AIXTRON

Deutsches Eigenkapitalforum

Christian Ludwig, VP IR 26. November 2024

qixtroin

This document may contain forward-looking statements regarding the business, results of operations, financial condition and earnings outlook of AIXTRON. These statements may be identified by words such as "may", "will", "expect", "anticipate", "contemplate", "intend", "plan", "believe", "continue" and "estimate" and variations of such words or similar expressions. These forward-looking statements are based on the current assessments, expectations and assumptions of the executive board of AIXTRON, of which many are beyond control of AIXTRON, based on information available at the date hereof and subject to risks and uncertainties. You should not place undue reliance on these forward-looking statements. Should these risks or uncertainties materialize or should underlying expectations not occur or assumptions prove incorrect, actual results, performance or achievements of AIXTRON may materially vary from those described explicitly or implicitly in the relevant forward-looking statement. This could result from a variety of factors, such as those discussed by AIXTRON in public reports and statements, including but not limited those reported in the chapter "Risk Report". AIXTRON undertakes no obligation to revise or update any forward-looking statements as a result of new information, future events or otherwise, unless expressly required to do so by law.

Due to rounding, numbers presented throughout this report may not add up precisely to the totals indicated and percentages may not precisely reflect the absolute figures for the same reason.

Our registered trademarks: AIXACT[®], AIXTRON[®], Close Coupled Showerhead[®], EXP[®], EPISON[®], Gas Foil Rotation[®], Optacap[™], OVPD[®], Planetary Reactor[®], PVPD[®], STExS[®], TriJet[®]



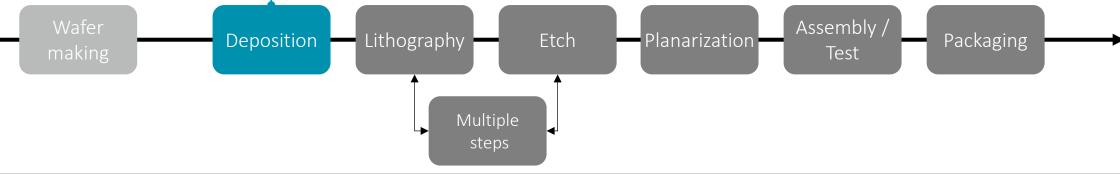
- Company introduction and market update
- Q3/2024 highlights and financials
- Q3/2024 backup



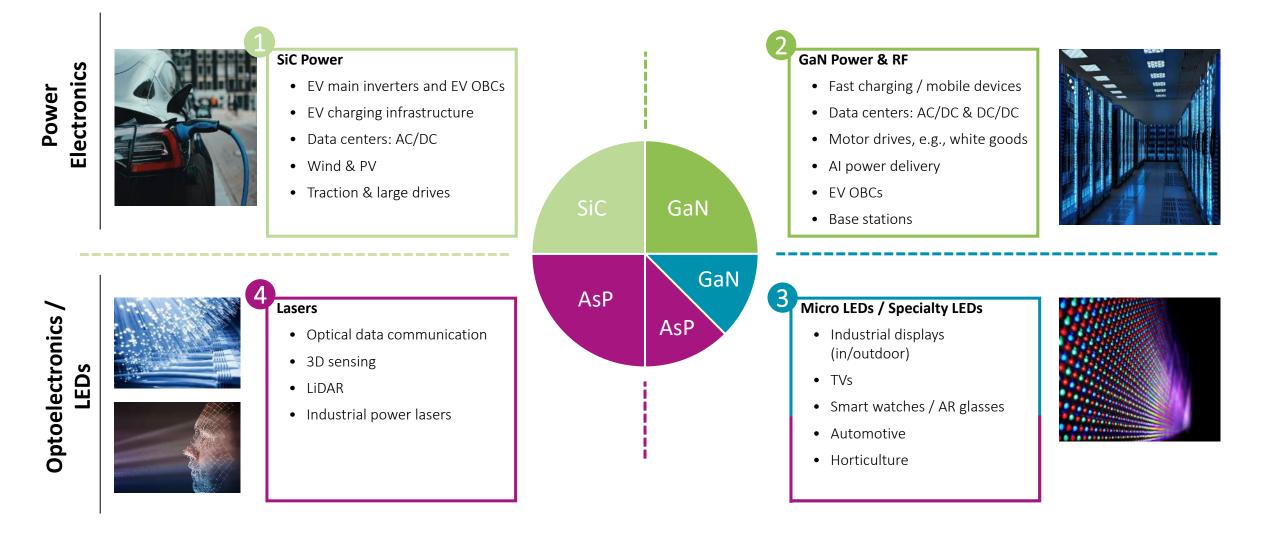


Focused Business Model

- AIXTRON is the leading supplier of <u>deposition</u> <u>equipment</u> to the <u>compound semiconductor</u> industry
- (MO)CVD: The tools run a (Metal-Organic) Chemical Vapor Deposition process for deposition of compound semiconductors
- Competitive strength comes from <u>strong focus</u> and clear <u>technology / market leadership</u> in <u>fast growing segments</u> of the market



We address a comprehensive set of growth applications with our G10 family of products

