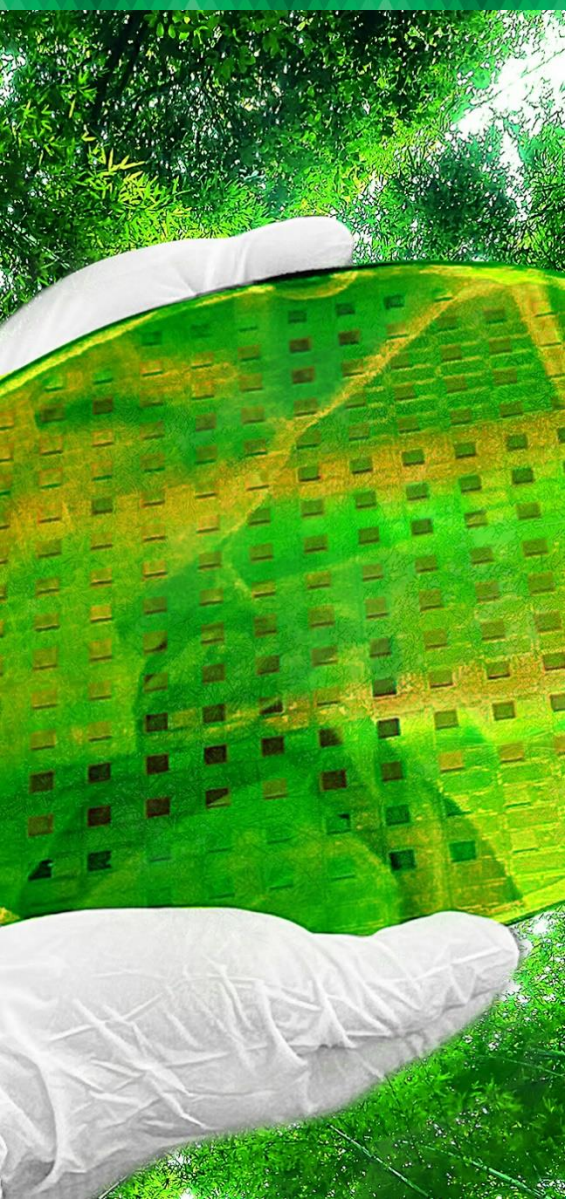


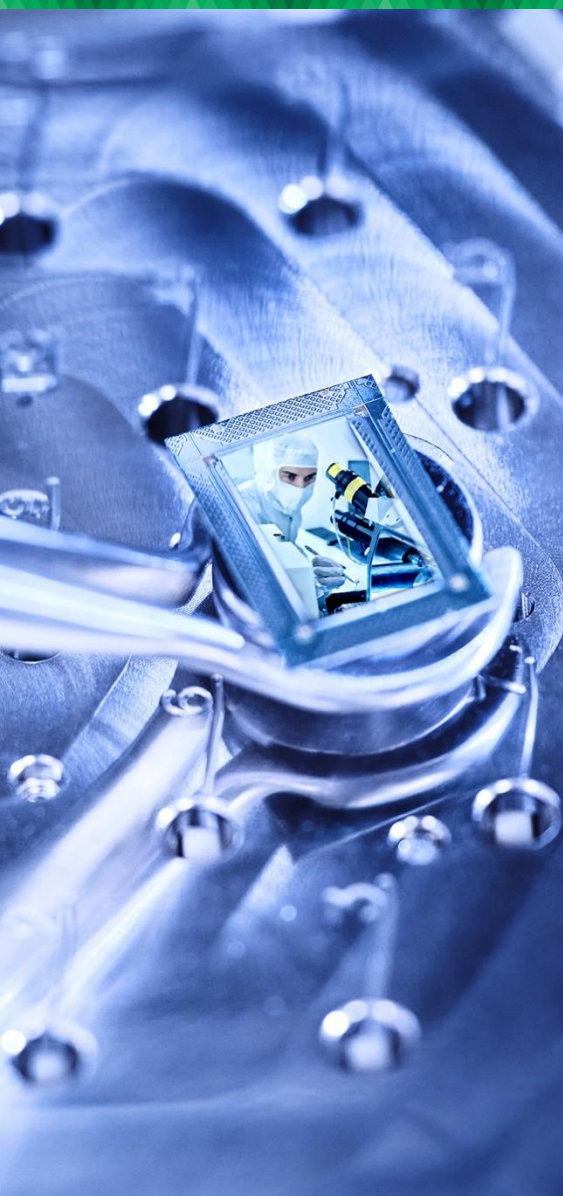


INVESTOR PRESENTATION Q2-23 RESULTS

July 27, 2023

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.

- I. Key Highlights
- II. Market & Strategy
- III. Outlook
- IV. Financial Appendix



I. KEY HIGHLIGHTS

Q2-23 Revenue and Net Income Up 21.8% and 52.5% vs. Q1-23 Revenue and Operating Profit Above Mid-point of Guidance

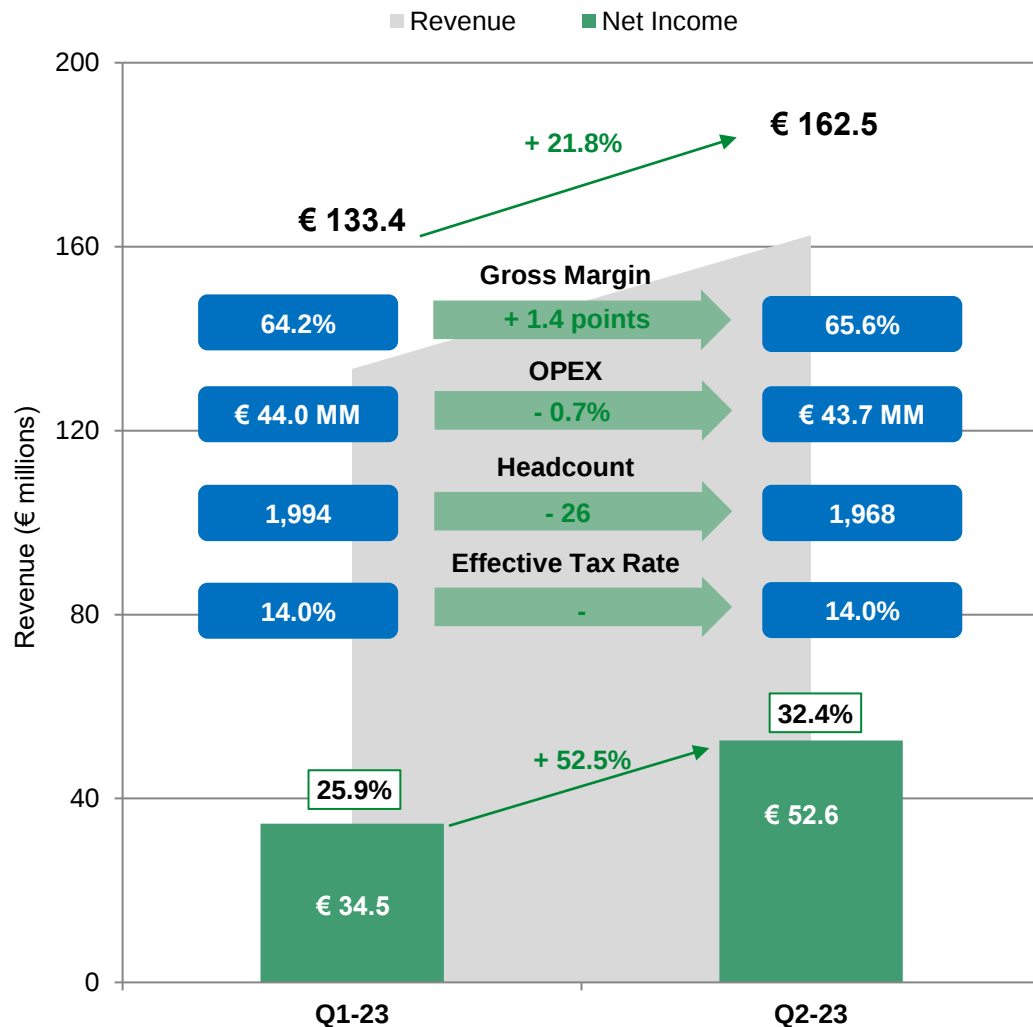
€ millions	Guidance Q2-23*	Q2-23	Δ Q1-23	Δ Q2-22
Revenue	Up 15%-25%	162.5	+ 21.8%	- 24.1%
Orders		112.6	- 20.7%	- 26.5%
Gross Margin	62%-64%	65.6%	+ 1.4pts	+ 4.6pts
Opex	Down 0-5%	43.7	- 0.7%	+15.3%
Operating Income	58.0**	62.9	+ 50.8%	- 32.0%
Net Income		52.6	+ 52.5%	- 30.4%
EPS Basic		0.68	+ 54.5%	- 27.7%
Net Cash		74.0	- 77.3%	- 73.9%

