



Cautionary note regarding forward-looking statements

All matters discussed in this presentation, except for any historical data, are forward-looking statements. Forwardlooking statements involve risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements. These include, but are not limited to, economic conditions and trends in the semiconductor industry generally and the timing of the industry cycles specifically, 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 disruption due to natural disasters, terrorist activity, armed conflict or political instability, changes in import/export regulations, pandemics, epidemics and other risks indicated in the company's reports and financial statements. The company assumes no obligation nor intends to update or revise any forwardlooking statements to reflect future developments or circumstances.





- **Investment highlights**
- Q1 2024 results
- 3 **Business environment, strategy, and targets**
- **Annex: detailed financials**



Investment highlights



Investment highlights

Strong long-term prospects

- ASM is focused on enabling deposition technologies, with key strengths in innovation
- Leader in the ALD market, which is expected to grow by a CAGR of 10%-14% from 2022 to 2027
- Expanding our position in the Si Epi market (CAGR of 10%-15% from 2022 to 2027 for the leading-edge Epi segment)
- Selective growth in PECVD and Vertical Furnaces, and healthy growth in spares & services
- Our silicon carbide (SiC) epitaxy product line addresses the market for SiC devices, driven by increasing EV penetration

→ A healthy profitability

Q1 2024 adjusted gross margin of 52.9%, thanks to a generally positive mix, and in particular continued strong sales from China, which increased to a quarterly record, and an adjusted operating margin of 30.0%

Strong balance sheet

- Solid cash position of €712m at the end of Q1 2024, no debt
- Authorization of a new share buyback program of €150m, which was announced in February 2024. Proposed dividend of €2.75 per share to be paid over 2023 to be approved at the next AGM in May 2024.

> Stepping up our focus on sustainability

- Net Zero targets to 2035 for scope 1, 2, and 3 were recently verified by the SBTi in August 2023. ASM launched its Climate Transition Plan (CPT) in March 2024
- We aim for an increase in the female participation rate to 20% of the total workforce by 2025, up from 15% in 2021 (2023: 17%)



Q1 2024 results

Q1 2024 Financial highlights



€698m

New orders

(10% yoy at constant currencies)

€639m

Revenue

(-8% yoy at constant currencies)

52.9%

Adjusted gross margin⁽¹⁾

(51.1% in Q1 2023)

€192m

Adjusted operating profit(1)

(€221m in Q1 2023)

30.0%

Adjusted operating margin⁽¹⁾ (31.2% in Q1 2023)

€173m

Net earnings (€380m in Q1 2023)

€712m

Cash position

€62m

Free cash flow

€31m

Capex

⁽¹⁾ Adjusted figures are non-IFRS performance measures (previously referred to "normalized"). Refer to the Annex for a reconciliation of non-IFRS performance measures

Q1 2024 highlights



Orders and revenue

- Q1 new orders came in at €698 million up 10% at constant currencies compared to Q1 2023, supported by healthy GAA 2nm orders, and a strong increase in memory orders, mainly for HBM-related DRAM applications.
- Revenue down 8% yoy at constant currencies, but at the high end of our previous guidance of €600-640 million.

Margins and profitability

- Adjusted gross margin at 52.9%, thanks to a generally positive mix, and in particular continued strong sales from China, which increased to a quarterly record.
- Adjusted operating margin at 30.0% was down yoy, mainly due to the decrease in revenue and partly offset by the increase in gross margin, while the increase in opex was relatively moderate in Q1.

End-market demand and outlook

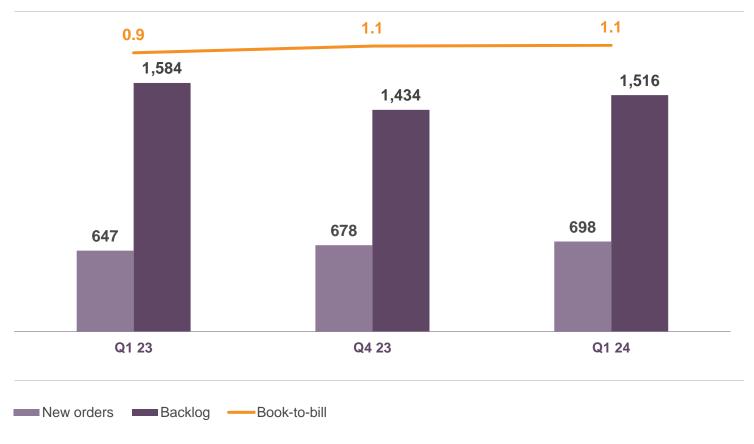
- Bookings again included a healthy level of tool orders related to the gate-all-around (GAA) 2nm technology node. Current traction confirms our
 expectation that the GAA migration is going to be a strong driver for ASM.
- Memory bookings showed a solid increase compared to a lower level last year, for the larger part driven by HBM-related demand for high-performance DRAM. Bookings from the Chinese market remained at a strong level in the first quarter.
- Order intake in power/analog/wafer (excluding silicon carbide Epi) continued to be relatively low, reflecting the soft conditions in this market segment.
- Revenue for Q2 2024 is projected to increase to €660-700 million. Revenue in H2 is expected to increase by 10% or more compared to H1 2024. Full year 2024 is expected to be another year of growth for ASM.



New orders supported by GAA and HBM

Orders and backlog

(€m)



Q1 2024 new orders came in at €698 million, up 10% yoy at constant currencies.

We booked healthy 2nm GAA orders and a strong increase in memory orders, mainly for HBM-related DRAM applications. In addition, bookings from the Chinese market remained at a strong level in the first quarter.

New orders were led by foundry, followed by memory, and logic.

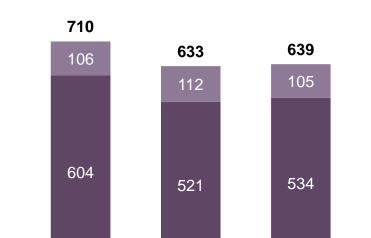
Backlog increased to €1,516 million compared to €1,434 million at the end of Q4 2023.