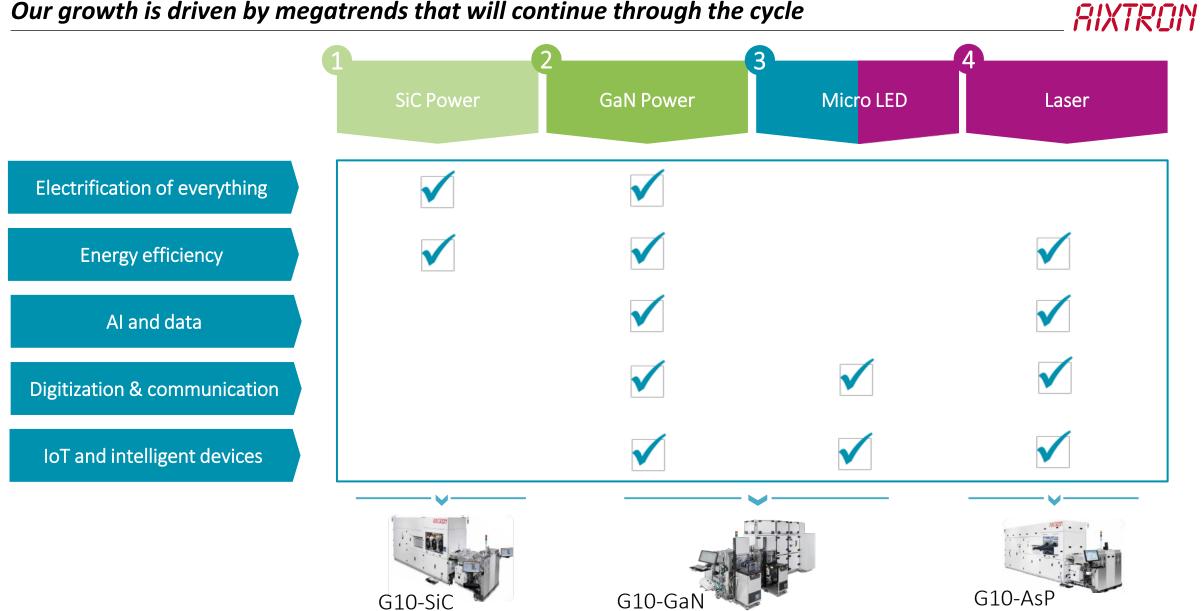


Track record proves execution capability – and gives positive perspective mid/long term



AIXTRON revenues by applications in EUR million





Our growth is driven by megatrends that will continue through the cycle



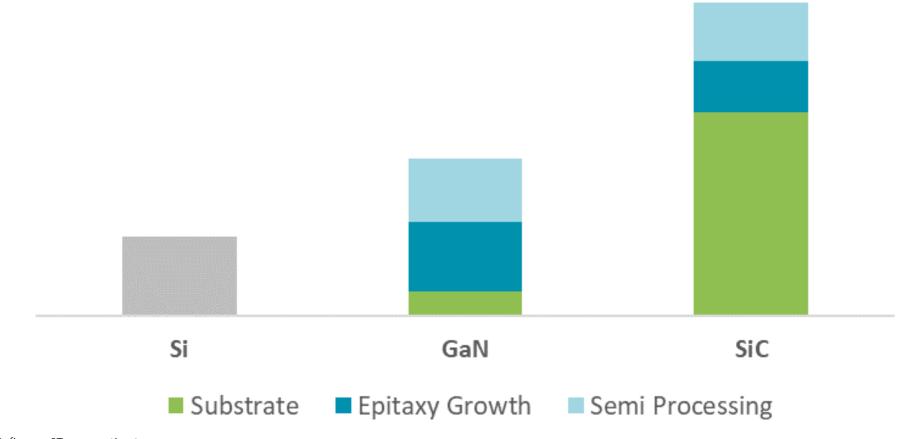
World Semiconductor Market 2023 USD 527 bn **Power Semiconductor Market 2023** USD 22 bn 14% 4.2% 86% 95.8% Logic/Memory/Other Si Power SiC&GaN Power

AIXTRON end markets with strong growth outlook

- SiC with ~12.5% market share in Power today
- Predicted 5 year CAGR of 25%¹
- GaN with ~1.5% market share in Power today
- Predicted 5 year CAGR of 50%¹

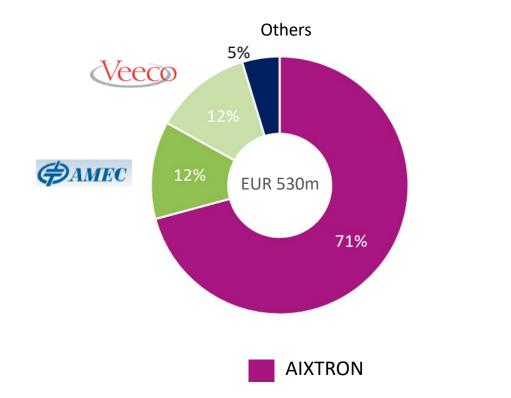


GaN factor ~2x, SiC factor ~4x more expensive than Si

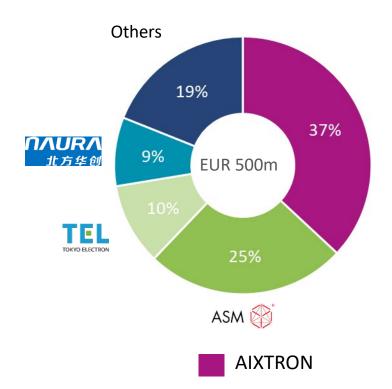




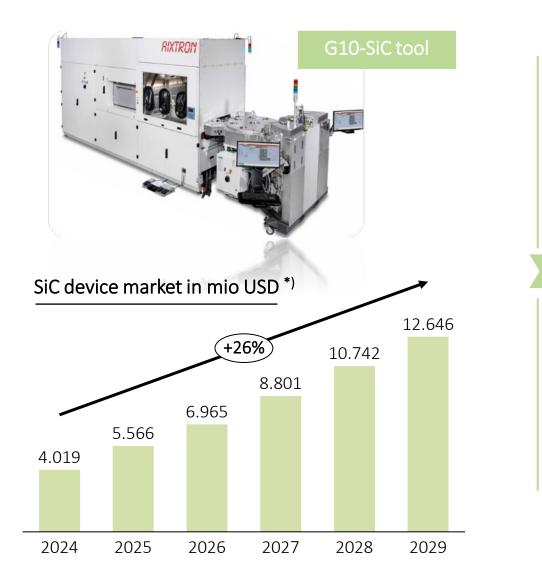
MOCVD (GaN/LED/Opto)



CVD (SiC)







Market update

- <u>Short-term (2025/2026)</u>: "down market" due to capacity overbuild in 2022-2024 and reduced EV adoption
- <u>Mid-term (2026-2029)</u>: ~doubling of annual tool demand by 2029 expected due to
 - Continued EV ramps
 - Market share gains of SiC vs. silicon due to rapidly declining prices of SiC wafers

