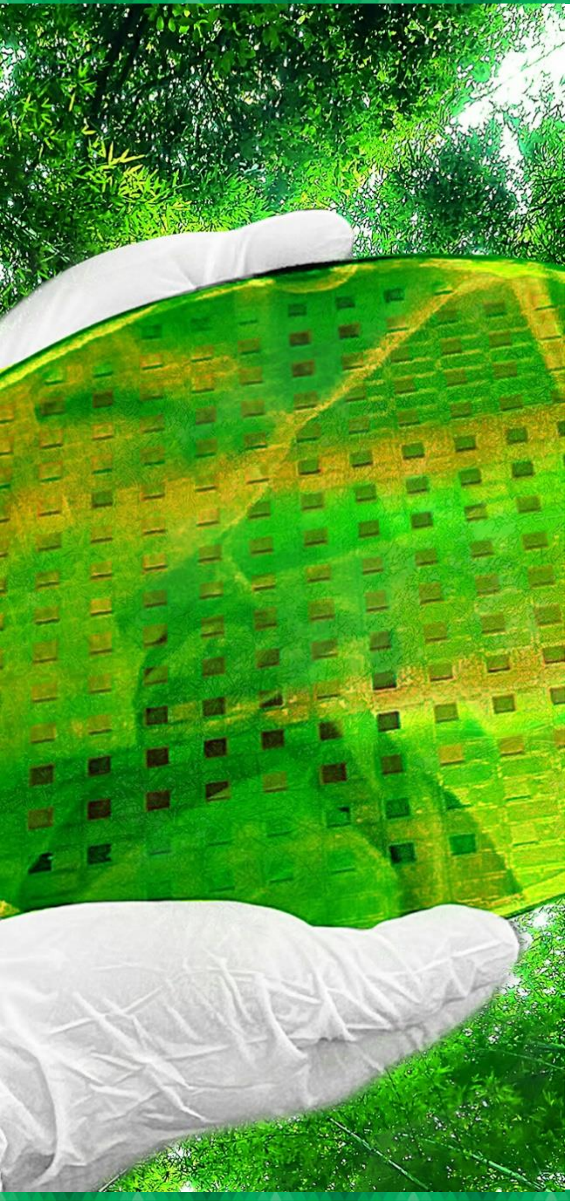

INVESTOR PRESENTATION
Q3-23 RESULTS

October 26, 2023

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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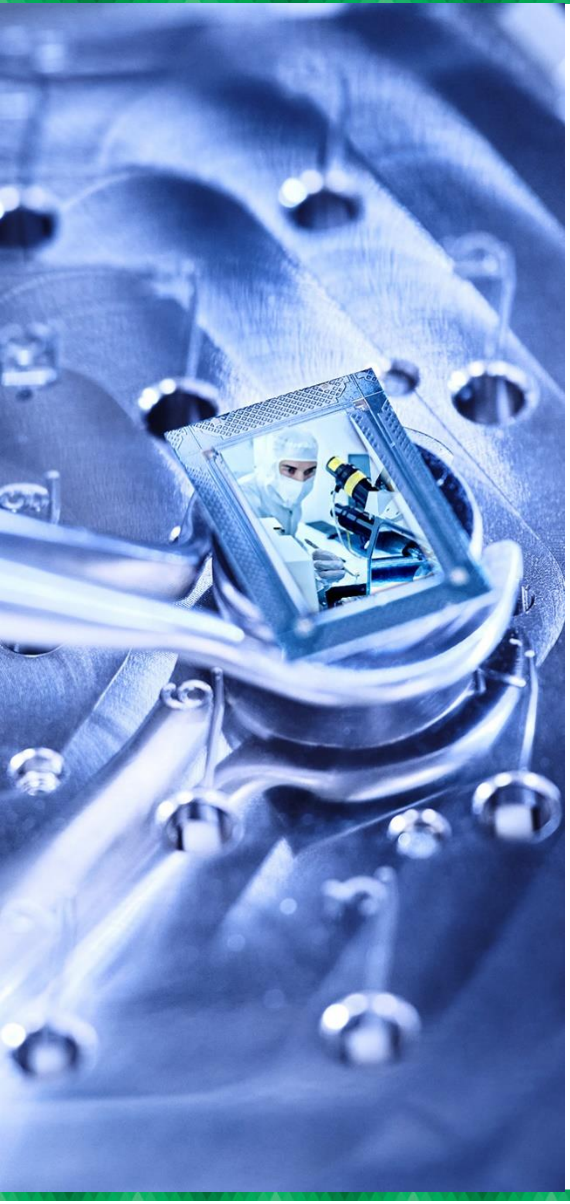


I. KEY HIGHLIGHTS

Q3-23 Revenue and Operating Profit Above Mid-point of Guidance
Orders Up 13.1% Sequentially Due to Advanced Computing Applications

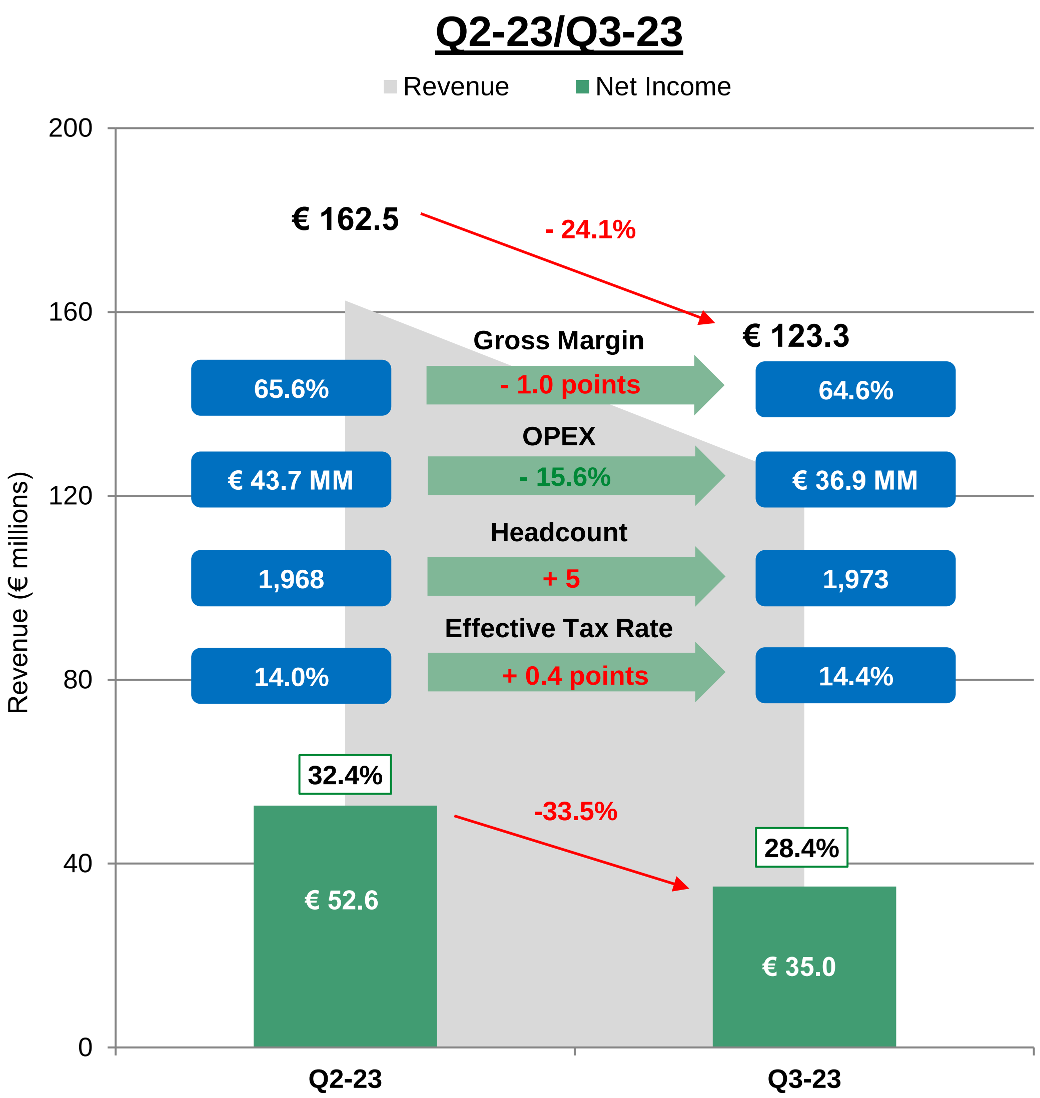
Besi

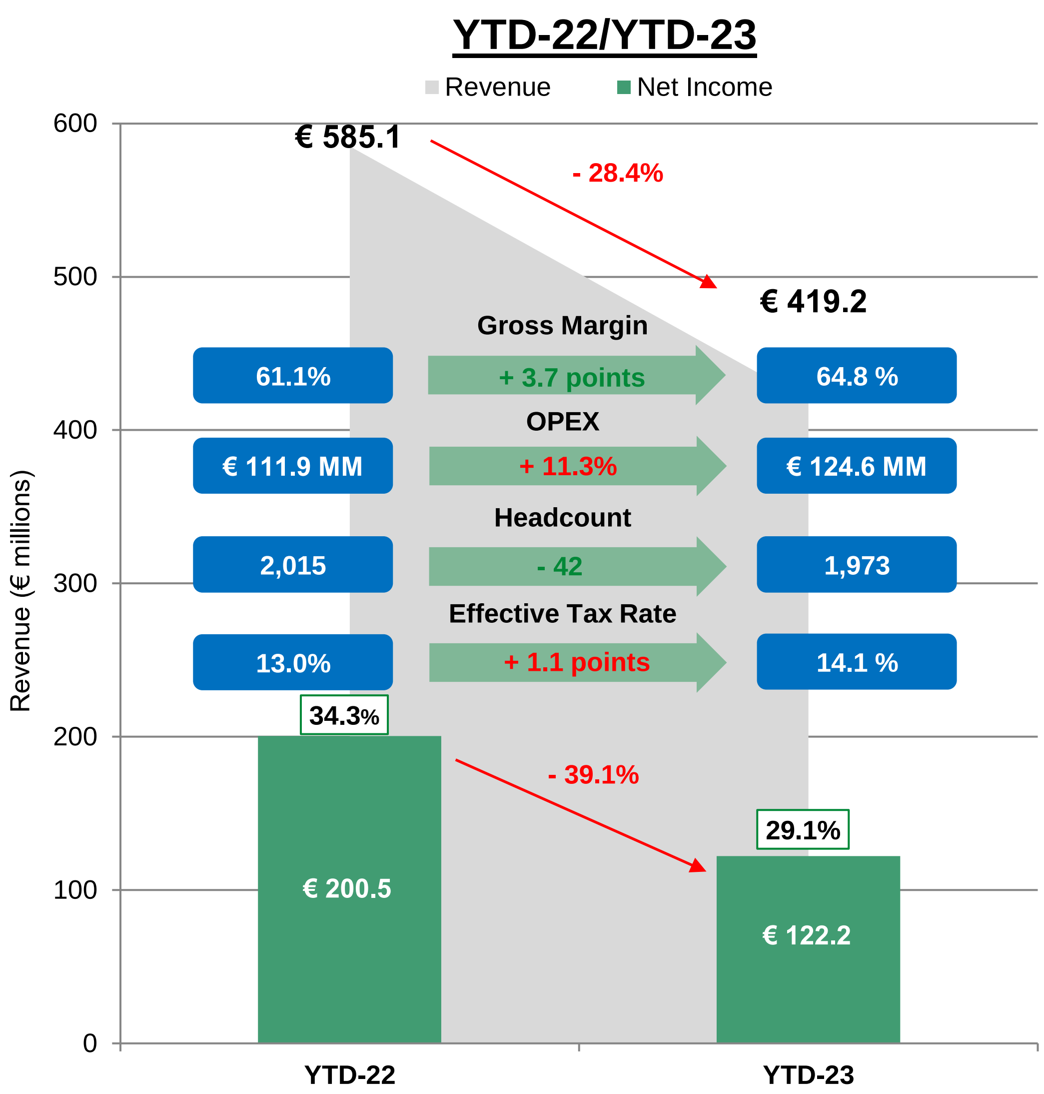
€ millions	Guidance Q3-23*	Q3-23	Δ *Q2-23*	Δ *Q3-22*
Revenue	Down 20%-30%	**123.3**	- 24.1%	- 27.0%
Orders		**127.3**	+ 13.1%	+ 1.6%
Gross Margin	62%-64%	**64.6%**	- 1.0pts	+ 2.3pts
Opex	Down 10-15%	**36.9**	- 15.6%	+8.5%
Operating Income	38.6**	**42.7**	- 32.1%	- 40.0%
Net Income		**35.0**	- 33.5%	- 38.9%
EPS Basic		**0.45**	- 33.8%	- 36.6%
Net Cash		**90.2**	+ 21.9%	- 73.7%

