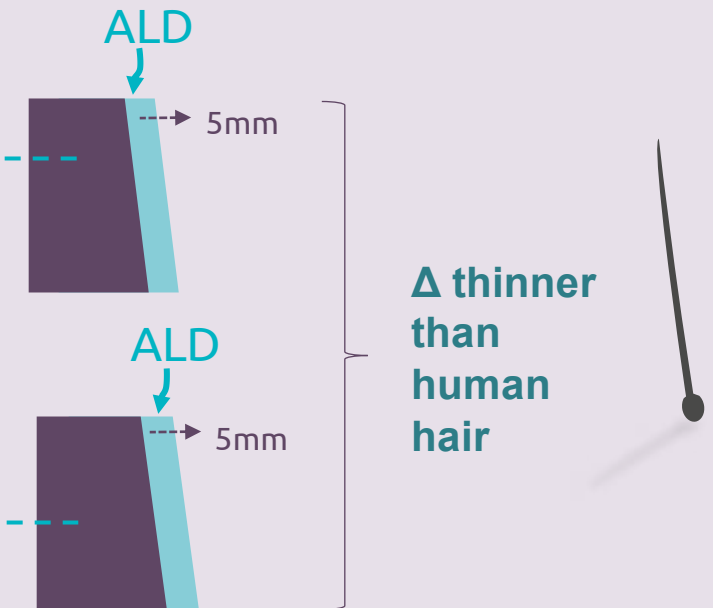
Depositing 1nm ALD film uniformly across a 300 mm wafer over trillions of HAR features



Coating all Dubai with 5mm ALD film full of MANY Burj Khalifa



Uniformly coating entire city



Standard deviation (1 sigma) in thickness is less than the width of a human hair



In 3 years, device aspect ratio will exceed equivalent of stacking 50 Burj Khalifa towers vertically, reaching beyond stratosphere and coating with same precision

ASM is market leader in ALD



ASM is market leader in ALD



- **ASM's ALD legacy: 50+ yrs**
- Solving ALD's toughest challenges
- Largest product portfolio to address diverse application needs
- ASM expands ALD-compatible materials
- Prolific & impactful IP portfolio



1974

Dr. Suntola invents ALD (ALE)



1987

Microchemistry (MC) founded in Helsinki (Neste)



1998

First 200mm Pulsar® released



1999

ASM acquires MC from Neste



2000

Acquired Sherman PEALD patents



2004

Genitech acquisition



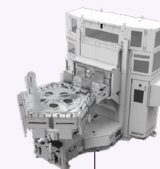
2008

Semiconductor International – Pulsar® "PoY" "Switch is On" launched at SEMICON



2018

ASM introduces Synergis®, a dual chamber thermal ALD product



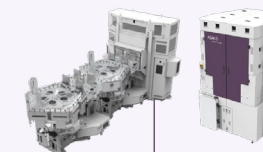
2019

ASM introduces XP8® quad chamber module



2022

Acquisition of Reno Sub-Systems



2024

ASM introduces Prominis® ALD and XP8E® platform

50+ years driving innovation in ALD

ASM is market leader in ALD



- ASM's ALD legacy: 50+ yrs
- **Solving ALD's toughest challenges**
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Industry Problem

Reactor challenges

Non-uniform precursor delivery/plasma
Parasitic CVD
Thermal uniformity
Radical/ion recombination
Plasma damage



ASM Solutions

Reactors Designed for ALD

- ✓ Tools conceived for ALD
- ✓ Small volume reactors; cross-flow and showerhead type
- ✓ Integrated pulse valves
- ✓ Tykon™ EVC plasma control with fast impedance matching and less variation

Pulsar®



QCM™



Precursor issues

Soft-saturation
Precursor decomposition
Steric hindrance
Necessary volatility
Byproduct interaction



Precursor Innovation Sphere

Precursor development strategy:

- ✓ Best network (in-house/partner chemical scientists)
- ✓ Co-located with ASM hardware

Precursor delivery:

- ✓ Best temperature uniformity
- ✓ Increasing chemical dose/sources



University of Helsinki and ASM Chemical Innovation Group (taken in 2023)

Surface effects

Poorly functionalized surfaces
Contaminated surfaces
Outgassing
Topography
Surface and precursor interaction



Integrated solutions

Clustering for modular co-development

- ✓ Clean (thermal/plasma)
- ✓ Treat (inhibit, functionalize)
- ✓ Controlled environment

Tession®



XP8E®



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Wide range of technically differentiated ALD products on new platform to enable enhanced clustering & productivity for a range of applications and fab volumes

Single

High-k, dipole and work function

Pulsar®



EmerALD®



High quality oxides, carbides and nitrides

Dual

Patterning, high-k, WF, conducting nitrides, metallization, liner/gapfill, interfacial eng/clustered films

Synergis®



Formis®/Formion®



Magma®



Valion®



Silicon oxides, metal oxides, metal nitrides, metals, clean/treatment

DCM™



Quad

HAR gap-fill, TSV liner, low-k liner, SiN liner metallization, high-k, interfacial eng/clustered films

QCM™



Arius™



JQCM™



Tession®

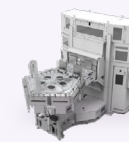


HT silicon oxides/doped oxides, silicon nitrides, metal oxides, nitrides, metals, clean/treatment

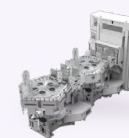
Platform

New platform with integrated AI/ML

XP8®



XP8E®



Tailored ALD solutions for every customer need



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Elements
accessed
by ALD

1980's

1 H 1.008 Hydrogen																	2 He 4.002602 Helium				
3 Li 6.94 Lithium	4 Be 9.0121831 Beryllium															5 B 10.81 Boron	6 C 12.011 Carbon	7 N 14.007 Nitrogen	8 O 15.999 Oxygen	9 F 18.998403163 Fluorine	10 Ne 20.1797 Neon
11 Na 22.98976928 Sodium	12 Mg 24.305 Magnesium															13 Al 26.9815385 Aluminium	14 Si 28.085 Silicon	15 P 30.973761998 Phosphorus	16 S 32.06 Sulfur	17 Cl 35.45 Chlorine	18 Ar 39.948 Argon
19 K 39.0983 Potassium	20 Ca 40.078 Calcium	21 Sc 44.955908 Scandium	22 Ti 47.867 Titanium	23 V 50.9415 Vanadium	24 Cr 51.9961 Chromium	25 Mn 54.938044 Manganese	26 Fe 55.845 Iron	27 Co 58.933194 Cobalt	28 Ni 58.6934 Nickel	29 Cu 63.546 Copper	30 Zn 65.38 Zinc	31 Ga 69.723 Gallium	32 Ge 72.630 Germanium	33 As 74.921595 Arsenic	34 Se 78.971 Selenium	35 Br 79.904 Bromine	36 Kr 83.798 Krypton				
37 Rb 85.4678 Rubidium	38 Sr 87.62 Strontium	39 Y 88.90584 Yttrium	40 Zr 91.224 Zirconium	41 Nb 92.90637 Niobium	42 Mo 95.95 Molybdenum	43 Tc 98 Technetium	44 Ru 101.07 Ruthenium	45 Rh 102.90550 Rhodium	46 Pd 106.42 Palladium	47 Ag 107.8682 Silver	48 Cd 112.414 Cadmium	49 In 114.818 Indium	50 Sn 118.710 Tin	51 Sb 121.760 Antimony	52 Te 127.60 Tellurium	53 I 126.90447 Iodine	54 Xe 131.293 Xenon				
55 Cs 132.90545196 Caesium	56 Ba 137.327 Barium	57 La 138.90547 Lanthanum	72 Hf 178.49 Hafnium	73 Ta 180.94788 Tantalum	74 W 183.84 Tungsten	75 Re 186.207 Rhenium	76 Os 190.23 Osmium	77 Ir 192.217 Iridium	78 Pt 195.084 Platinum	79 Au 196.966569 Gold	80 Hg 200.592 Mercury	81 Tl 204.38 Thallium	82 Pb 207.2 Lead	83 Bi 208.98040 Bismuth							
			58 Ce 140.116 Cerium	59 Pr 140.90766 Praseodymium	60 Nd 144.242 Neodymium	61 Pm 145 Promethium	62 Sm 150.36 Samarium	63 Eu 151.964 Europium	64 Gd 157.25 Gadolinium	65 Tb 158.92535 Terbium	66 Dy 162.50 Dysprosium	67 Ho 164.93033 Holmium	68 Er 167.259 Erbium	69 Tm 168.93422 Thulium	70 Yb 173.054 Ytterbium	71 Lu 174.9668 Lutetium					