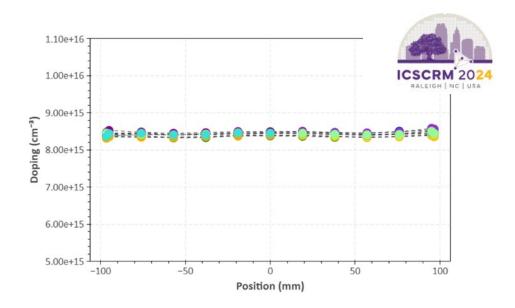
AIXTRON update

- Short-term (2025/2026): "flat" due to
 - Market share gains (additional customers)
 - Some AIXTRON customers grow despite overall market slowdown – esp. by serving the China EV market
- Mid-term (2026-2029):
 - Growth in line with or faster than the market



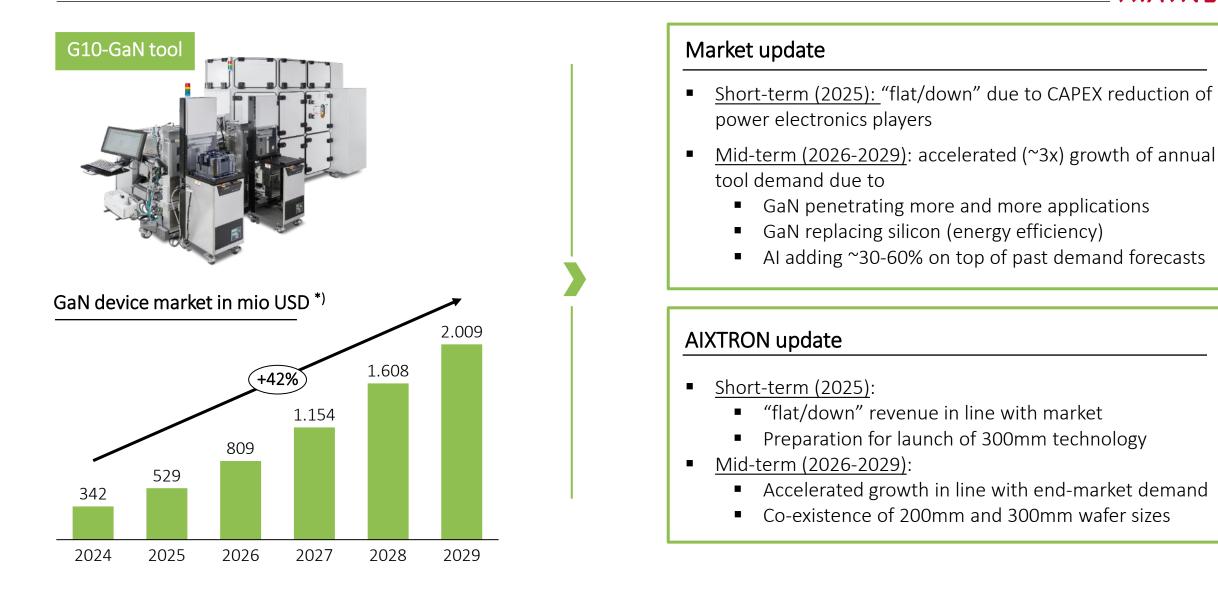


- Market adoption further fueled by **increased availability of 200mm substrates**
- Multi-ject technology as market disruptor
 - Enables very long epi campaigns without recipe change
 - Now enabling material uniformities
 better than Single Wafer performance reference points

