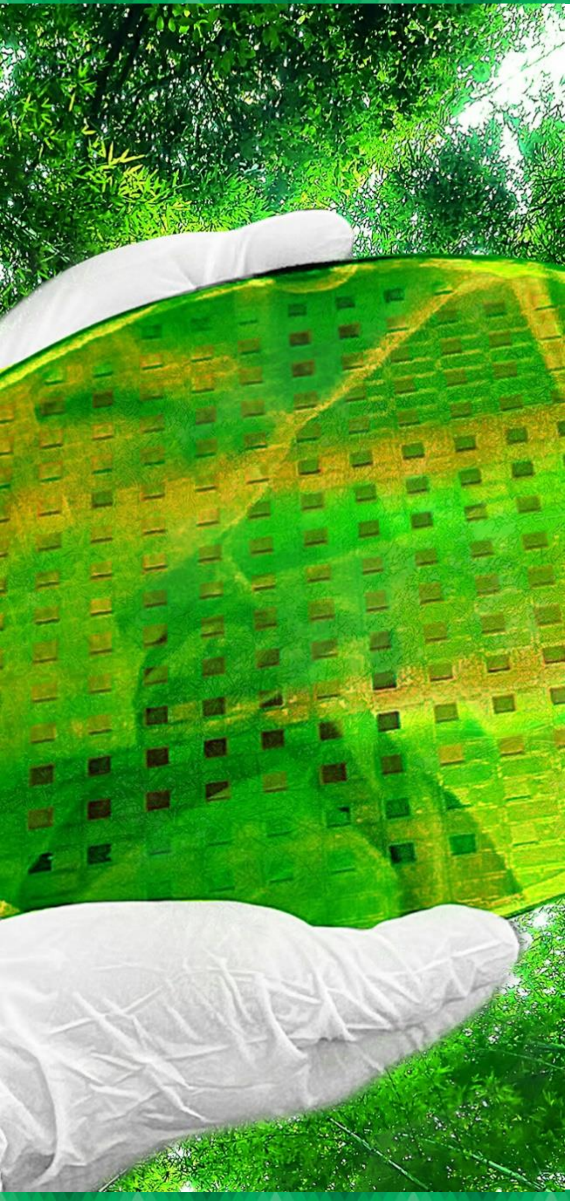

INVESTOR PRESENTATION
Q4 and FY 2023 RESULTS

February 22, 2024

Safe Harbor Statement

This presentation contains statements about management's future expectations, plans and prospects of our business that constitute forward-looking statements, which are found in various places throughout the presentation, including, but not limited to, statements relating to expectations of orders, net sales, product shipments, expenses, timing of purchases of assembly equipment by customers, gross margins, operating results and capital expenditures. The use of words such as “anticipate”, “estimate”, “expect”, “can”, “intend”, “believes”, “may”, “plan”, “predict”, “project”, “forecast”, “will”, “would”, and similar expressions are intended to identify forward looking statements, although not all forward-looking statements contain these identifying words. The financial guidance set forth under the heading “Outlook” contains such forward-looking statements. While these forward looking statements represent our judgments and expectations concerning the development of our business, a number of risks, uncertainties and other important factors could cause actual developments and results to differ materially from those contained in forward looking statements, including any inability to maintain continued demand for our products; failure of anticipated orders to materialize or postponement or cancellation of orders, generally without charges; the volatility in the demand for semiconductors and our products and services; the extent and duration of the COVID-19 pandemic and measures taken to contain the outbreak, and the associated adverse impacts on the global economy, financial markets, global supply chains and our operations as well as those of our customers and suppliers; failure to develop new and enhanced products and introduce them at competitive price levels; failure to adequately decrease costs and expenses as revenues decline; loss of significant customers, including through industry consolidation or the emergence of industry alliances; lengthening of the sales cycle; acts of terrorism and violence; disruption or failure of our information technology systems; consolidation activity and industry alliances in the semiconductor industry that may result in further increased customer concentration, inability to forecast demand and inventory levels for our products; the integrity of product pricing and protection of our intellectual property in foreign jurisdictions; risks, such as changes in trade regulations, conflict minerals regulations, currency fluctuations, political instability and war, associated with substantial foreign customers, suppliers and foreign manufacturing operations, particularly to the extent occurring in the Asia Pacific region where we have a substantial portion of our production facilities; potential instability in foreign capital markets; the risk of failure to successfully manage our diverse operations; any inability to attract and retain skilled personnel, including as a result of restrictions on immigration, travel or the availability of visas for skilled technology workers as a result of the COVID-19 pandemic; those additional risk factors set forth in Besi's annual report for the year ended December 31, 2022 and other key factors that could adversely affect our businesses and financial performance contained in our filings and reports, including our statutory consolidated statements. We expressly disclaim any obligation to update or alter our forward-looking statements whether as a result of new information, future events or otherwise.

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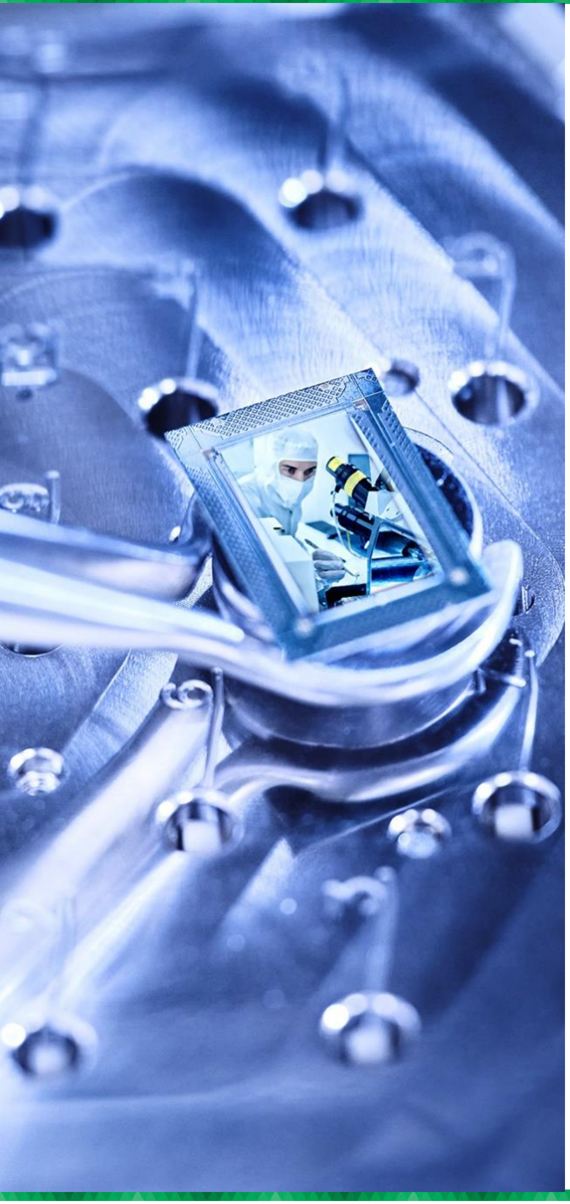