ASM has developed reference processes for >70% of the elements cited in ALD literature

Source: www.atomiclimits.com/alddatabase



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Our growth strategy to 2030

Opportunities and growth through technology inflections

Service innovation and automation

The art of atomic layering

Delivering long-term value

Investor Day 2025

102



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- ASM expands ALD-compatible materials
- **Prolific & impactful IP portfolio**

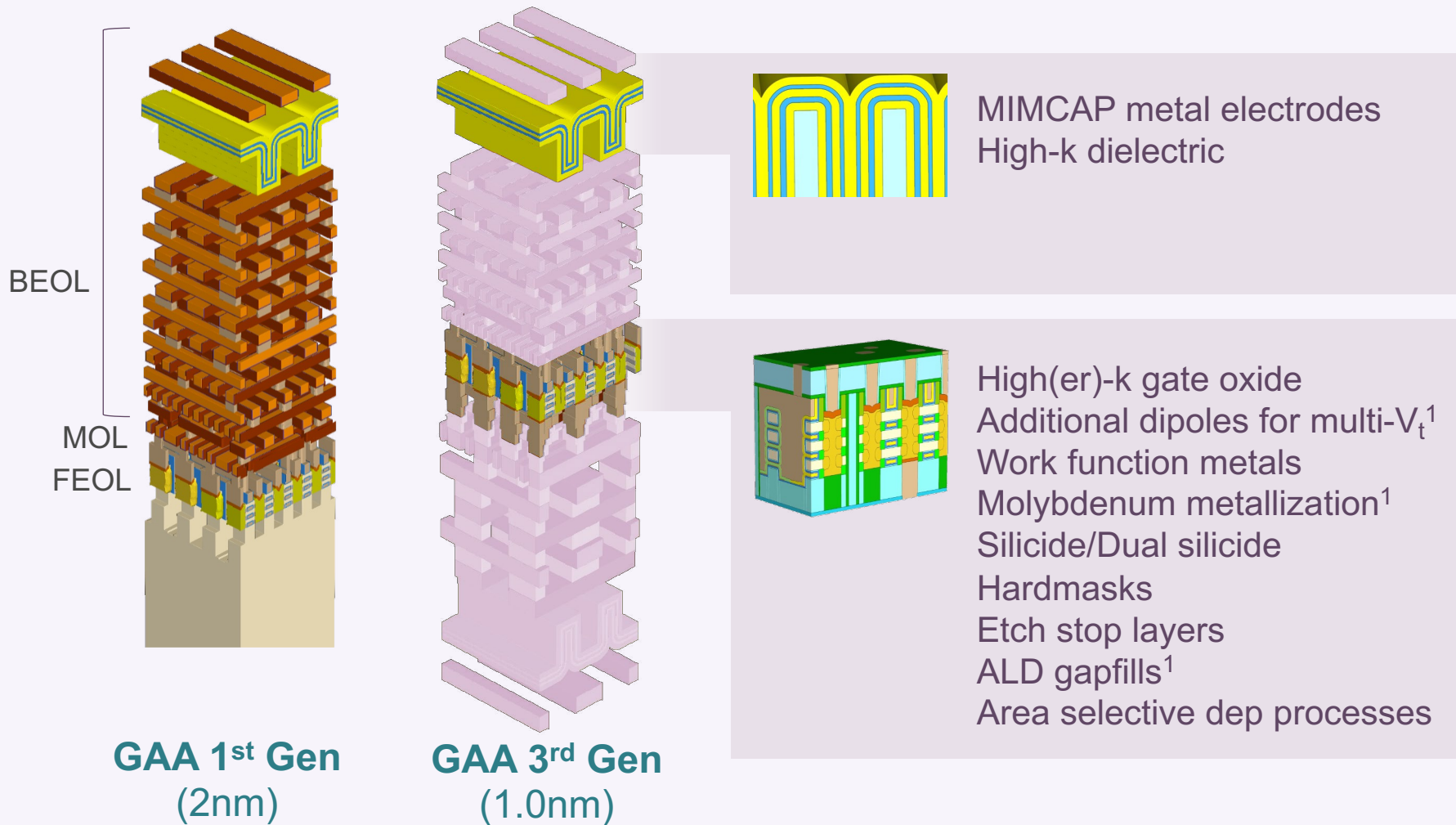
Competitive impact



Source: LexisNexis® PatentSight® (November 2024), for more information, please visit <https://www.lexisnexisip.com/resources/atomic-layer-deposition-thin-layers-are-a-big-thing/>



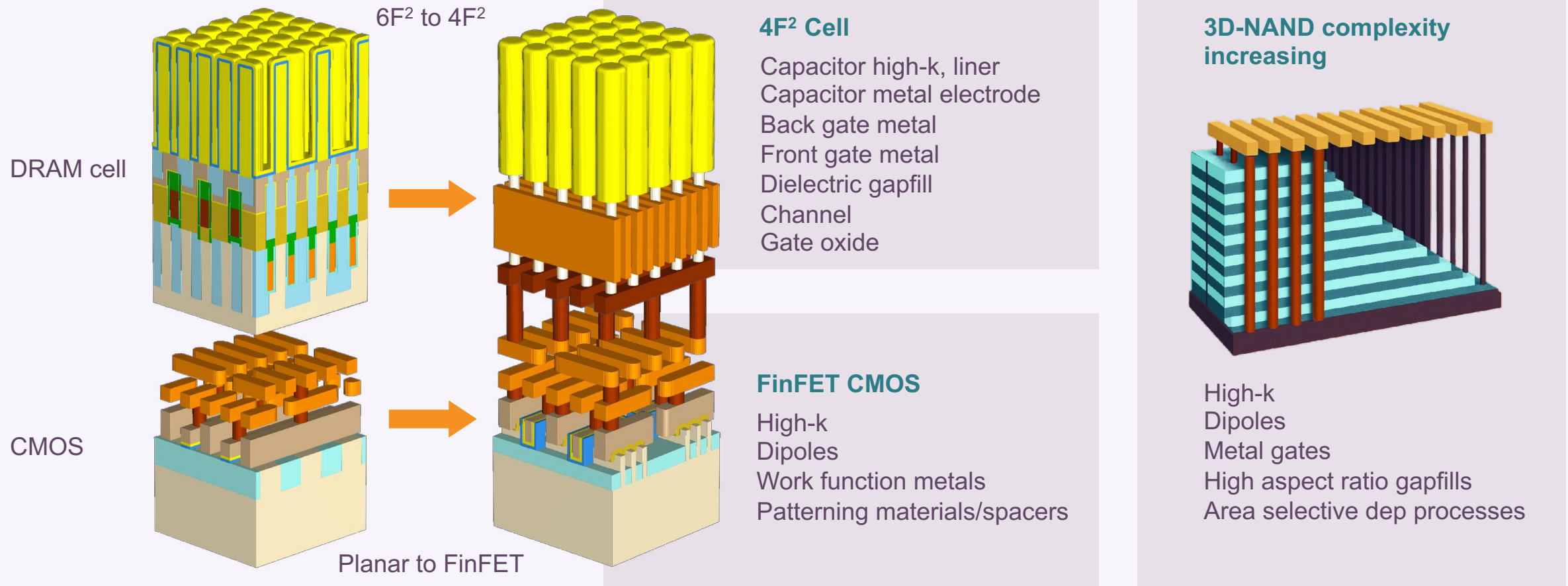
Increasing GAA complexity drives ALD growth



More ALD materials and passes needed with GAA technology scaling

1) Deepdive

Memory transitions accelerate ALD adoption





ALD is essential for 3D scaling
of functional and gapfill layers
ASM excels in solving many
high value problems with
unique solutions

Deep dive

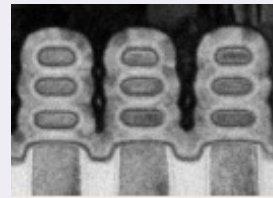
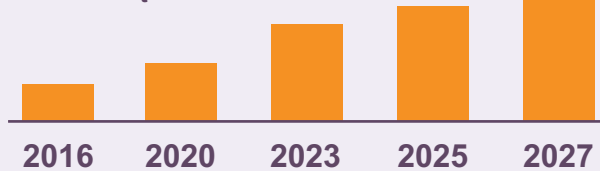
ASM dipole technology meets growing V_t tuning needs