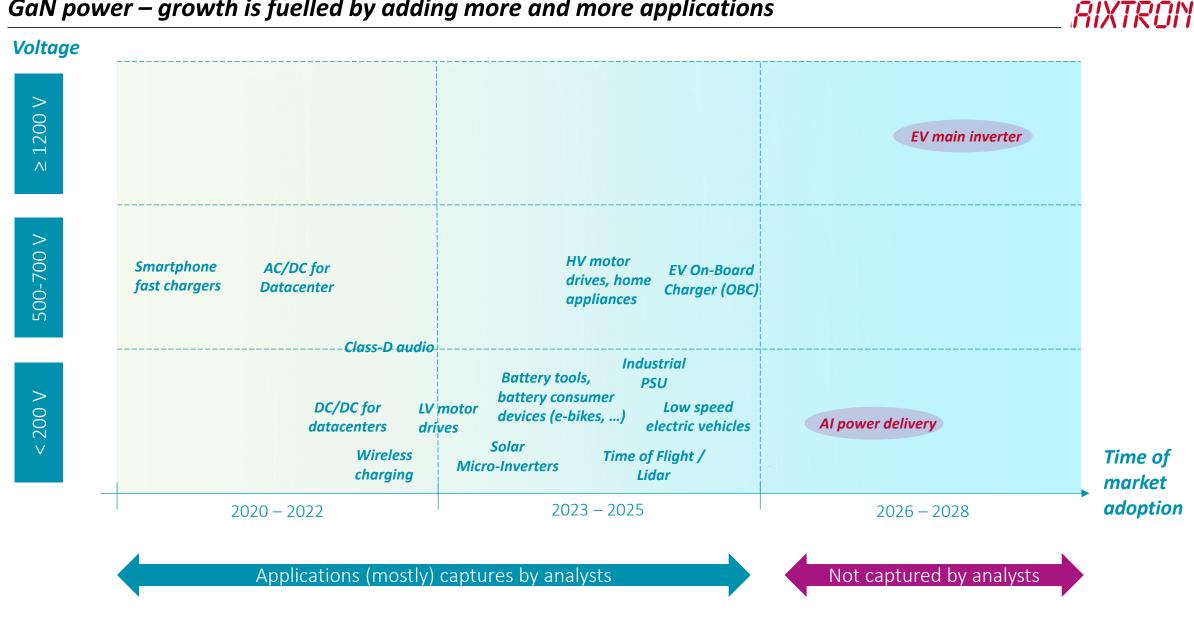


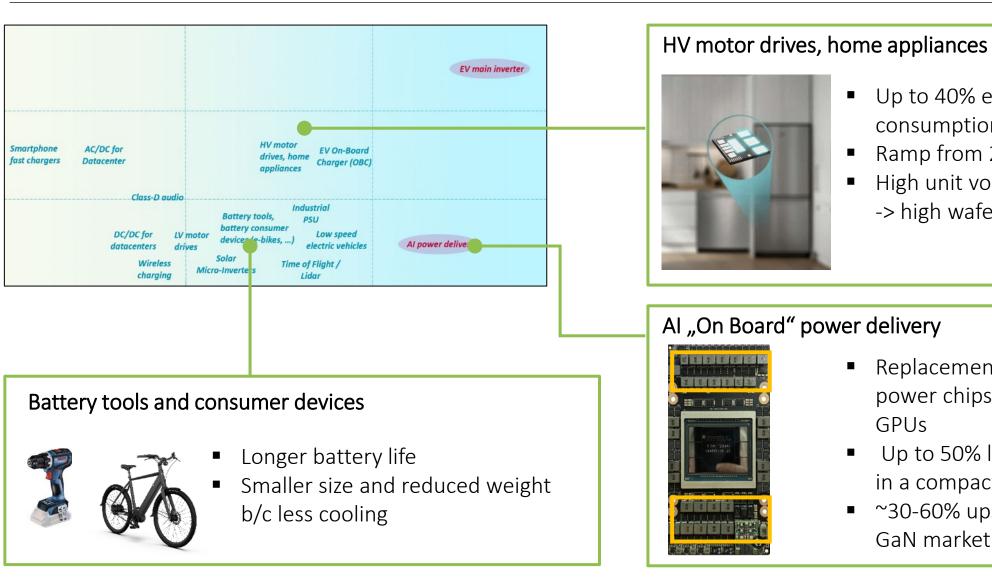
Lab results presented at ICSCRM '24 showing 200mm SiC doping uniformity of (Max-Min)/mean ±0.6 – 0.9%





GaN power – growth is fuelled by adding more and more applications





AIXTRON

Up to 40% energy

GPUs

consumption reduction

Replacement of silicon

power chips around the

in a compact form factor

~30-60% upside to today's

GaN market models

Up to 50% lower power loss

Ramp from 2024 onwards

High unit volume, large dies -

-> high wafer consumption



200mm GaN multi-wafer tool



- Leading platform for 150mm / 200mm wafer size
- Based on 20+ years GaN experience
- Used by all key GaN-players worldwide today (tool of record)

300mm GaN single-wafer tool



- Key ingredients from 200mm technology transfered to 300mm
- Builds on prior experience in GaN
 - Experience gained from today's installed base
 - 300mm showerhead technology (30+ years)
- Technological outperformance vs. 200mm platform recently confirmed by a leading customer





Market update

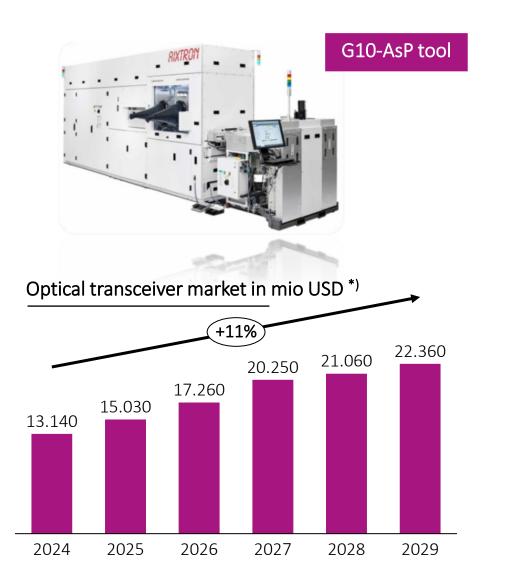
Short-term:

- Slowdown in EU/US after exit of Apple/Osram
- Continued work in TW/CN/KR on LED brightness and cost per display
- Mid-term:
 - Fab construction for serving volume market targeted for 2026/2027

AIXTRON update

- Short-term (2025):
 - R&D work with multiple customers
- Mid-term (2026/2027):
 - Growth in line with the market





Market update

- Digestion of overcapacity until 2025
- New capacity installations starting in 2026 driven by
 - Increasing data traffic
 - IoT and AI as drivers for data
- Doubling of annual tool demand (2028 vs. 2024) expected

AIXTRON update

- Growth in line with market
- Maintain market share through qualification of new tool generation G10-AsP at customers



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AIXTRON – 9M/2024 Key highlights



Financials Q3/2024: Robust quarter delivered

- Order Intake with EUR 144m above prior year (Q3/2023: EUR 118m)
- <u>Revenues with EUR 156m</u> at lower half of guided range; delivery of large project shifted to Q4 per customer request
- Gross Profit at EUR 67m; Gross Margin at 43%; improved product mix vs. H1
- <u>EBIT at EUR 38m</u>; EBIT Margin at 24%; improved due to volume and mix effects vs. H1



Progress in SiC and 300mm GaN activities

- <u>SiC</u>: Further uniformity improvements presented at recent ICSCRM now clear leader in performance and cost per wafer
- GaN: Recent market news on 300mm GaN-technology underpin the structural growth expectations in GaN
 - AIXTRON working for many years on a 300mm GaN platform based on leading showerhead technology
 - Several 300mm tools already integrated into R&D and pilot lines of leading semiconductor customers
 - New innovation center fully meeting future 300mm cleanroom requirements to support R&D roadmap

FY/2024 guidance confirmed

- Revenues FY/24E: EUR 620m EUR 660m
- Gross Margin FY/24E: 43% 45%
- EBIT Margin FY/24E: 22% 25%



Revenues Q4/24E: EUR 215m – 255m

Structural growth drivers fully intact - but visibility on FY/2025 remains low

- Demand in end markets currently weaker than originally expected
- As of today, revenue FY/2025 likely to be on FY/2024 level or slightly below