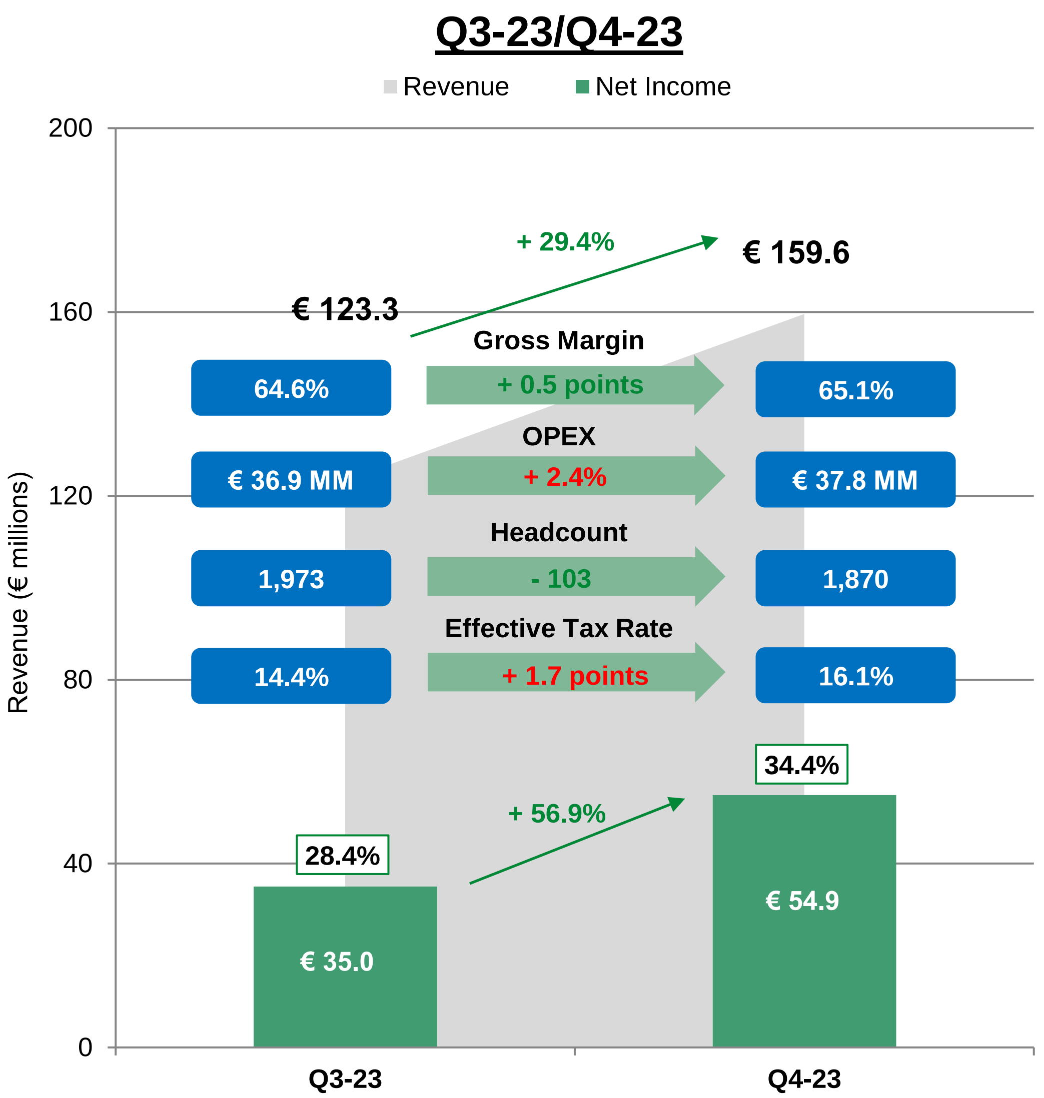
I. KEY HIGHLIGHTS

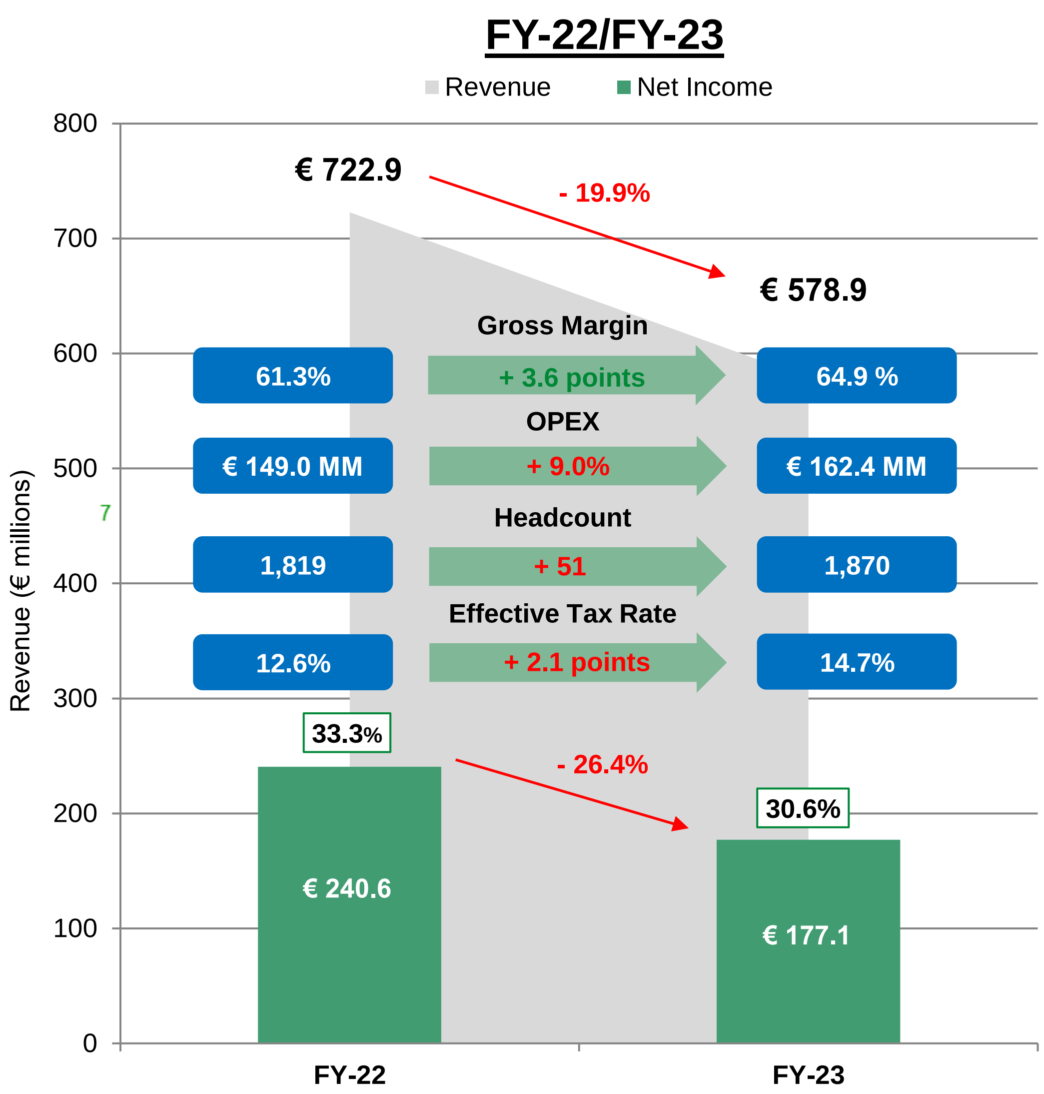
Q4 Results Exceed Guidance. Orders Up 30.7% vs. Q3-23

€ millions	Guidance Q4-23*	Q4-23	∆ Q3-23	∆ Q4-22
Revenue	Up 15%-25%	**159.6**	+ 29.4%	+ 15.9%
Orders		**166.4**	+ 30.7%	- 7.8%
Gross Margin	62%-64%	**65.1%**	+ 0.5pts	+ 2.8pts
Opex	Up ~5%	**37.8**	+ 2.4%	+ 1.9%
Operating Income	55.5**	**66.1**	+ 54.8%	+ 35.7%
Net Income		**54.9**	+ 56.9%	+ 36.6%
EPS Basic		**0.71**	+ 57.8%	+ 39.2%
Net Cash		**113.0**	+ 25.3%	- 67.4%

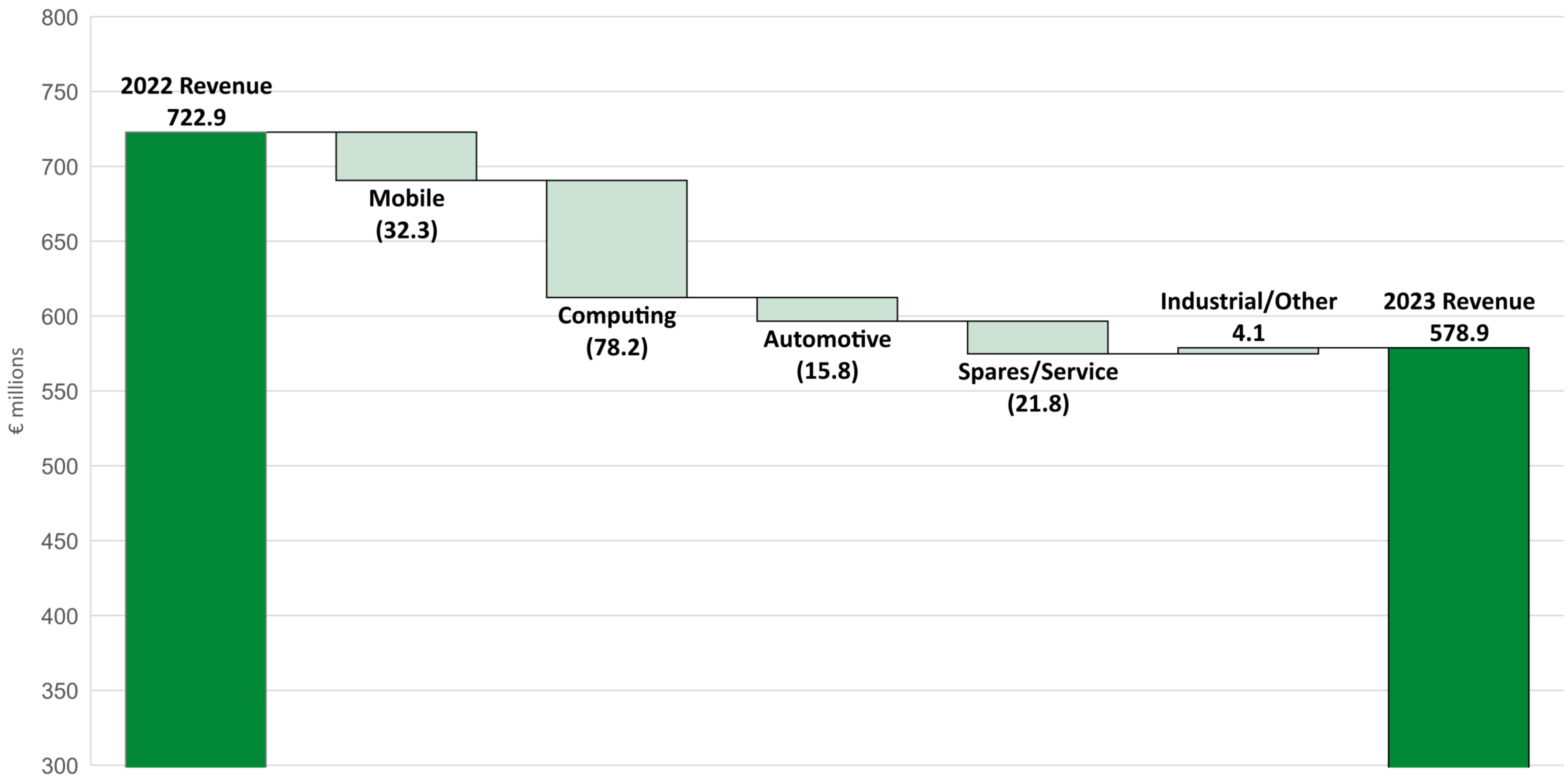
* As compared to Q3-23
** At midpoint of guidance range

Leadership Position in Advanced Packaging Helped Offset Weakness in Mainstream Assembly Markets