* As compared to Q2-23

** At midpoint of guidance range

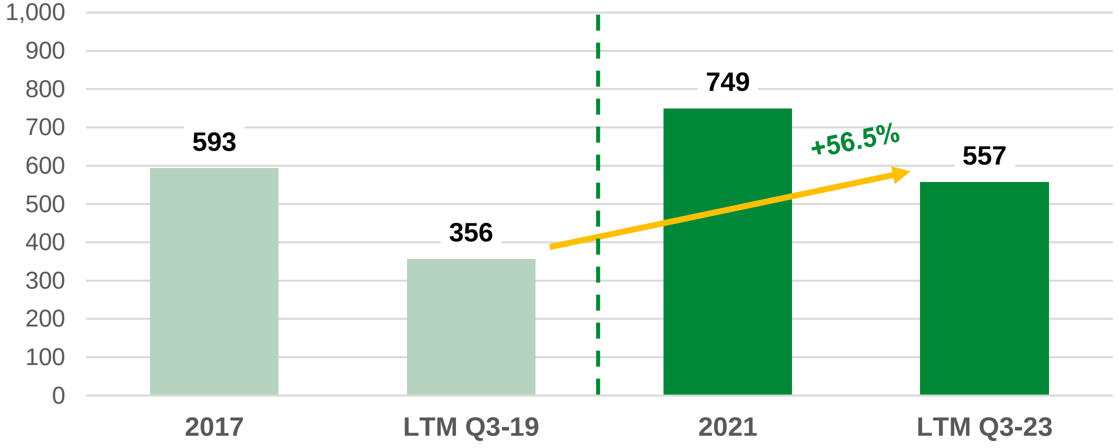
YTD-23 Results Reflect Challenging Market, Particularly for Computing Applications. However, Profit Level Remains Elevated



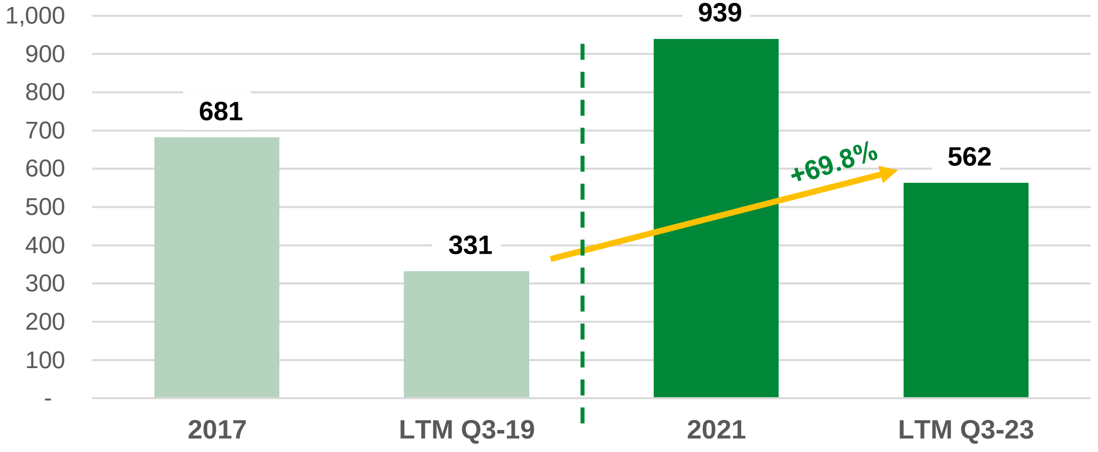


Besi Continues Significant Outperformance vs. Last Industry Downturn

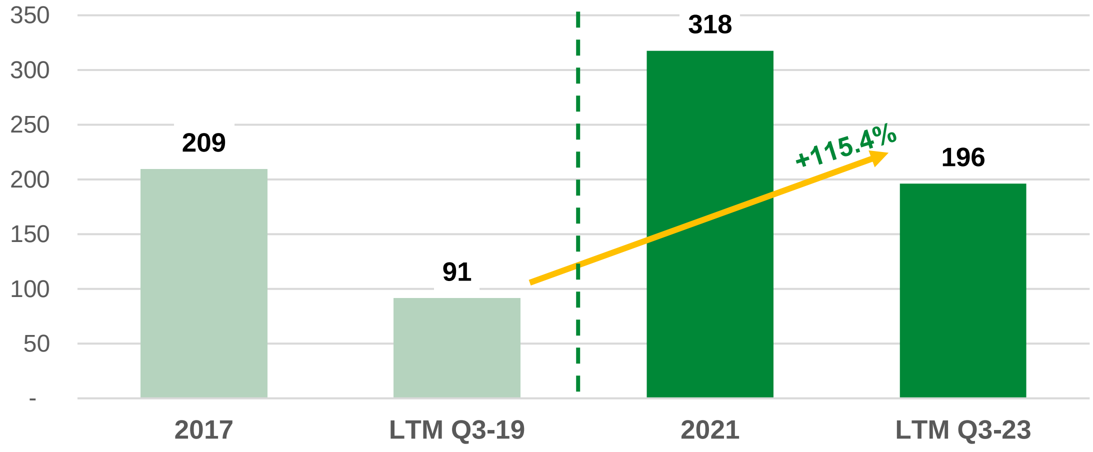
Revenue (€MM)



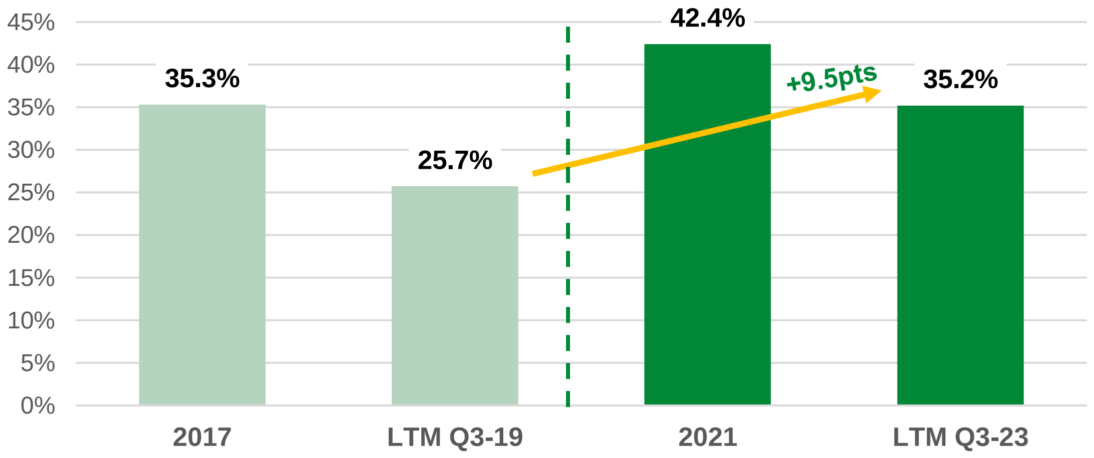
Orders (€MM)



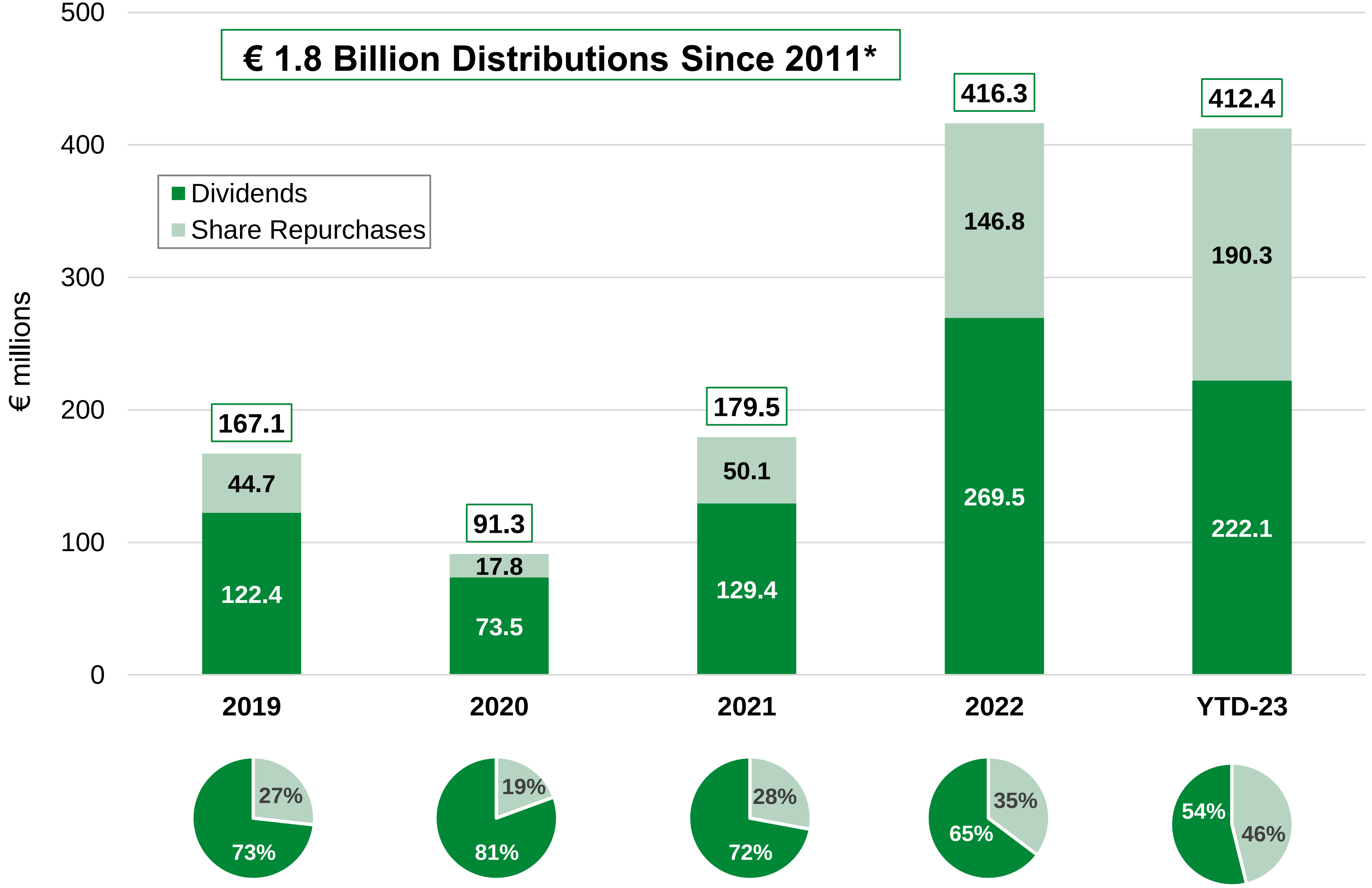
Operating Profit (€MM)