* As compared to Q1-23

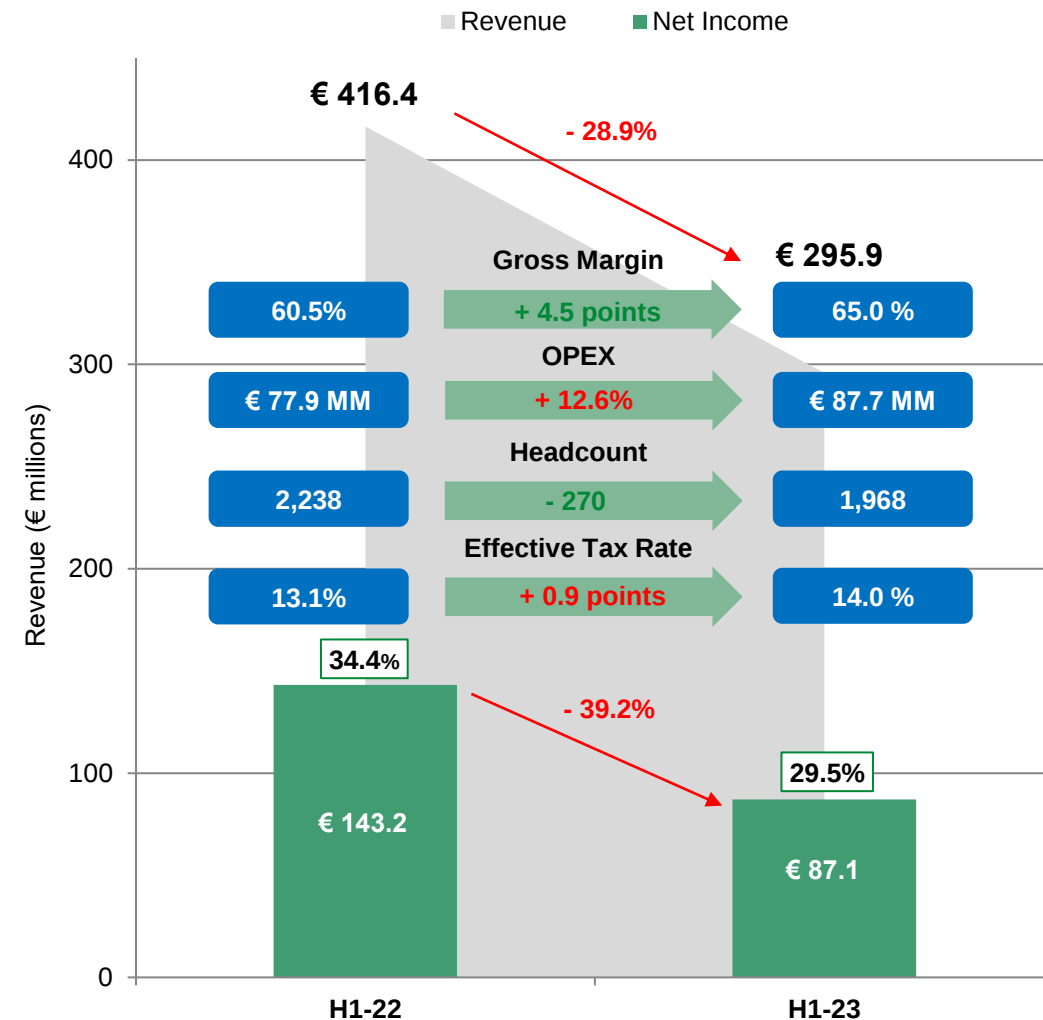
** At midpoint of guidance range

H1-23 Affected by Broad Based Weakness in Computing Applications

Q1-23/Q2-23

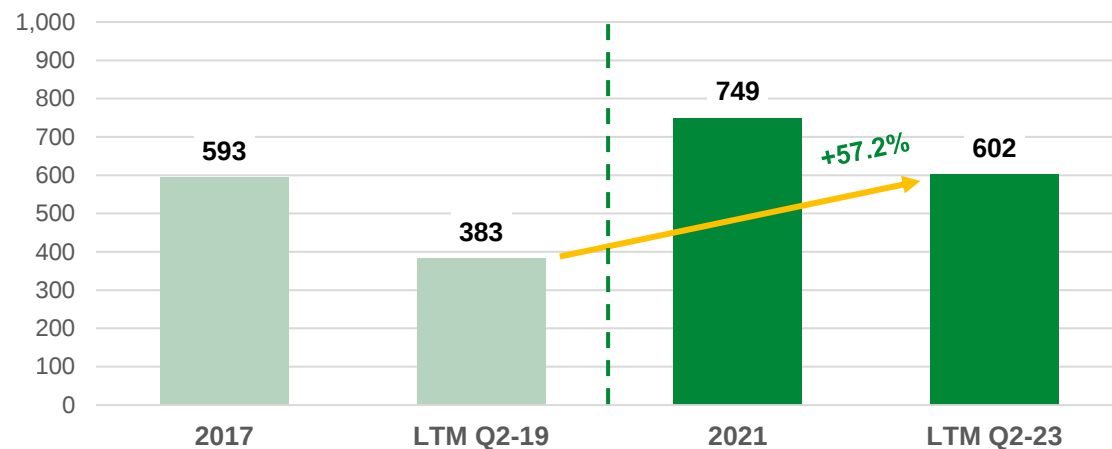


H1-22/H1-23

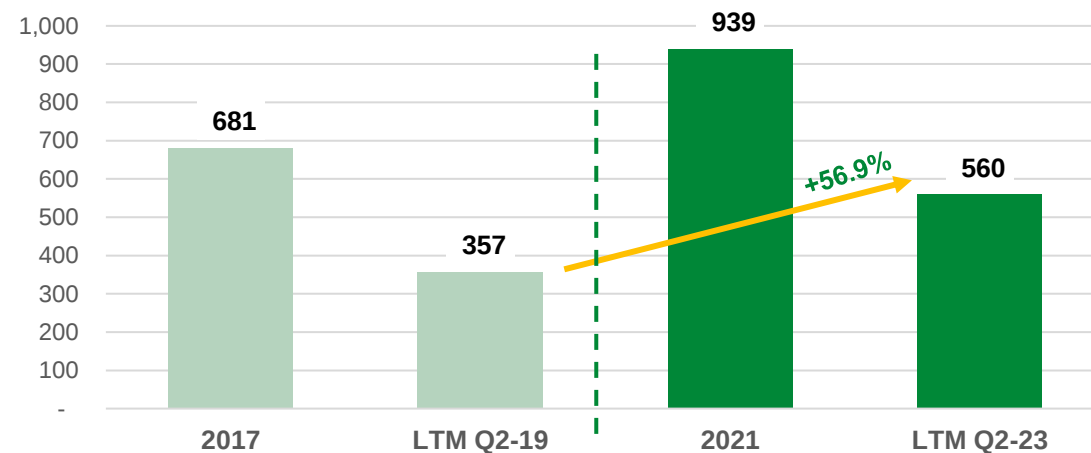


Continued Outperformance vs. Last Industry Downturn

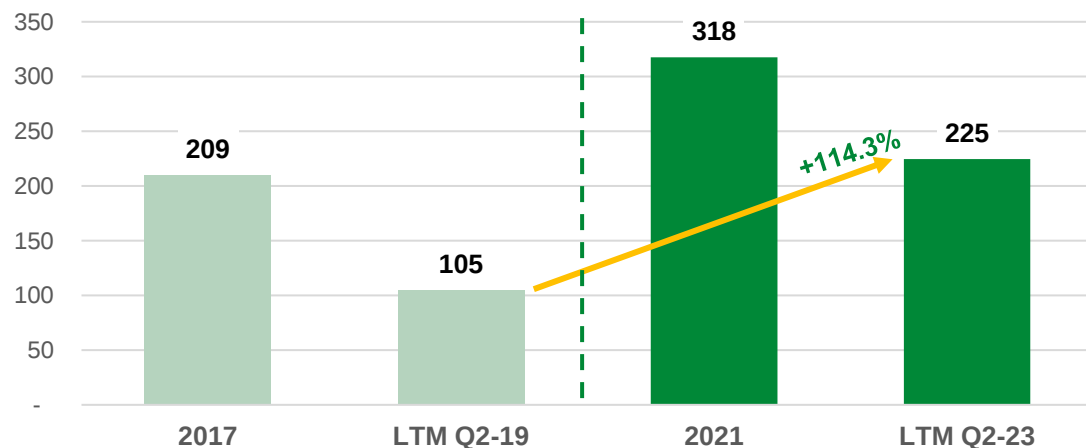
Revenue (€MM)



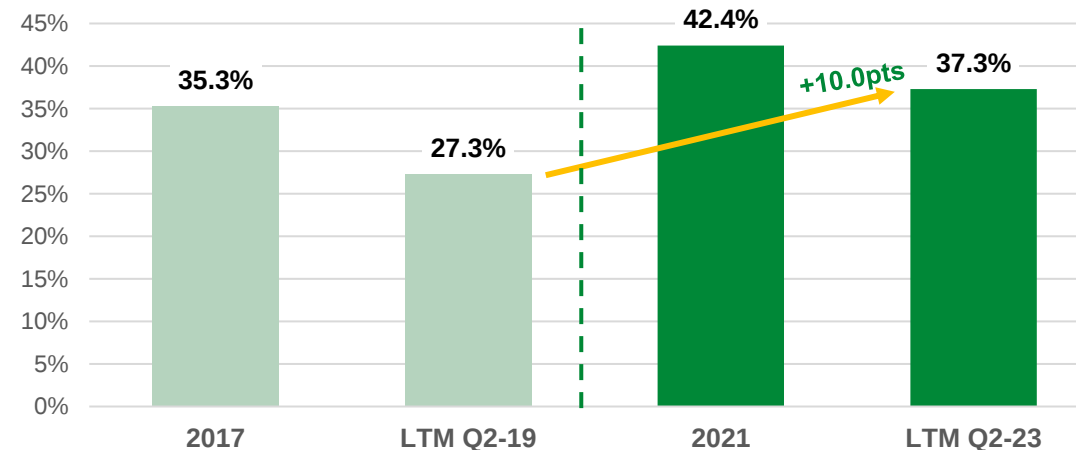
Orders (€MM)



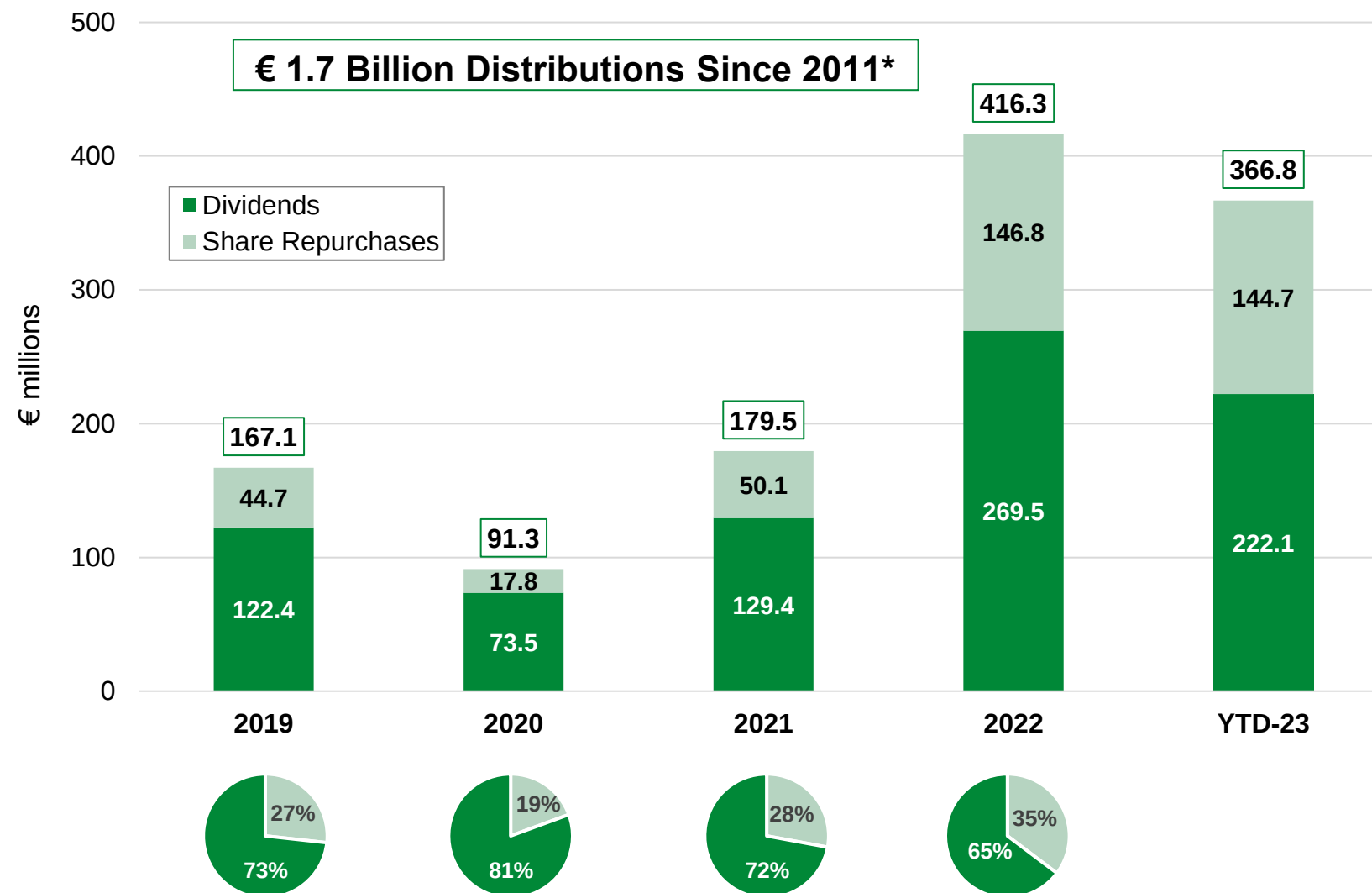
Operating Profit (€MM)