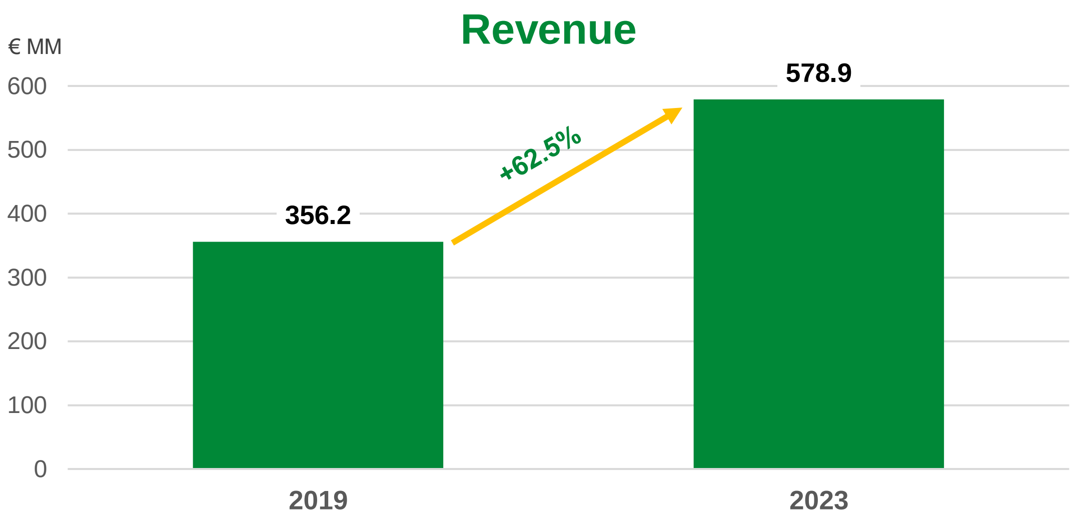


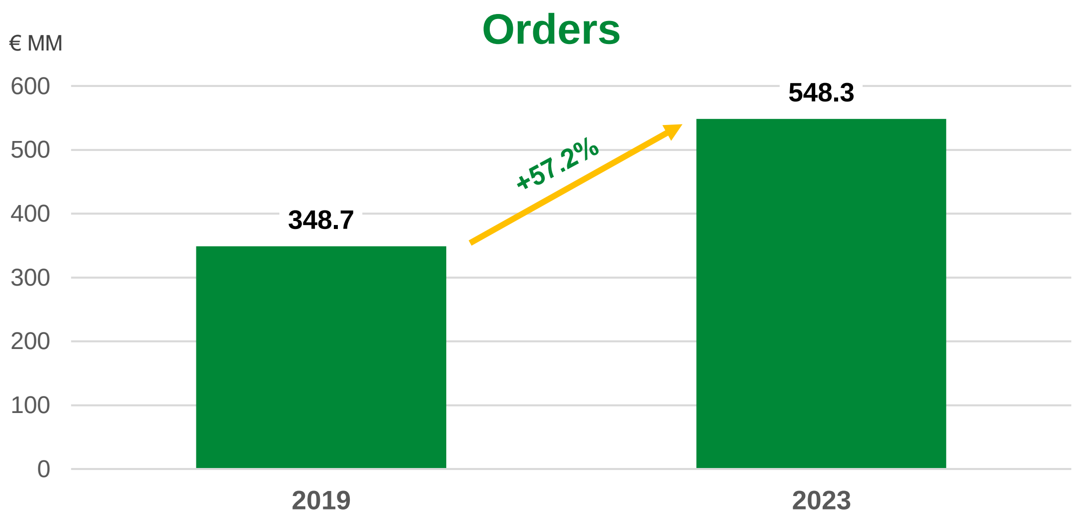


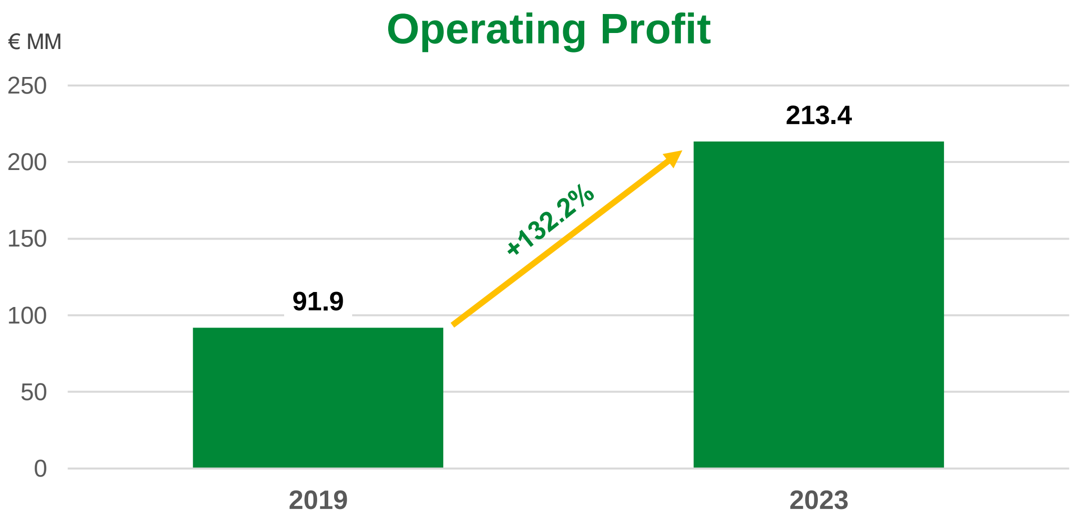
End-User Market Trends 2022/2023

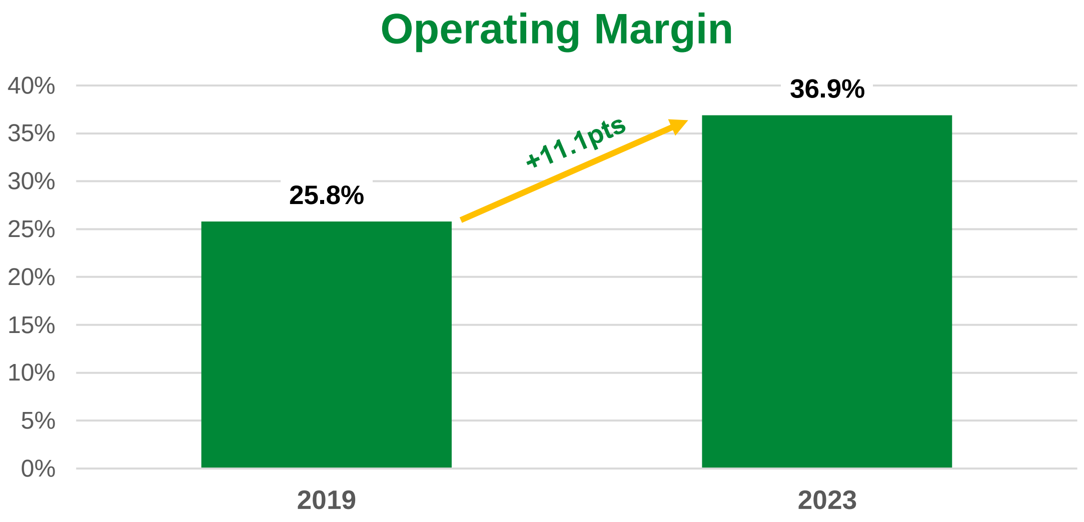


Performance Significantly Above Last Industry Downturn

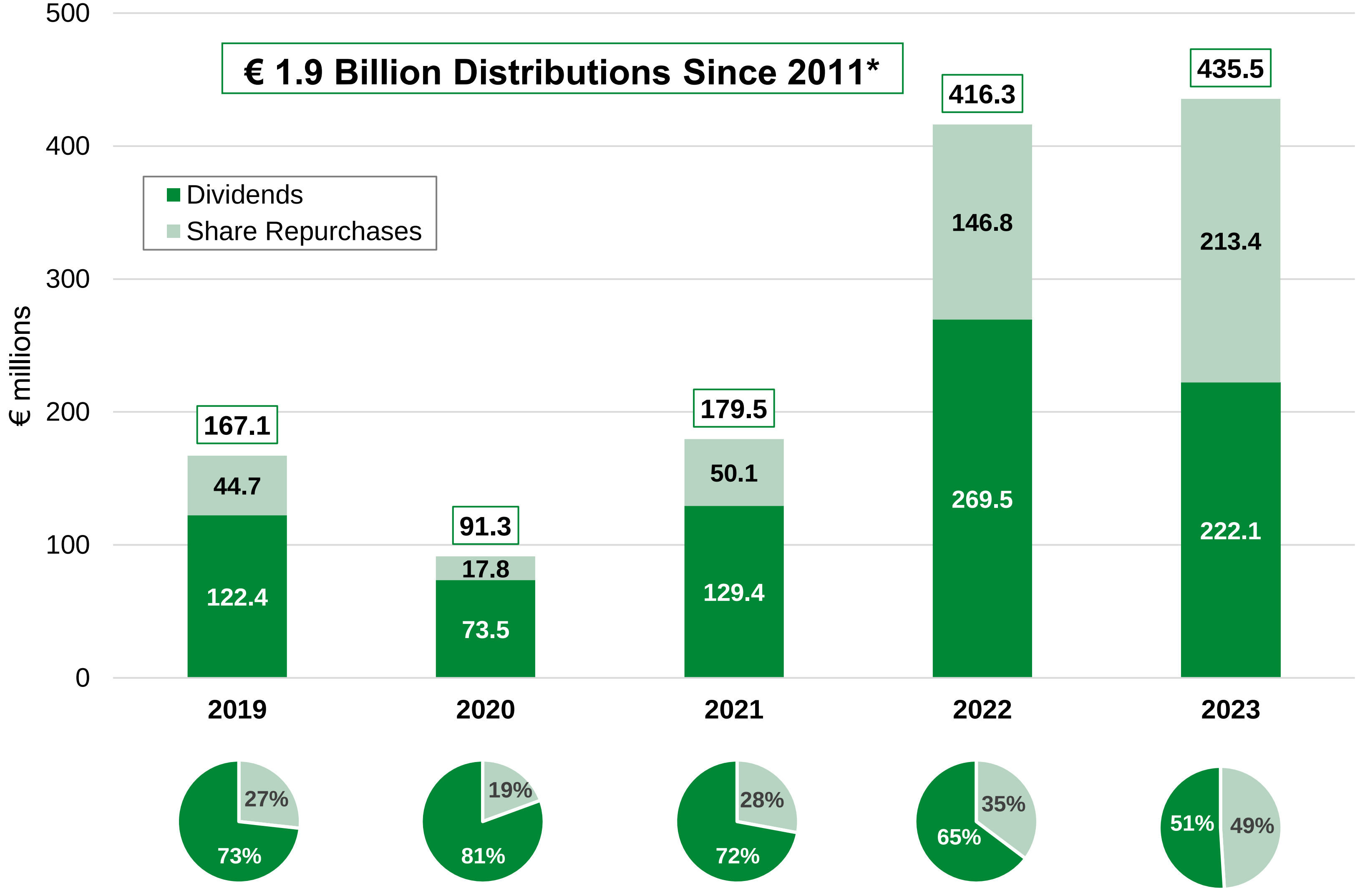






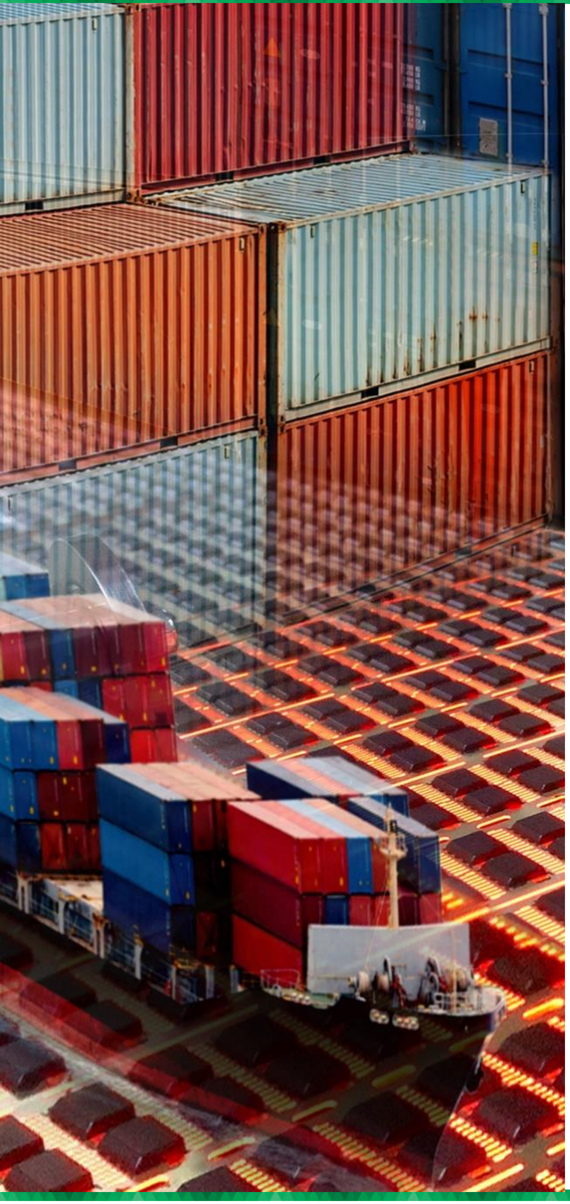


Attractive Capital Allocation Policy Continues



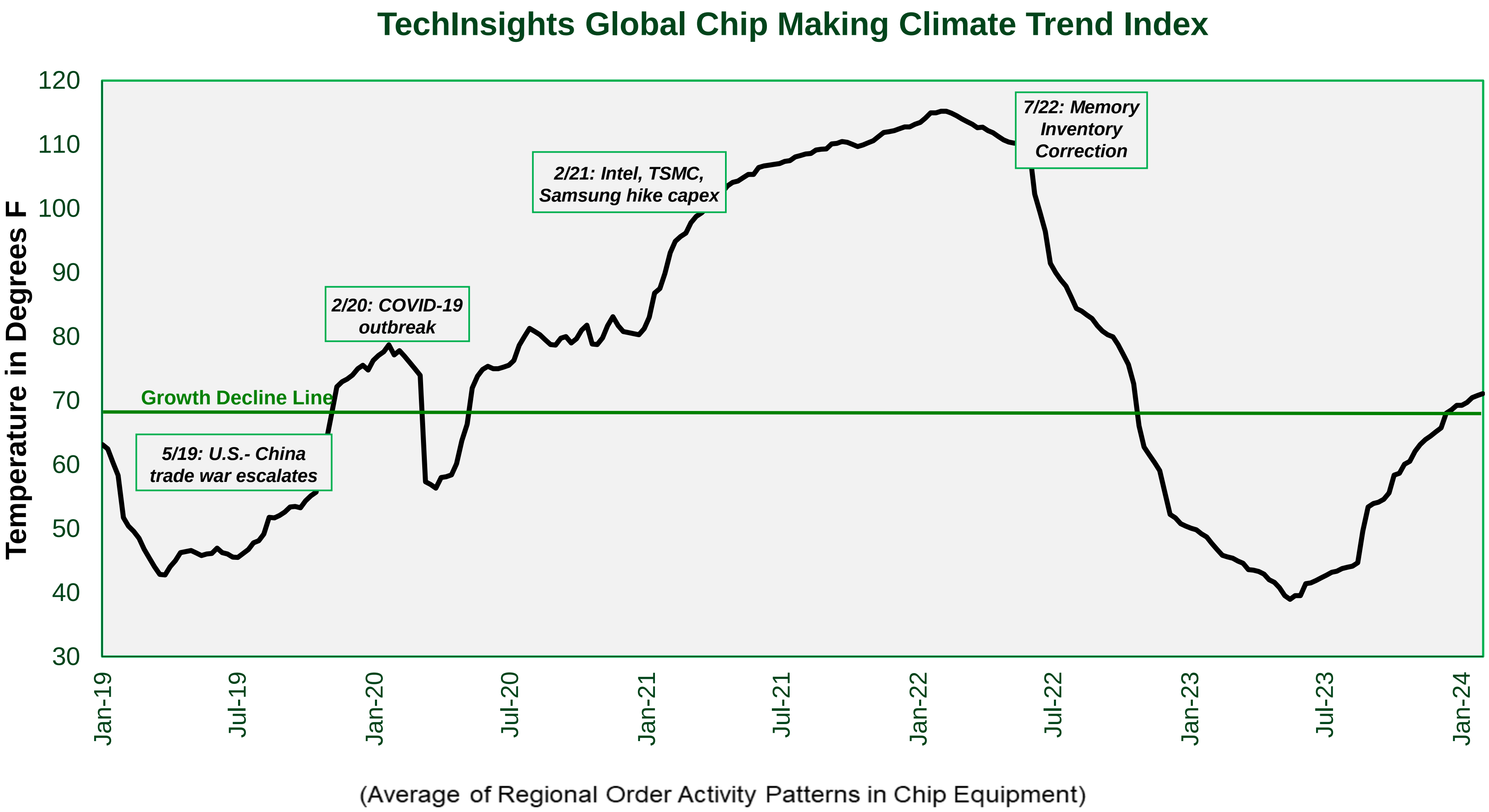
* Includes proposed dividend for approval at 2024 AGM.