Operating Margin



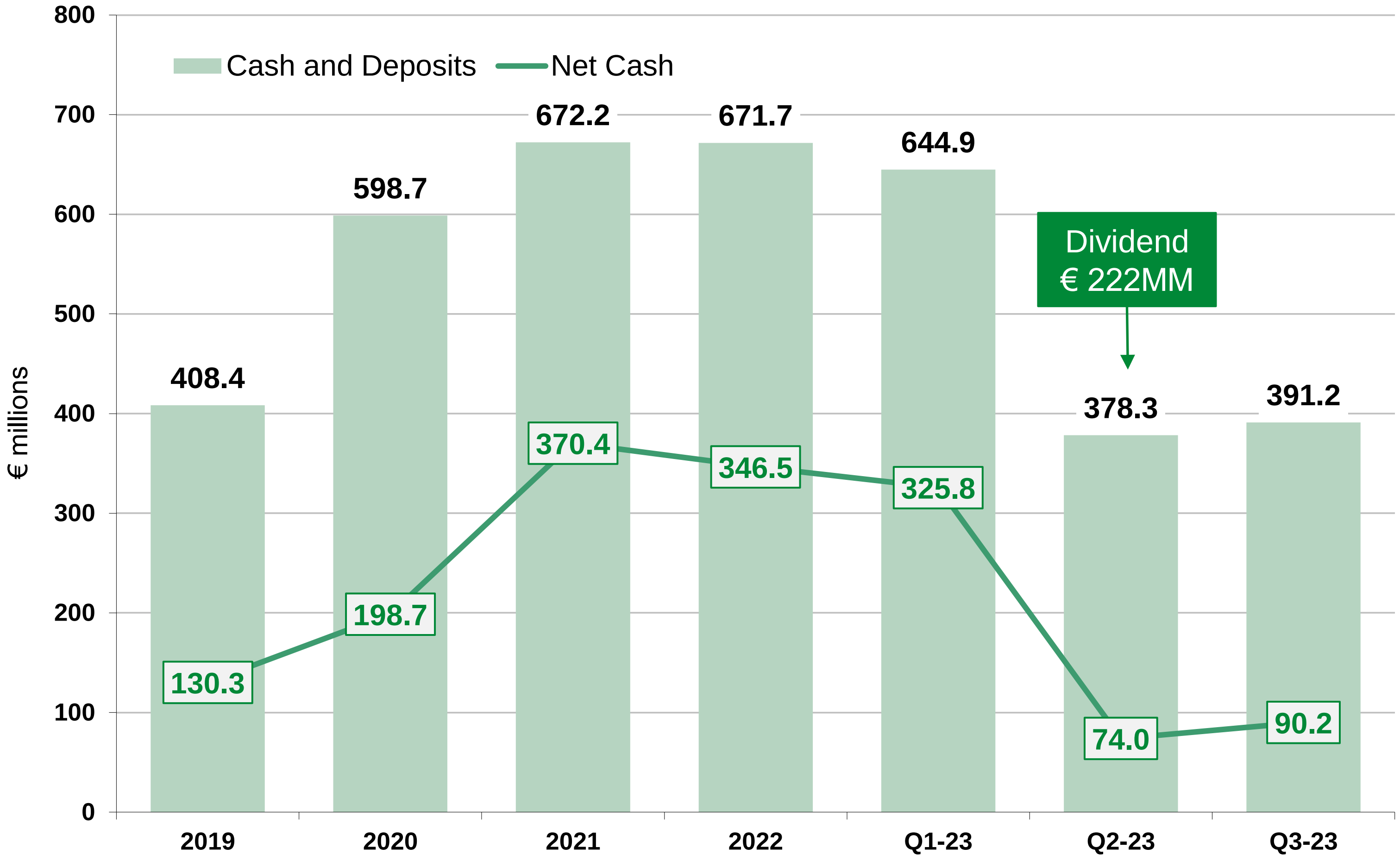
2023 Capital Allocation Exceeds Prior Year Levels. €1.8 Billion Distributed Since 2011



- **€ 412 million distributed YTD-23**
- **€ 300 million share buyback program:**
  - ~4.1 million shares purchased through Q3-23 for € 287 million at avg price of € 69.13 per share
- Treasury shares: 4.9% of TSO
- To be completed October 27, 2023
- **Next € 60 million share buyback program announced**
  - Effective November 1, 2023
  - Expected completion: October 2024

* Includes share repurchases through September 30, 2023

Strong Liquidity Position Maintained



<u>Q3-23 vs. Q2-23</u>

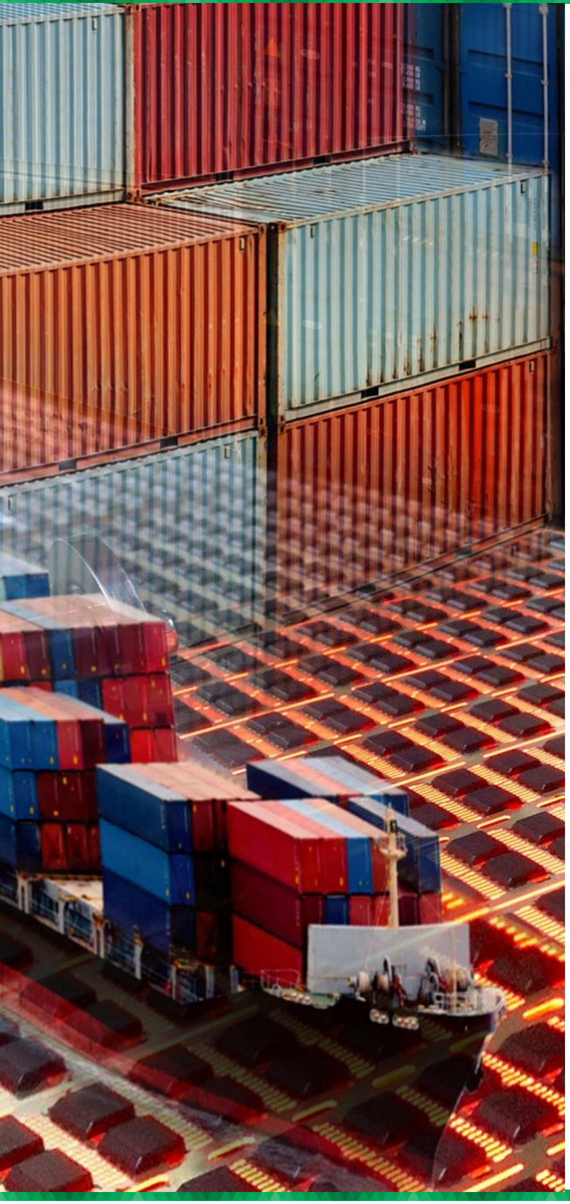
- Cash and deposits of € 391.2 million
  - +€ 12.9 million, or 3.4% vs. Q2-23 due to:
    - + € 65.1 million cash flow from operations
    - - € 45.5 million capital allocation
    - - € 4.7 million capitalized R&D
    - - € 2.0 million capex
- Net cash increases to € 90.2 million
  - Equals 16% of LTM revenue

<u>Q3-23 vs. Q3-22</u>

- Cash and deposits down € 270.6 million due to capital allocation of € 477 million