Revenue at high end of guidance, solid GM



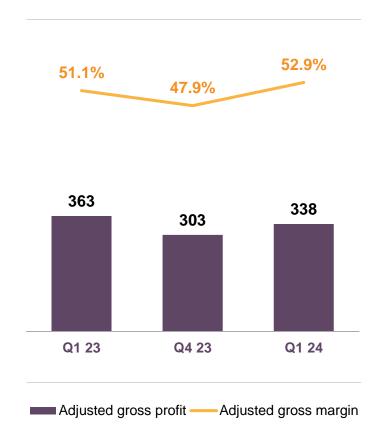
Q1 23





Q4 23

Adjusted gross profit (€m)



Revenue

Q1 2024 revenue came in at €639 million, down 8% yoy and up 2% gog at cc, and was at the high end of the guidance of €600-640 million.

Revenue was mainly driven by foundry, followed by memory, while we saw a reduction in power/analog/wafer.

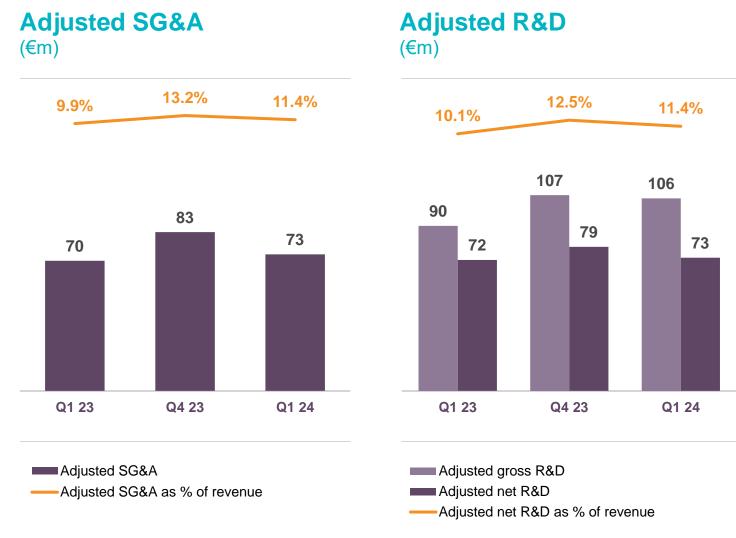
Equipment revenue was down by 10% yoy at cc. Spares & services grew 2% yoy at cc.

Adjusted gross margin

Adjusted gross margin at 52.9% in Q1 2024 was driven by a generally positive mix, and in particular a continued strong contribution from China sales, which increased to a quarterly record.

Q1 24

SG&A growth moderates, continued R&D investment



Adjusted SG&A

Adjusted SG&A increased 4% yoy and decreased 12% gog, mainly explained by lower variable expense and somewhat lower expenses across the board in most departments.

At constant currencies SG&A increased 6% yoy and decreased 12% gog.

Adjusted R&D

Adjusted gross R&D increased 17% yoy and decreased 2% gog. Adjusted net R&D increased 2% yoy and decreased 8% gog.

The yoy increase is in line with our strategy to continue to support investments for future growth opportunities.

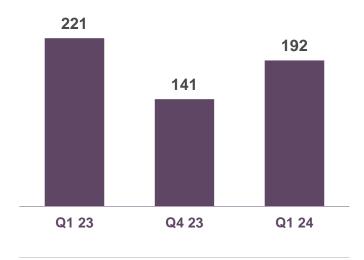
At constant currencies net R&D increased 5% yoy and decreased 7% gog.



OM at 30.0% thanks to higher gross margin & lower opex

Adjusted operating result (€m)





Adjusted operating result Adjusted operating margin

Adjusted finance income (€m)

	Q1 23	Q4 23	Q1 24
Adjusted net interest income (expense)	1	3	6
Foreign currency exchange gains (losses)	(7)	(25)	23

Income of investment in associates (€m)

	Q1 23	Q4 23	Q1 24
Share in income of investments in associates (ex amort. intangible assets)	9	2	5

Adjusted operating result

Adjusted operating result was up qoq but down yoy, mainly explained by the decrease in revenue and partly offset by the increase in gross profit margin.

Adjusted finance income

A substantial part of ASM's cash position is denominated in US dollars. The resulting translation differences are included in finance income

Income from investments in associates (25% shareholding in ASMPT)

Share in income is adjusted for amortization of intangible assets resulting from the sale of the 12% stake of ASMPT in 2013, on a currencycomparable basis, is expected to amount to €0.4 million in 2024.



Adjusted net earnings up €79m qoq

Adjusted net earnings

(€m)

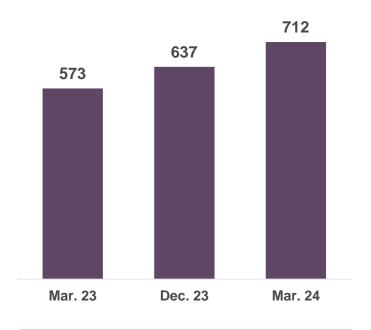
	Q1 23	Q4 23	Q1 24
Net earnings	380	91	173
Amortization intangible assets (resulting from the acquisitions of Reno and LPE)	(17)	(9)	(5)
Income taxes (deferred taxes on PPA adjustments)	5	3	1
Finance expense (earn-out)	(2)	(2)	(2)
Amortization intangible assets (resulting from the sale of the 12% stake of ASMPT)	(3)	(0)	(0)
Reversal of impairment of investments in associates	215	-	-
Adjusted net earnings	183	100	179

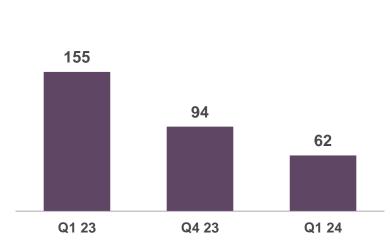
Adjusted net earnings in the first quarter 2024 increased by €79 million to €179 million compared to previous quarter mainly due to higher operating results.