AIXTRON Innovation Center in Herzogenrath (Germany) - build and completion throughout 2024



First tools moved in as planned in Q3/2024



- Total invest of EUR ~100 million
- 1,000m² additional cleanroom space
- Allows for collaboration and co-development with customers
- Designed and built for 300mm recent market news on 300mm fully supports decision



	Revenues	Gross Profit	Margin	EBIT	Margin
Q3	€ 156.3 m <i>-5% YoY</i>	€ 67.1 m <i>-12% YoY</i>	43%	€ 37.5 m <i>-17% YoY</i>	24%
9M	€ 406.4 m -2% YoY	€ 160.0 m -12% YoY	39%	€ 60.3 m <i>-35% YoY</i>	15%

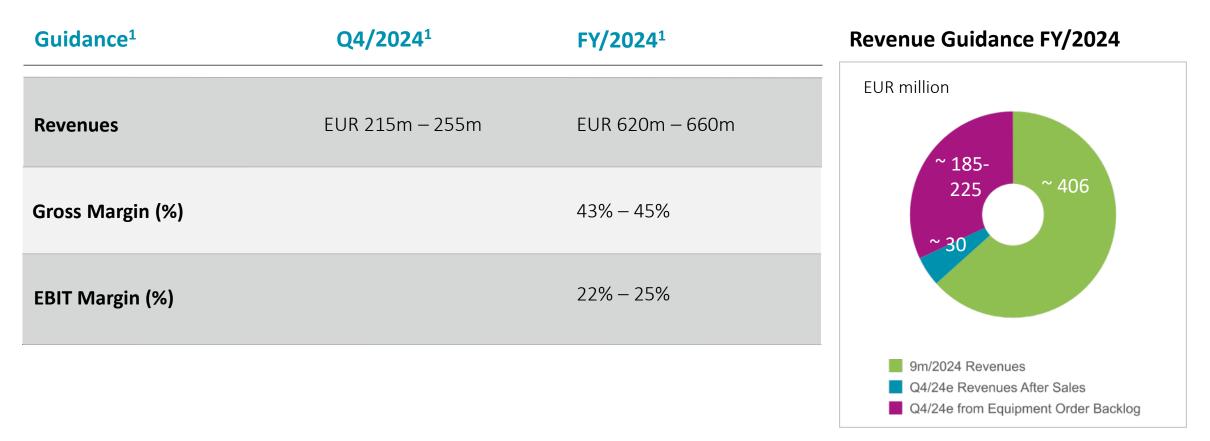
- Gross margin improvement in Q3 vs. H1 due to better mix; further significant step up expected in Q4
- EBIT margin improvement in Q3 vs. H1 due to volume and mix; further significant step up expected in Q4
- R&D costs at peak level due to finalization of G10 family and next gen (300mm) development in parallel

	Working Capital ¹	Operating Cash Flow	Free Cash Flow	Cash Balance ²
Q3	€ 385.2 m	€ 15.4 m	€ -1.5 m	€ 78.1 m
	€ +26.8 m vs. Q2/24	€ +10.6 m YoY	€ +0.6 m YoY	€ -1.3 m vs. Q2/24
9M	€ 385.2 m	€ 28.2 m	€ -58.0 m	€ 78.1 m
	€ +31.5 m vs. Q4/23	€ +93.8 m YoY	€ +24.3 m YoY	€ -103.6 m vs. Q4/23

- Inventory burn down kicking in after peak reached in Q2; further positive impact expected in Q4 and throughout 2025
- Working Capital in Q3 increasing due to decrease in payables and customer advance payments
- High Capex in 2024 driven by strategic investments in Innovation Center; significant reduction expected in 2025

AIXTRON – Guidance for Q4/2024 and FY/2024

EUR million





- Company introduction and market update
- Q3/2024 highlights and financials
- Q3/2024 backup

Renewed product portfolio – strong market adoption of G10 tool family

RIXTRON



- 9x150mm (6") or 6x200mm (8")
- Cost benefit of batch tool with uniformity on par with single wafer tool
- Highest productivity in the market
- End Markets/Products:
 Electric vehicles, charging
 infrastructure



- 8x150mm (6") or 5x200mm (8")
- Compact cluster for high volume GaN manufacturing
- Designed for replacement of Si power devices with GaN devices

• End Markets/Products:

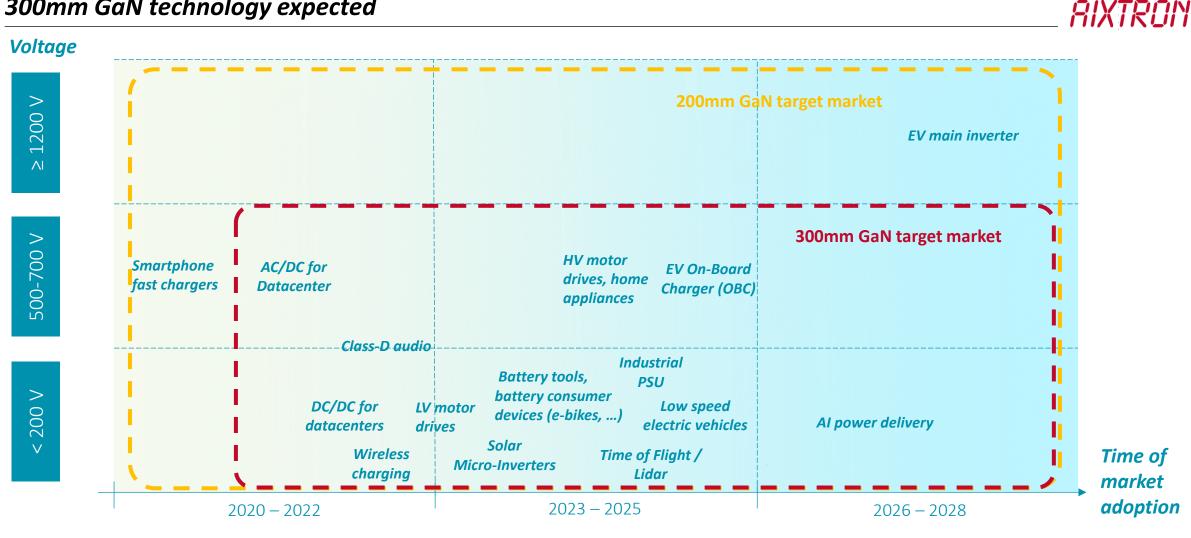
GaN Power Electronics & Wireless communication