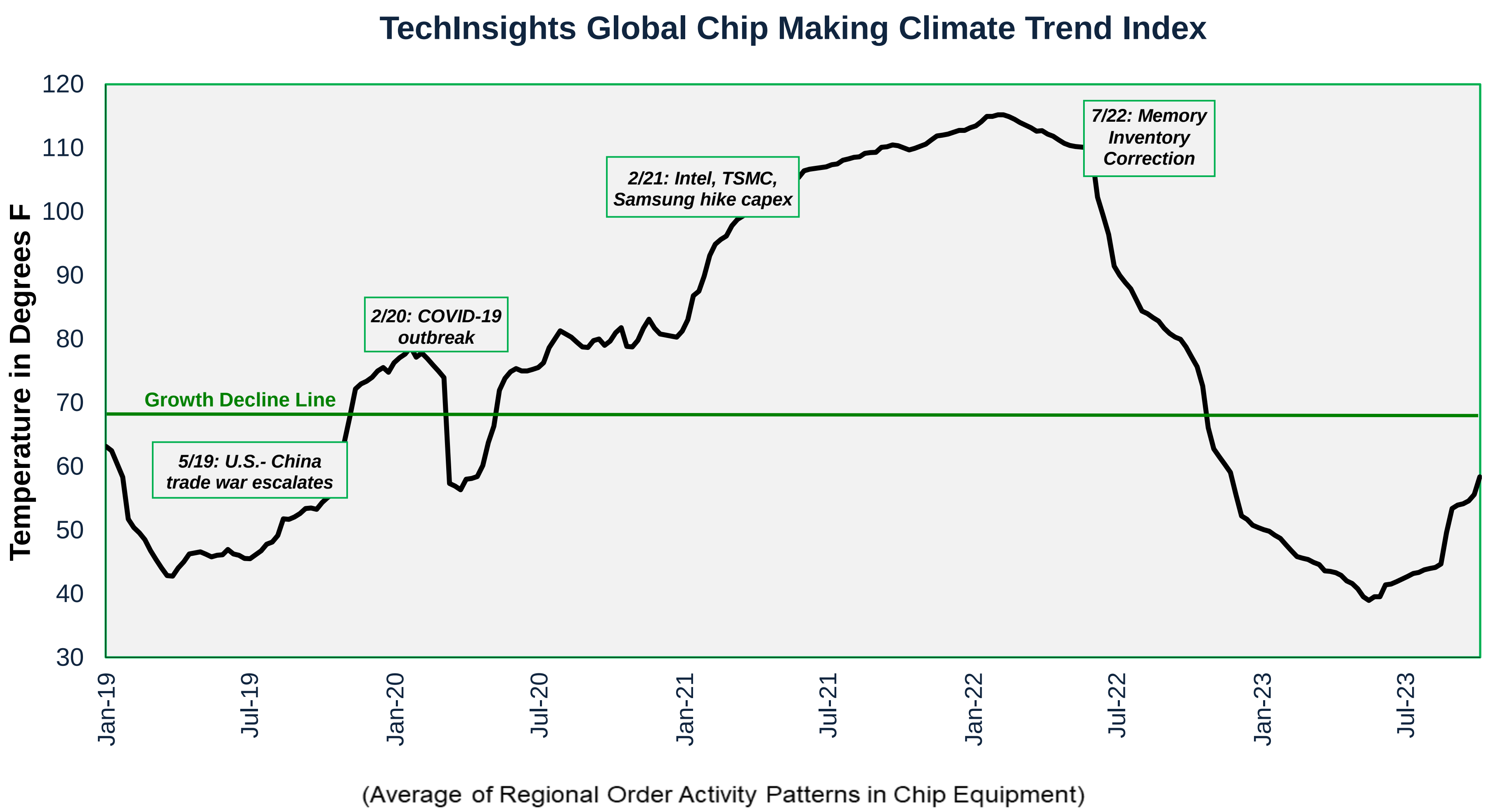
<u>Convertible Notes</u>

- € 330.2 million outstanding at September 30, 2023
  - € 4.9 million converted in Q3-23
  - 2023/2024 Notes reduced to € 5.2 million



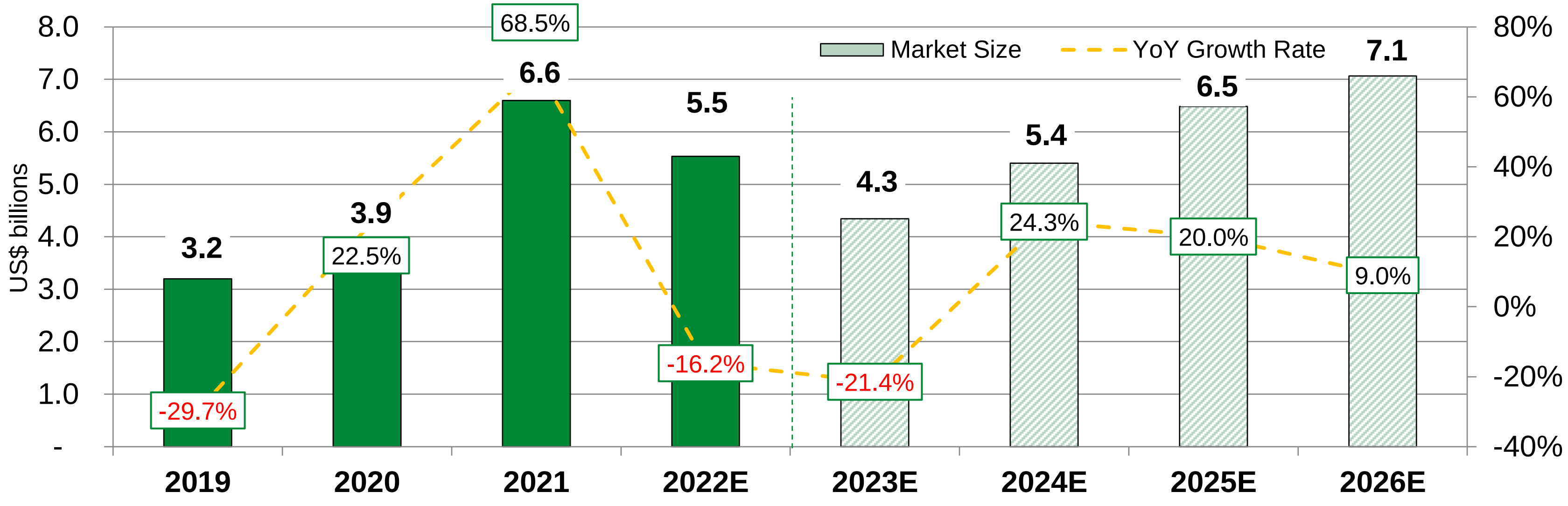
II. MARKET & STRATEGY

New Industry Upturn Forming Post Q2-23 Trough

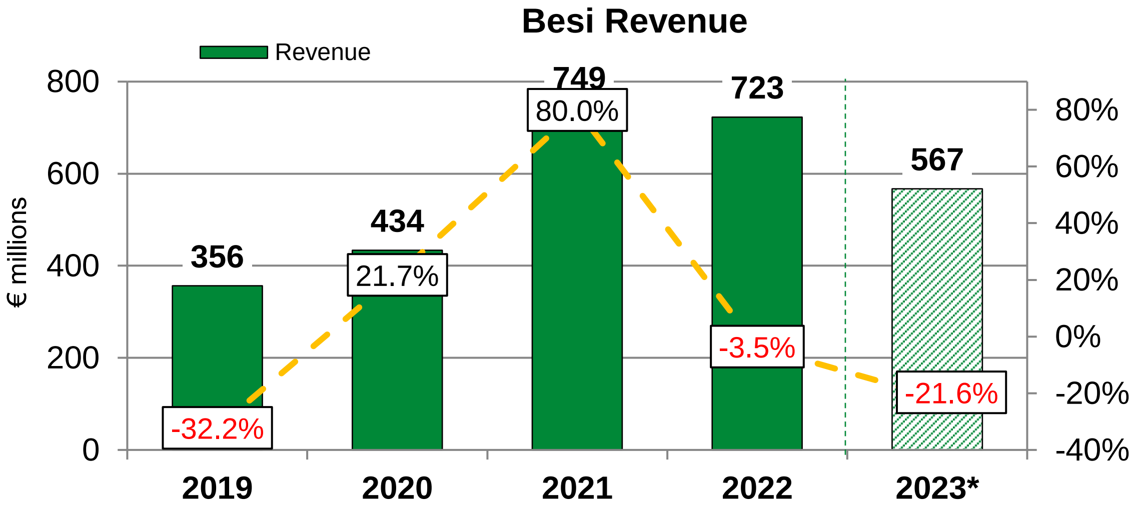


Source: TechInsights, October 2023

Assembly Market Rebound Forecast 2024-2025



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



* At midpoint of Q4-23 guidance

TechInsights forecasts 21.4% downturn in 2023
- Versus -23.4% last forecast
- ~34% decrease from 2021 peak

Strong rebound anticipated in 2024 and 2025
- Expected to reach $ 7.1 billion in 2026
  - +62% 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

Strategy Update

Business

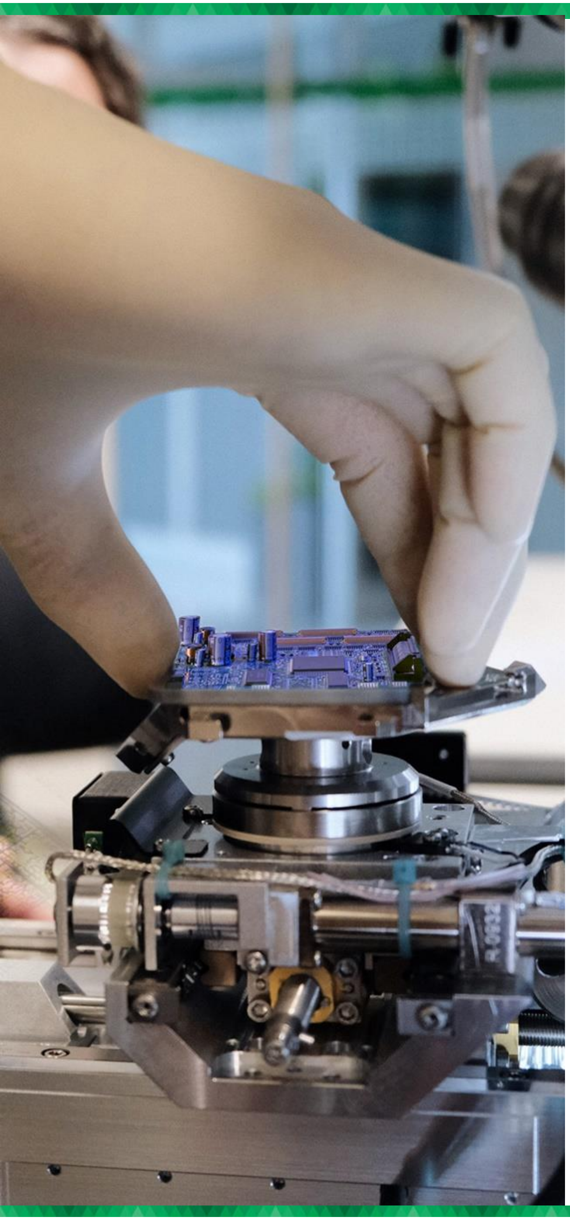
- Effectively navigating industry downturn at high profitability levels
  - Overhead aligned with market conditions
  - LTM revenue and operating profit up 56.5% and 115.4% versus 2019 trough

Development

- Orders for Hybrid bonding, Photonics and Chip on Wafer on Substrate applications increased significantly in Q3.
- Multiple Hybrid bonding orders from 2 customers received in Q3-23
- Further Hybrid bonding orders received post quarter end from 2 customers. Additional orders expected in Q4-23.
- Post quarter end, Die Bonding orders for Chip on Wafer on Substrate applications received from Korean subcontractor

Operations

- Singapore cleanroom completed in Q3-23
- Vietnam tooling support facility to be completed in Q4-23
- Branch office established in India to support increased mobile assembly demand
  - Initial orders received in Q3



III. OUTLOOK

Guidance Q4 and FY 2023

€ in millions	Q3-23	Q4-23	FY 2023E*	vs. FY 2022
Revenue	€ 123.3	+25% - +15%	€ 567.2	-22%
Gross Margin	64.6%	62% - 64%	64.4%	+3.1 pts
Operating Expenses	€ 36.9	+~5%	€ 163.4	+10%