- **€ 435.5 million distributed in 2023**
- **€ 300 million buyback program completed:**
  - ~4.3 million shares purchased
  - Average price: € 69.87 per share
- **New € 60 million program:**
  - € 10 million purchased in 2023 at average price of € 123.93 per share
- **Treasury shares equal 5.1% of TSO**
- **€ 2.15 dividend proposed for AGM approval. 94% pay-out ratio**



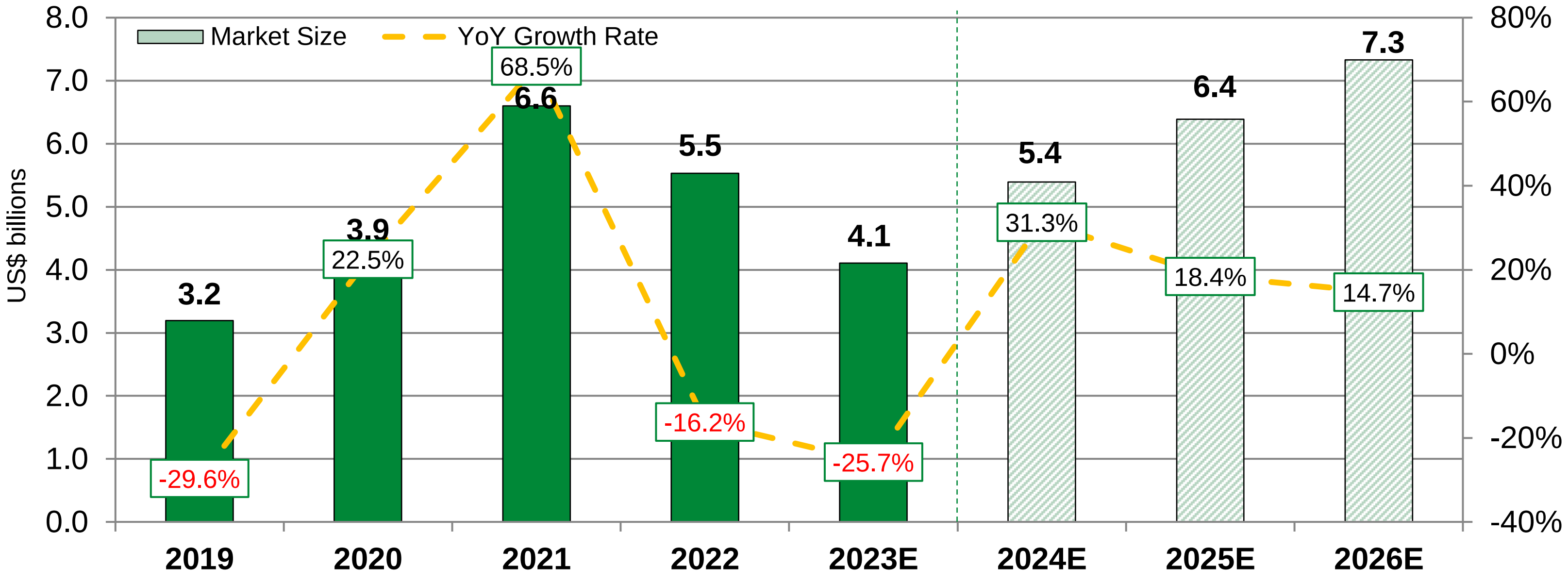
II. MARKET & STRATEGY

Market Conditions Reached Trough in 2023. New Upcycle Underway



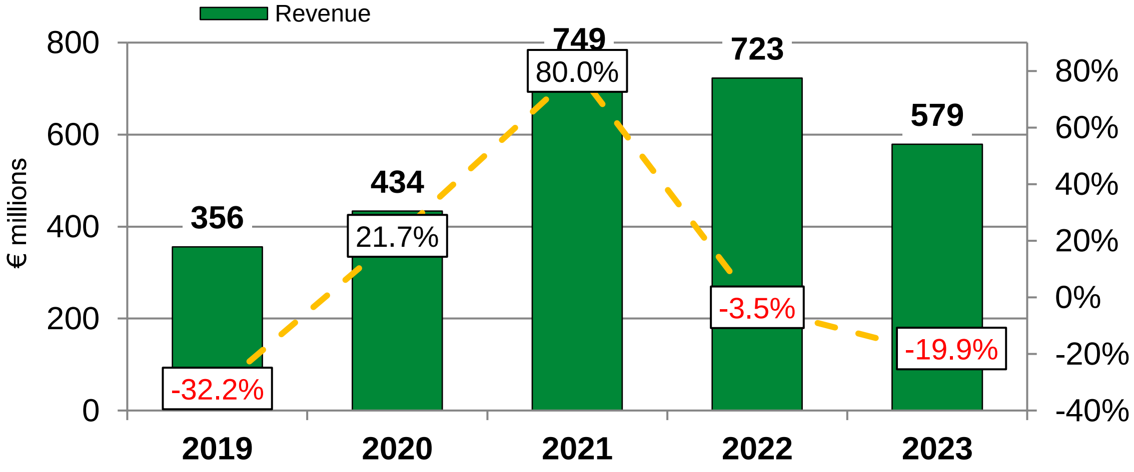
Source: TechInsights, February 2024

Assembly Equipment Market Trends 2019-2026E



Source: TechInsights, December 2023. Assembly equipment revenue excludes hybrid bonding contribution and service revenue.

Besi Revenue



TechInsights now forecasts 26% downturn in 2023

- Versus -23% last forecast
- ~40% decrease from 2021 peak

Strong rebound anticipated

- Forecast $ 7.3 billion in 2026
  - +78% from 2023 levels

Secular fundamentals intact:

- AI, Datacenter, HPC, 5G, primary drivers
- Investment in new process technologies: hybrid bonding/CSP
- Onshoring new advanced packaging fabs

Strategic Initiatives Successfully Achieved 2023

Key Highlights
✓ Navigated industry downturn at high profitability levels
✓ Increased orders for next generation AI, HBM and photonics applications
✓ Well positioned for next upturn with leading advanced packaging portfolio
✓ Progress continued on hybrid bonding adoption and wafer level assembly agenda
✓ ESG initiatives favorably position Besi to meet or exceed 2024 targets
✓ Operating footprint increased with expansion in Malaysia, Singapore and Vietnam
✓ Technology Advisory Board formed

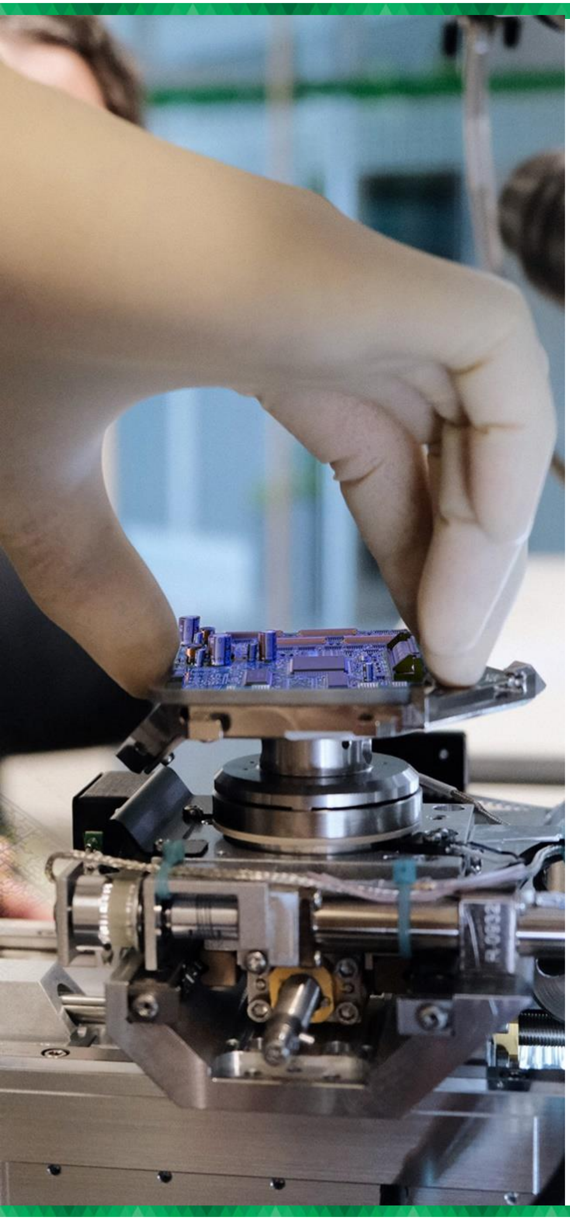
Advanced Packaging Update

2.5D Assembly

- AI logic/memory stacking
- Photonics, HBM3 primary drivers
- Expanded orders for Multi Module and Flip Chip systems in H2-23
- TCB Next chip to wafer system delivered
- Shipped first in-line, flip chip system for 2.5D assembly HBM/logic applications

3D Hybrid Bonding

- Installed base of 40+ revenue producing units
- Customer adoption expanded from 3 to 9
- Year-end backlog and orders up ~2x vs. Q4-22
- Half of Q4-23 HB orders for leading edge, 100 nm accuracy
- First orders received from memory customer



III. OUTLOOK

Guidance Q1-24

	Q4-23	Q1-24
Revenue	€159.6	-5% - -15%
Gross Margin	65.1%	64% - 66%
Baseline Operating Expenses	€ 35.6	+5% - 0%
Total Operating Expenses	€ 37.8	+ 55% - + 50%

