INVESTOR PRESENTATION
Q2-24 RESULTS

July 25, 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 and other global pandemics 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; those additional risk factors set forth in Besi's annual report for the year ended December 31, 2023 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

Q2-24 Results At High End of Guidance. Orders Up 64.5% vs. Q2-23

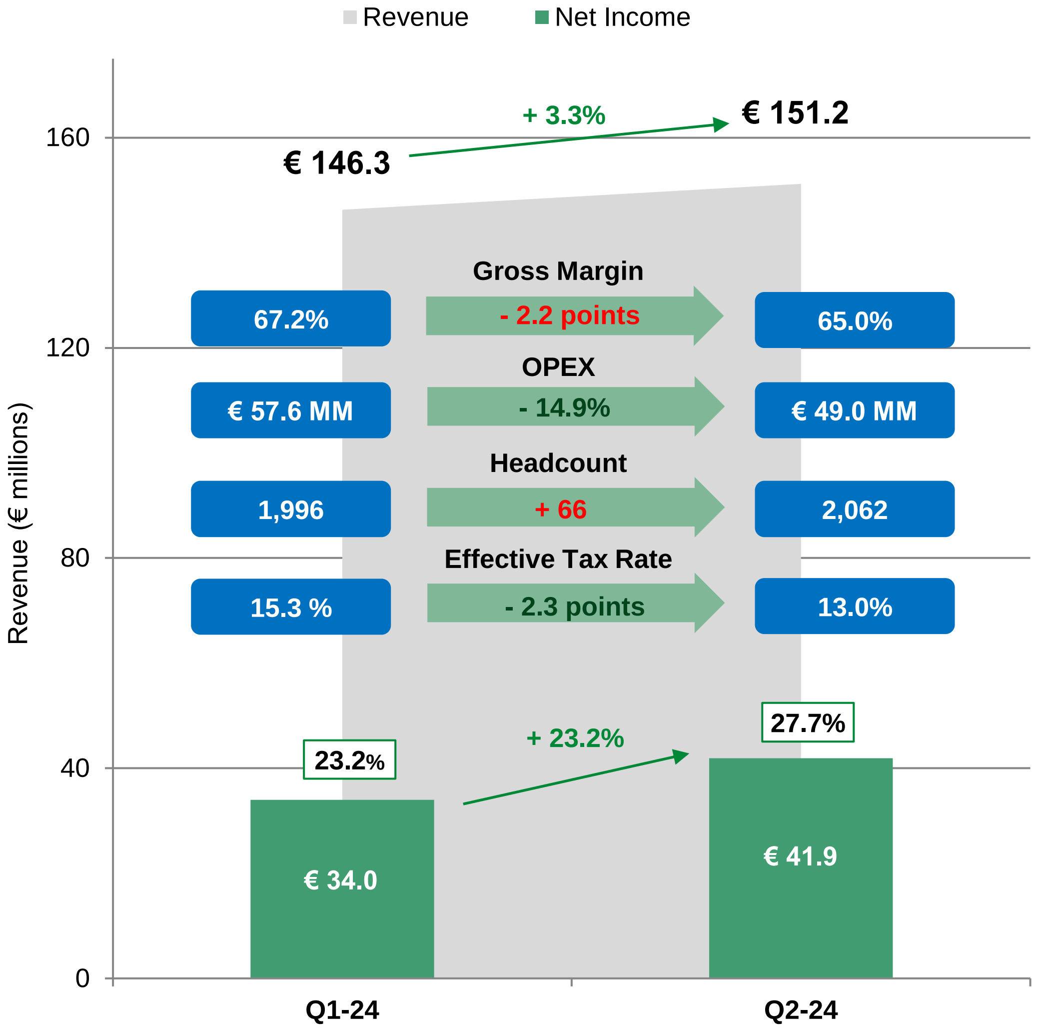
€ millions	Guidance Q2-24*	Q2-24	∆ Q1-24	∆ Q2-23
Revenue	Flat (up/down 5%)	**151.2**	+3.3%	-7.0%
Orders		**185.2**	+45.0%	+64.5%
Gross Margin	63-65%	**65.0%**	-2.2pts	-0.6pts
Opex	Down 15-20%	**49.0**	-14.9%	+12.1%
Operating Income	46.2**	**49.3**	+21.1%	-21.6%
Net Income		**41.9**	+23.2%	-20.3%
EPS Basic		**0.53**	+20.5%	-22.1%
Net Cash		**74.4**	-58.9%	+0.5%