GAA driving more stringent functional film requirements only met by ALD

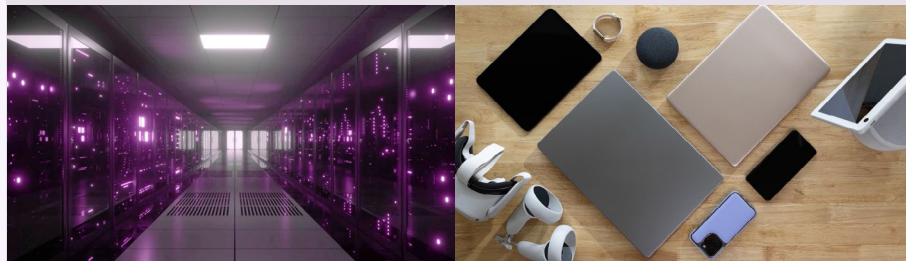
V_t s increase node over node

Total V_t s



More V_t levels

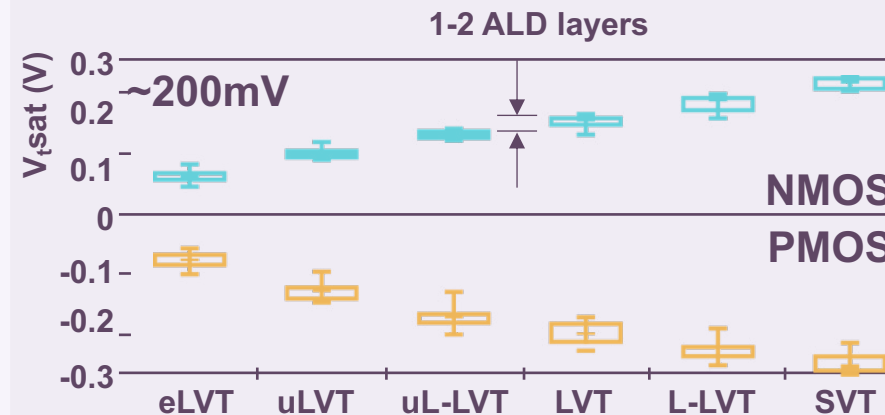
Needed to optimize power and performance enabled by “zero-volume” dipoles



Low V_t
for increased
performance

High V_t
for reduced power
consumption

Reducing gap between V_t levels



- New dipole materials and atomic scale precision required to shift and tune V_t with necessary separation
- Multiple ALD pattern assist layers needed to place dipoles

ASM advancing multi- V_t with precisely controlled dipole layers

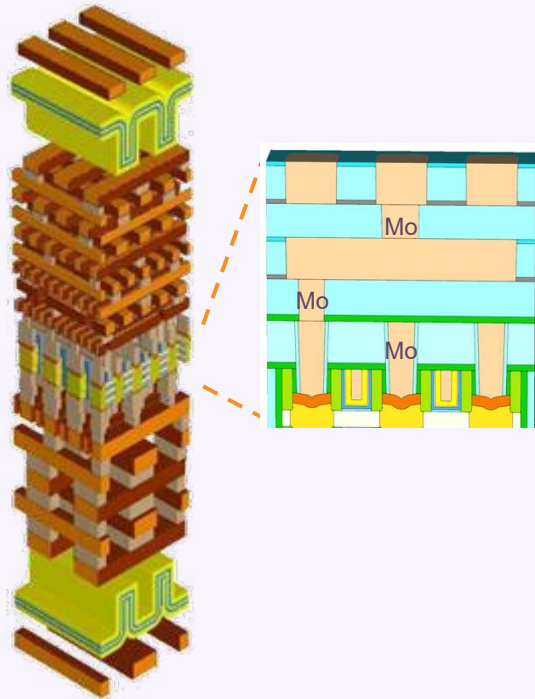
Source: S.-Y. Wu et al, IEDM 2022 (TSMC 3nm)

Integrated solution for molybdenum metallization



Requirements

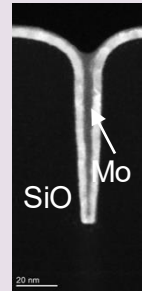
Low resistivity (seam-free),
non-damaging, low temperature
Mo metallization solution for via
and trench fill in Logic



PEALD and thermal Mo ALD with integrated surface clean

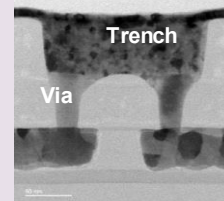
PEALD Mo Liner

<400C,
seam free
conformality,
low resistivity



Tession®

Thermal ALD trench fill



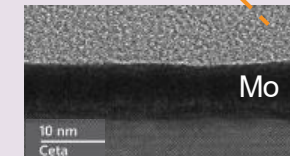
Prominis®

Solid source

Leader in solid
chemistry
management



Formion®

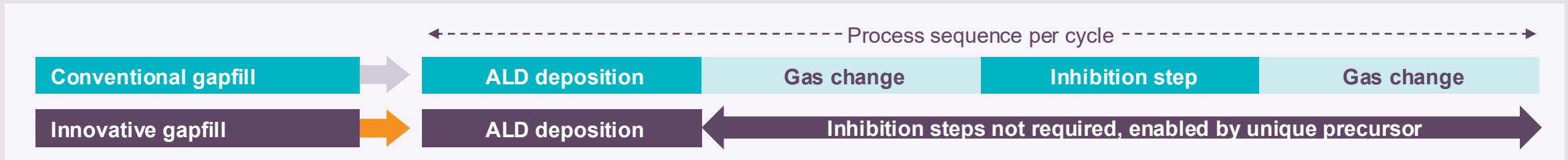


Atomically smooth
interface via
surface clean

Flexible, multi-process
integrated solution
for all molybdenum
metallization
challenges




Innovations for vertical and lateral ALD gapfill



Lateral gapfill

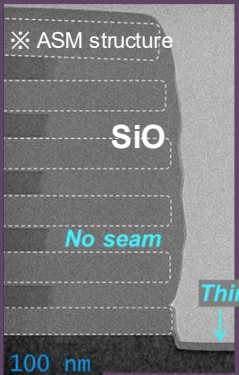
Challenges



Seam

- Seams in lateral trench
- Minimal deposition on side and bottom

ASM solutions



※ ASM structure

SiO₂

No seam

Thin

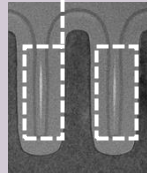
100 nm

Seamless gapfill in lateral trenches with thin film at side and bottom

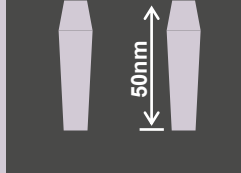
Vertical gapfill

Challenges

Logic Re-entrant narrow CD



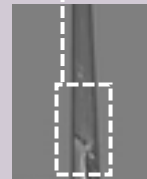
Seam



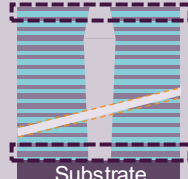
<6nm

50nm

3D-NAND High aspect ratio, >250:1



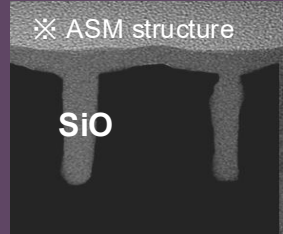
Void



Substrate

ASM solutions

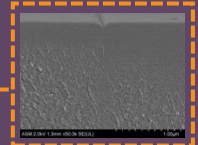
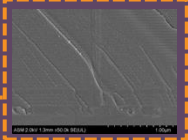
Gapfill without seams and void-free



※ ASM structure

SiO₂

Void-free



Providing innovative solutions for future nodes' challenging demands on HVM-proven hardware



Key takeaways

1 Essential

ALD is essential technology for advanced, 3D structures.

2 Growth

Single-wafer ALD set to grow at 9-13% CAGR, outpacing WFE (6%)
Leading logic/foundry inflections and expanding in memory.

3 Legacy

Unparalleled legacy in ALD (50+ years).

4 Innovation

ASM leads ALD market and continuously innovates to stay ahead of what's next.

5 Clustering

New common platform drives enhanced clustering & productivity:
Couples surface clean and deposition solutions.

6 ALD+

ALD+ means advanced materials, chemical and technology solutions,
tackling high value problems.