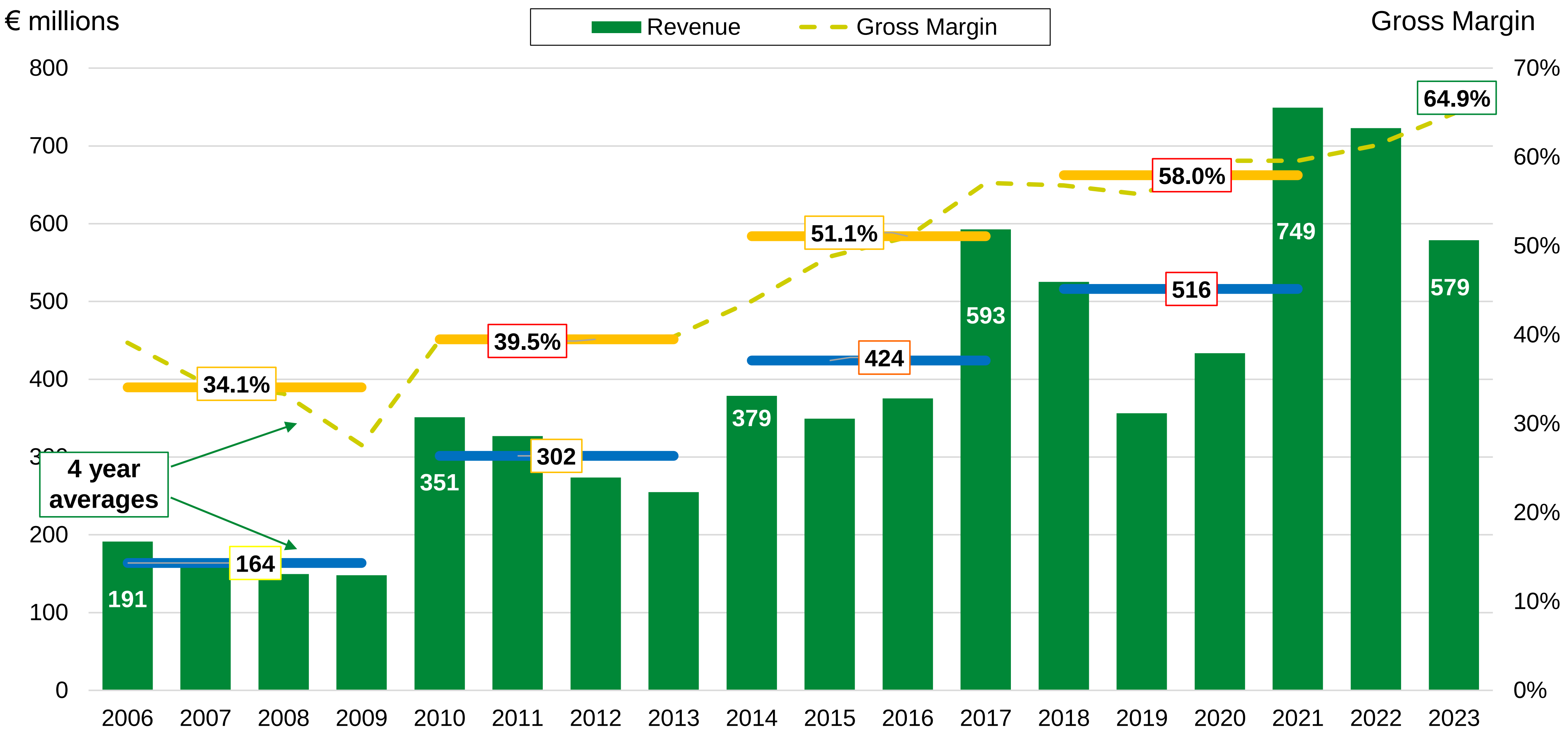
€ in millions

Financial Calendar

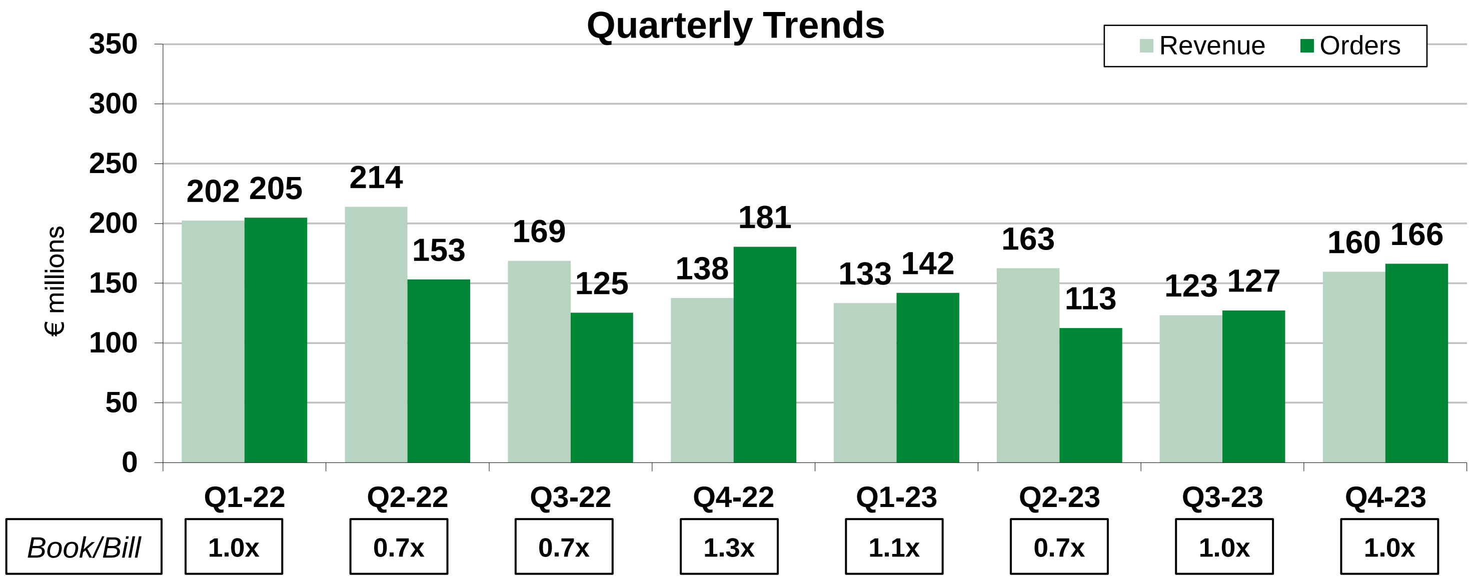
1-Mar-24	Susquehanna Technology conference (virtual)
8-Mar-24	ODDO BHF TMT Forum (virtual)
12-Mar-24	Citi’s TMT conference, London
25-Apr-24	Besi’s Q1-2024 results
25-Apr-24	Besi’s Annual General Meeting of Shareholders
6-Jun-24	Besi Analyst Day, Radfeld, Austria
25-Jul-24	Besi’s Q2-2024 results
24-Oct-24	Besi’s Q3-2024 results

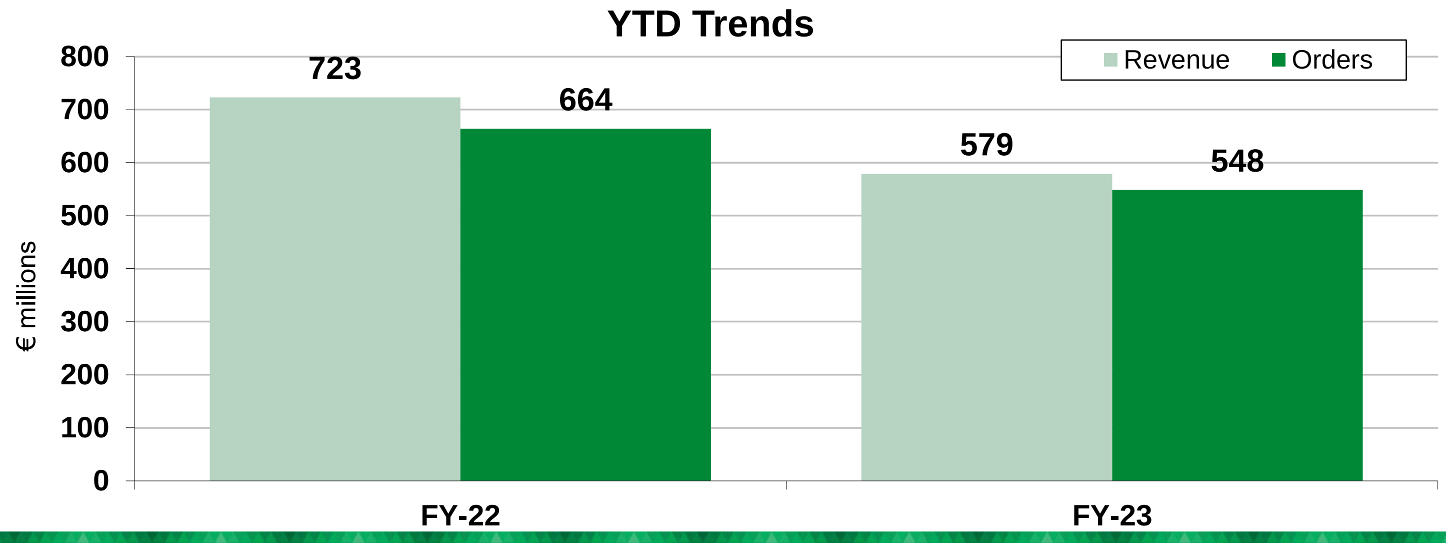
IV. FINANCIAL APPENDIX

Through Cycle Revenue and Gross Margin Trends



Revenue/Order Trends





Q4-23 vs. Q3-23

- **Revenue: +€ 36.3 million (+29.4%)**
  - Increased shipments for hybrid bonding, photonics and other AI-related computing applications
- **Orders: +€ 39.1 million (+30.7%)**

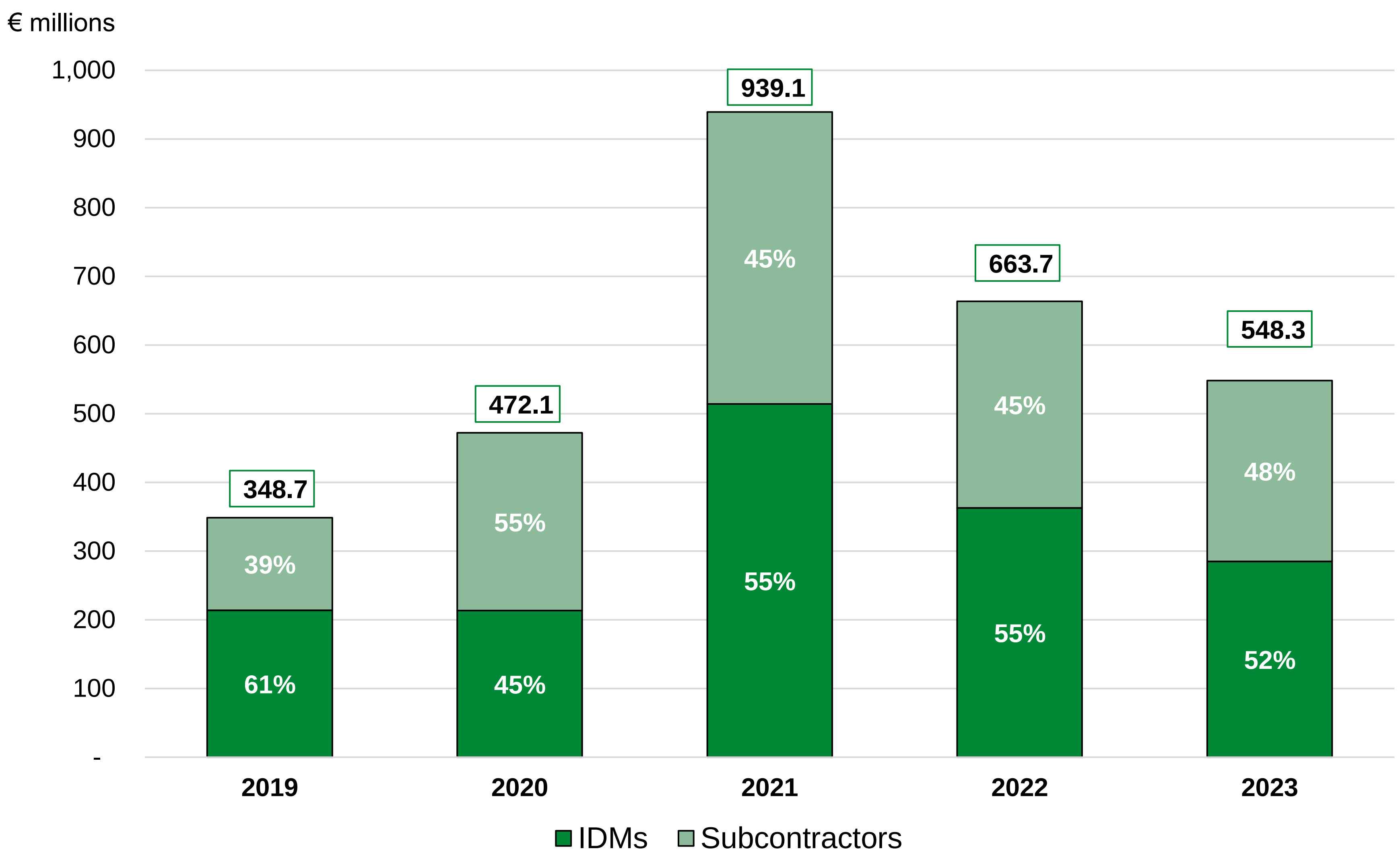
Q4-23 vs. Q4-22

- **Revenue: +€ 21.9 million (+15.9%)**
- **Orders: -€ 14.1 million (-7.8%)**
  - Due to pull forward of mobile orders into Q4-22 from Q1-23 due to supply chain concerns