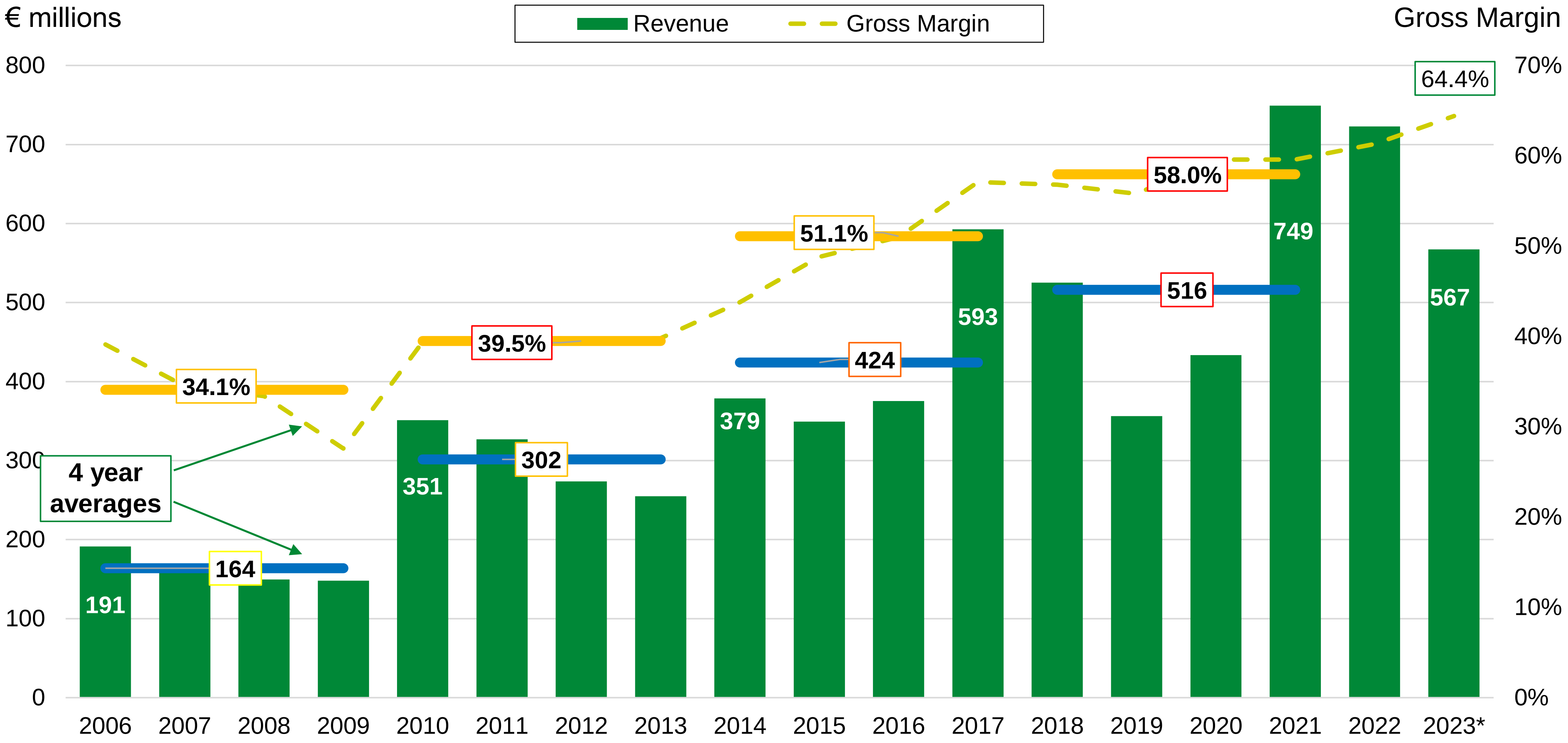
* Assumes midpoint of guidance for Q4-23

Financial Calendar

6-Nov-23	Roadshow New York, organized by Morgan Stanley
15/16-Nov-23	European TMT conference Morgan Stanley, Barcelona
21-Nov-23	ING Benelux conference, Brussels
21-Nov-23	Euronext Tech Leaders Campus, Paris
22-Nov-23	Van Lanschot Kempen conference, London
29-Nov-23	BofA Tech Hybrid Field trip (virtual)
5-Dec-23	UBS Global TMT conference, New York
12-Dec-23	ING Benelux Conference, New York
9-Jan-24	BofA SMID Conference 2024 (virtual)
16-Jan-24	26th Annual Needham Growth conference (virtual)
22-Feb-24	Besi's Q4/FY-2023 results
25-Apr-24	Besi's Q1-2024 results
25-Apr-24	Besi's Annual General Meeting of Shareholders

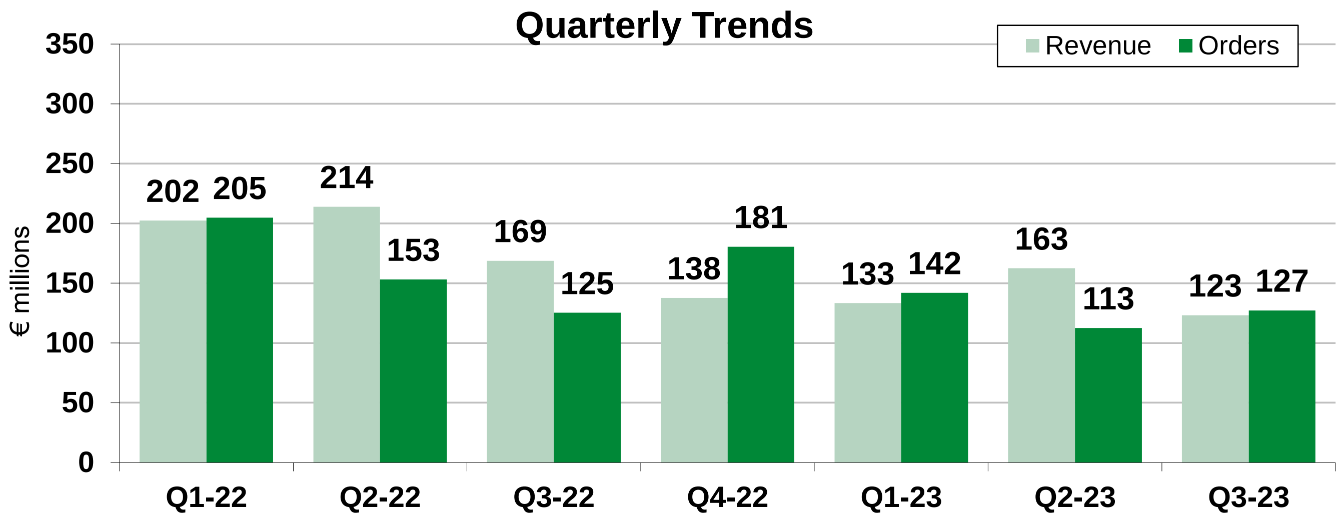
IV. FINANCIAL APPENDIX

Through Cycle Revenue and Gross Margin Trends

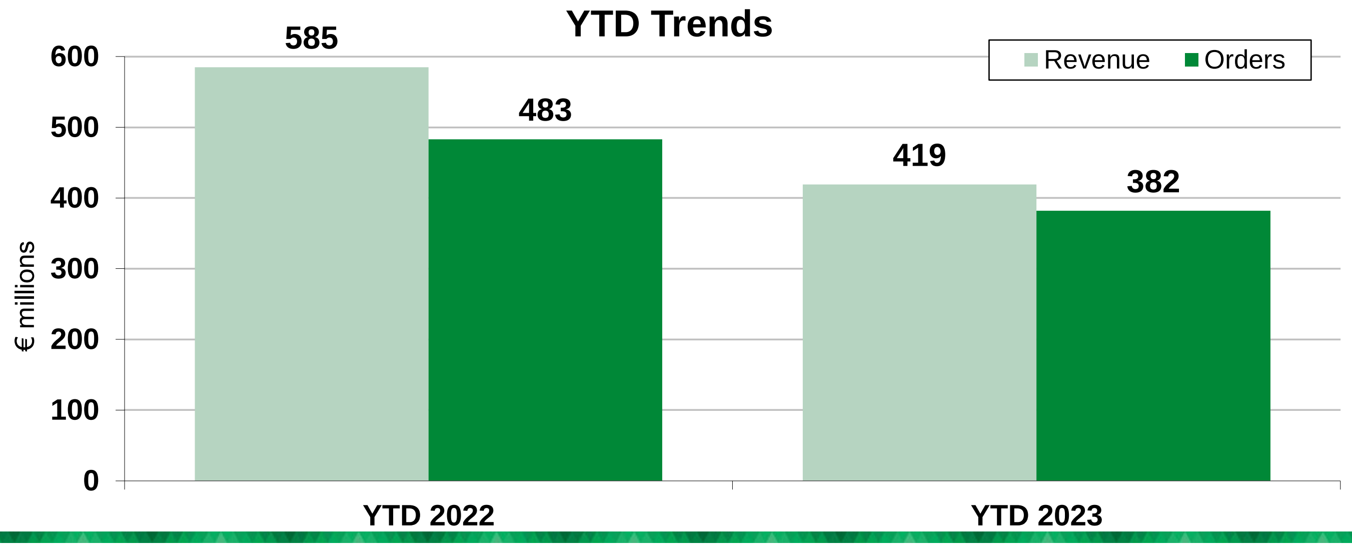


* Including midpoint of guidance for Q4-23.

Revenue/Order Trends



Book/Bill	1.0x	0.7x	0.7x	1.3x	1.1x	0.7x	1.0x



Q3-23 vs. Q2-23

- **Revenue: -€ 39.2 million (-24.1%)**
  - Lower mobile shipments post H1 seasonal build
  - Partial offset: increased computing/automotive
- **Orders: +€ 14.7 million (+13.1%)**
  - Primarily computing and photonics applications
    - Includes increased demand for Hybrid Bonders
  - Partial offset: lower automotive/industrial demand