- 8x150mm (6") or 5x200mm (8")
- Fully automated AsP MOCVD system
- 10x lower defect density than predecessor tool
- End Markets/Products: Micro LED, Optical Communications, 3Dsensing & LiDAR

G10 with significant revenue contribution in 2024

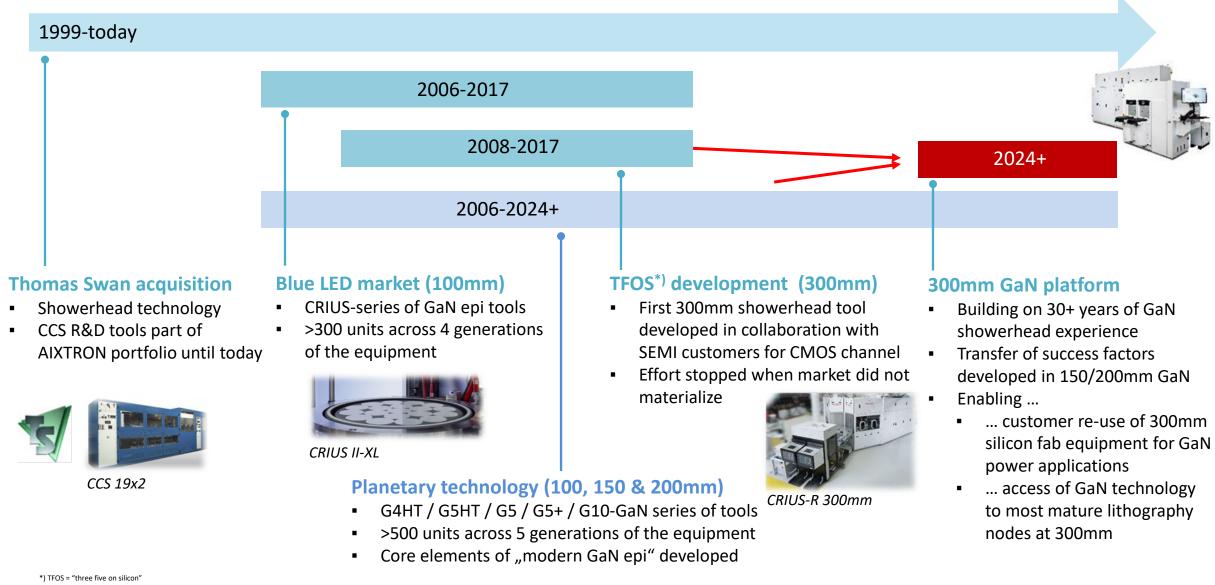
GaN power adoption progressing application by application: co-existence of 200mm and 300mm GaN technology expected



Co-existence of 200mm and 300mm GaN power expected for extended periods of time

• Reuse strategies for chip-making equipment expected as key driver for 200mm vs. 300mm decisions