Solid cash of €712m, FCF down due to increased working capita









Cash

Cash increased to €712 million at the end of March 2024, up from €637 million at the end of December 2023.

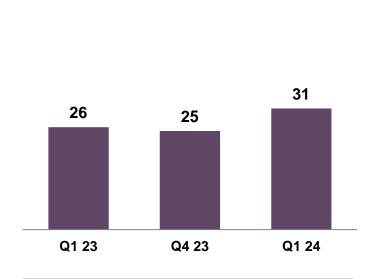
Free cash flow (FCF)

FCF decreased to €62 million, down from €94 million in Q4 23, mainly due to increased working capital, partly offset by a higher operating result.

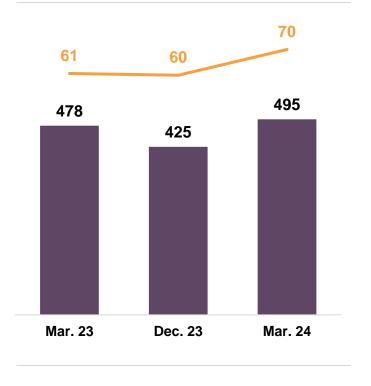


Higher capex and working capital





Working capital (€m)



 Days of working capital Working capital

Capex

Capex increased to €31 million, up from €25 million in Q4 2023.

Annual capex target continues to be €100-180 million.

Working capital

Net working capital increased to €495 million (from €425 million at the end of December 2023), mainly explained by higher level of inventories and accounts receivable.

Days of working capital increased to 70 at the end of Q1 2024, compared to 60 at the end of Q4 2023, and still within our target range of 55 to 75.

Financial outlook



As included in the Q1 2024 press release published on April 23, 2024:

While market conditions are still mixed in the first part of the year, we expect the recovery in wafer fab equipment (WFE) spending to gradually pick up speed in the remainder of the year. We expect revenue in the second guarter of 2024, at constant currencies, to increase to a range of €660-700 million, which is higher than we indicated with our Q4 report.

We now project ASM's revenue in the second half to increase 10% or more compared to the first half, at constant currencies. With that, we expect 2024 to be another growth year for ASM. We still expect sales from the Chinese market in the second half to be lower, but the decrease will be more moderate than we previously anticipated. Sales in advanced logic/foundry, mainly for GAA, and in the memory segment are expected to be higher in the second half.

In part supported by previously announced new customer wins we still expect our silicon carbide (SiC) Epi sales to increase by a meaningful double-digit percentage in 2024. However, this growth will be somewhat slower than we expected at the start of the year, as some SiC customers have recently been pushing out new investments.

We reiterate our revenue target for 2025 (range of €3.0-3.6 billion), driven by an expected rebound in the WFE market, including the move of GAA 2nm technology into high-volume manufacturing in 2025, and a further recovery in the memory markets.

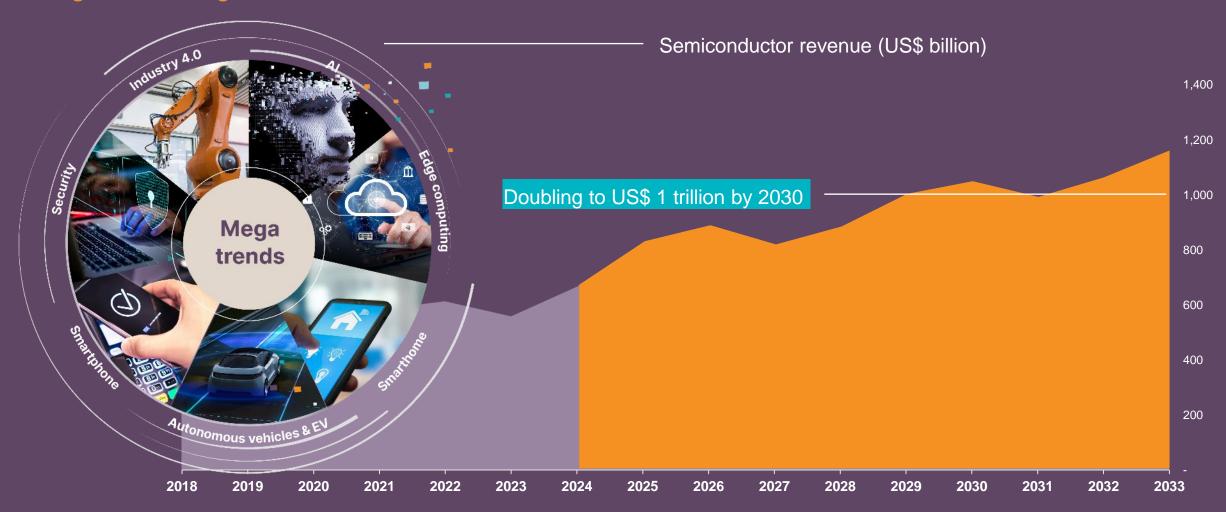


Business environment, strategy, and targets





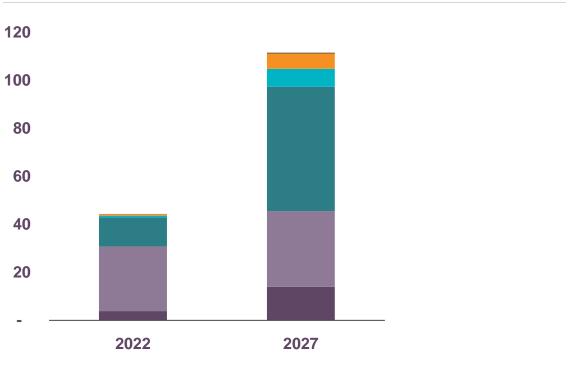
Megatrends driving the semiconductor market





Al to drive increased capacity requirements

Al semiconductor sales outlook (US\$b)



■ Automotive ■ Communications ■ Compute ■ Consumer Electronics ■ Industrial ■ Storage

Al-specific functions in >30% of logic devices by 2027 with significant upside

What it means for ASM:

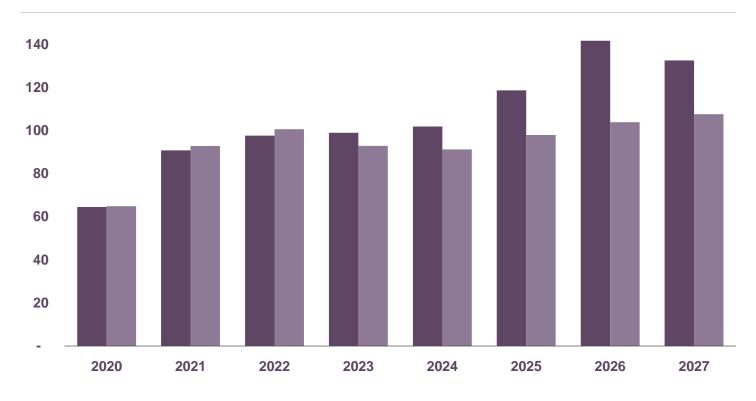
- Increased capacity
 - More datacenters with higher content servers GPU, ASIC, communications, **HB DRAM**
 - More silicon content edge device (ex. phone GPU, NPU, Auto ADAS systems) → More fabs
- Inflections
 - Acceleration of Finfet to GAA → more single-wafer ALD and Epi steps
 - High performance/ bandwidth DRAM drives high-k adoption, metals → more single-wafer ALD and Epi steps



WFE spending expected to grow in 2024-2027

WFE market forecast

(US\$b)



WFE growth driven by secular trends of Al, 5G, EV, edge computing, etc.

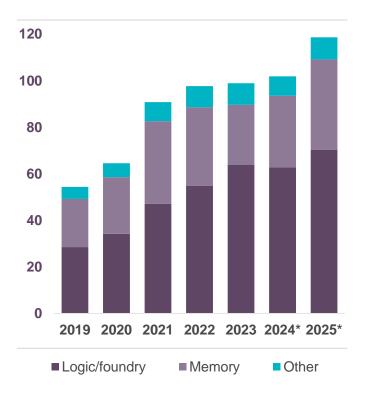
- Longer-term trend supported by multiyear investments
- Further scaling, 3D transitions and GAA driving investments in advanced CMOS
- In recent years, especially in 2023, increased investments in China have contributed to WFE growth

TechInsights Gartner

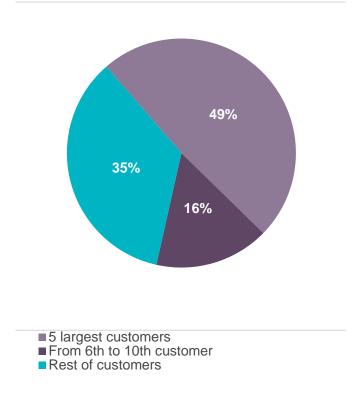


WFE by application & ASM customer concentration

WFE market by application in US\$b



ASM FY23 revenue by customer concentration in %



WFE market by application

Logic/foundry to account for more than half of total WFE sales in 2024

ASM FY2023 revenue by customer concentration

The 5 largest customers accounted for 49% of revenue in FY2023

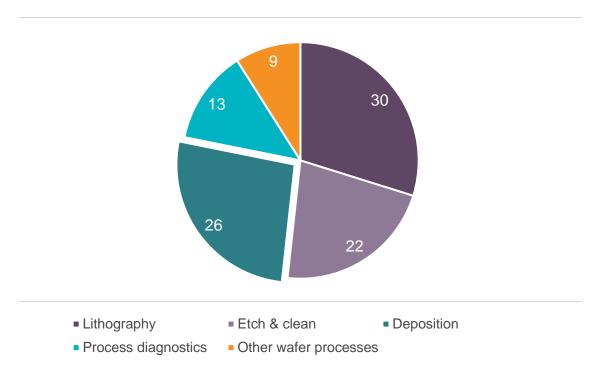
The next 5 largest customers, 6th to 10th, accounted for 16% of revenue in FY2023

* Estimates



ASM is focused on deposition equipment

WFE market segments in 2023 (\$b)



- ASM's focus is on deposition
- We are market leader in ALD (mid 50s%) share). ALD accounts for more than half of our total equipment revenue
- Expanding our position in the Si Epi market and entered the high-growth SiC Epi market
- Selective growth in PECVD and vertical furnaces and healthy growth in spares and services

ASM

Growth through Innovation - strategy unchanged

Our purpose is to improve people's lives through advancing technologies that unlock new potential



Strategy enablers







Early customer engagements



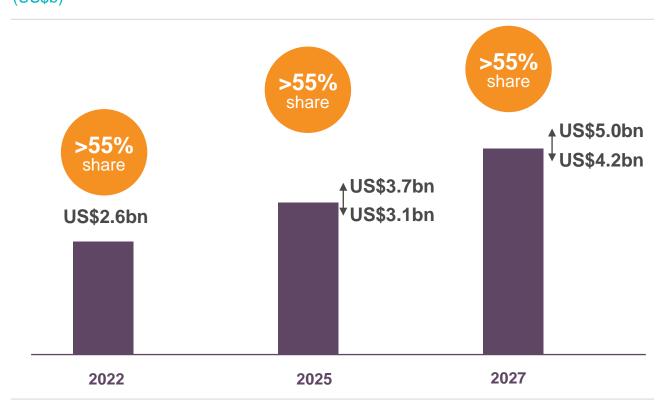
Flawless operational excellence





ALD market to increase to \$4.2-5.0b by 2027

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



Note: estimated range for 2025 is unchanged compared to 2021 Investor Day, forecast for 2027 was introduced in Investor Day 2023

Logic/foundry

- GAA transition
- High-k gate & Vt tuning
- Sacrificial layers, HM, ESL
- Metals
- Selective ALD
- High aspect ratio TSV