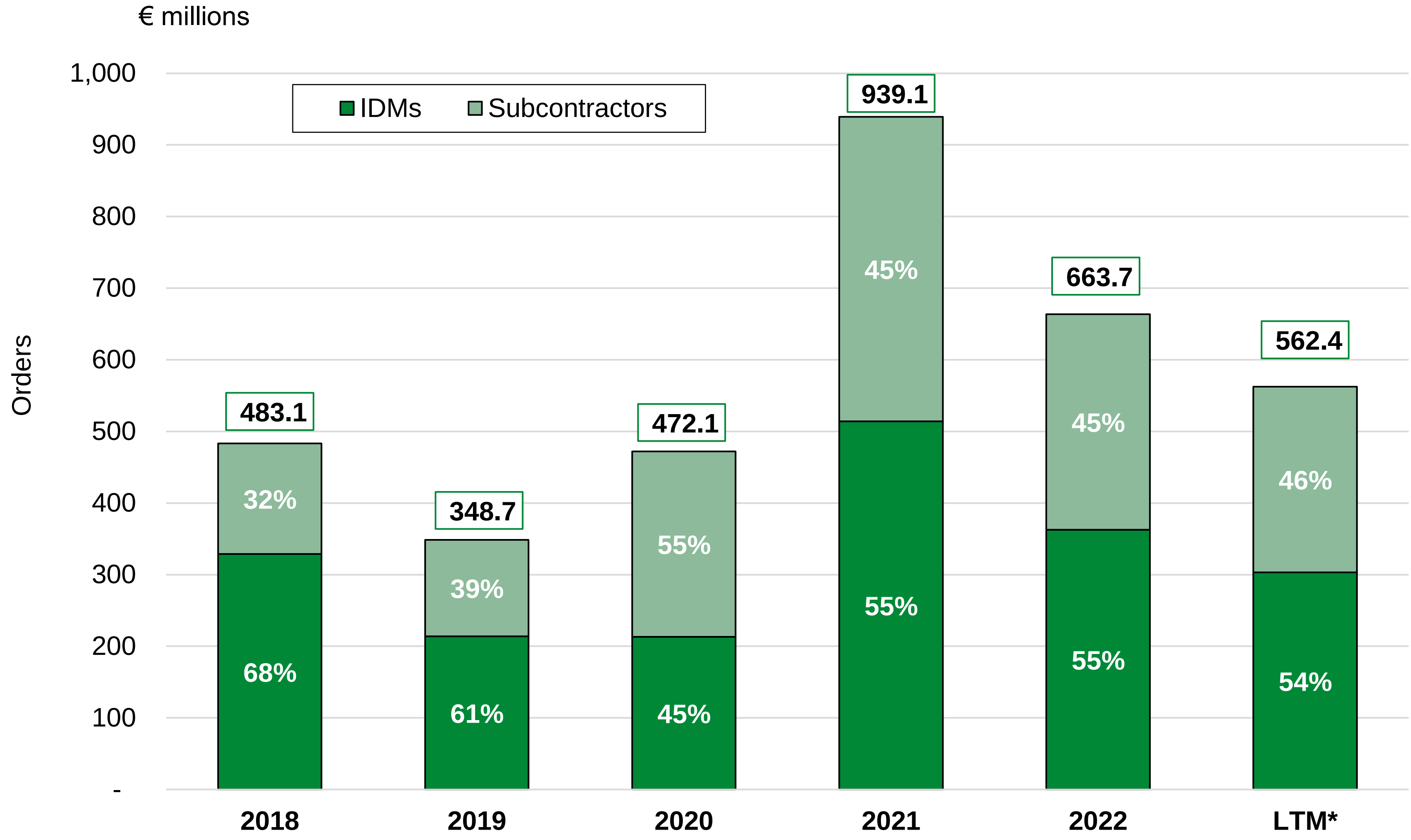
Q3-23 vs. Q3-22

- **Revenue: -€ 45.5 million (-27.0%)**
  - Significantly lower demand for computing applications
- **Orders: +€ 2.0 million (+1.6%)**

YTD-23 vs. YTD-22

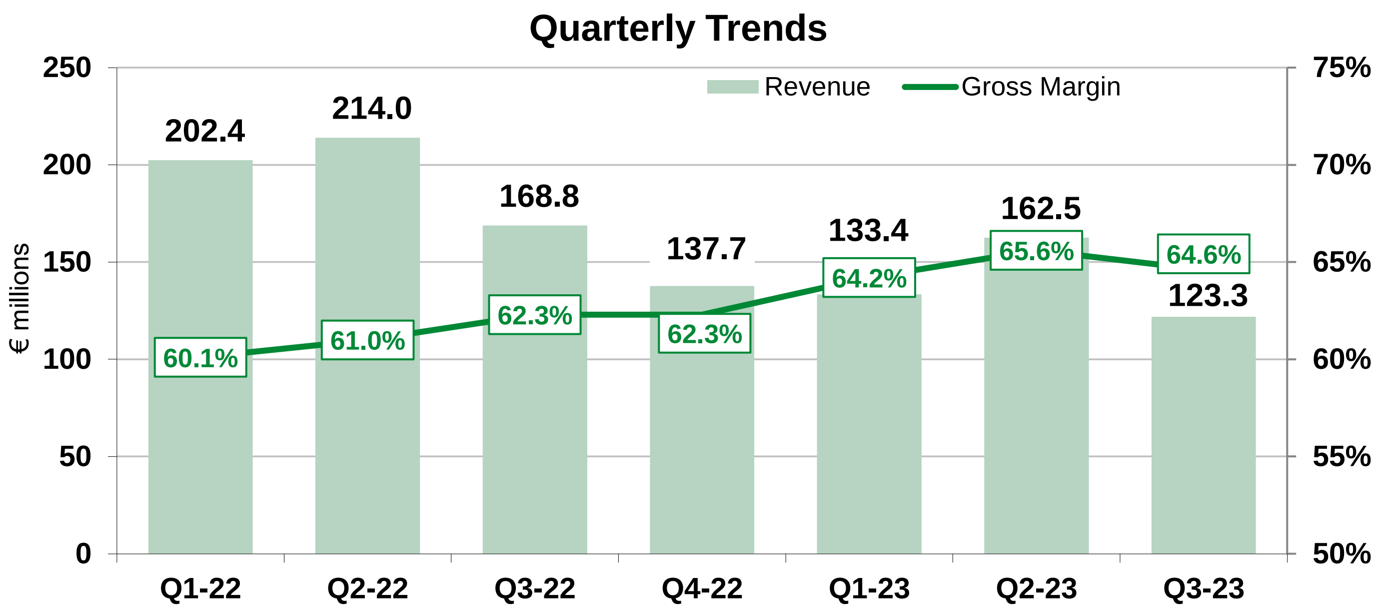
- **Revenue: -€ 165.9 million (-28.4%)**
  - Broad based decline
  - Particular weakness for computing applications by IDMs and Asian subcons
- **Orders: -€ 101.3 million (-21.0%)**
  - Adverse market conditions
  - Weakness in computing and, to a lesser extent, automotive markets

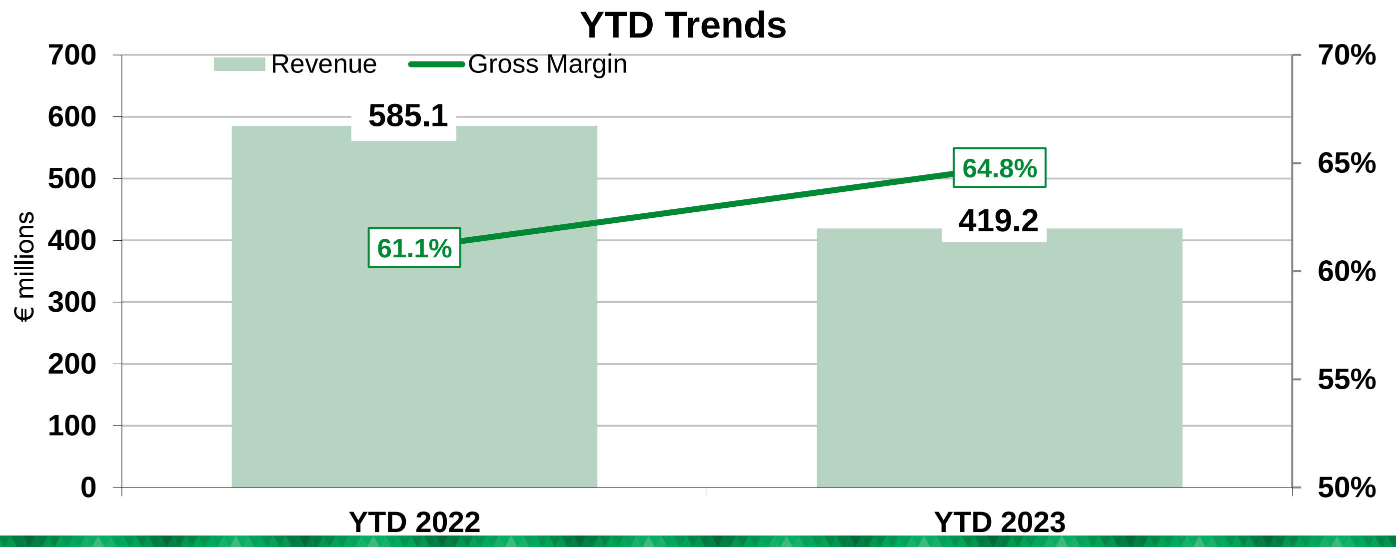
IDM/Subcontractor Order Trends



* Last twelve months ended September 30, 2023

Gross Margin Trends





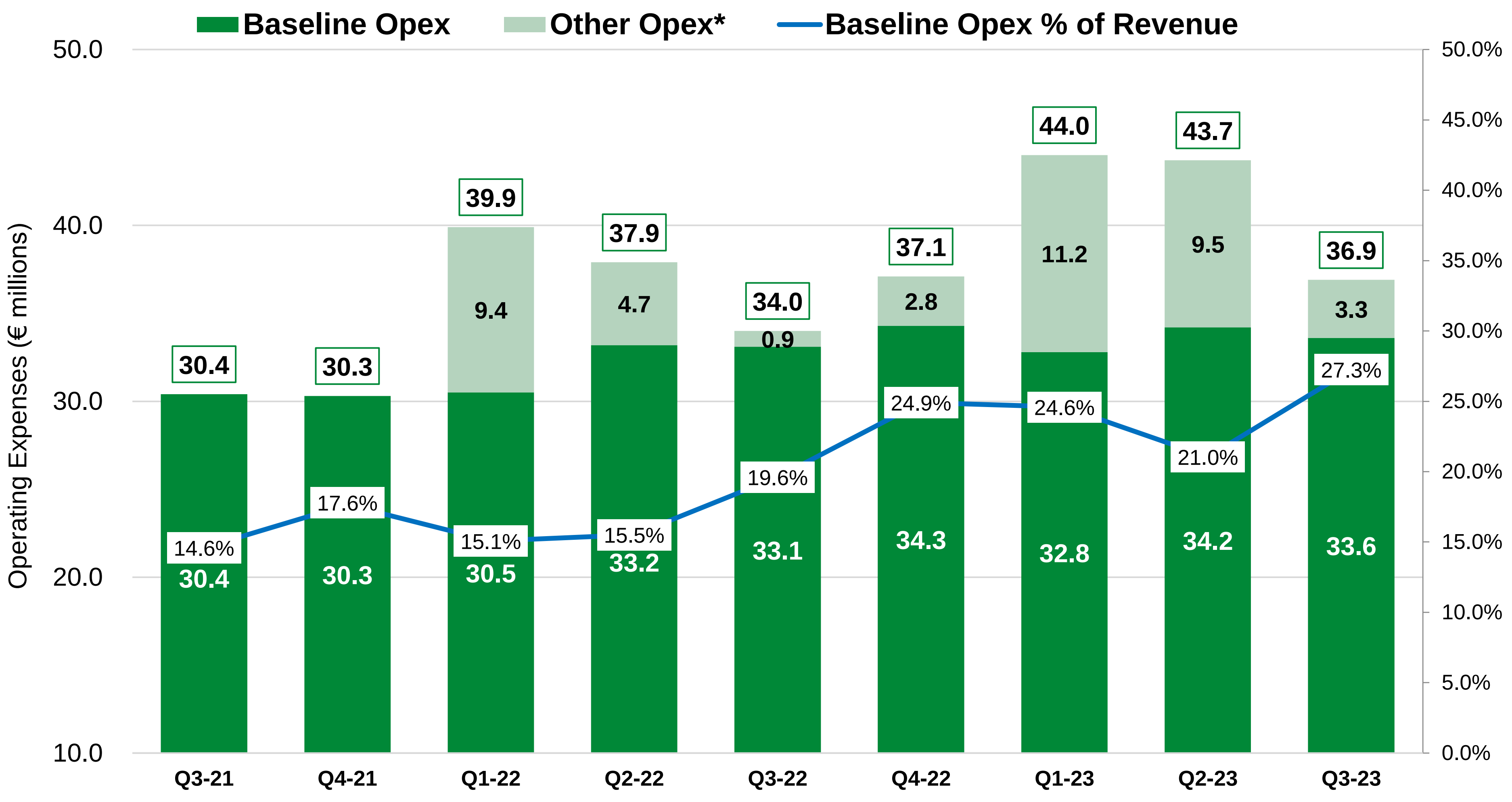
Q3-23 vs. Q2-23
- **64.6% vs. 65.6% (-1.0 points)**
  - Above prior guidance (62-64%) due to net forex benefit
  - Net forex positive: Revenue - USD vs. EUR
    Costs - MYR/RMB vs. EUR