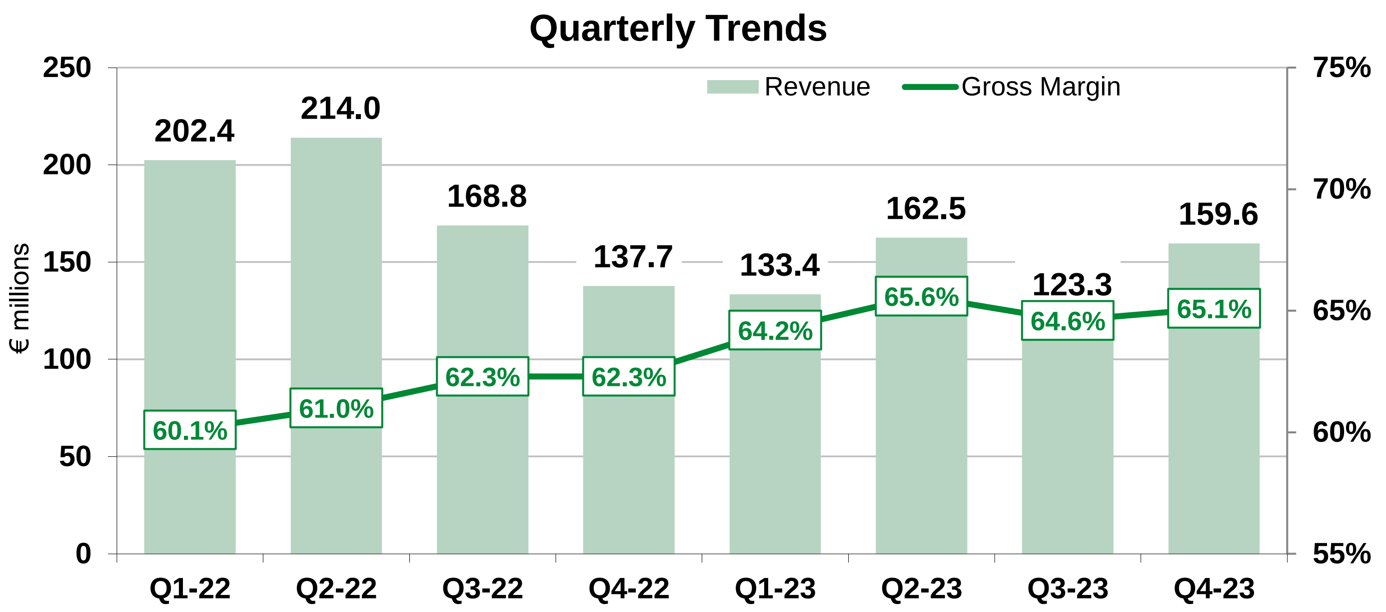
FY-23 vs. FY-22

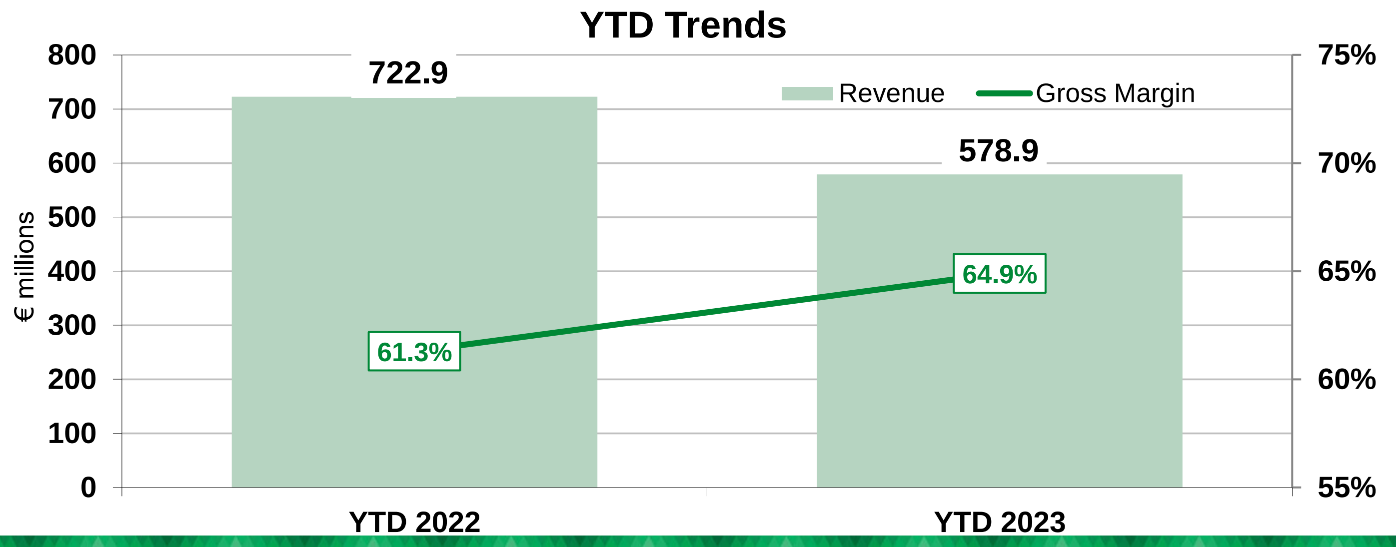
- **Revenue: -€ 144.0 million (-19.9%)**
  - Adverse market conditions
  - Lower demand for mainstream computing and automotive applications
- **Orders: -€ 115.4 million (-17.4%)**
  - Partial offset: strong H2-23 growth for photonics, hybrid bonding and HBM applications

IDM/Subcontractor Order Trends



Gross Margin Trends





Q4-23 vs. Q3-23

- **65.1% vs. 64.6% (+0.5 points)**
  - Favorable advanced packaging product mix
  - Net forex neutral

Q4-23 vs. Q4-22

65.1% vs. 62.3% (+2.8 points)

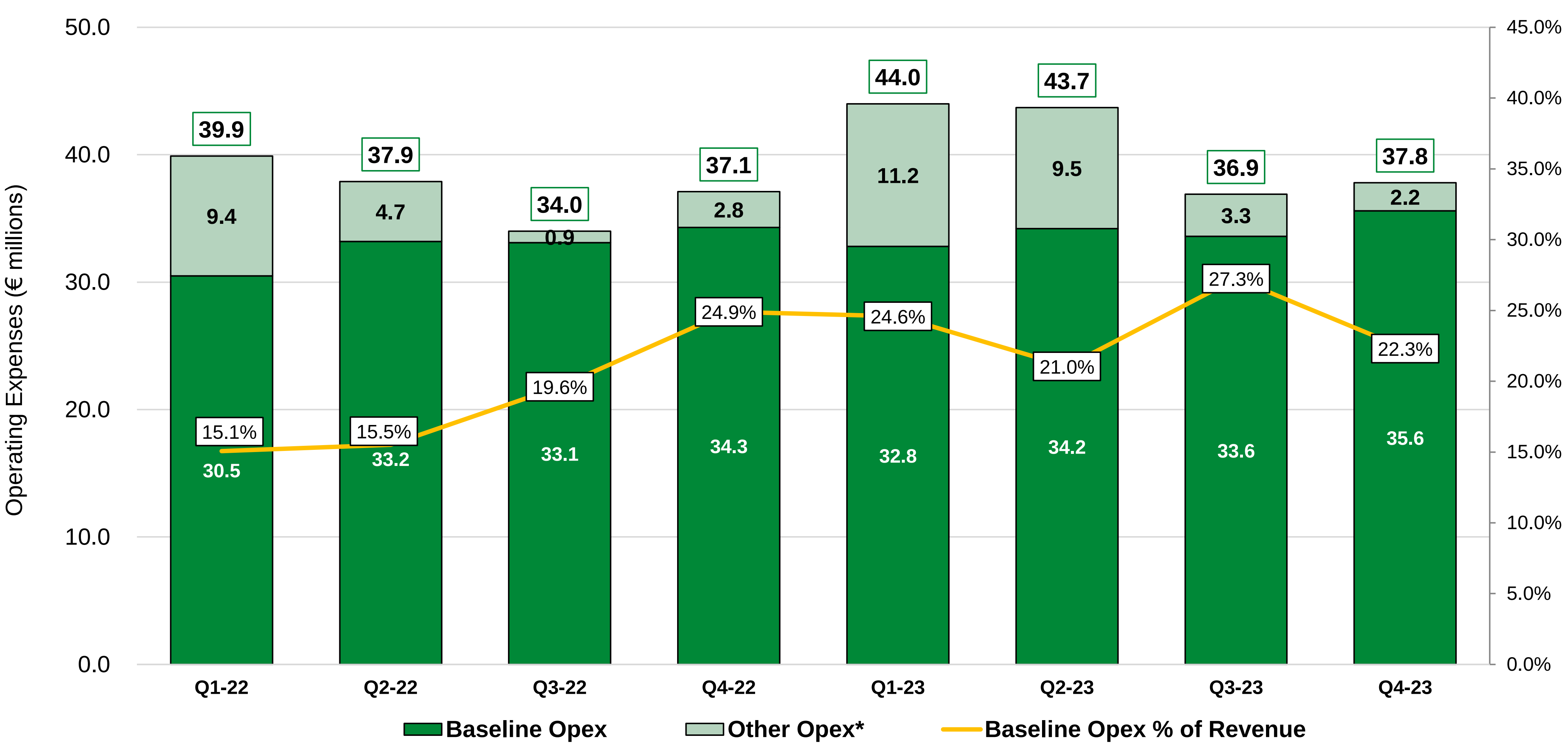
- Favorable product mix
- Net forex neutral: Revenue - USD vs. EUR
  Costs - MYR/RMB vs. EUR

FY-23 vs. FY-22

- **64.9% vs. 61.3% (+3.6 points)**
  - New product introductions
  - Cost control efforts
  - Effective supply chain management
  - Net forex benefits