Operating Margin



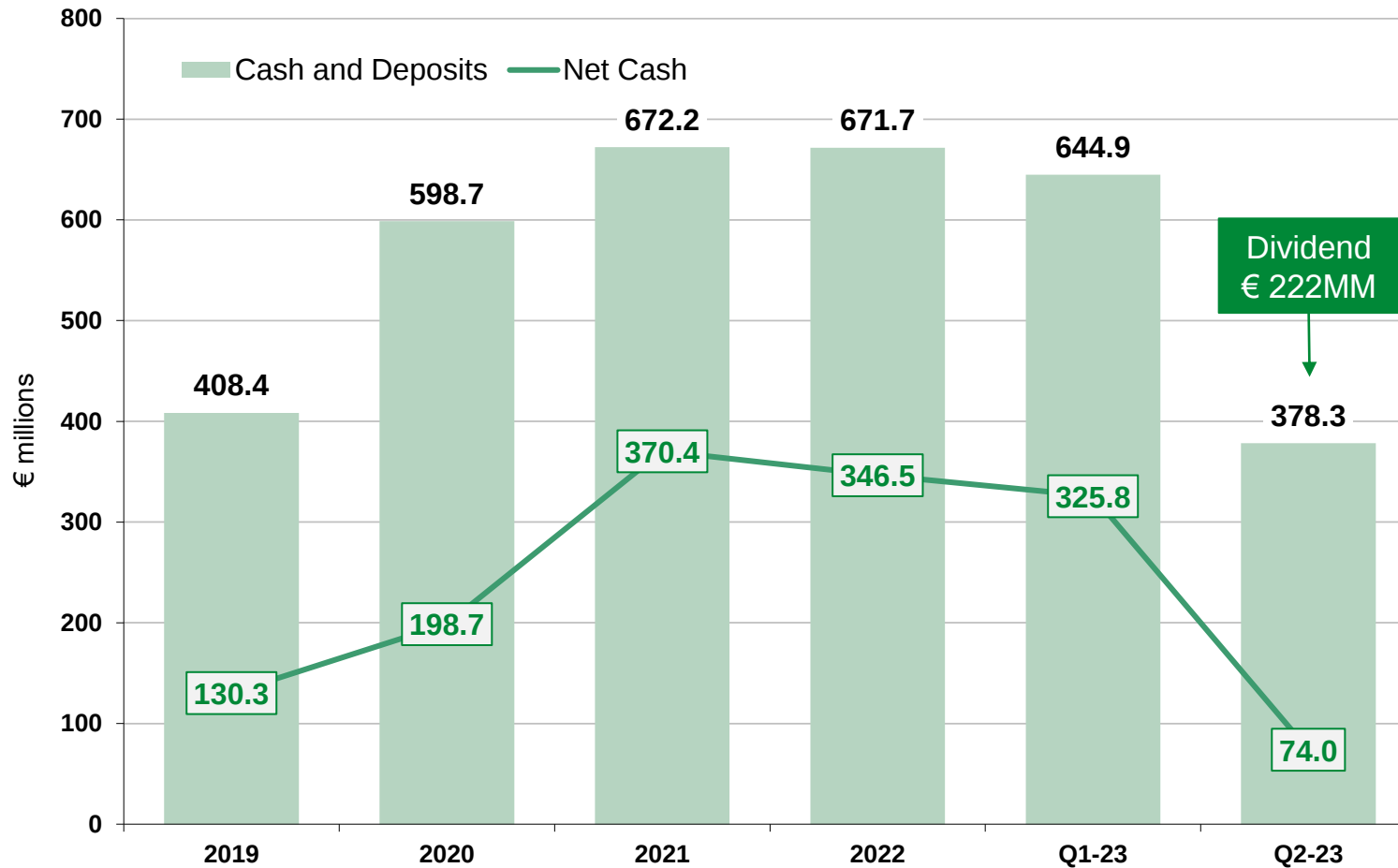
Capital Allocation Increasing



- **€ 367 million distributed YTD-23 including € 289 million in Q2-23**
- **Current € 300 million share buyback program:**
 - ~3.7 million shares purchased through Q2-23 for € 241 million
 - Treasury shares: 4.5% of TSO
 - Expected completion: October 2023

* Includes share repurchases through June 30, 2023

Strong Liquidity Position Maintained



Q2-23 vs. Q1-23

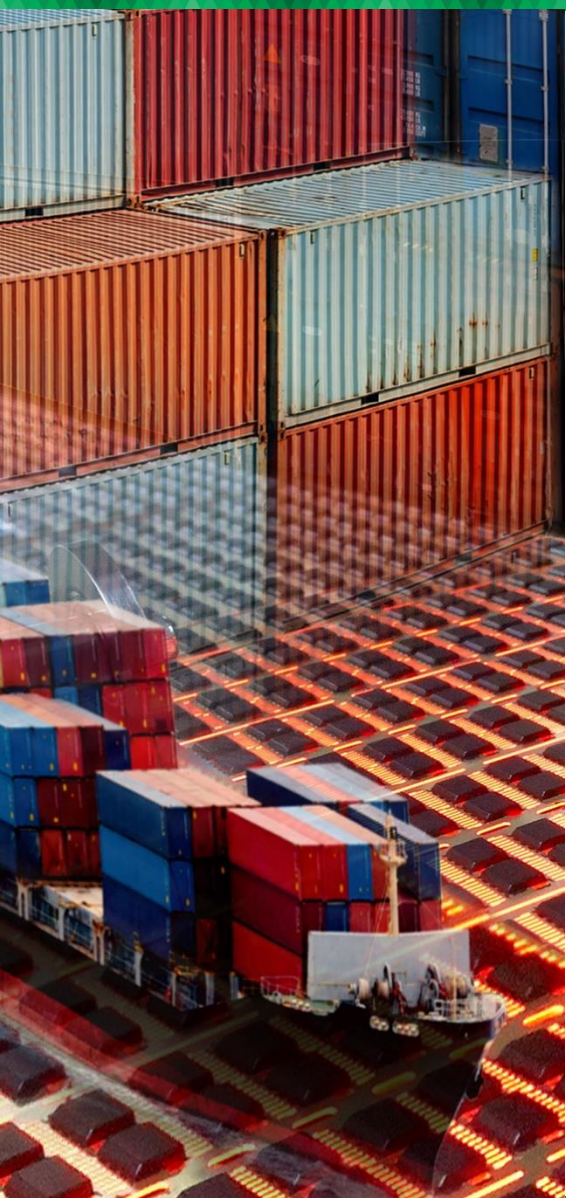
- Cash and deposits of € 378.3 million
 - -€ 266.6 million primarily due to:
 - + € 28.7 million cash flow from operations
 - - € 289.1 million capital allocation
 - - € 5.3 million capitalized R&D
 - - € 2.3 million capex
- Net cash decreases to € 74.0 million
 - Equals 12% of LTM revenue

Q2-23 vs. Q2-22

- Cash and deposits down € 223.3 million (-37.1%)
- Net cash down € 210.0 million (-73.9%)
- Due to increased share repurchases

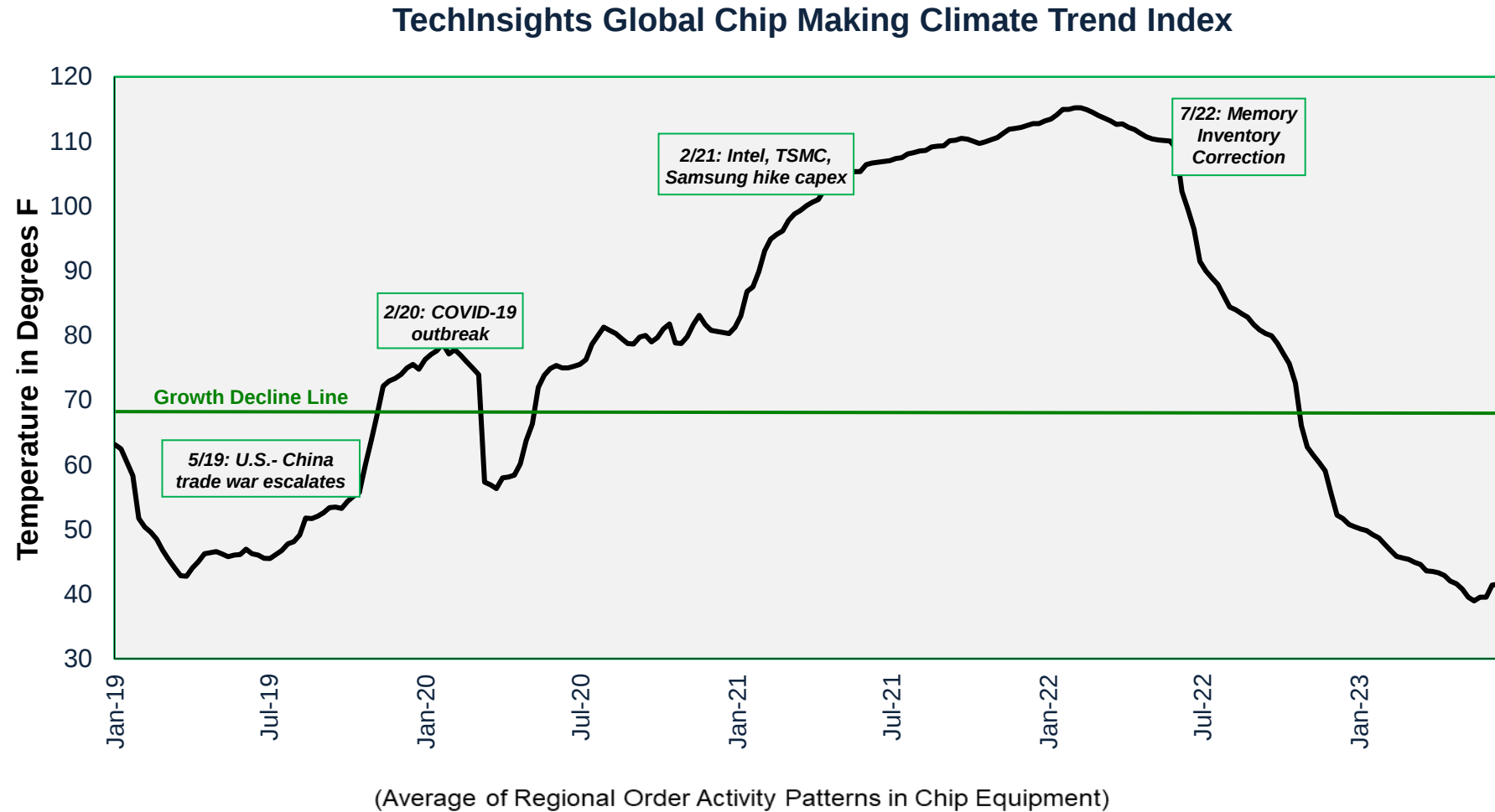
Convertible Notes

- € 333.9 million outstanding at July 27, 2023
 - € 16.9 million converted in Q2-23
 - 2023/2024 Notes reduced to € 8.9 million