Q3-23 vs. Q3-22
- **64.6% vs. 62.3% (+2.3 points)**
  - Net forex positive : Revenue - USD vs. EUR
    Costs - MYR/RMB vs. EUR
  - Cost control efforts

YTD-23 vs. YTD-22
- **64.8% vs. 61.1% (+3.7 points)**
  - More favorable product mix
  - Net forex benefits
  - Timely overhead alignment with changing market conditions

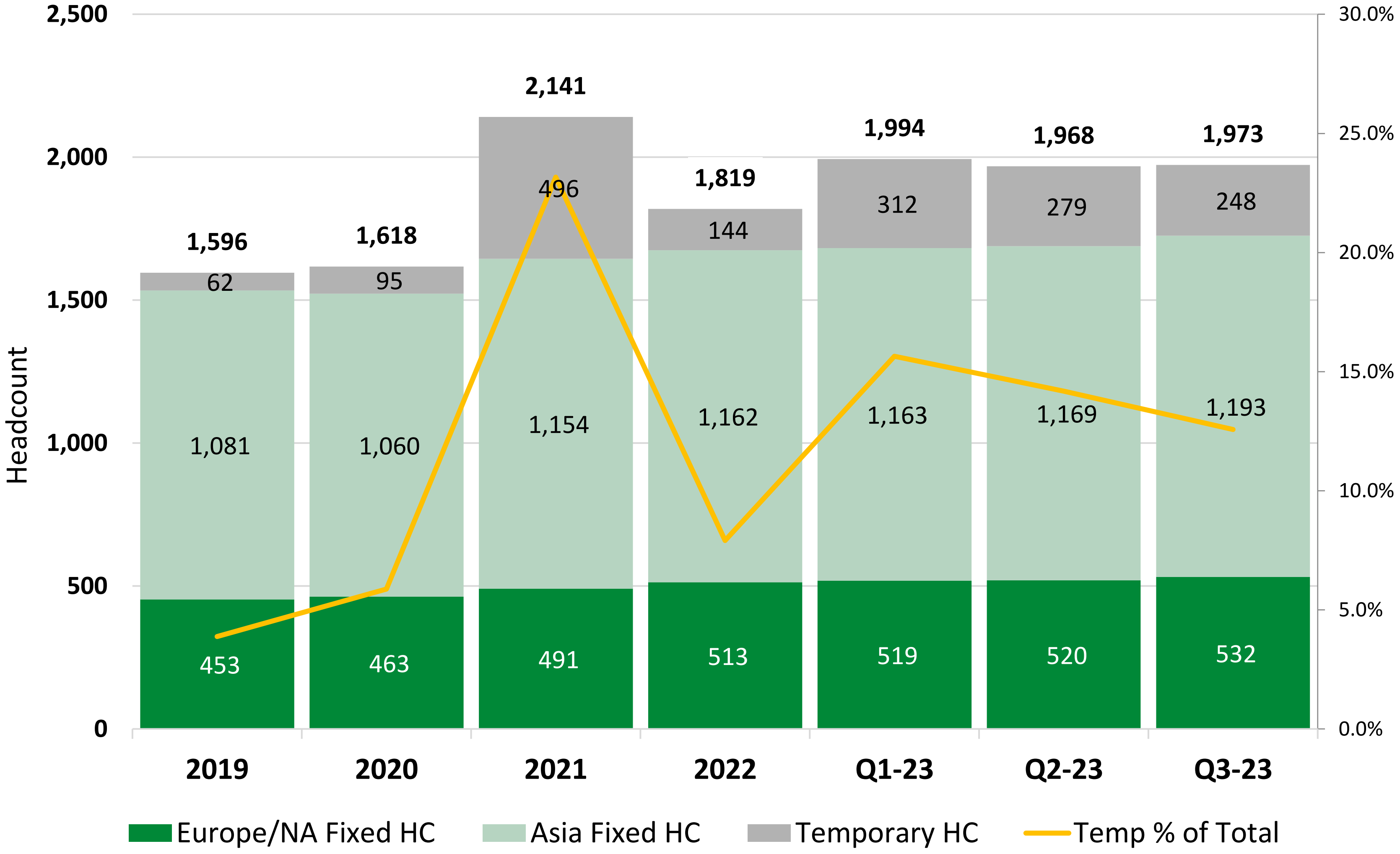
* Favorable impact
Unfavorable impact

Baseline Operating Expense Trends



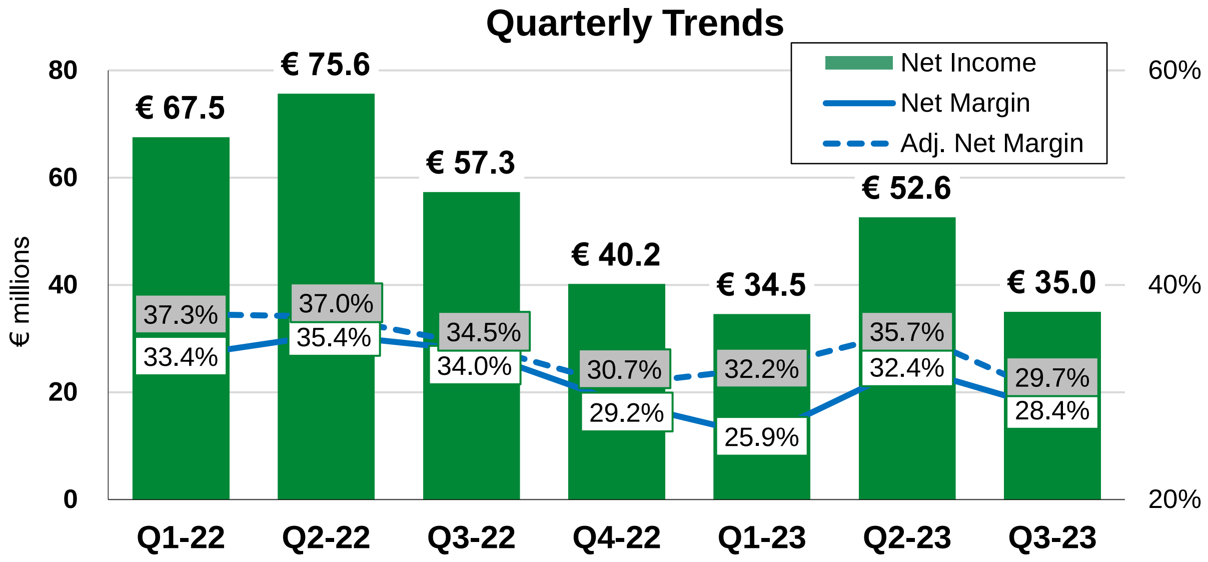
* Other Opex includes both short-term and long-term incentive compensation, restructuring costs, net R&D capitalization/amortization and certain one-time items including strategic consulting costs.

Headcount Trends

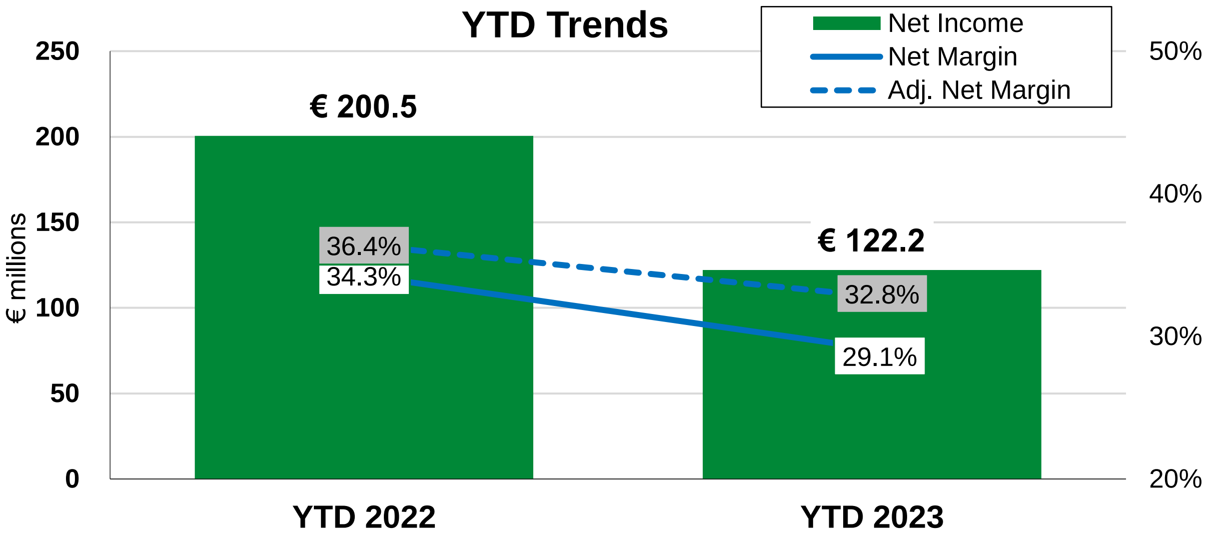


- HC aligned with market conditions:
  - Temporary HC down 60% from Q1-22
  - Total HC down 15% from Q1-22
- Increasing European and Asian fixed HC to support wafer level assembly expansion

Net Income Trends



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



<u>Q3-23 vs. Q2-23</u>

- **€ 35.0 million (-€ 17.6 million or -33.5%)**
  - -24.1% lower revenue
  - -1.0 point gross margin decrease
  - Partial offset: Opex down 15.6%