Memory

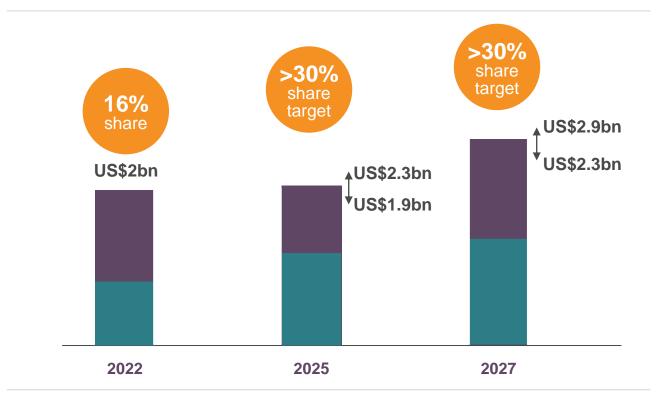
- High-k gate & Vt tuning
- Metals
- High aspect ratio gap-fill
- Selective ALD
- CAGR ALD market '22-'27 10-14%



Si epi market to reach \$2.3-2.9b by 2027

Si epitaxy market outlook

(US\$b)



Non-leading-edge Leading-edge

Note: estimated range for 2025 has been increased compared to US\$1.5-1.8bn presented in Investor Day 2021, forecast for 2027 was introduced in Investor Day 2023

Leading-edge

Continued growth in leading-edge driven by GAA and high-performance DRAM

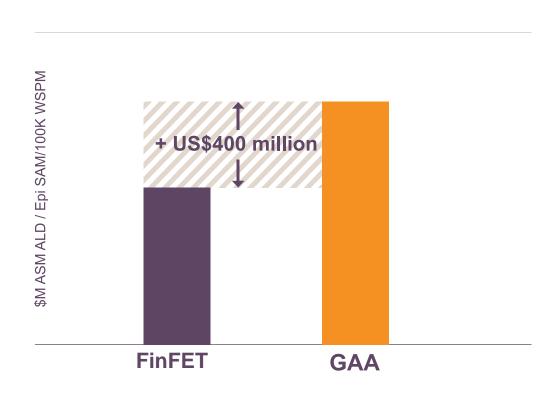
Non-leading-edge

- Wafer, power, analog
 - Continued growth in wafer, power, analog compared
- Strong momentum driven by Intrepid **ESA**
- Non-leading-edge foundry
 - Investments in 2025-2027 expected to be at lower level compared to 2022
 - ASM continues to have a limited position
- Change in market mix towards leading edge expected in 2024-2027 with move to GAA
- CAGR Si epitaxy market '22-'27 3-8%, with leading-edge segment outgrowing epi market with CAGR '22-'27 of 10-15%



Increased ALD and Epi SAM with move to GAA

Increases served available market for ASM by ~ US\$400 million per 100k wafer starts per month (WSPM)



ASM internal market data, figure not to scale

Single-wafer ALD

- High-k gate & Vt tuning
- Sacrificial layers, HM, ESL
- Metals
- Selective ALD
- High aspect ratio TSV

Epitaxy

- GAA nanosheet stack
- Source/drain contact

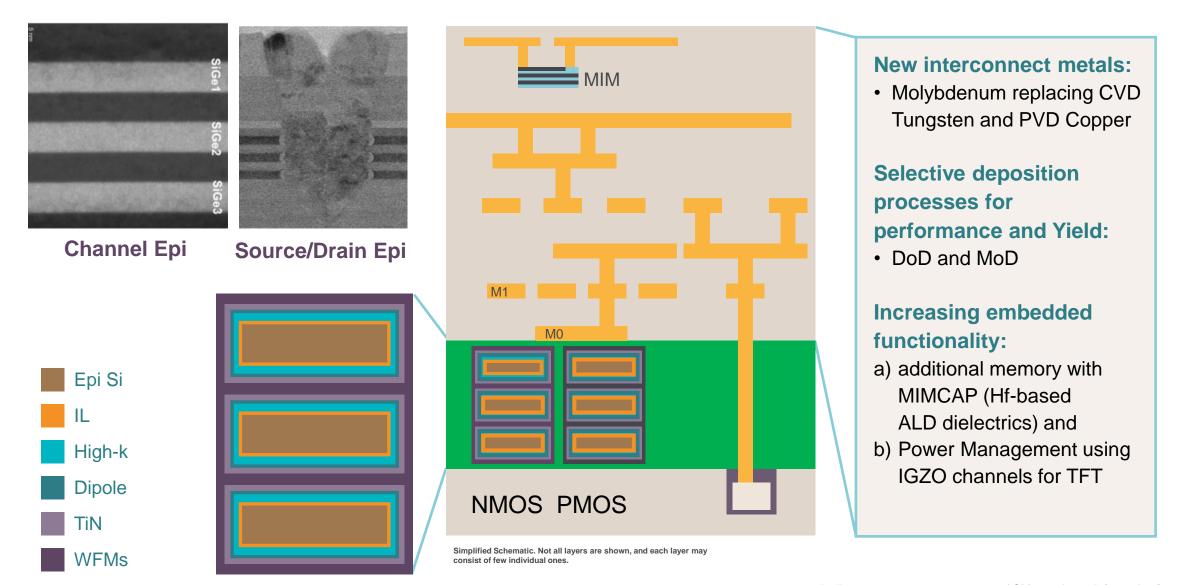
In the transition to gate-all-around:

- We expect to maintain our leading market share in single-wafer ALD
- We expect to gain market share in Epi

First meaningful orders of GAA pilot line booked in H2 2023



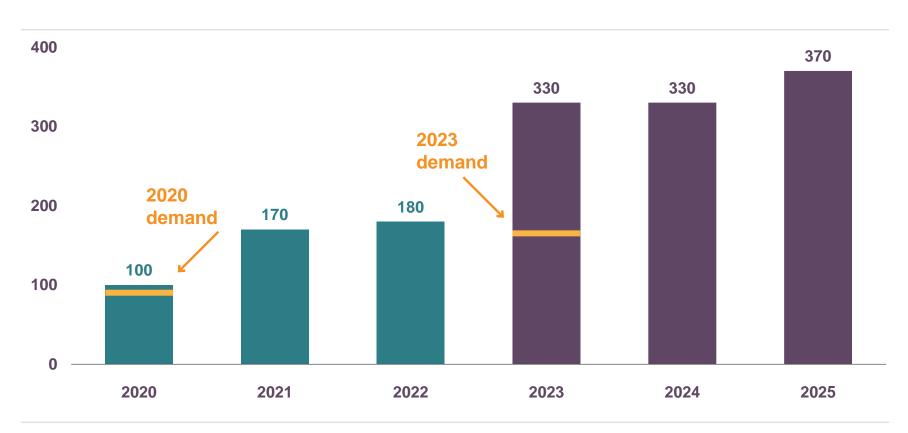
Logic GAA creates new ALD/Epi opportunities