Investing for growth, delivering long-term value

Paul Verhagen

CFO

Key takeaways



1 Value for stakeholders

ASM Growth through Innovation strategy is creating significant value for stakeholders.

2 Guidance 2027

Guidance 2027: revenue adjusted for currency only to €3.7-€4.6 billion and margins increased.

3 Guidance 2030

New guidance for 2030 is as follows:

- Revenue of more than €5.7 billion, representing a 2024-2030 CAGR of at least 12%, outperforming WFE.
- Gross margin target range increased to 47%-51%
- Operating margin target range increased to 28%-32%. Target >30% by 2030.

4 Operating expenses

Continue low double-digit % investment in net R&D while SG&A is expected to decrease to below 7% in 2030, both as % of total sales.

5 Capital allocation

Capital allocation policy unchanged. Investment in growth remains the key priority with excess cash returned to shareholders.

6 Net Zero 2035 target

Driving sustainability is not only a license to operate, it also makes business sense.

Note: All numbers presented throughout this presentation are adjusted numbers excluding purchase price allocation adjustment



Growth through Innovation strategy has created significant value over FY20 - FY24

€1.0 billion

Total cash returned
to shareholders

€1.6 billion¹

Accumulated free cash flow

36.5%²

Average ROIC

22.0%

Revenue CAGR

48.7%

Average gross margin

27.0%

Average operating margin

100%

Renewable electricity since
2024

-85%

Reduction in scope 1 and 2
emissions (2024 vs 2020)

1) Excluding ASMPT dividends and acquisitions

2) Excluding share of income from ASMPT and equity value and cash



Latest view FY25

- ASM expects Q3 2025 revenue to be as previously guided.
- Q4 2025 revenue to be below earlier expectations. This is due to lower-than-expected demand in leading-edge logic/foundry, with a mixed picture per customer, as well as lower demand in the power/wafer/analog markets.
- For this reason, revenue in the second half of 2025 is expected to be 5%-10% lower compared to the first half of 2025 at constant currencies.
- For bookings, the above-mentioned demand weakness is projected to result in a book to bill of below 1 in the second half of 2025.
- The updated guidance for H2 2025 implies that revenue growth (at constant currencies) for the full year 2025 will be at the lower end of the previously guided range of 10%-20%.
- For the full year 2025, we still expect to grow strongly in leading-edge logic/foundry. The structural outlook for this market segment remains strong.



Excess cash returned to shareholders

Dividend per share

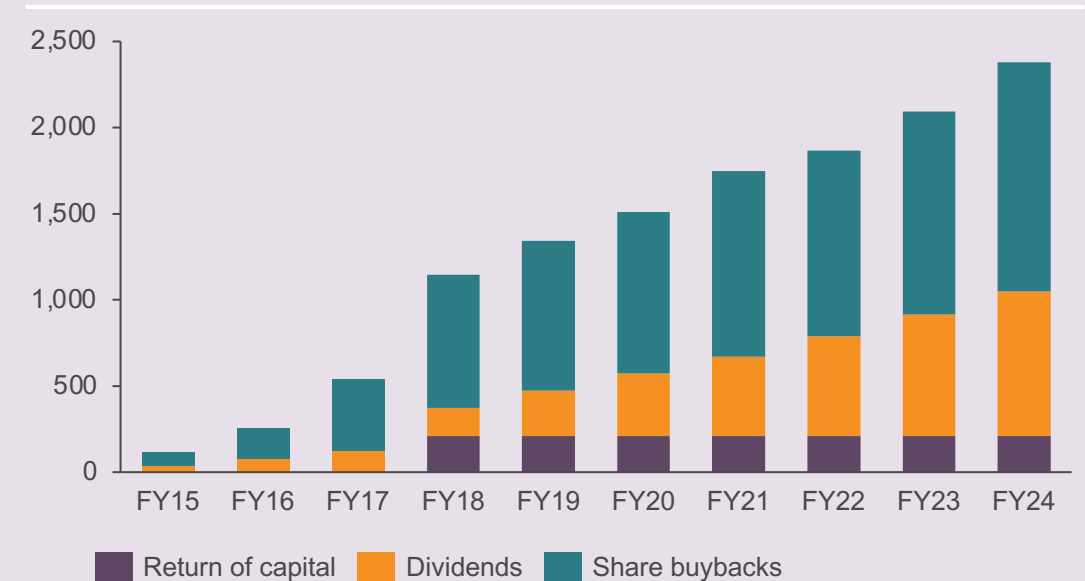
(in € paid over)



Dividends gradually increased from €0.70 per ordinary share in FY15 to €3.00 in FY24

Cumulative cash returned to market

(€ million)



Cash returned to shareholders

- More than €2.3 billion cash returned since FY15 of which approximately:
 - €1.3 billion in share buyback
 - €0.8 billion in dividends
 - €0.2 billion in return of capital

Strong total shareholder return



Total cumulative shareholder return



Note: Indexed total return ASM vs. AEX and SOX as of January 2020, up to September 2025

Status update on FY27 guidance





2027 revenue guidance adjusted for currency only, margins increased

	FY 2027	Current view
Revenue	€4.0-€5.0 billion	€3.7-€4.6 billion adjusted for currency ¹
Gross margin %	46%-50% (FY26-FY27)	47%-51% (FY26-FY27)
SG&A % revenue	High single digit (FY26-FY27)	High single digit (FY26-FY27)
R&D (net) % revenue	High single digit to low double digit (FY26-FY27)	Low double digit (FY26-FY27)
Operating margin %	26%-31% (FY26-FY27)	28%-32% (FY26-FY27)
Effective Tax Rate %	High teens to low twenties (FY26-FY27)	Low twenties (FY26-FY27)

1) Revenue adjusted based on USD/EUR 1.17.

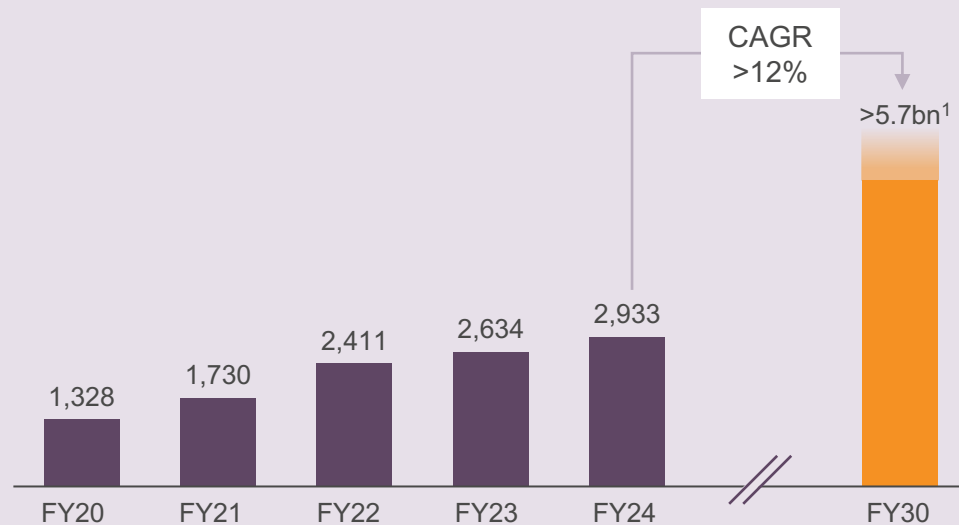
Targets for FY30



Revenue target of more than €5.7 billion in FY30, outgrowing WFE market

Revenue

(€ million)



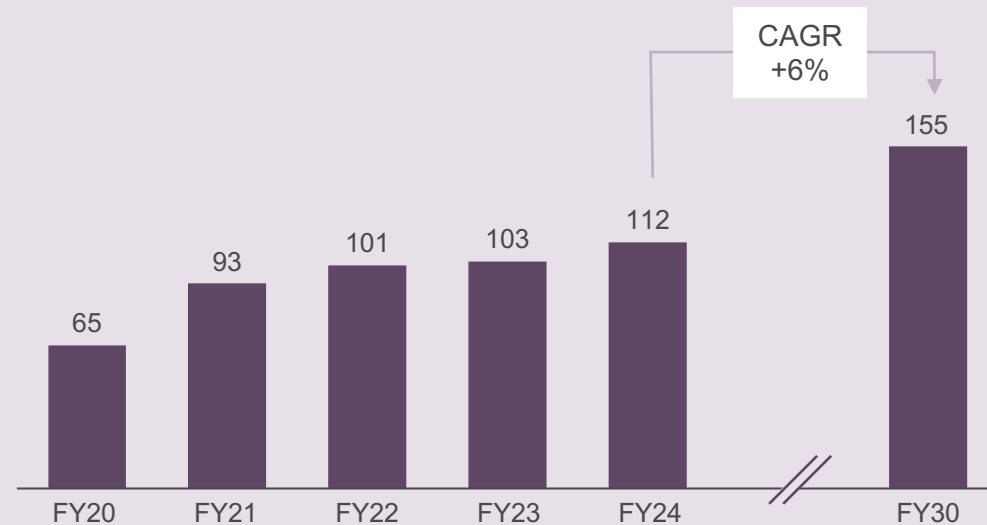
Growth drivers for period '25 – '30:

- Growth of end markets
- Growth and composition of WFE market
- Increased ALD intensity with new inflections and maintain ALD market leadership in logic/foundry and grow memory, in particular DRAM
- Increased Epi intensity with new inflections and market share gains
- Grow in advanced packaging applications
- Spares and services > grow Outcome-based services

1) At comparable currencies

WFE market forecast

(US\$ billion)



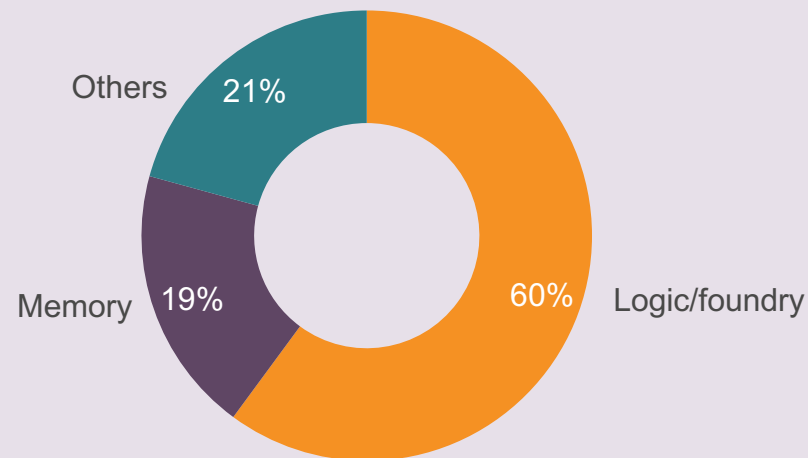
Source: Historical WFE: TechInsights (June 2025); 2030 WFE: ASM internal analysis

ASM expects to outgrow the WFE market over the next six years



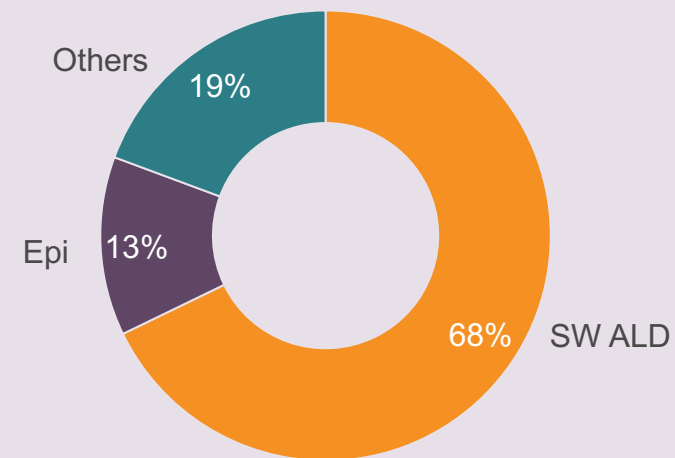
Highest exposure in logic/foundry and ALD

Revenue by served market as % of equipment revenue
(average FY20-FY24)



- Leading-edge logic/foundry is the key growth driver
- Mature logic/foundry contribution has also been robust in 2023/2024, particularly from the Chinese market
- Memory has on average been the smaller segment in recent years, but represents a strategic growth area for ASM
- The Others segment mainly consists of the power/analog/wafer segments

Revenue by product as % of equipment revenue
(average FY20-FY24)

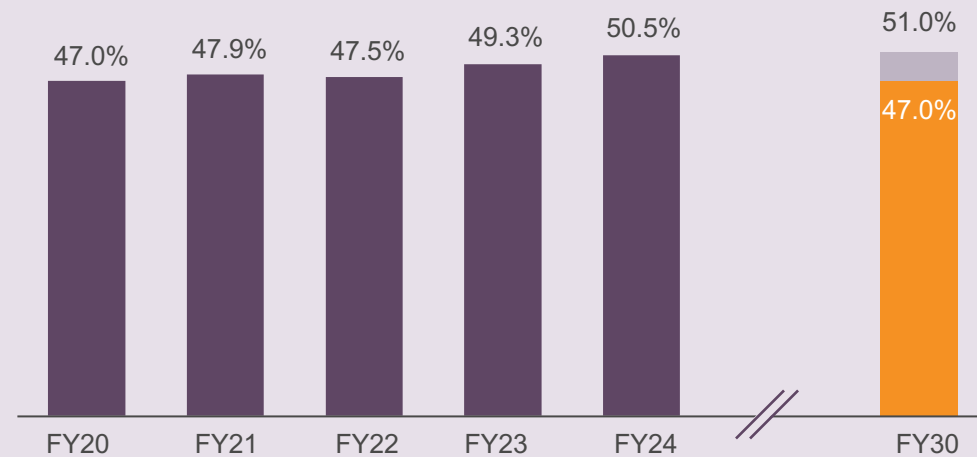


- ALD represents the largest part of sales
- We have a growing position in Si Epi, driven by market share gains in the leading-edge logic/foundry market
- The Others category consists of vertical furnaces, PECVD and SiC Epi, in which we target selective growth opportunities

Mid-term gross margin guidance increased to 47%-51%



Gross margin



Factors affecting gross margin:

Sales price development

Application and customer mix

Cost efficiencies:

- Supply chain improvements, e.g., Merge in Transit (MIT)
- Standardization and commonality of platforms
- Value engineering

Operating leverage

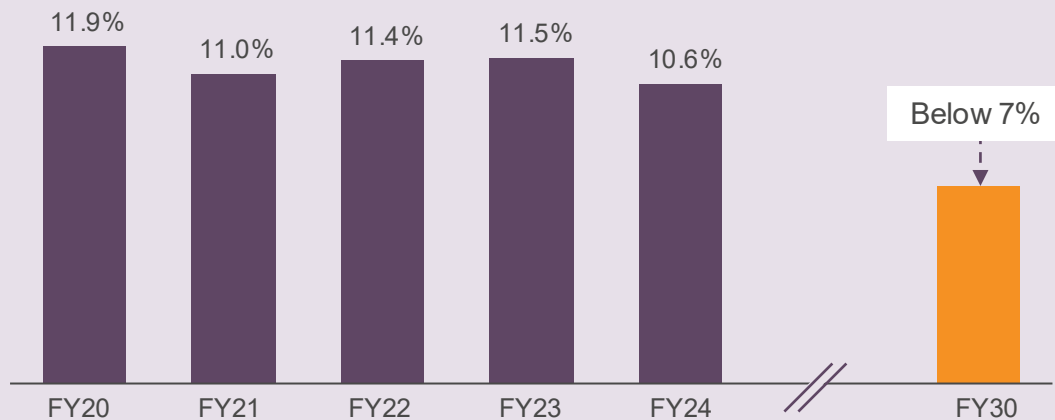
Some impact from USD EUR currency development despite reasonably good natural hedge

Potential unfavorable impact from geopolitical changes (tariffs) uncertain and not included