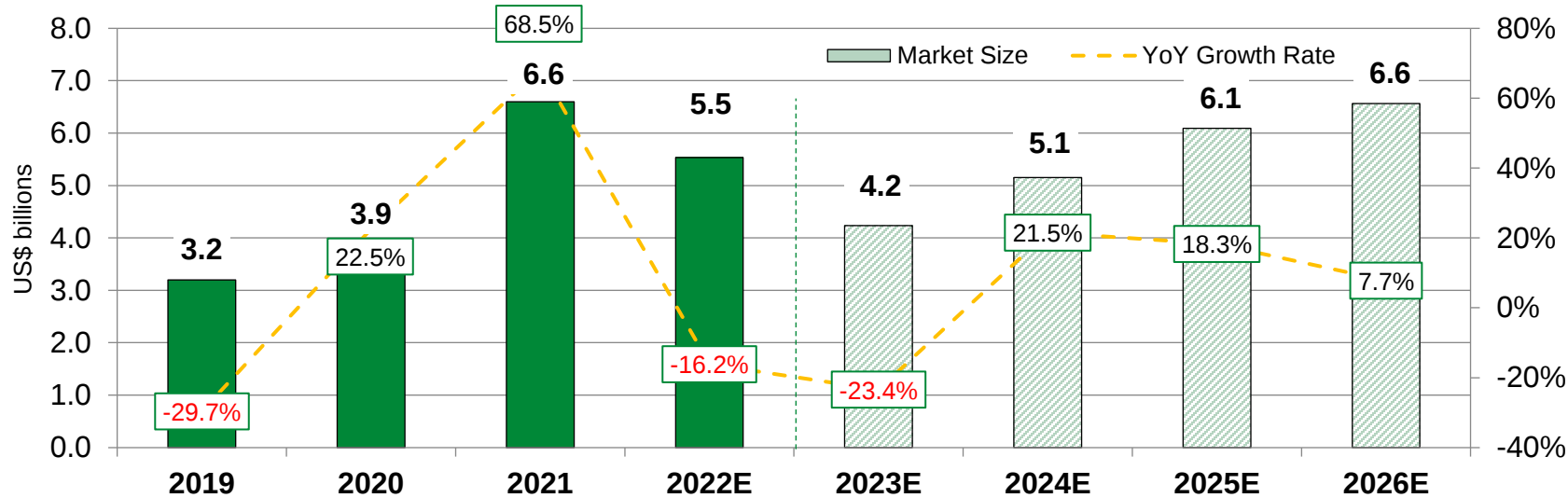
II. MARKET & STRATEGY

Industry Downturn Appears to Have Bottomed in Q2-23



Source: TechInsights, July 2023

Assembly Market Rebound Forecast 2024-2025



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

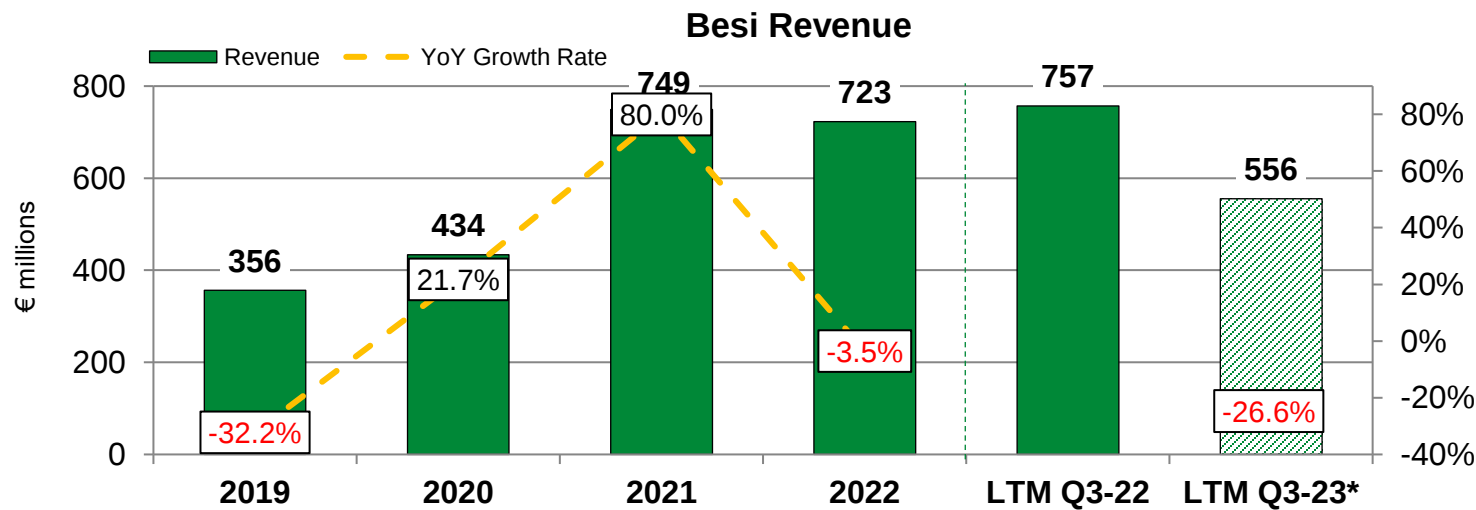
TechInsights forecasts 23.4% downturn in 2023

- Unchanged versus last forecast
- Market decreases to \$4.2 billion
- ~36% decrease from 2021 peak

Strong rebound anticipated in 2024 and 2025

Secular fundamentals intact:

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



* At midpoint of Q3-23 guidance

Business

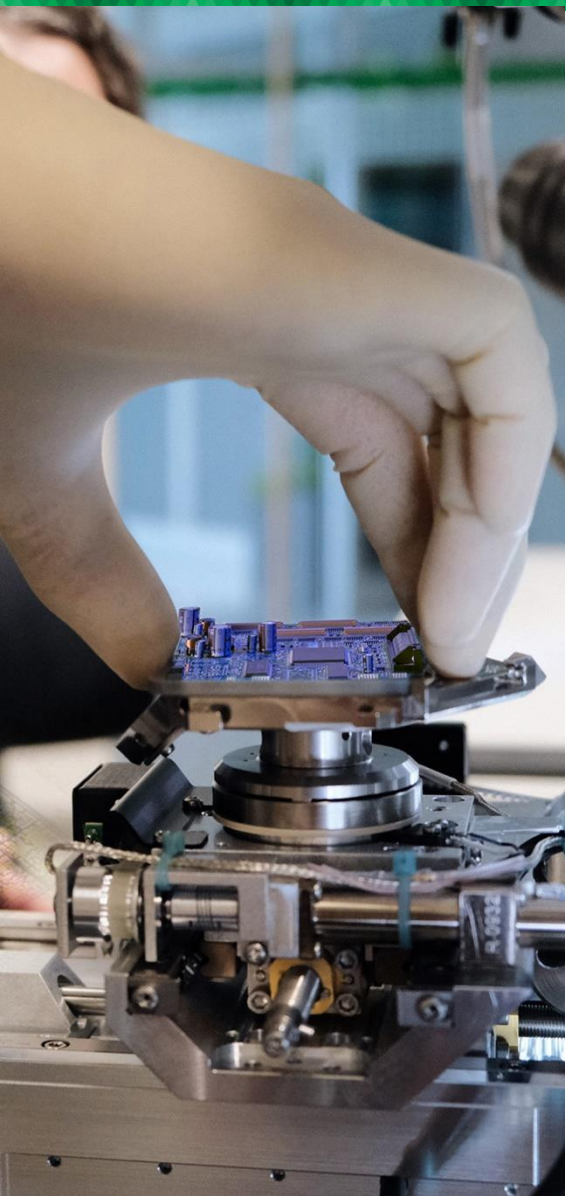
- Effectively navigating industry downturn at high profitability levels
- Overhead aligned with market conditions
- 47% and 12% reduction in temps and total HC vs. Q2-22
- 2023 Strategic Review completed

Development

- Continued R&D investment in future
- Strong HB engagement for data center, AI, mobile and HBM
- H1-23 activity focused on process qualification and sampling
- Follow on orders anticipated in H2-23 for industry ramp in 2024-2026
- First TCB C2W shipped

Operations

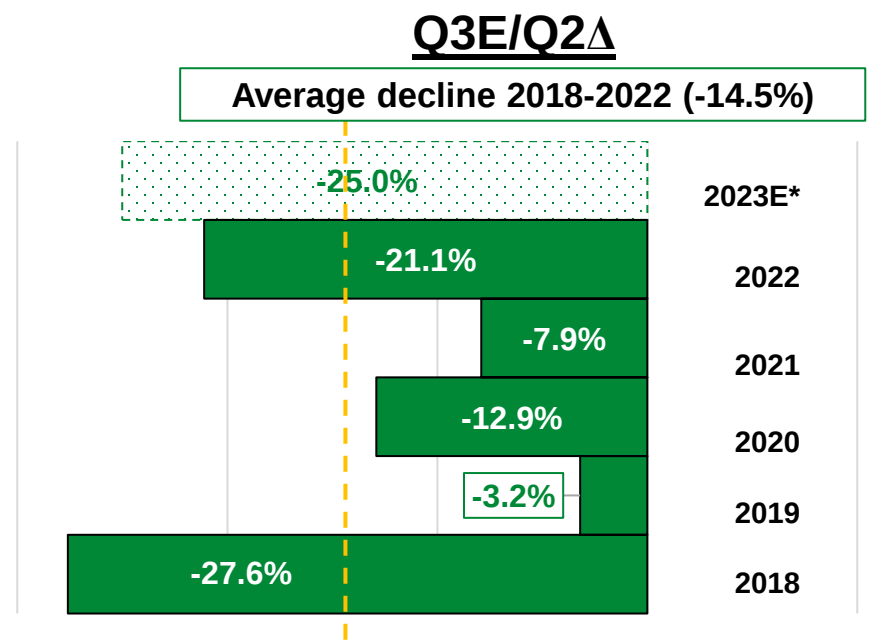
- Singapore cleanroom completion in Q3-23
- Vietnam tooling support facility by Q4-23
- New company in India formed to support increased mobile assembly demand