ASM investing in capacity ahead of needs

Indexed manufacturing capacity (2020=100)



Capacity in place for targeted growth through 2027 following Singapore second floor expansion, completed in 2023, and Korea expansion, to be completed in 2025



Target net zero by 2035



SBTi verified ASM Net Zero 2035 target, announced in August 2023

ASM launched its Climate Transition Plan (CTP) in March 2024



Target 100% renewable electricity (RE) by 2024

Use of RE increased from 73% to 88% in 2023



Scope 3 use of our products is the majority of our GHG footprint

• Product sustainability fully incorporated in the product development and improvement process



ASM - originator, founding member, and chair of Semiconductor Climate Consortium

• Recognized through inaugural SEMI Sustainability Leadership Award at SEMICON West 2023



Sustainability fully integrated into product development



Our vision is to develop differentiated & eco-efficient tools & processes, while maximizing energy saving through product innovation.

Our aim is to lower energy/precursor usage, emissions and cost per wafer



FY25 & FY27 financial targets

	FY2022 ⁽¹⁾	FY2023 ⁽¹⁾	FY2025	FY2027
Revenue	€2.4 billion	€2.6 billion	€3.0 - €3.6 billion	€4.0 - €5.0 billion
Revenue growth	33% yoy ⁽²⁾	9% yoy ⁽²⁾	16 - 21% CAGR (FY20-FY25)	11 - 16% CAGR (FY22-FY27)
Gross margin %	47.5%	49.3%	46 - 50% (FY21-FY25)	46 - 50% (FY25-FY27)
SG&A % revenue	11.4%	11.5%	High single digit (FY25)	High single digit (FY25-FY27)
R&D (net) % revenue	9.5%	11.2%	High single digit to low teens (FY25)	High single digit to low teens (FY25-FY27)
Operating margin %	26.6%	26.6%	26-31% (FY21-FY25)	26-31% (FY25-FY27)
Capex	€101 million	€154 million	€100 - €180 million (FY25)	€100 - €180 million (FY27)
Effective Tax Rate	17.7% ⁽³⁾	18.1% ⁽³⁾	High teens to low twenties (FY25)	High teens to low twenties (FY25-FY27)
Total working capital	62 days	60 days	55-75 days (FY25)	55-75 days (FY25-FY27)

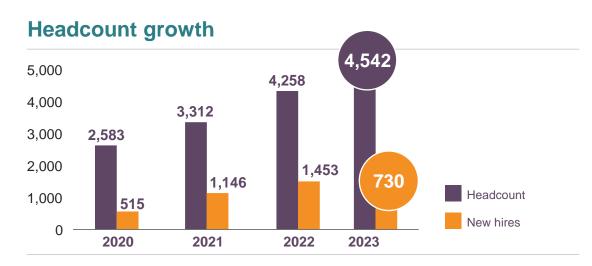
¹ Refers to adjusted numbers excluding purchase price allocation adjustments

² Refers to constant currencies

³ Effective tax rate is based on reported results excluding impairment on, and net income of our investment in ASMPT. ETR guidance is based on adjusted results



People are at the heart of our success

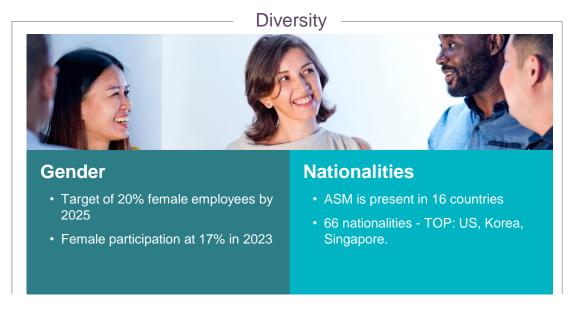


Retention

	All employees
2020	89.3%
2021	87.5%
2022	88.1%
2023	90.8%









Annex: detailed financials



(Estimated) amortization and earn-out expenses

€ million	Q1 2023 Actual	Q4 2023 Actual	Q1 2024 Actual	FY 2024 Estimate	FY 2025 Estimate	FY 2026 Estimate	FY 2027 Estimate
Cost of sales	(12.3)	(4.7)	_	_	_	_	<u>—</u>
Net research and development expenses	(3.5)	(3.5)	(3.5)	(14.0)	(14.0)	(14.0)	(14.0)
Selling, general and administrative expenses	(1.2)	(1.2)	(1.2)	(4.9)	(4.9)	(4.7)	(4.0)
Total impact on operating results	(17.0)	(9.4)	(4.7)	(18.9)	(18.9)	(18.7)	(18.0)
Finance expense (1)	(2.4)	(2.4)	(2.2)	(8.7)	(3.0)	_	<u> </u>
Income taxes (realization temporary differences)	4.7	2.6	1.3	5.2	5.2	5.1	4.9
Total impact on net earnings	(14.7)	(9.3)	(5.6)	(22.4)	(16.7)	(13.6)	(13.1)

⁽¹⁾ Finance expenses include the change in fair value of the contingent consideration (LPE earn-out).