Gradual decrease of SG&A as % of revenue and continued investments in R&D

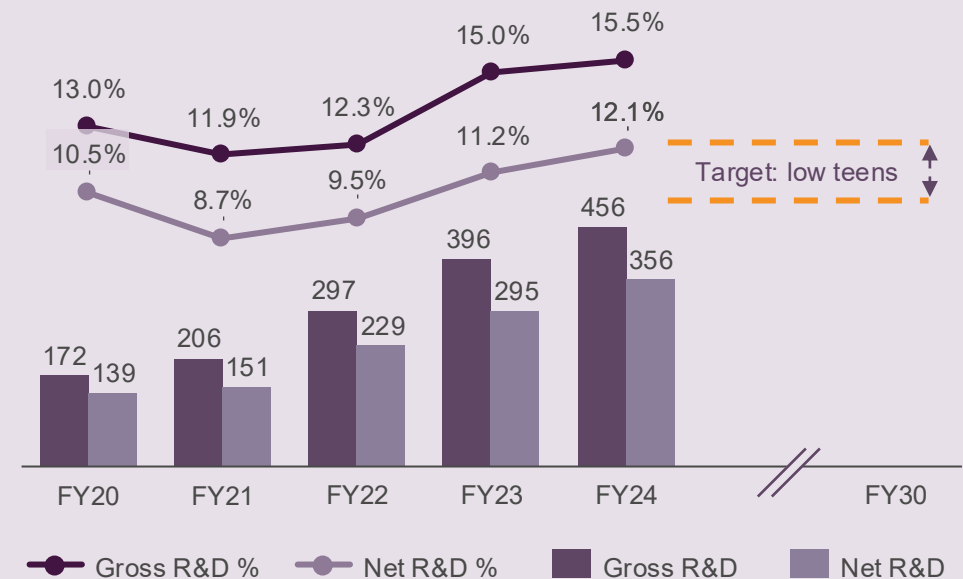
SG&A spend (as % of revenue)



SG&A as % of revenue gradually decrease

- Benefiting from operating leverage due to revenue growth, cost control, digitization and productivity improvements

Net R&D spend (as % of revenue)



Increasing to low teens depending on revenue growth

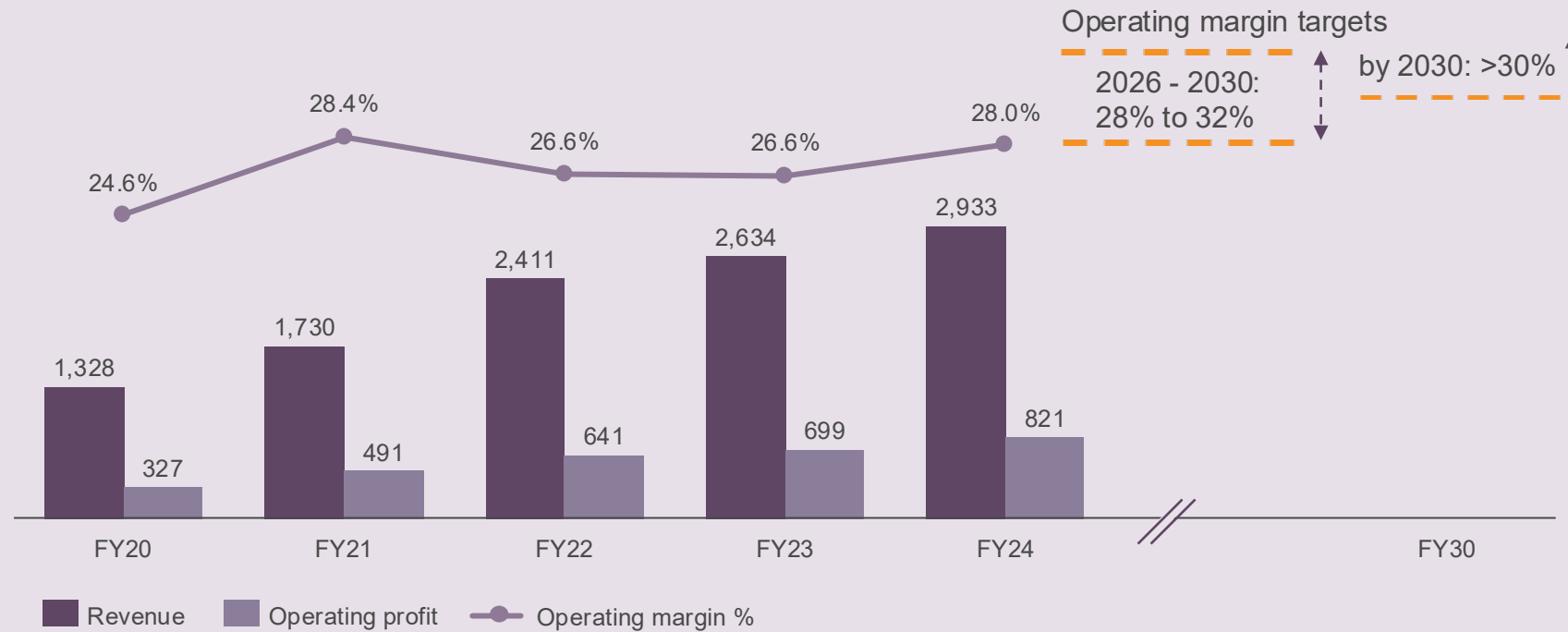
- Advanced R&D for inflections in logic/foundry and memory segments, including AP
- Lab expansions & equipment upgrades
- Continuous investments in R&D headcount
- Gross R&D investment is typically 2-4% higher than net R&D

Strong financial performance driven by revenue growth combined with disciplined gross margin and cost management



Revenue, operating profit and operating margin

(€ million)





Tax rate to gradually stabilize at low twenties

Effective tax rate¹



Remarks

Effective tax rate (ETR) in recent years gradually increased from mid to high teens to low twenties due to the impact from Global minimum tax and the relative development of results on a country-by-country basis

Global minimum tax of 15% has become effective since 2024 and has resulted in upward pressure on ETR due to impact on certain tax incentives

The allocation of taxable profits moves in sync with ASM business developments

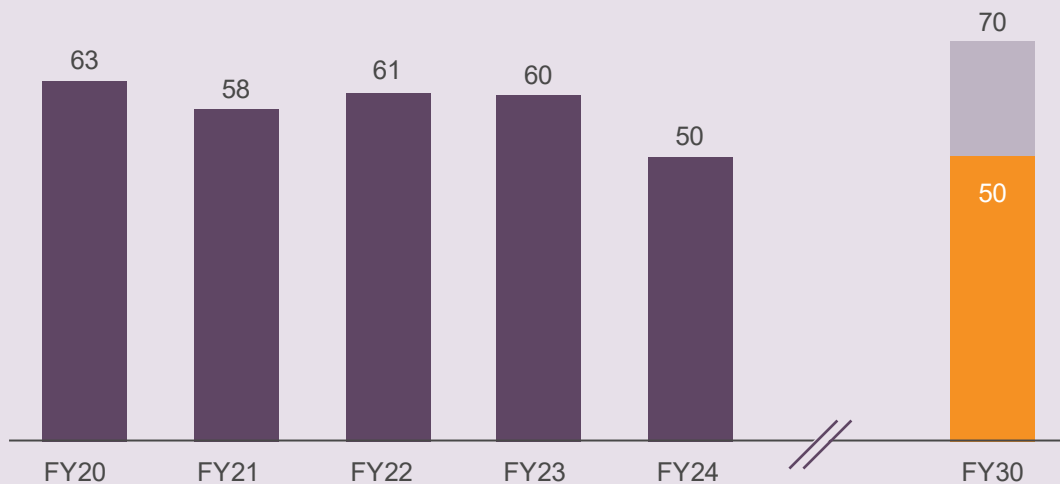
Global business and tax developments are continuously monitored assessing their potential ETR impact

1) ETR refers to effective tax rate excluding ASMPPT



Disciplined working capital management and increased capex to support growth

Working capital days

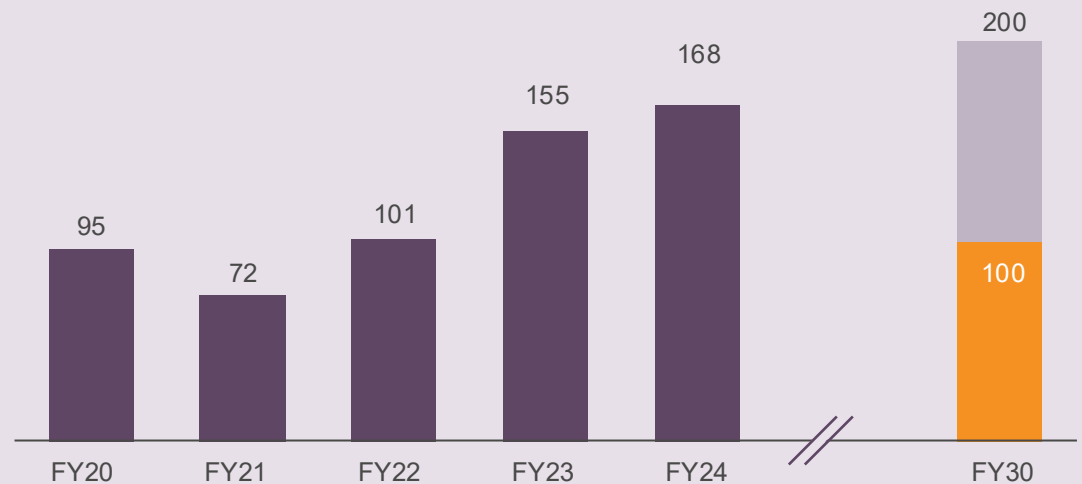


We expect working capital days to range from 50-70 days

Strong working capital in 2024 due to:

- Improved DIO at 63 days
- Relatively higher contract liabilities (mainly deferred revenue) at 54 days that are expected to normalize in coming years

Capital expenditure, gross (€ million)



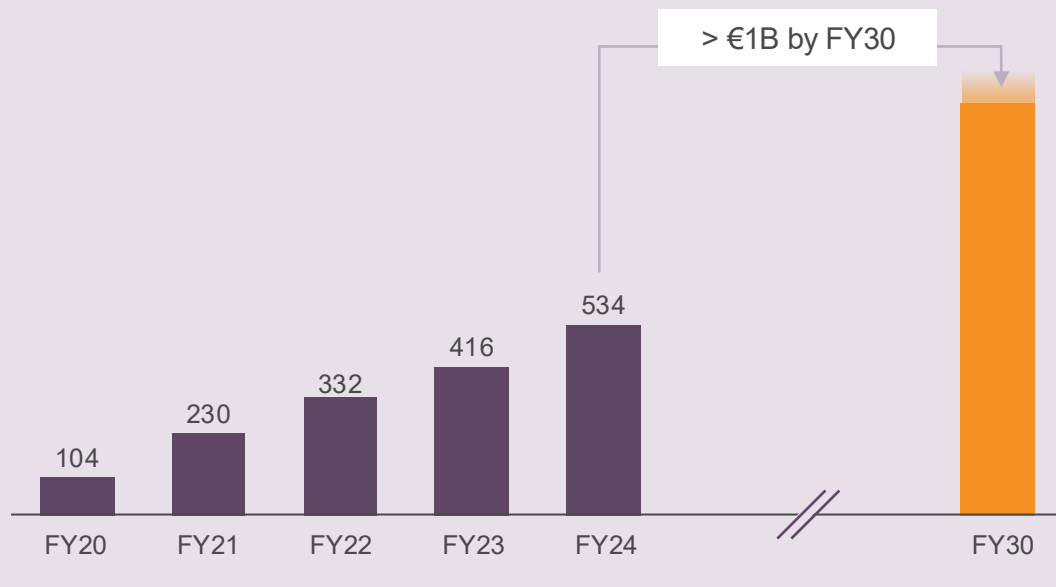
Capex €150-250m in years with infrastructure expansion and €100-200m after main expansions are completed

- Singapore completed in 2023
- South Korea completed in 2025
- Phoenix expected to be completed in Q1 2027
- Potential expansion in Europe starting in 2028
- Continued investments in products and metrology to support innovation



Continuous growth in FCF generation in excess of €1B by FY30

Free cash flow¹ (€ million)



FCF growth due to:

Continued investment in revenue growth with strong profitability

Strict working capital management

Annual capex €100-200 million

Capex of €150-250 million in years with infrastructure expansion

1) Excluding ASMPT dividends and acquisitions



Introducing FY30 targets

	FY 2024	FY 2030
Revenue	€2.9 billion	More than €5.7 billion by FY30 ¹
Revenue growth	12.0% yoy	At least 12% CAGR (FY24-FY30)
Gross margin %	50.5%	47-51% (FY26-FY30)
SG&A % revenue	10.4%	Below 7% (by FY30)
R&D (net) % revenue	12.1%	Low double digit (FY26-FY30)
Operating margin %	28.0%	28-32% (FY26-FY30), >30% by 2030
Capex (gross)	€168 million	€100-200 million (FY30)
Effective Tax Rate %	21.1%	Low twenties (FY26-FY30)
Total working capital	50 days	50-70 days (FY26-FY30)
Free cash flow	€534 million	More than €1 billion by FY30