III. OUTLOOK

€ in millions	Q2-23	Q3-23
Revenue	€ 162.5	-20% -30%
Gross Margin	65.6%	62% - 64%
Operating Expenses	€ 43.7	-10% -15%

Seasonal Revenue Trends



- Q2/Q3-23E decrease comparable to 2018 downturn

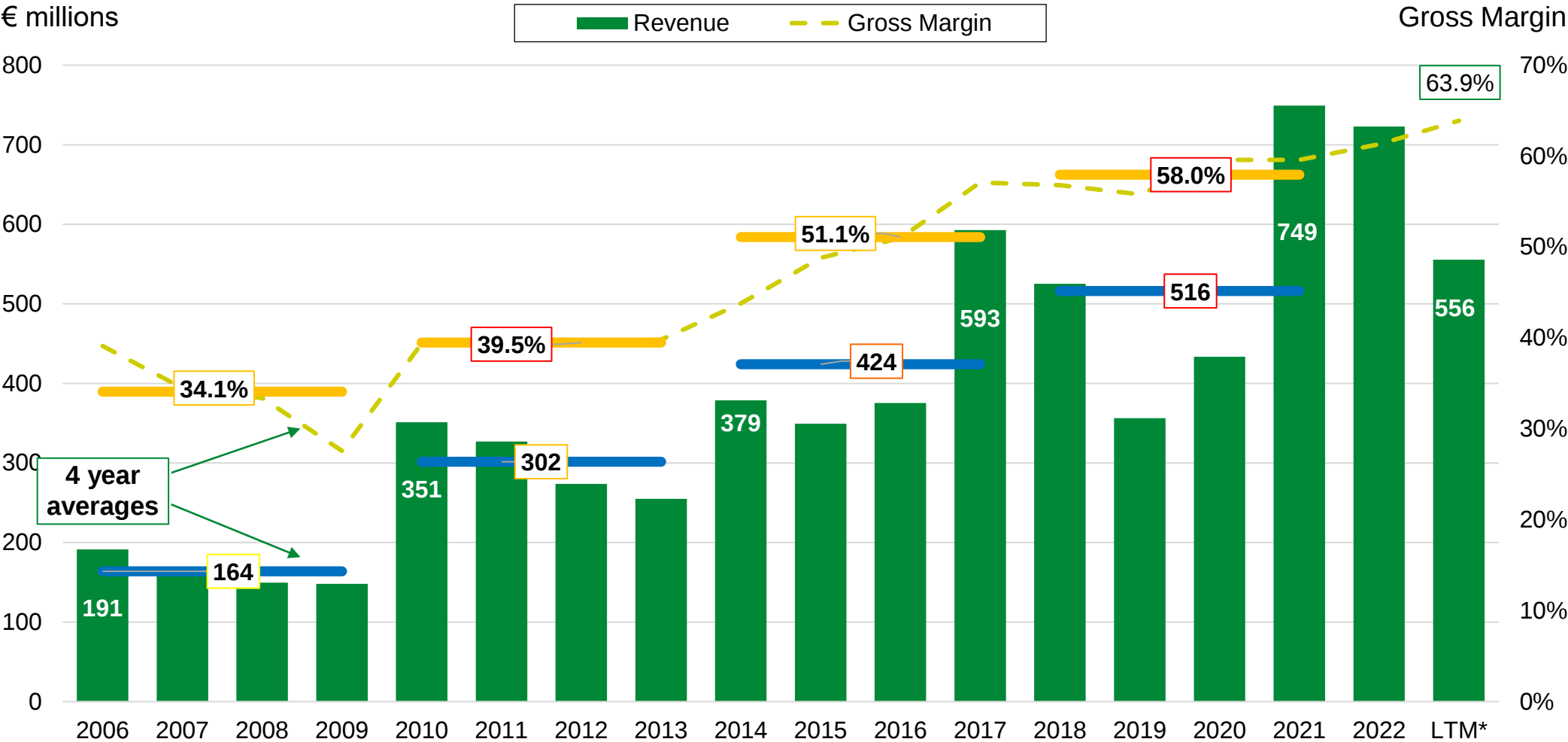
* Assumes midpoint of guidance for Q3-23

31-Jul-23	Roadshow New York, organized by Morgan Stanley
22-Aug-23	4 th Annual Needham virtual Semiconductor & SemiCap conference
6-Sep-23	Deutsche Bank TMT conference, London
13-Sep-23	Roadshow Helsinki, organized by ING
14-Sep-23	Roadshow Stockholm, organized by ING
15/16-Nov-23	European TMT conference Morgan Stanley, Barcelona
21-Nov-23	ING Benelux conference, Brussels
22-Nov-23	Van Lanschot Kempen conference, London
5-Dec-23	UBS Global TMT conference, New York



IV. FINANCIAL APPENDIX

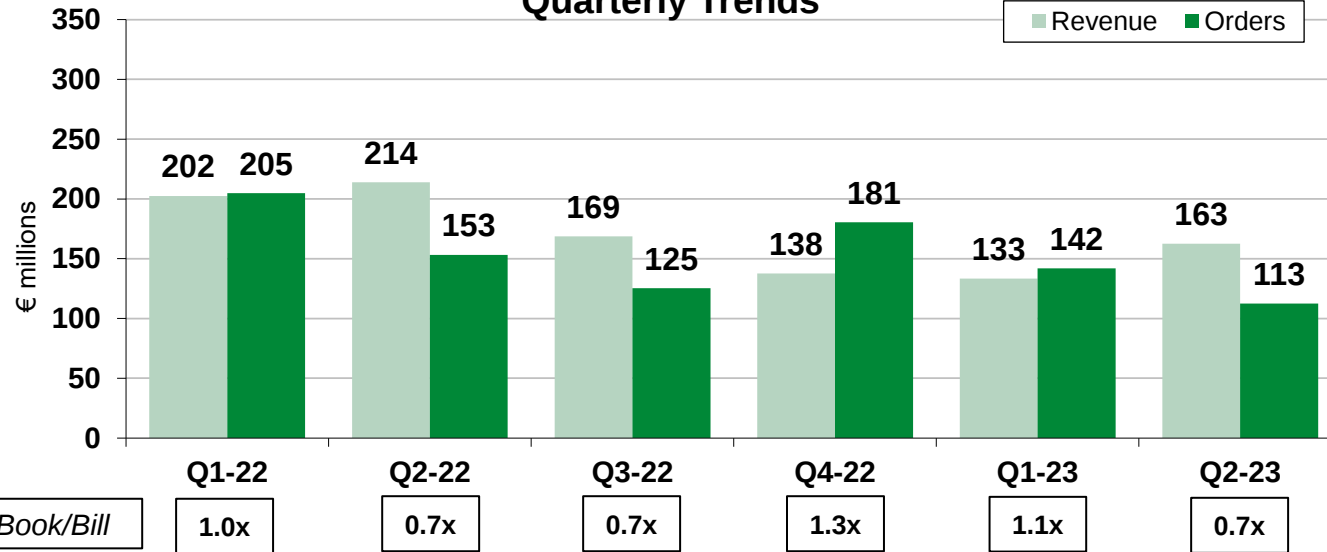
Through Cycle Revenue and Gross Margin Trends



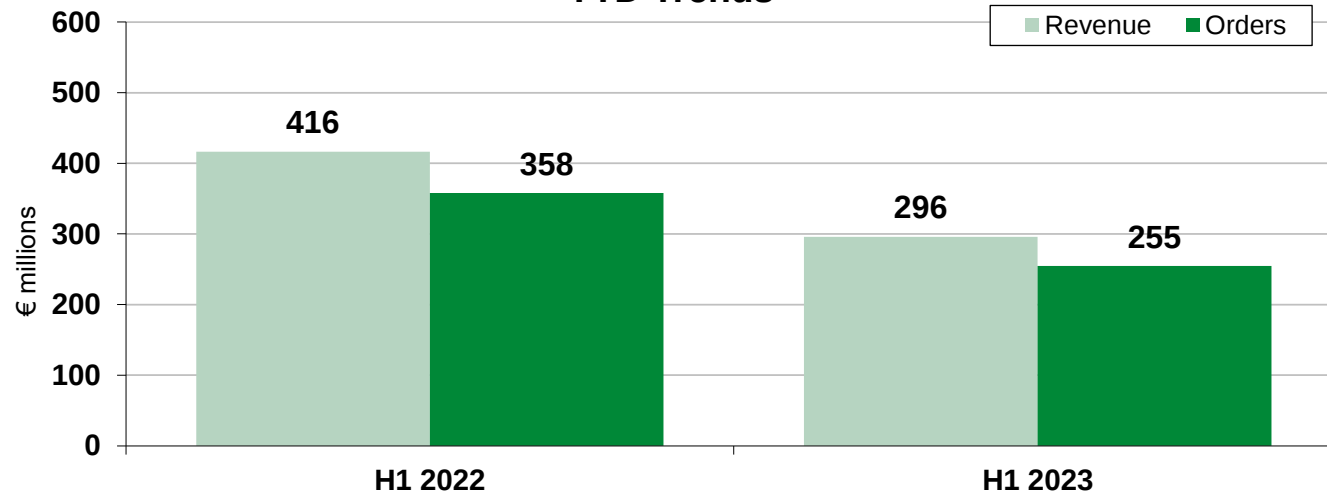
* LTM including midpoint of guidance for Q3-23.