Adjusted and reported P&L reconciliation

€ million	Q4 2023 reported	Δ	Q4 2023 adjusted	Q1 2024 reported	Δ	Q1 2024 adjusted
Revenue	633		633	639		639
Gross profit	299	5	303	338	-	338
Gross margin	47.2%		47.9%	52.9%		52.9%
SG&A	(85)	1	(83)	(74)	1	(73)
SG&A as a % of revenue	13.4%		13.2%	11.6%		11.4%
Net R&D	(83)	4	(79)	(77)	4	(73)
Net R&D as a % of revenue	13.0%		12.5%	12.0%		11.4%
Operating profit	132	9	141	187	5	192
Operating margin	20.8%		22.3%	29.3%		30.0%
Finance income (expense)	(24)	2	(22)	27	-	29
Income from investment in associates	2	-	2	5	-	5
Net earnings	91	9	100	173	6	179



Income statement (reported)

€ million	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024
New orders	647	486	627	678	698
Backlog	1,584	1,400	1,404	1,434	1,516
Book-to-bill ratio	0.9	0.7	1.0	1.1	1.1
Revenue	710	669	622	633	639
Cost of sales	(359)	(346)	(323)	(334)	(301)
Gross profit	351	323	299	299	338
Other income	0	0	(0)	-	-
Operating expenses:	-	-	-	-	-
Selling, general and administrative	(71)	(75)	(78)	(85)	(74)
Research and development	(75)	(77)	(74)	(83)	(77)
Total operating expenses	(146)	(152)	(152)	(167)	(151)
Operating result	204	171	147	132	187
Net interest income (expense)	(1)	0	1	1	4
Foreign currency exchange gain (loss)	(7)	8	3	(25)	23
Share in income of investments in associates	6	9	0	2	5
Reversal of impairment of investments in associates, net	215	-	-	-	-
Earnings before income taxes	418	188	152	110	219
Income taxes	(37)	(36)	(22)	(19)	(46)
Net earnings	380	151	130	91	173



Balance sheet

€ million	Mar. 23	Jun. 23	Sep. 23	Dec. 23	Mar. 24
Right-of-use assets	34	34	36	35	35
Property, plant and equipment	315	338	384	385	400
Evaluation tools at customers	73	71	71	80	89
Goodwill	318	320	321	320	321
Other intangible assets	647	664	696	706	738
Investments in associates	892	873	886	862	879
Other investments	6	10	11	11	13
Deferred tax assets	0	0	0	0	0
Other non-current assets	10	9	15	19	20
Total non-current assets	2,294	2,319	2,418	2,418	2,494
Inventories	575	582	574	526	576
Accounts receivable	568	535	526	488	616
Contract assets	53	39	44	59	51
Income taxes receivable	32	20	6	30	44
Other current assets	45	45	56	69	76
Cash and cash equivalents	573	490	547	637	712
Total current assets	1,846	1,710	1,754	1,809	2,075
Total Assets	4,140	4,030	4,172	4,227	4,569
Equity	3,088	3,046	3,181	3,227	3,422
Lease liabilities	21	21	22	23	22
Contingent consideration payable	81	83	86	88	90
Deferred tax liabilities	118	122	118	150	154
Total non-current liabilities	220	226	226	261	267
Accounts payable	252	218	208	178	244
Provision for warranty	31	27	24	23	21
Income taxes payable	69	50	34	22	55
Contract liabilities	304	312	316	300	322
Accrued expenses and other payables	175	151	183	216	238
Total current liabilities	831	758	765	739	880
Total Equity and Liabilities	4,140	4,030	4,172	4,227	4,569



Cash flow statement

€ million	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024
Net earnings from operations	380	151	130	91	173
Adjustments to reconcile net earnings to net cash from operating activities	(188)	23	27	16	22
Depreciation, amortization and impairments	42	44	44	52	42
Income tax paid	(30)	(38)	(28)	(23)	(21)
Decrease (increase) in working capital	6	(28)	36	30	(73)
Net cash from operating activities	210	152	208	166	142
Capital expenditures	(26)	(44)	(59)	(25)	(31)
Proceeds from sale of property, plant and equipment	1	0	2	0	(1)
Capitalized development expenditure	(29)	(38)	(39)	(42)	(44)
Purchase of intangible assets and other investments	(1)	(8)	(8)	(5)	(4)
Dividend received from associates	0	23	7	0	0
Net cash used in investing activities	(56)	(66)	(95)	(72)	(81)
Payment of lease liabilities	(3)	(3)	(3)	(4)	(3)
Purchase of treasury shares	-	(50)	(51)	-	-
Proceeds from issuance of treasury shares and other	(0)	(0)	1	0	-
Dividends to common shareholders	-	(123)	-	-	-
Net cash used in financing activities	(3)	(176)	(53)	(4)	(3)
Free cash flow excluding cash spent on acquisitions ⁽¹⁾	155	86	112	94	62



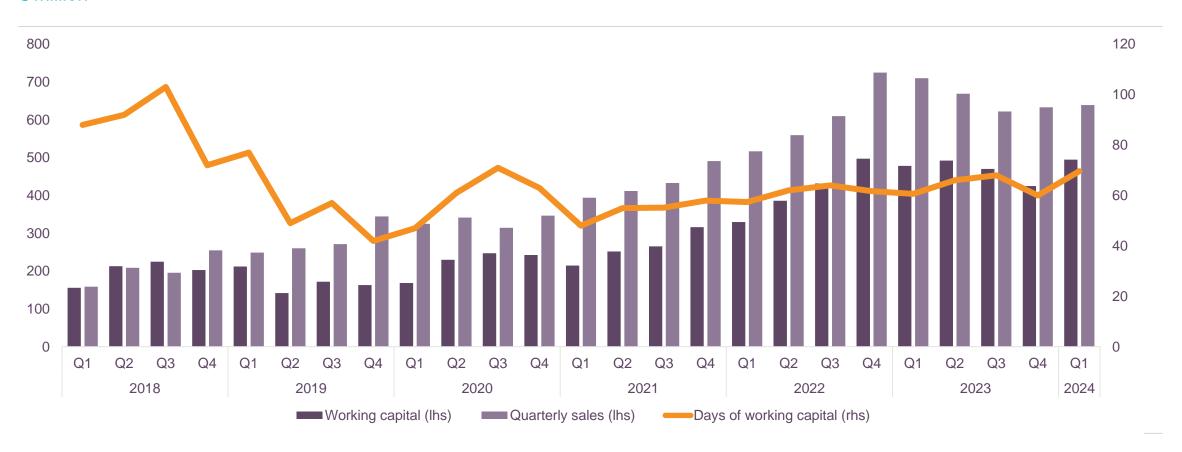
Gross and net R&D expenses (reported)