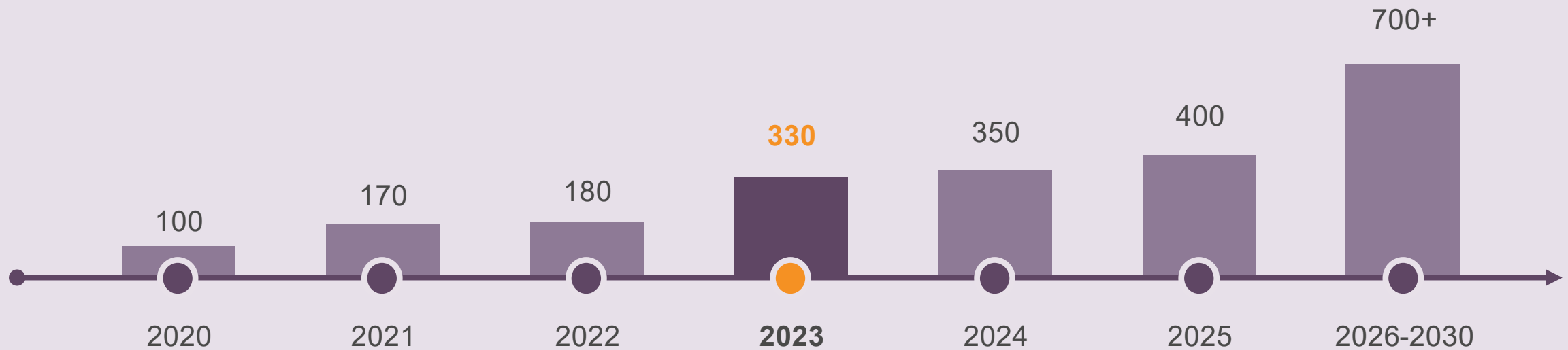
1) At comparable currencies

Capacity and margin improvement initiatives



ASM investing in flexible manufacturing capacity

Manufacturing capacity indexed to 2020



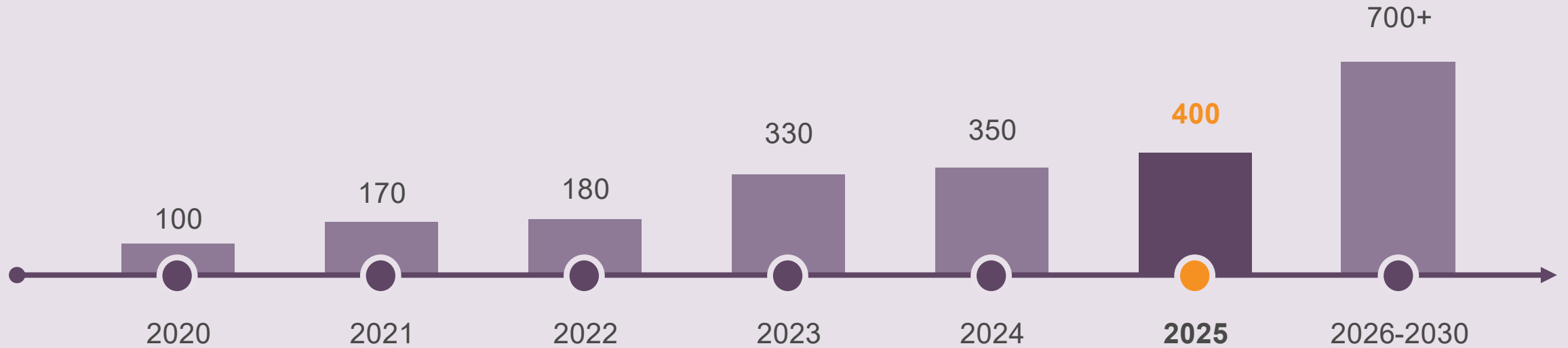
Singapore second floor expansion





ASM investing in flexible manufacturing capacity

Manufacturing capacity indexed to 2020



Korea expansion will provide further capacity and enhanced business continuity

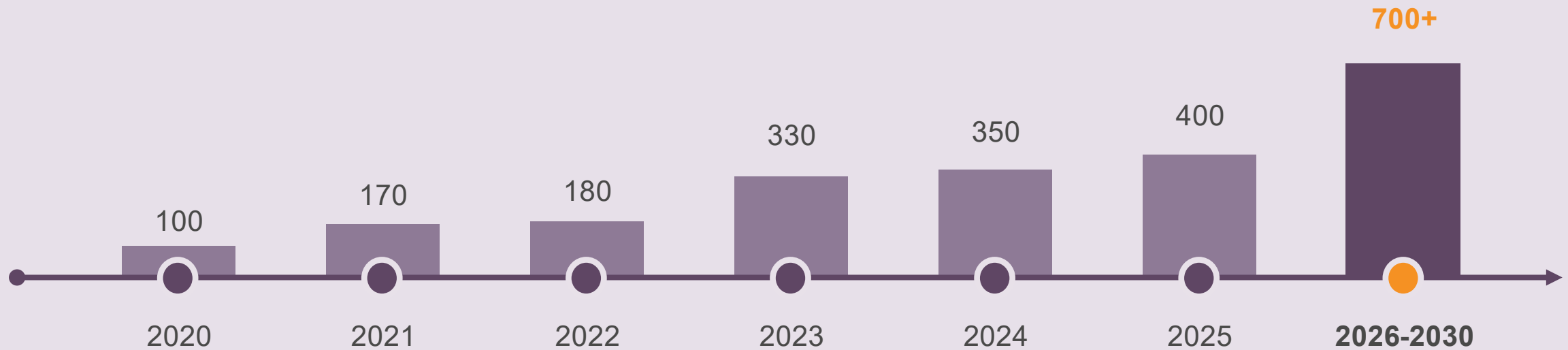
Dongtan expansion





ASM investing in flexible manufacturing capacity

Manufacturing capacity indexed to 2020



Incremental future capacity expansion can be realized via merge in transit and increased efficiency to scale for 2030

Future MIT



Increased efficiency





Drive operational excellence, flexible footprint and strong financial performance

1 Digital foundation

New digital foundation in place since July 2025 after successful big bang go live with new global ERP and PLM systems

2 Productivity

These new systems enable improved productivity, real time data analytics and increased benefits from AI

3 New product platforms

Improved platform development will reduce cost of product, inventory and lead times. New platforms will gradually replace previous generations in coming years

4 Manufacturing model

Improved manufacturing model including Merge In Transit will increase overall capacity and reduce cost of good for eligible tools

5 Operating margin

All these initiatives are expected to gradually and structurally improve operating margin by 200-300bps in the coming years which is reflected in the mid-term guidance

Capital allocation

Capital allocation strategy unchanged



Priority 1

Invest to support future growth

- R&D
- Capex
- M&A

Priority 2

Maintain a strong balance sheet

- Cash position around €800 million

Priority 3

Sustainable dividend payments

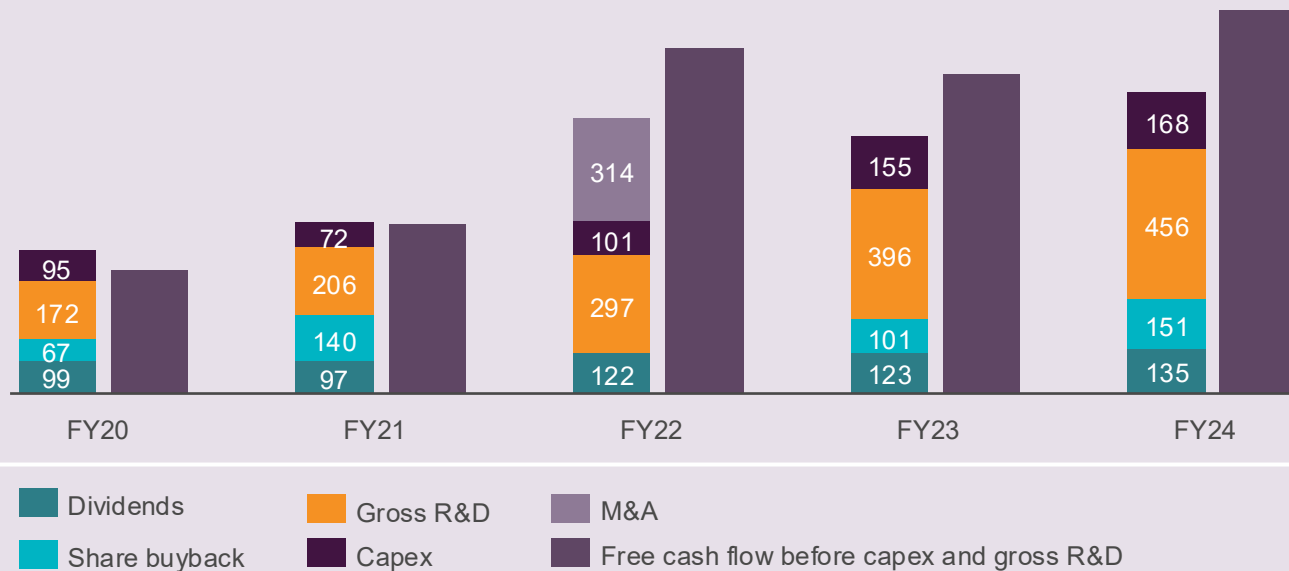
Priority 4

Return of excess cash to shareholders through share buybacks



Disciplined capital allocation driving strategic growth and sustained shareholder value

Capital allocation (€ million)



Capital allocation from FY20-FY24:

Majority of cash flow¹ allocated to R&D, capex and M&A to support value creating growth

Strongly increased funding of R&D to drive differentiation in innovation with strong ROI

Steady increase in dividends and share buybacks

1) Free cash flow before capex and gross R&D

Sustainability roadmap – Planning for 2035



Our sustainability framework covers 5 pillars





Focus areas defined through Double Materiality Assessment

Social	Environment	Climate change (E1) <ul style="list-style-type: none">• Climate change mitigation• Climate change adaptation• Energy• Product Sustainability
	Our workforce (S1)	Working conditions <ul style="list-style-type: none">• Health and safety• Adequate wages• Working hours Equal treatment and opportunities for all <ul style="list-style-type: none">• Training and skills development• Inclusion and Diversity• Equal pay for work of equal value
	Workers in the supply chain (S2)	Working conditions <ul style="list-style-type: none">• Health and safety• Working time Other work-related rights <ul style="list-style-type: none">• Forced labor
Governance	Business conduct (G1)	<ul style="list-style-type: none">• Corporate culture• Protection of whistleblowers Corruption and bribery <ul style="list-style-type: none">• Prevention and detection, including training• Incidents





Product sustainability strategy focuses on key technology drivers



Sustainable chemistry



Energy efficiency



GHG emission reduction

2035 targets

- 35% reduction of precursor consumption¹
- 90% reduction in NF3¹

- 35% reduction in thermal energy¹
- 20% reduction in RF energy¹

- Net-zero pathway for 3.11 use of sold products

Approach

- Use of alternative/green chemistry to reduce global warming potential (GWP)
- Reduce usage amount of precursor and process chemistry

- Reduce per wafer consumption via throughput improvement
- Reduce tool power and utilities usage through engineering design

- Reduce fuel or gas usage through alternative technologies
- Recycle or reuse materials

Examples

- Tenza™
- High throughput clean

- Turino™-CL
- GenMatch™

- Dynamic HPM² control
- High-efficiency chillers

1) Against a 2023 baseline
2) Hazardous production material

Key takeaways



1 Value for stakeholders

ASM Growth through Innovation strategy is creating significant value for stakeholders.

2 Guidance 2027

Guidance 2027: revenue adjusted for currency only to €3.7-€4.6 billion and margins increased.

3 Guidance 2030

New guidance for 2030 is as follows:

- Revenue of more than €5.7 billion, representing a 2024-2030 CAGR of at least 12%, outperforming WFE.
- Gross margin target range increased to 47%-51%
- Operating margin target range increased to 28%-32%. Target >30% by 2030.

4 Operating expenses

Continue low double-digit % investment in net R&D while SG&A is expected to decrease to below 7% in 2030, both as % of total sales.

5 Capital allocation

Capital allocation policy unchanged. Investment in growth remains the key priority with excess cash returned to shareholders.

6 Net Zero 2035 target

Driving sustainability is not only a license to operate, it also makes business sense.

Note: All numbers presented throughout this presentation are adjusted numbers excluding purchase price allocation adjustment

Thank you

ASM Investor Day 2025