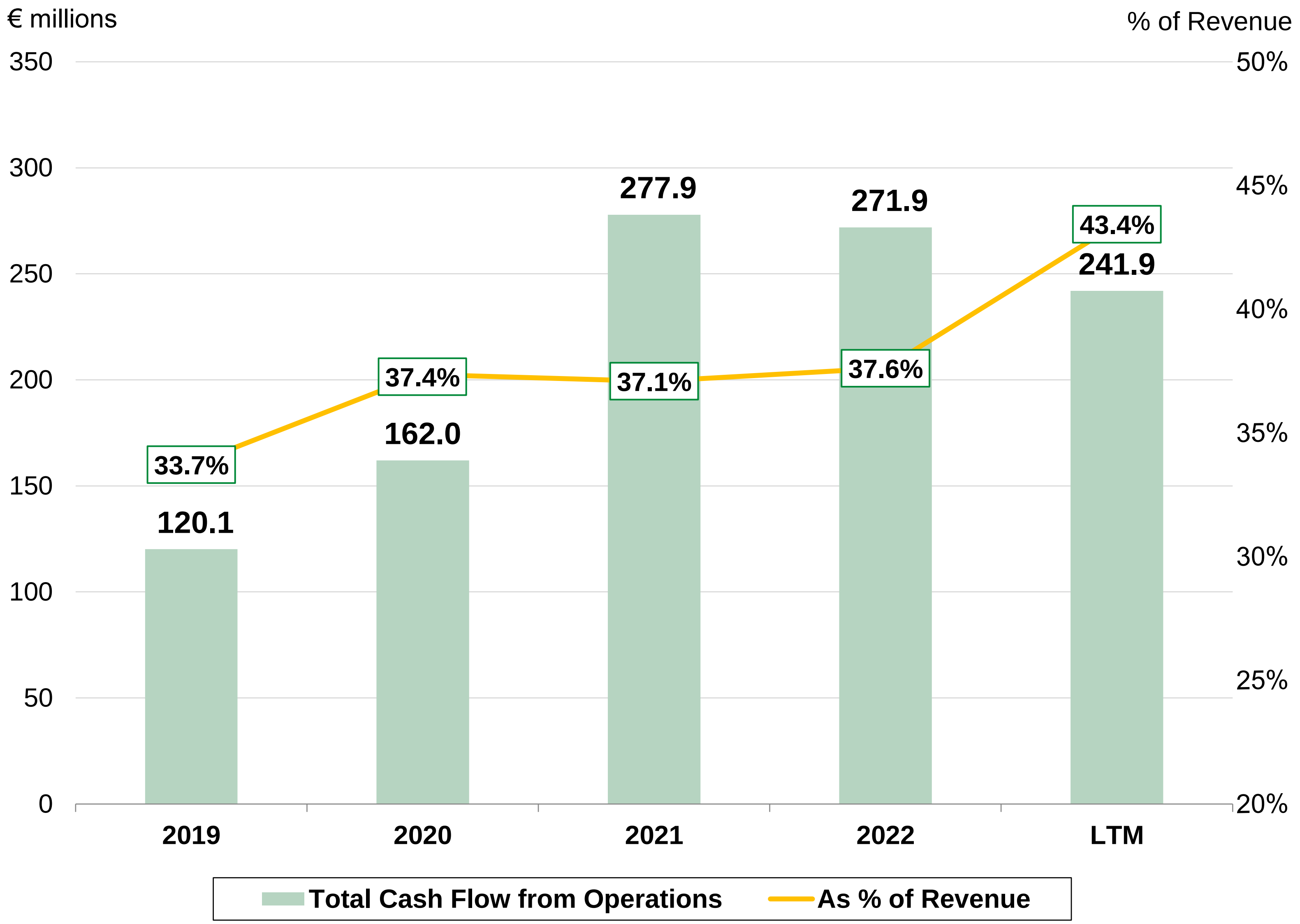
<u>Q3-23 vs. Q3-22</u>

- **-€ 22.3 million or -38.9%**
  - -27.0% lower revenue
  - -€ 2.9 million increased opex
    - € 1.6 million consulting + higher share based compensation
  - Partial offset:
    - +2.3 point gross margin increase
    - Higher interest income on cash balances

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

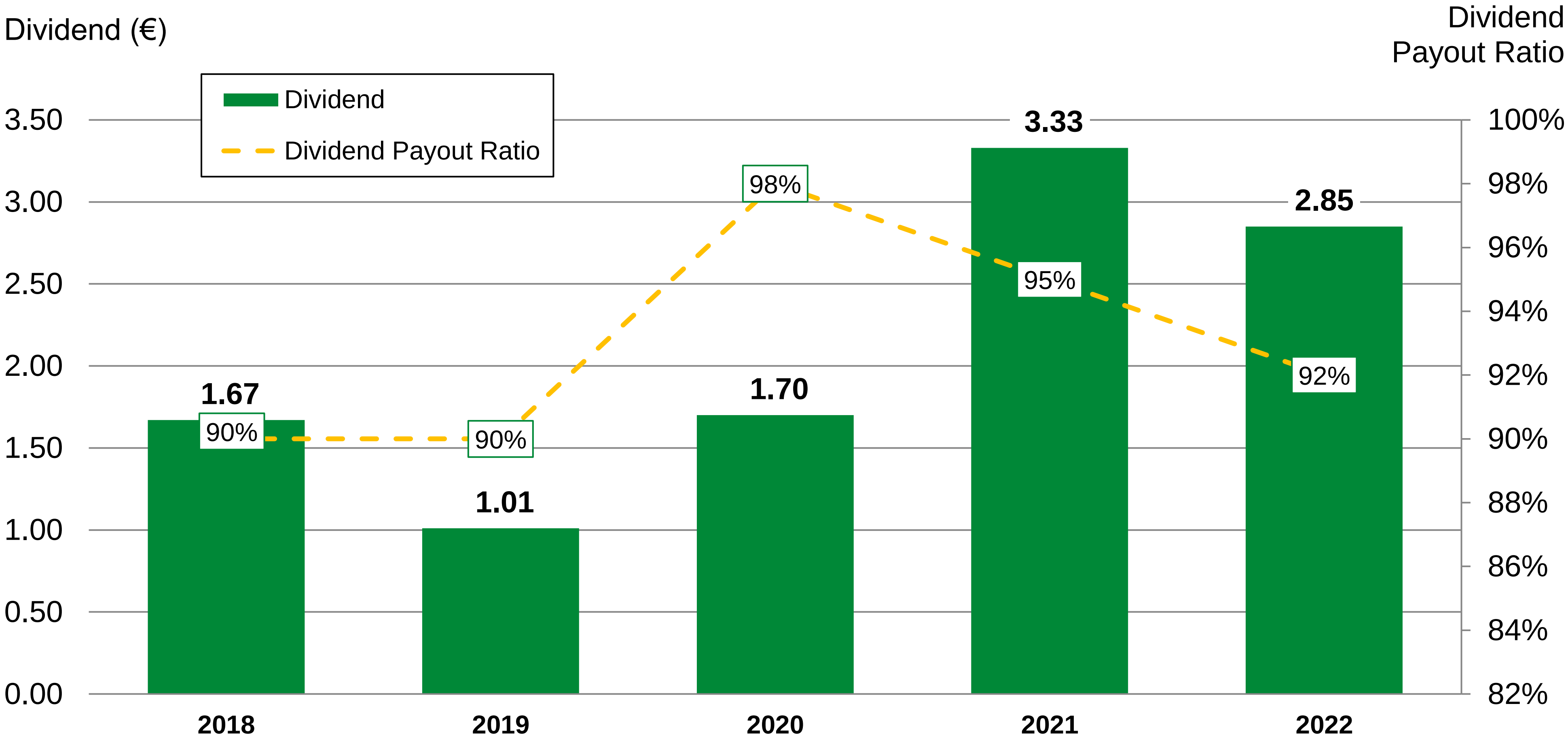
- **€ 122.2 million (-€ 78.3 million)**
  - -28.4% revenue decrease
  - -€ 12.7 million increased opex: higher consulting costs and share based compensation
  - Partial offset:
    - 3.7 point gross margin increase
    - +€ 8.2 million higher interest income earned

Cash Flow Efficiency Trends

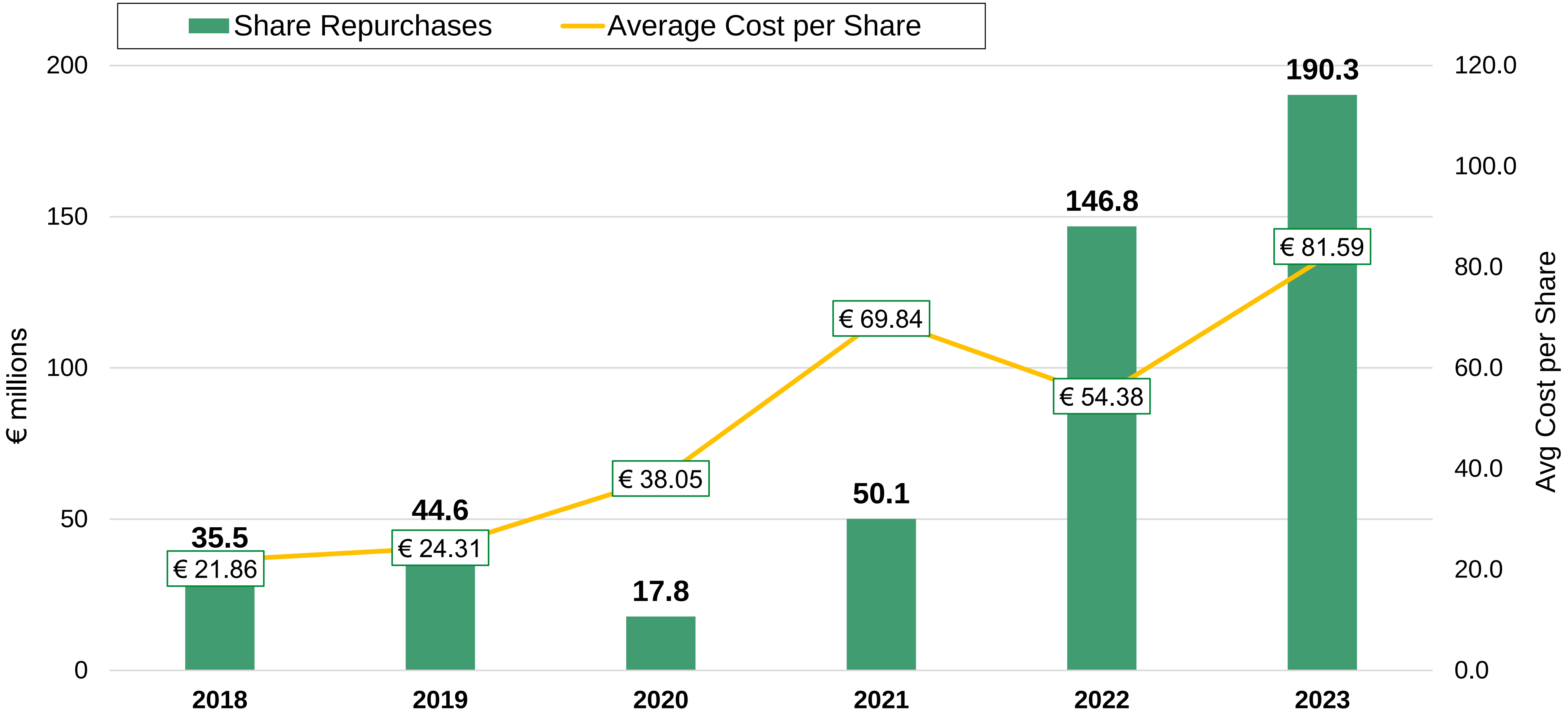


Dividend Trends

Cumulative dividends of € 1.2 billion since 2011, or € 15.63 per share



Share Repurchase Activity



- Approximately 4.0 million treasury shares at September 30, 2023, representing 4.9% of shares outstanding
- 77.2 million shares outstanding at September 30, 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 drive 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 fighting climate change

Attractive capital allocation policy