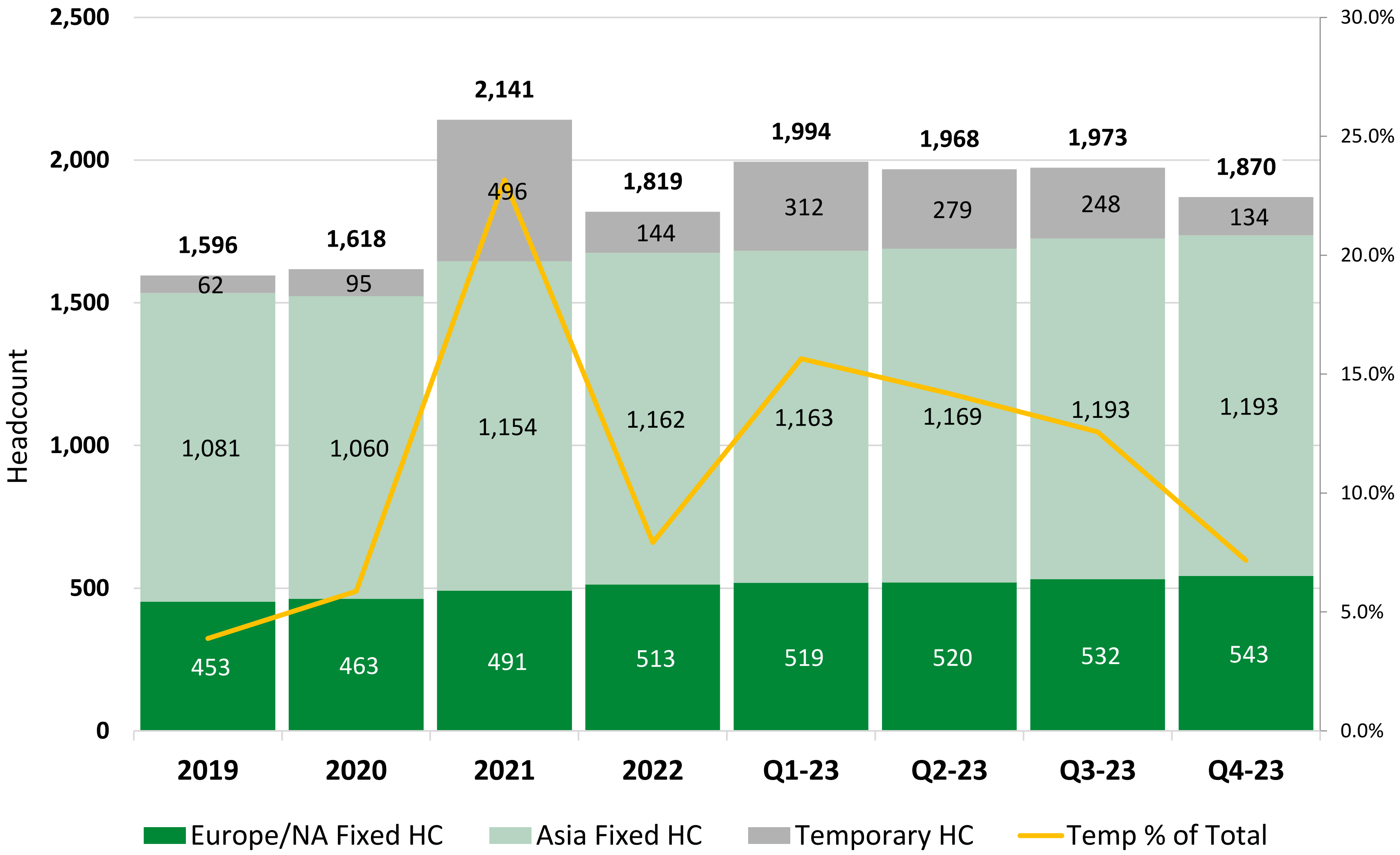
* Favorable impact
Unfavorable impact

Baseline Operating Expense Trends



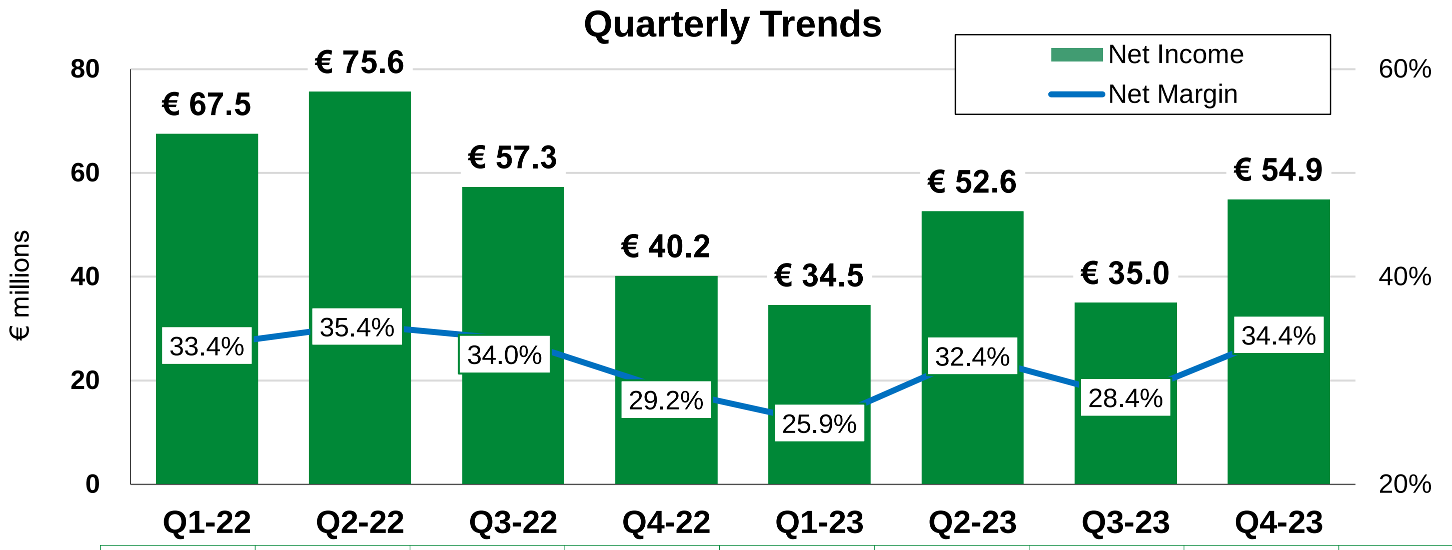
* Other Opex includes both short-term and long-term incentive compensation, restructuring costs, net R&D capitalization/amortization and certain one-time items including strategic consulting costs.

Headcount Trends



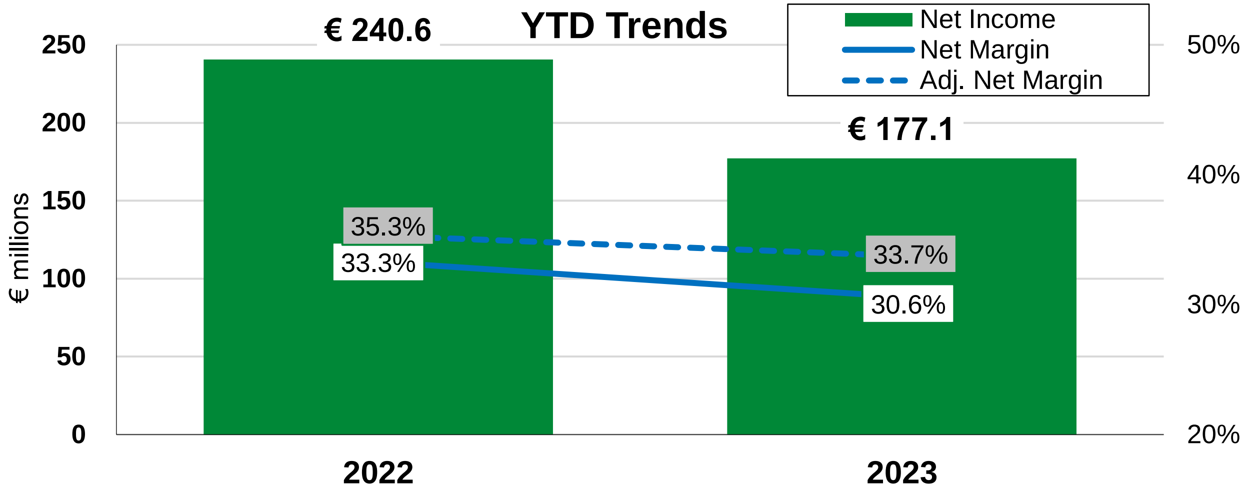
- Headcount aligned with market conditions:
  - Temporary headcount down 73% vs. last industry peak
  - Total headcount down by 12.7%
- Increasing European and Asian fixed headcount in downturn to support wafer level assembly expansion

Net Income Trends



37.3%	*37.0%*	*34.5%*	*30.7%*	*32.2%*	*35.7%*	*29.7%*	*36.2%*	*Adj. Net margin**

* Adjusted to exclude share-based compensation expense in each of the respective periods.



<u>Q4-23 vs. Q3-23</u>

- **€ 54.9 million (+€ 19.9 million or +56.9%)**
  - +29.4% higher revenue
  - +0.5 point gross margin increase
  - Cost control efforts limit opex growth

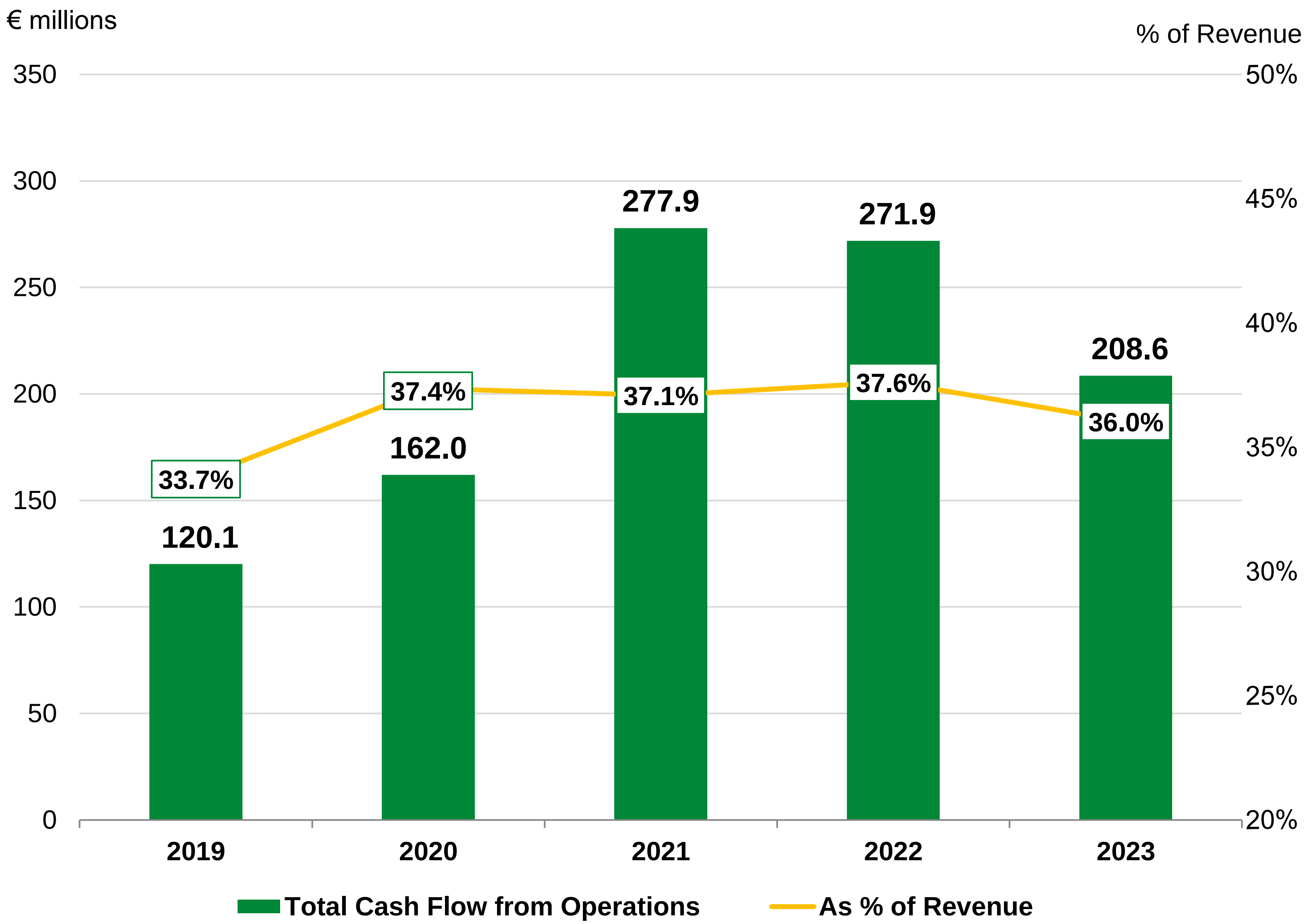
<u>Q4-23 vs. Q4-22</u>

- **+€ 14.7 million or +36.6%**
  - +15.9% higher revenue
  - +2.8 point gross margin increase
  - -€ 2.9 million financial expense, net due to higher interest rates
  - Partial offset:
    - Higher effective tax rate (+5.2 points)
    - Adjusted effective tax rate of 12.5%