Revenue/Order Trends

Quarterly Trends



YTD Trends



Q2-23 vs. Q1-23

- **Revenue: +€ 29.1 million (+21.8%)**
 - Above mid point of prior guidance
 - Primarily increased mobile for high-end & mainstream applications
- **Orders: -€ 29.4 million (-20.7%)**
 - Lower high-end mobile post Q4-22/Q1-23 build
 - Partial offset: increased automotive bookings by Asian subcontractors

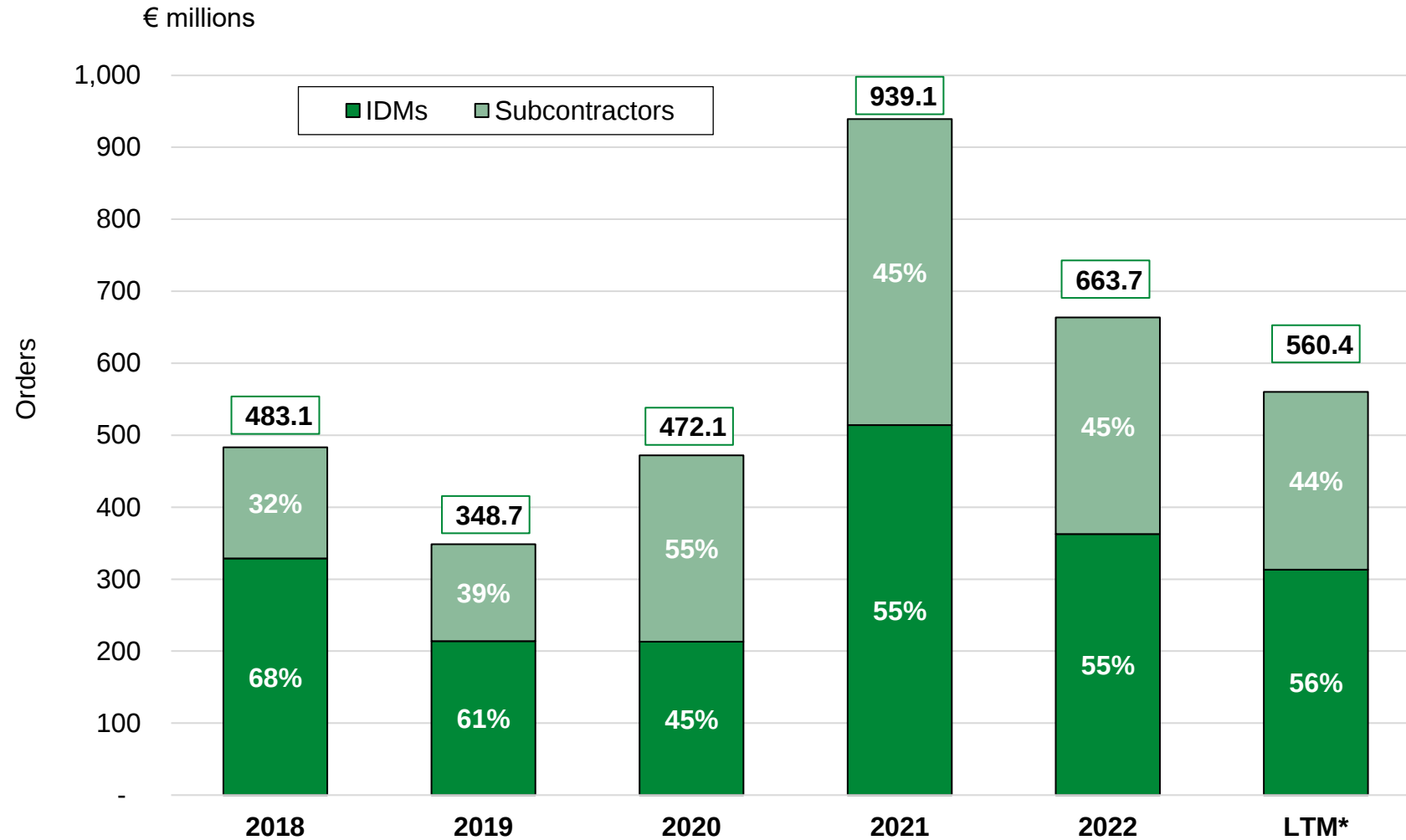
Q2-23 vs. Q2-22

- **Revenue: -€ 51.5 million (-24.1%)**
- **Orders: -€ 40.5 million (-26.5%)**
 - Ongoing assembly downturn

H1-23 vs. H1-22

- **Revenue: -€ 120.5 million (-28.9%)**
 - Broad based decline computing applications
 - Partial offset: Increased high-end mobile
- **Orders: -€ 103.3 million (-28.9%)**
 - Adverse market conditions
 - Weakness in computing end user markets

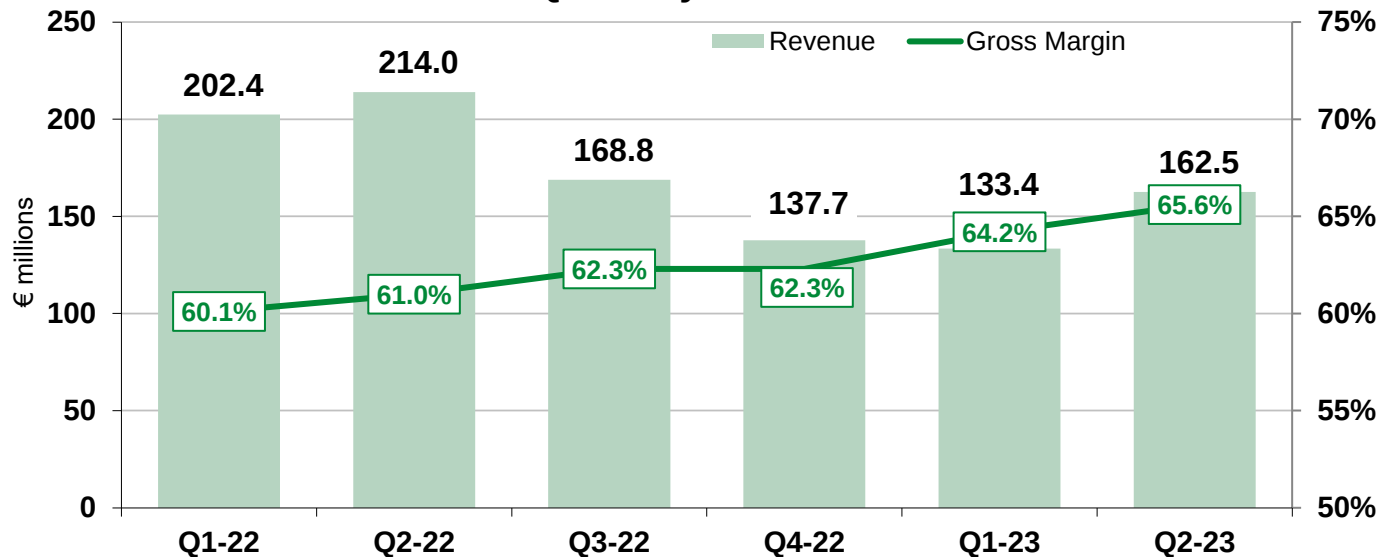
IDM/Subcontractor Order Trends



* Last twelve months ended June 30, 2023

Gross Margin Trends

Quarterly Trends



Q2-23 vs. Q1-23

- **65.6% vs. 64.2% (+1.4 points)**
 - Above prior guidance
 - Favorable product mix
 - Cost control efforts
 - Net forex positive: Revenue - **USD vs. EUR**
Costs - **MYR/RMB vs. EUR**

Q2-23 vs. Q2-22

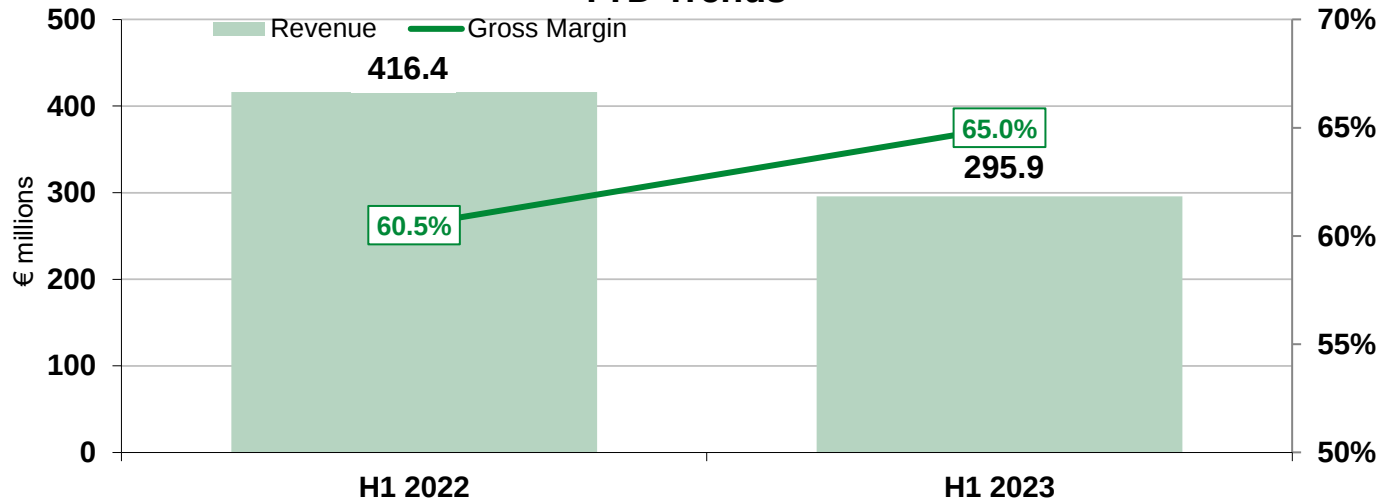
- **65.6 vs. 61.0% (+4.6 points)**
 - Favorable product mix
 - Lower production personnel costs
 - Net forex positive : Revenue - **USD vs. EUR**
Costs - **MYR/RMB vs. EUR**