In 300mm AIXTRON builds on a long history of showerhead and GaN epi tools

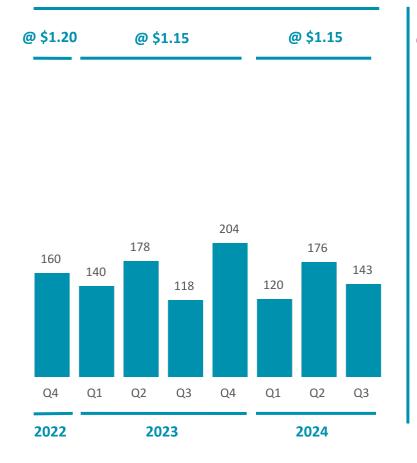


24 Months Business Development

EUR million

Order Intake

(incl. equipment & after sales)¹



Revenues

(incl. equipment & after sales)²

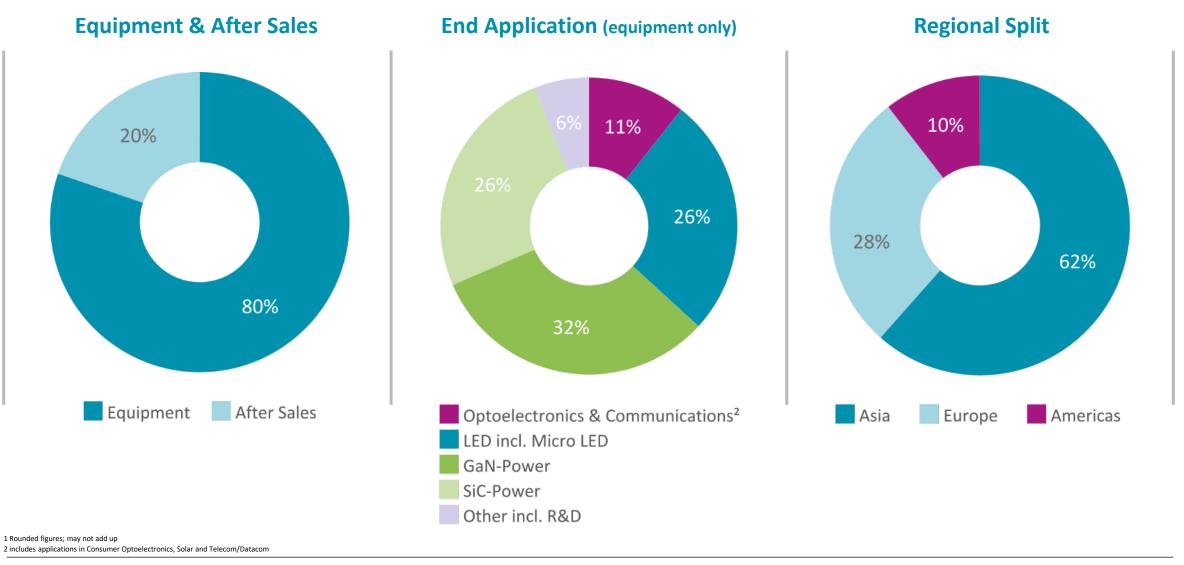


Order Backlog

(equipment only)¹

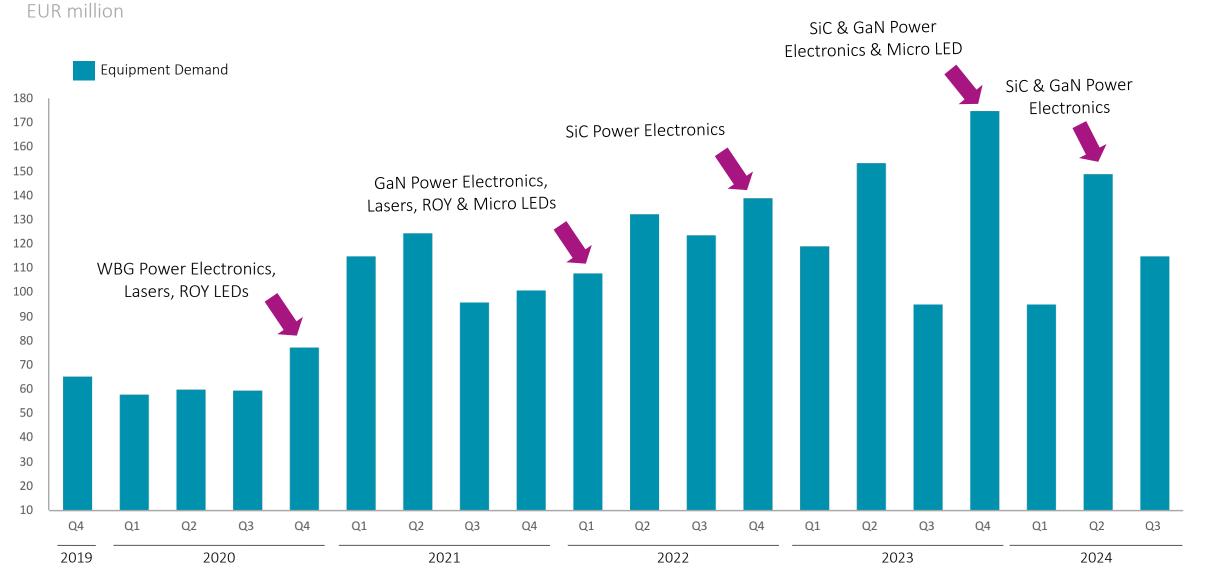


1 USD order intake and backlog were recorded at the prevailing budget rate (2022: \$1.20/€; 2023: \$1.15/€: 2024: \$1.15€) 2 USD revenues were converted at the actual period average FX rate (2022: \$1.06/€; 2023: \$1.08/€; 2024: \$1.09/€)



Demand Drivers on Order Intake per Quarter (Equipment Only)





AIXTRON Competitive Landscape – clear market leader

		USA	Europe	China/Taiwan	Korea	Japan
Opto	GaAs/InP Lasers ROY (Micro) LED	Veeco		Hermes Epitek		TAIYO NIPPON SANSO The Gas Professionals
	GaN (Micro) LED	Veeco		C TOPEC Hermes Epitek	TE5	TAIYO NIPPON SANSO The Gas Professionals
Power	GaN Power	Veeco		Элмес		TAIYO NIPPON SANSO The Gas Professionals
	SiC Power		ASM 🔯			TEL TOKYO ELECTRON

Consolidated Income Statement¹

(EUR million)	9M/2024	9M/2023	+/- (%)	Q3/2024	Q3/2023	+/- (%)
Revenues	406.4	415.7	(2)%	156.3	165.0	(5)%
Cost of sales	246.4	234.9	5%	89.2	88.8	0%
Gross profit	160.0	180.8	(12)%	67.1	76.2	(12)%
Gross margin	39%	43%	(4)pp	43%	46%	(3)pp
Selling expenses	11.0	10.1	9%	3.6	3.4	6%
General & admin expenses	23.9	24.3	(2)%	8.2	7.8	5%
R&D	68.7	59.8	15%	21.2	20.8	2%
Net other operating income	(3.9)	(6.7)	(42)%	(3.5)	(1.1)	218%
EBIT	60.3	93.4	(35)%	37.5	45.3	(17)%
EBIT margin	15%	22%	(7)pp	24%	27%	(3)pp
Net profit	52.9	83.5	(37)%	30.9	39.6	(22)%

Consolidated Balance Sheet¹



(EUR million)	30.09.24	30.06.24	31.12.23
Property, plant & equipment and leased assets	224.3	209.8	147.8
Goodwill	72.6	72.9	72.3
Other intangible assets	5.4	5.4	4.4
Others	42.1	44.5	41.8
Non-current assets	344.5	332.5	266.3
Inventories	426.7	447.9	394.5
Trade receivables	116.4	117.0	157.6
Others	36.6	35.5	30.0
Cash & cash deposits & investments	78.1	79.4	181.7
Current assets	657.7	679.7	763.7
Equity	789.9	758.1	777.6
Non-current liabilities	7.3	7.5	7.7
Trade payables	39.0	72.9	57.8
Contract liabilities for advance payment	118.9	133.0	141.3
Others	47.2	40.7	45.6
Current liabilities	205.1	246.6	244.6
Balance sheet total	1,002.2	1,012.2	1,029.9

Consolidated Statement of Cash Flows¹



(EUR million)	9M/2024	9M/2023	Q3/2024	Q3/2023
Net result	52.9	83.5	30.9	39.6
Adjust for:				
Non-cash items	6.8	4.4	11.3	12.1
Changes in Working Capital ²	(31.5)	(153.5)	(26.8)	(46.9)
Cash flow from operating activities	28.2	(65.6)	15.4	4.9
Capital expenditures/disposals	(86.2)	(16.6)	(17.0)	(7.0)
Free cash flow	(58.0)	(82.3)	(1.5)	(2.2)
FX effects/other		(0.5)	0.1	0.9
Cash & cash deposits & investments	78.1	209.9	78.1	209.9