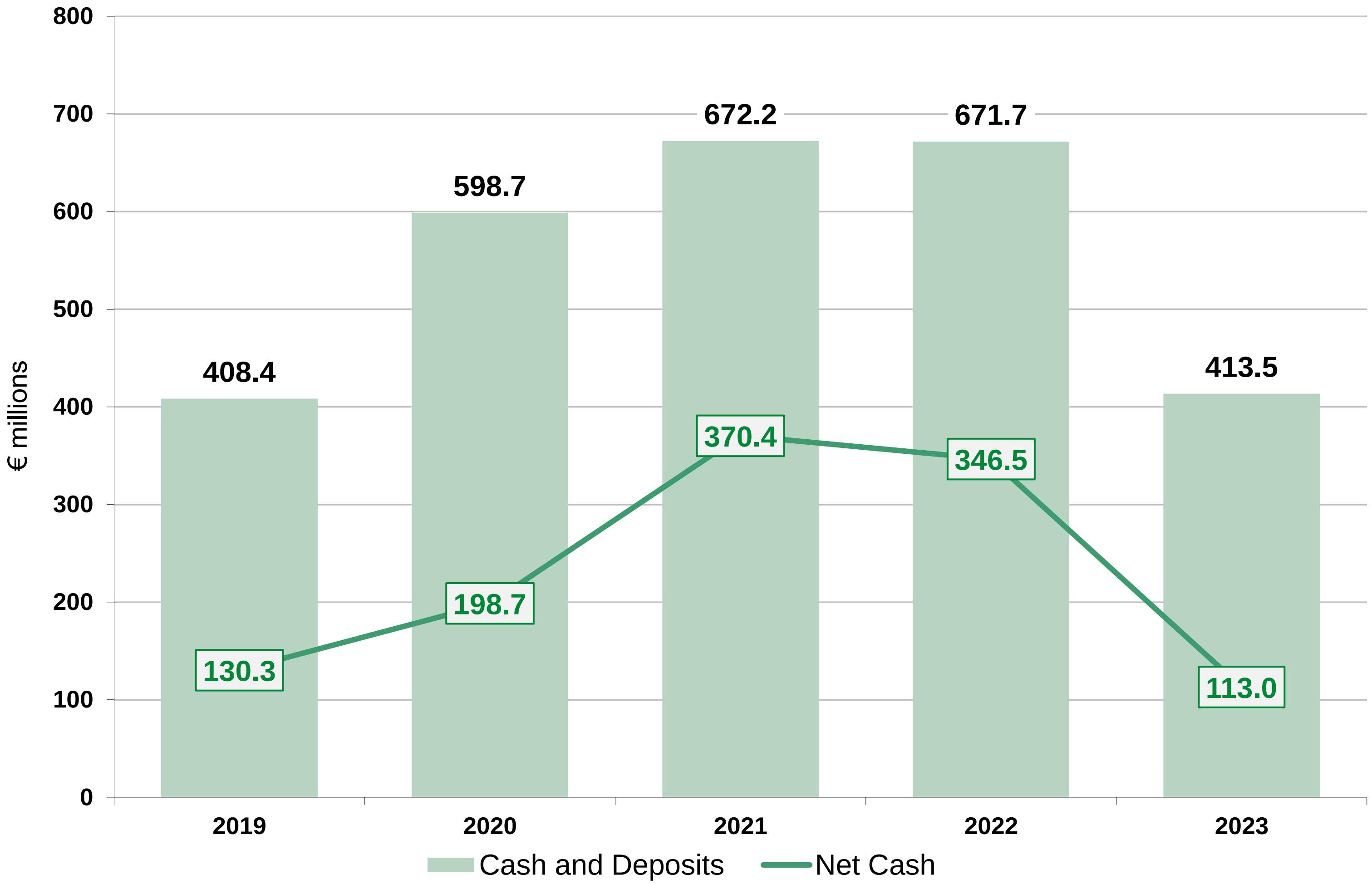
<u>FY-23 vs. FY-22</u>

- **€ 177.1 million (-€ 63.5 million)**
  - -19.9% revenue decrease
  - -€ 13.4 million increased opex
    - Strategic consulting, share based comp
  - Partial offset:
    - € 12.9 million lower financial expense, net
    - 3.6 point gross margin increase

Cash Flow Efficiency Trends



Strong Liquidity Position Maintained



Q4-23 vs. Q3-23

- Cash and deposits of € 413.5 million
  - +€ 22.3 million, or 5.7% vs. Q3-23 due to:
    - + € 53.3 million cash flow from operations
    - - € 23.1 million capital allocation
    - - € 5.8 million capitalized R&D
    - - € 1.5 million capex

- **Net cash increases to € 113.0 million**
  - Equals 20% of LTM revenue

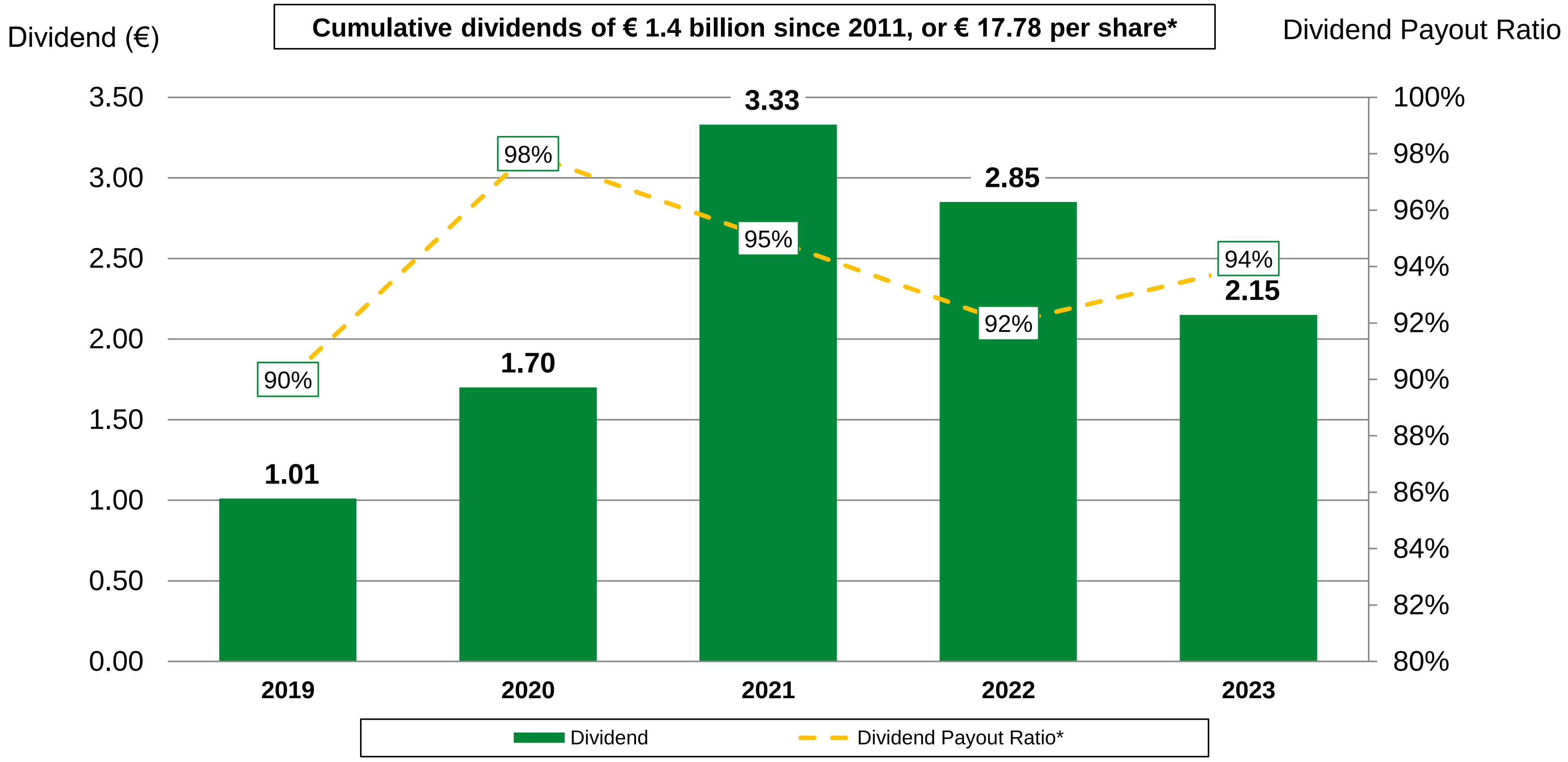
Q4-23 vs. Q4-22

- Cash and deposits down € 258.2 million due to capital allocation of € 435 million

Convertible Notes

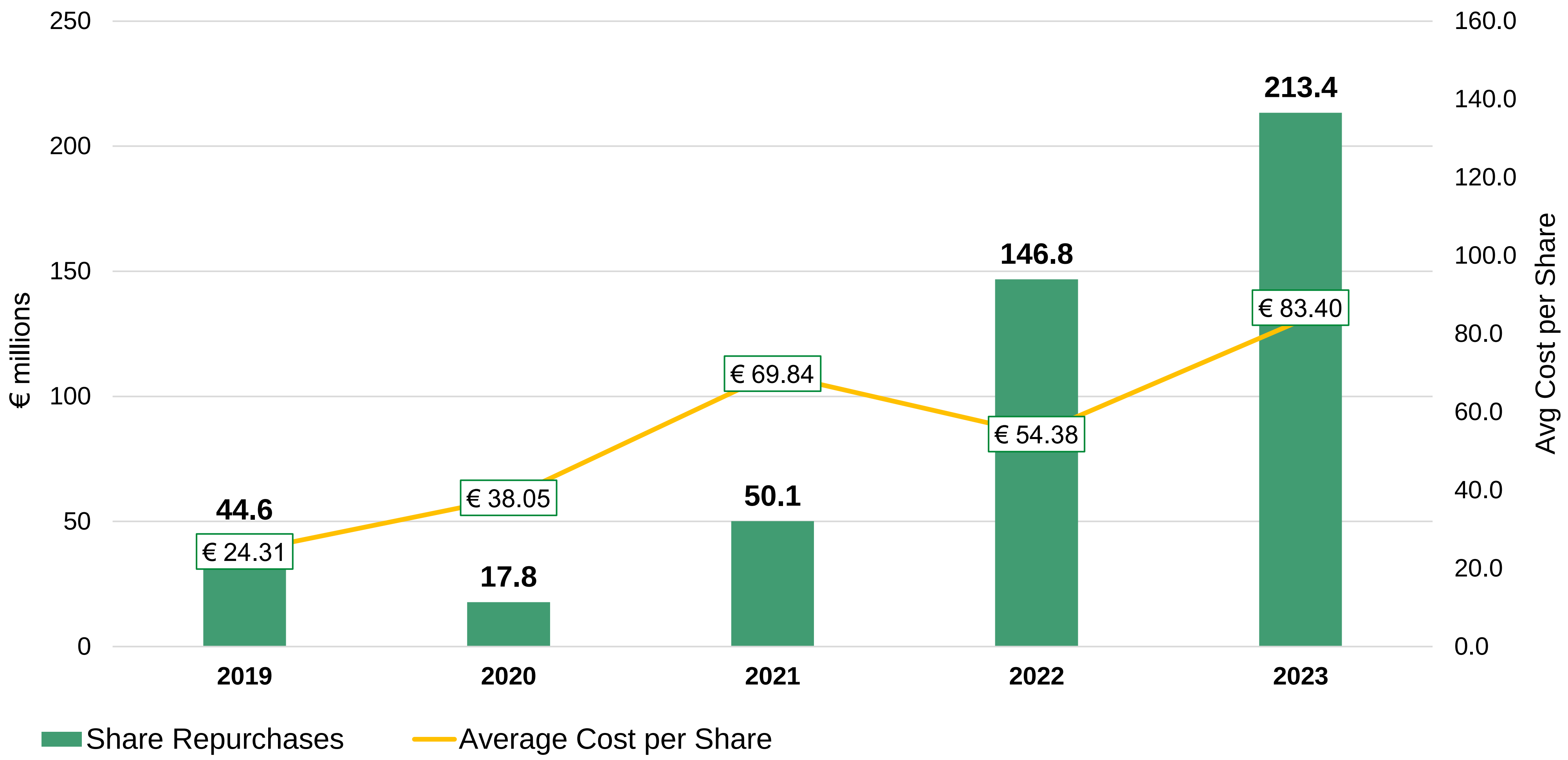
- € 328.2 million outstanding at December 31, 2023
  - € 2.0 million converted in Q4-23
  - 2023/2024 Notes reduced to € 3.2 million

Dividend Trends



* Calculated on Basic EPS. Includes value of both cash and stock dividends. Includes proposed dividend for approval at 2023 AGM.

Share Repurchase Activity



- Approximately 4.1 million treasury shares at December 31, 2023, representing 5.1% of shares outstanding
- 77.0 million shares outstanding at December 31, 2023, net of treasury

Investment Considerations

- Assembly market ever more critical in semiconductor value chain
- Disciplined strategic focus has created an industry leader
- Long term secular trends favor advanced packaging growth
- Wafer level assembly new growth opportunity
- Market presence has grown via key IDMs, supply chains and partners
- Tech leadership and scalability result in superior financial returns
- Commitment to sustainable growth and combatting climate change
- Attractive capital allocation policy