H1-23 vs. H1-22

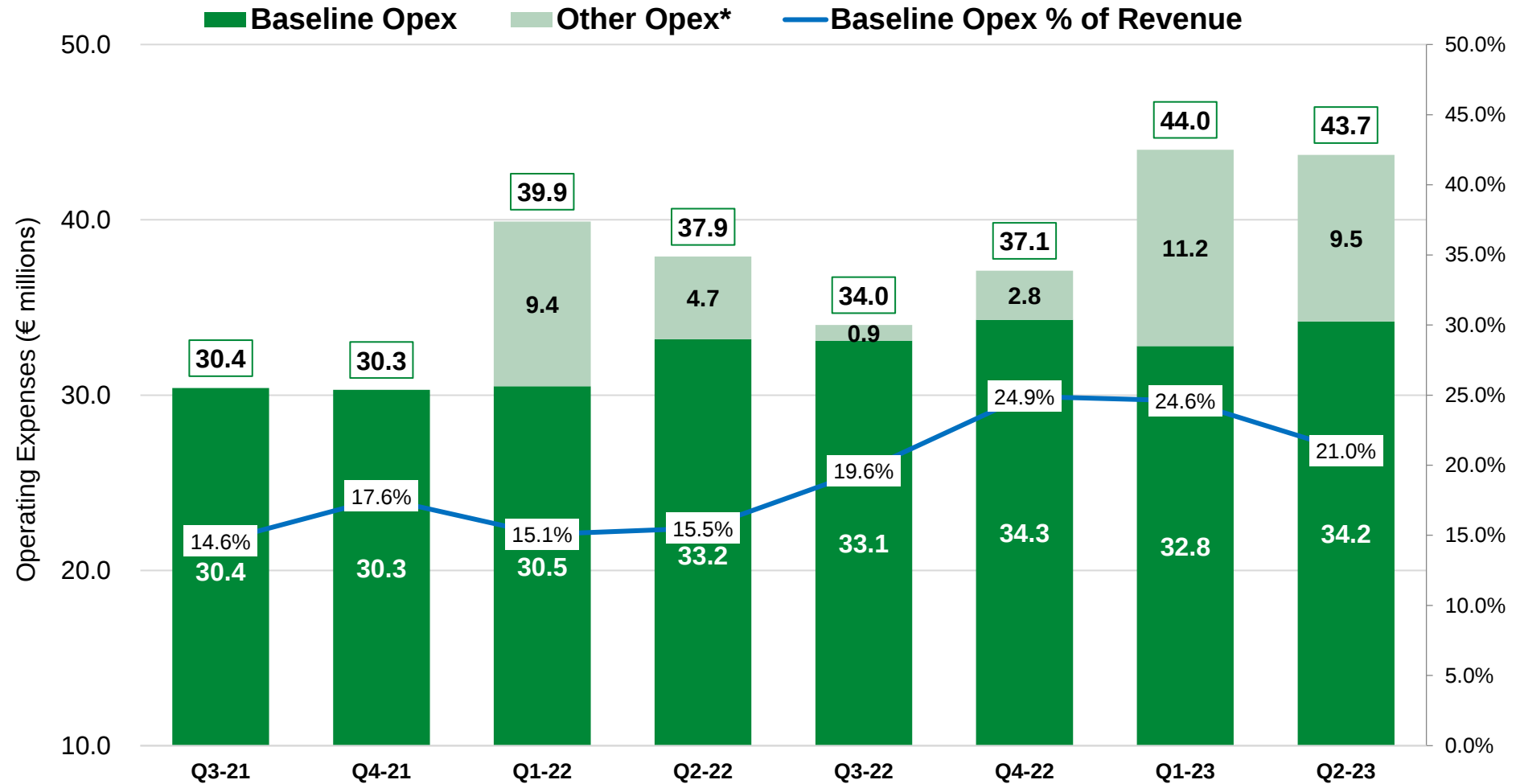
- **65.0 vs. 60.5% (+4.5 points)**

* Favorable impact
Unfavorable impact

YTD Trends

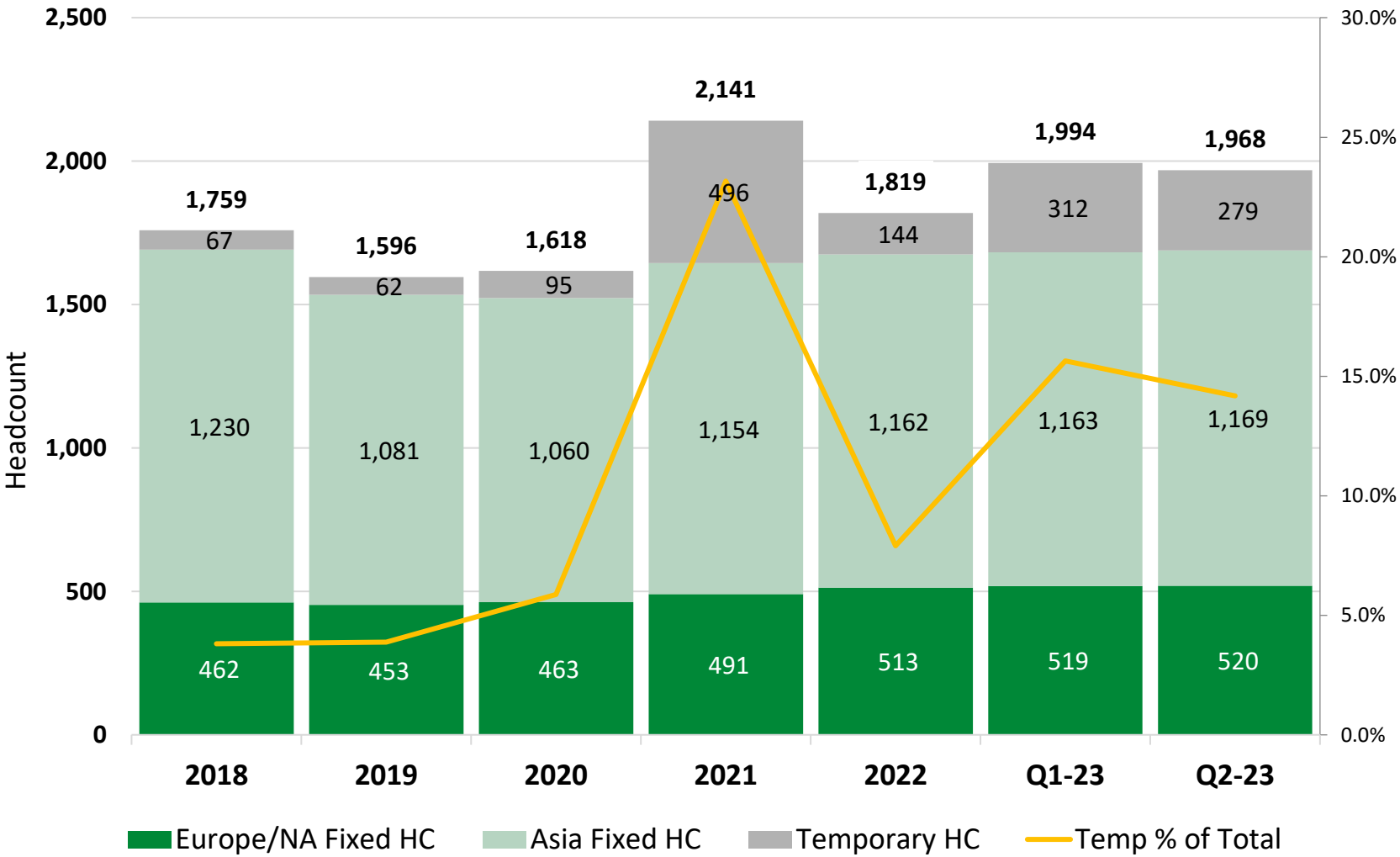


Baseline Operating Expense Trends



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

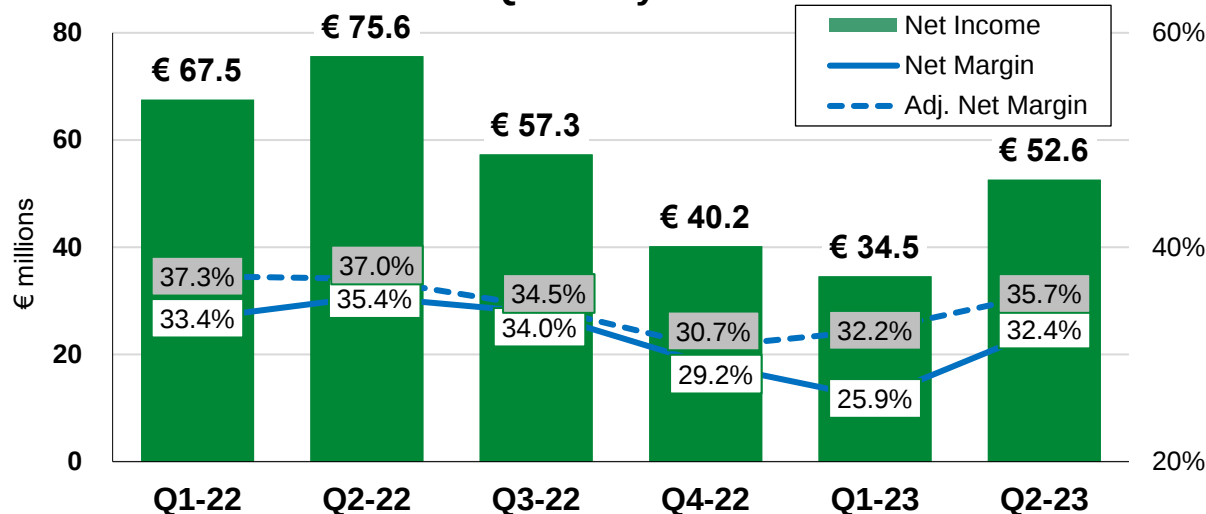
Headcount Trends



- HC aligned with market conditions:
 - Temporary HC down 47% from Q2-22
 - Total HC down 12%
- Increasing European fixed HC to support wafer level assembly expansion

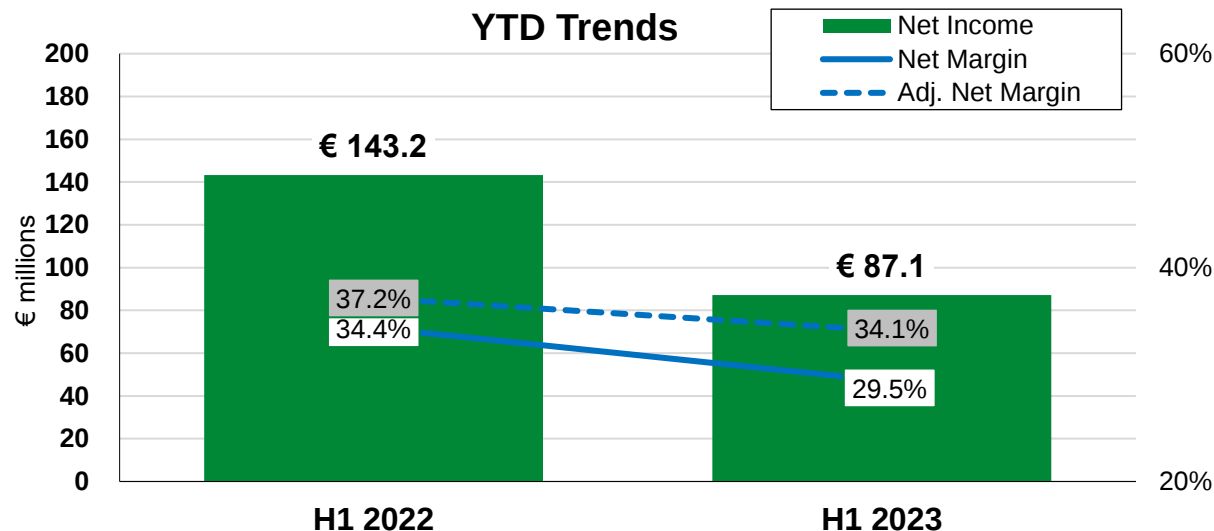
Net Income Trends

Quarterly Trends



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

YTD Trends



Q2-23 vs. Q1-23

- **€ 52.6 million (+€ 18.1 million)**
 - +21.8% higher revenue
 - +1.4 point gross margin increase
 - +€ 3.8 million decrease share-based compensation
 - -Increased strategic consulting and variable sales expenses