Four Year View on Consolidated Income Statement¹



(EUR million)	FY/23	FY/22	FY/21	FY/20
Revenues	629.9	463.2	429.0	269.2
Cost of sales	350.8	267.9	247.5	161.0
Gross profit	279.0	195.3	181.5	108.3
Gross margin	44%	42%	42%	40%
Selling expenses	14.1	11.2	10.0	9.7
General & admin expenses	32.6	29.2	25.4	18.0
R&D	87.7	57.7	56.8	58.4
Net other operating income	(12.1)	(7.6)	(9.7)	(12.6)
EBIT	156.8	104.7	99.0	34.8
EBIT margin	25%	23%	23%	13%
Net result	145.2	100.5	94.8	34.5

Four Year View on Consolidated Balance Sheet¹



(EUR million)	31.12.2023	31.12.2022	31.12.2021	31.12.2020
Property, plant & equipment and leased assets	147.8	99.0	74.0	63.5
Goodwill	72.3	72.5	72.3	71
Other intangible assets	4.4	3.3	2.2	2.9
Others ²	41.8	34.9	25.4	74.9
Non-current assets	266.3	209.7	174.0	212.2
Inventories	394.5	223.6	120.6	79.1
Trade receivables	157.6	119.7	81.0	41.3
Others	30.0	24.5	12.6	8.1
Cash & cash deposits & investments	181.7	325.2	352.5	249.7
Current Assets	763.7	692.9	566.7	378.2
Equity	777.6	663.3	592.2	496.4
Non-current liabilities	7.7	10.0	8.5	6.6
Trade payables	57.8	46.1	19.6	10.8
Contract liabilities for advance payment	141.3	141.2	77.0	50.8
Others	45.6	41.9	43.4	25.8
Current liabilities	244.6	229.3	140.1	87.5
Balance Sheet total	1,029.9	902.6	740.7	590.4

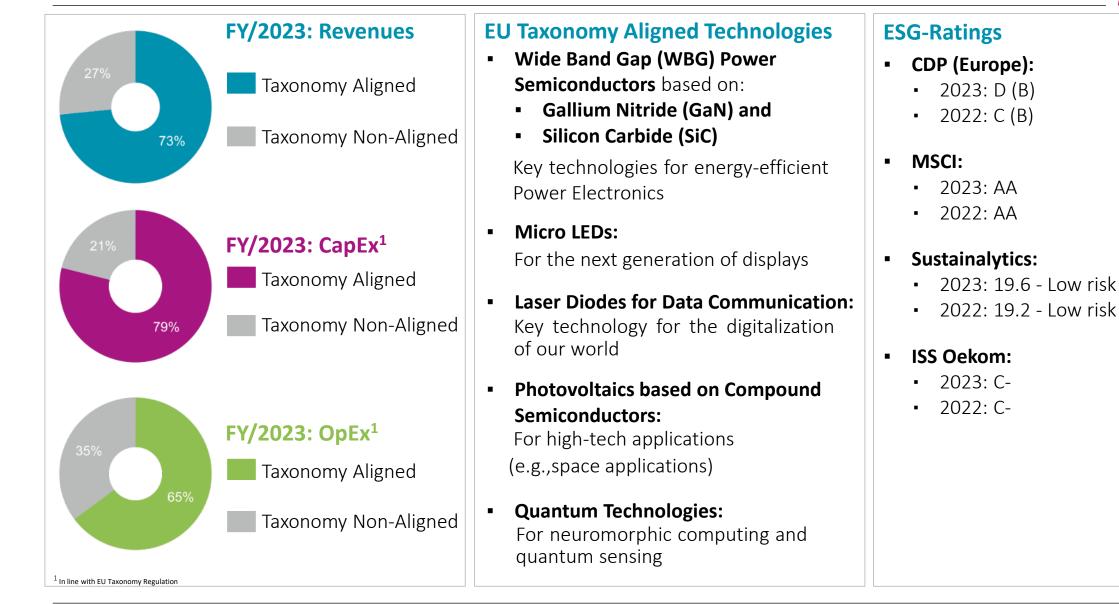
Four Year View on Consolidated Statement of Cash Flows¹



(EUR million)	FY/23	FY/22	FY/21	FY/20
Net Result	145.2	100.5	94.8	34.5
Adjust for:				
Non-Cash Items	4.3	(11.9)	18.3	9.2
Changes in Working Capital ²	(196.8)	(51.5)	(46.7)	(20.4)
Cash Flow from Operating Activities ²	(47.3)	37.1	66.4	23.3
Capital Expenditures/Disposals	(62.4)	(29.5)	(17.4)	(9.3)
Free Cash Flow	(109.7)	7.7	48.7	14.0
FX Effects/Other	(1.7)	(0.4)	3.2	(2.0)
Cash & cash deposits & investments	181.7	325.2	352.5	309.7

EU Taxonomy Alignment & ESG-Ratings – well above industry standard





Our Financial Reporting Dates:

27 Feb. 2025	FY/24 Results, Conference Call
30 Apr. 2025	Q1/25 Results, Conference Call
31 Jul. 2025	Q2/25 Results, Conference Call
30 Oct. 2025	Q3/25 Results, Conference Call

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Conferences & Roadshows:

19 Nov	DZ BANK Equity Conference, Frankfurt
20/21 Nov	Morgan Stanley European Technology [et al.]
	Conference 2024, Barcelona
26 Nov	Deutsches Eigenkapitalforum 2024,
	Frankfurt
28/29 Nov	Roadshow Mailand/Lugano
2 Dec	Berenberg European Conference 2024,
	London
9/10 Jan	ODDO BHF Forum 2025, Lyon

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For Dial-in Data, please refer to our website: <u>www.aixtron.com/en/investors/events/conference-calls</u>



AIXTRON

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