€ million	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024
Gross R&D expenses	94	104	102	111	109
Capitalization of development expenses	(29)	(37)	(39)	(42)	(44)
Amortization of capitalized development expenses	11	11	11	11	12
Impairment capitalized development expenses	-	-	-	2	-
Net R&D expenses	75	77	74	83	77
Gross R&D as % of revenue	13.2%	15.5%	16.3%	17.5%	17.1%
Net R&D as % of revenues	10.6%	11.6%	11.9%	13.0%	12.0%



Working capital: historical development

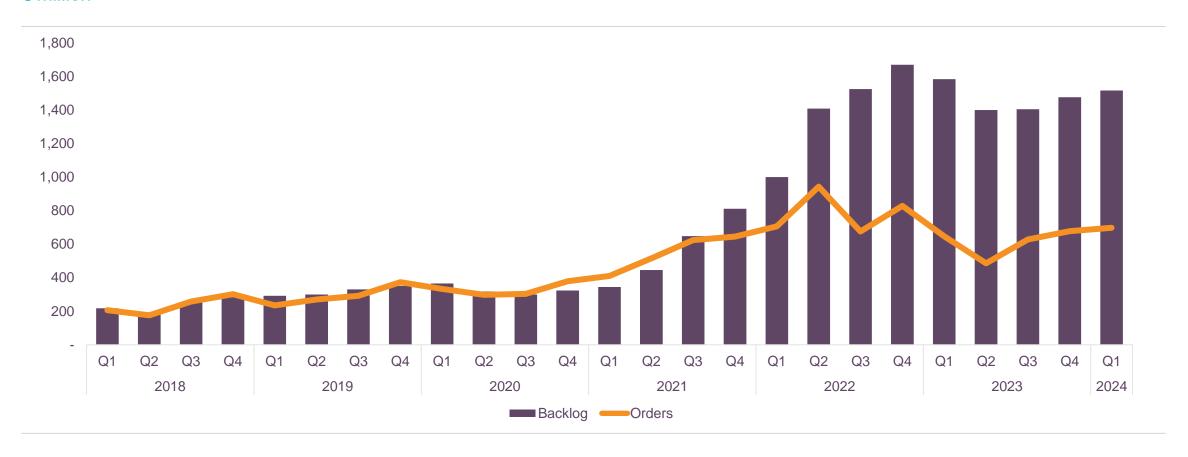
€ million





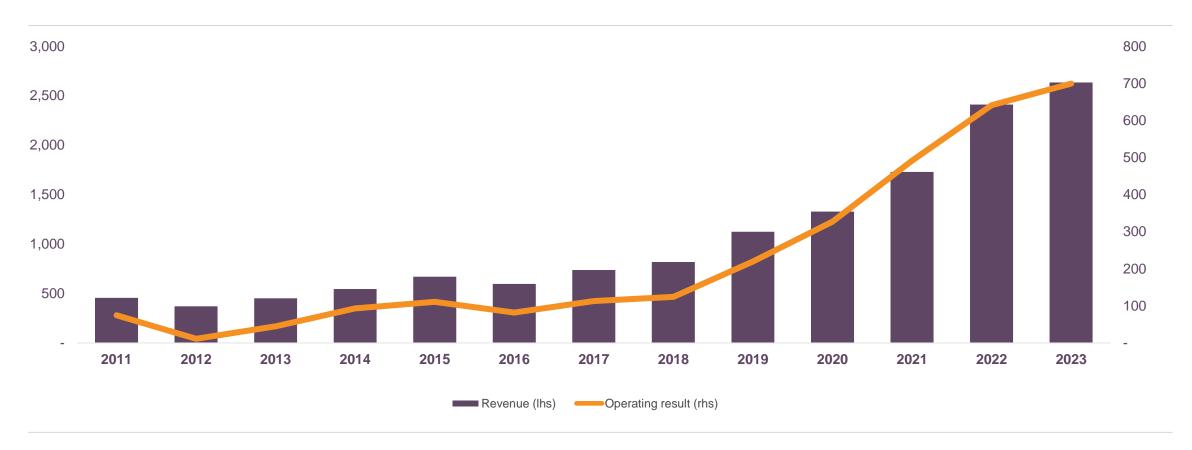
Orders and backlog: historical development

€ million



Revenue and operating result: historical development

€m

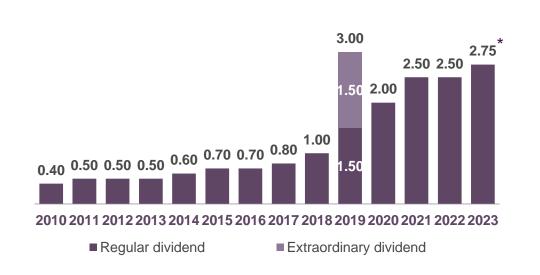




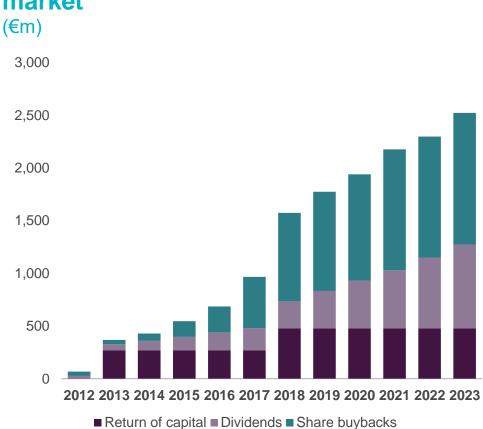
Cash returned to shareholders

Dividend per share

(€ paid over)



Cumulative cash returned to market





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