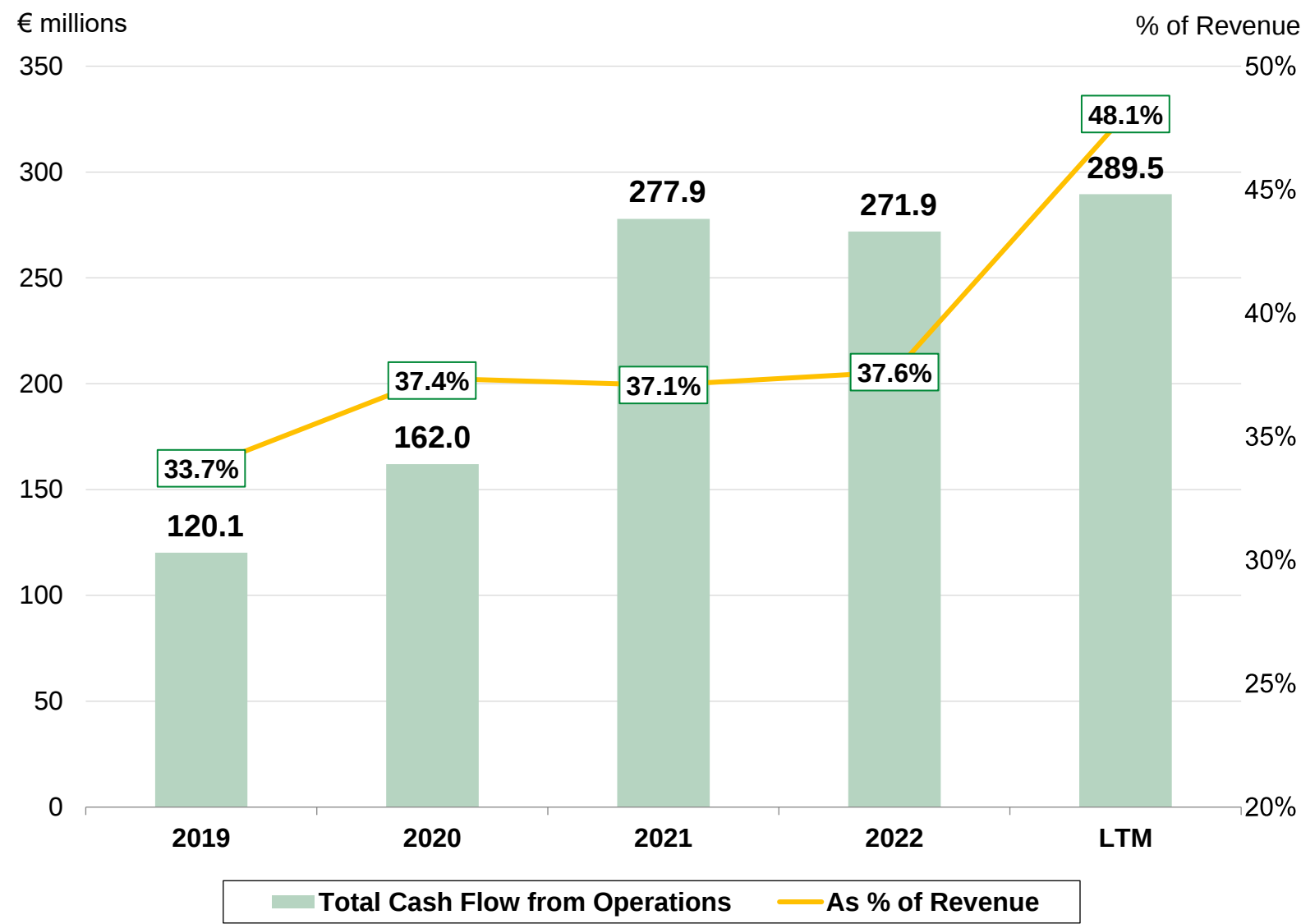
Q2-23 vs. Q2-22

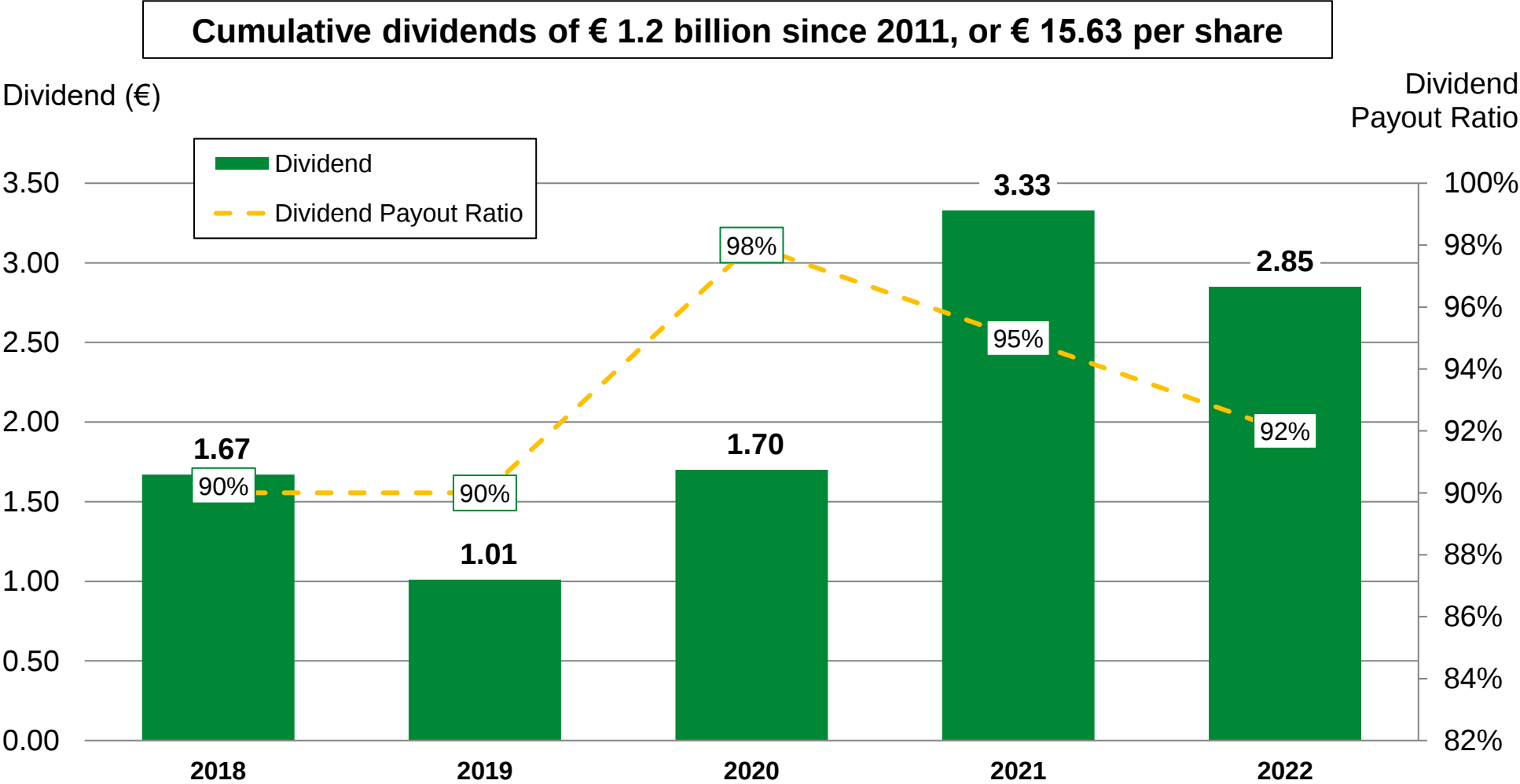
- **-€ 23.0 million**
 - -24.1% lower revenue
 - -€ 4.2 million higher strategic consulting and share-based compensation
 - -7.4% higher R&D
 - Partial offset:
 - 4.6 point gross margin increase
 - Higher interest income on cash balances

H1-23 vs. H1-22

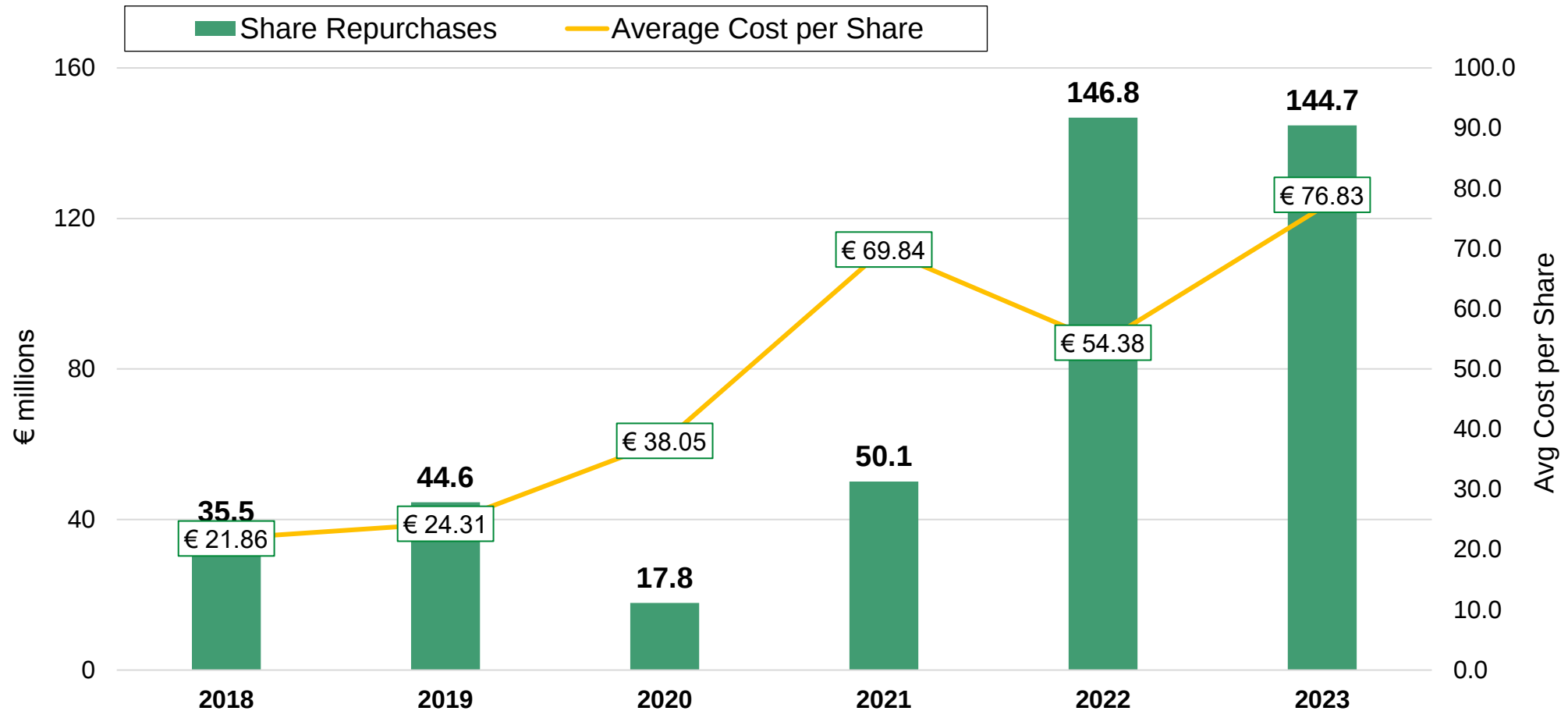
- **€ 87.1 million (-€ 56.1 million)**
 - -28.9% revenue decrease
 - -€ 9.8 million opex: R&D, share based comp and strategic consulting costs
 - Partial offset: 4.5 point gross margin increase

Cash Flow Efficiency Trends





Share Repurchase Activity



- Approximately 3.6 million treasury shares at June 30, 2023, representing 4.5% of shares outstanding
- 77.5 million shares outstanding at June 30, 2023, net of treasury

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