* As compared to Q1-24

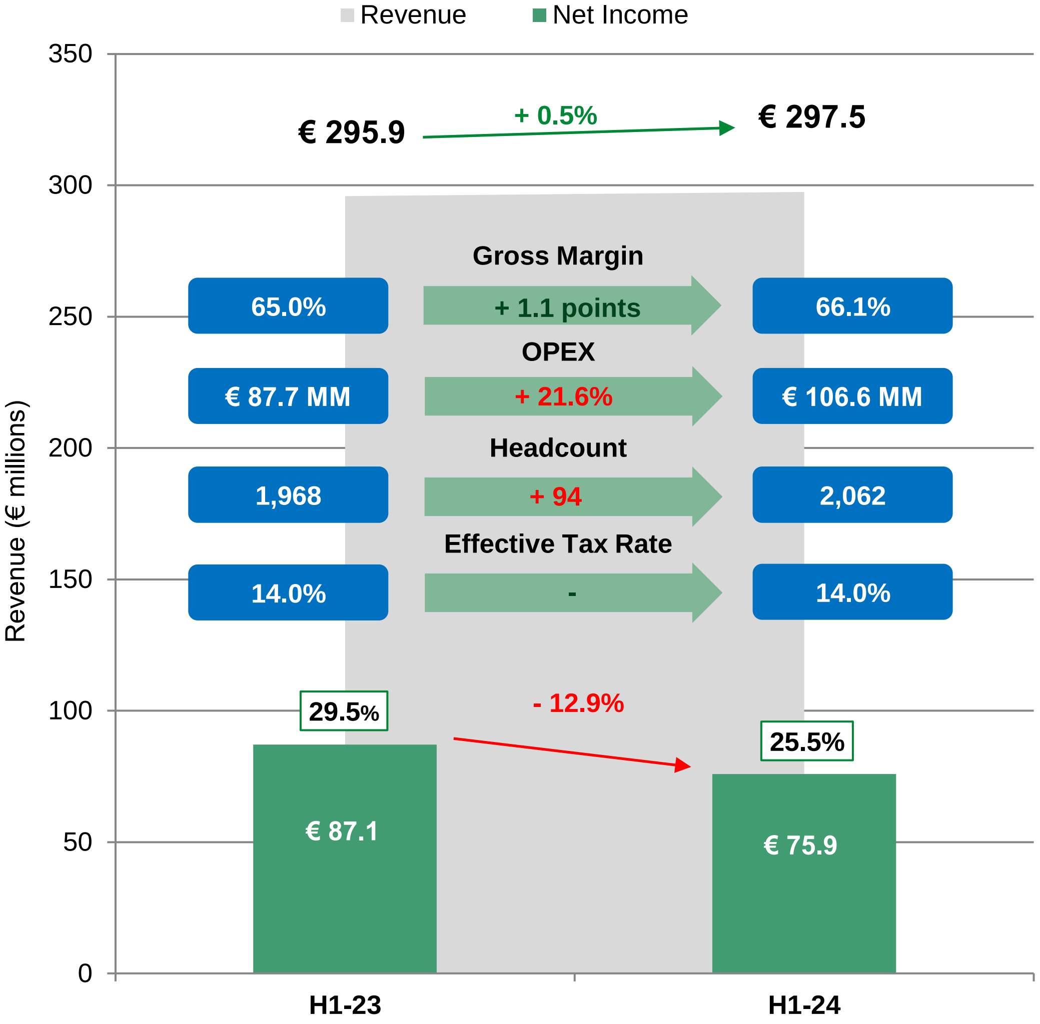
** At midpoint of guidance range

H1-24 Results Show Improving Revenue, Orders and Gross Margins Despite Ongoing Weakness in Mainstream Markets

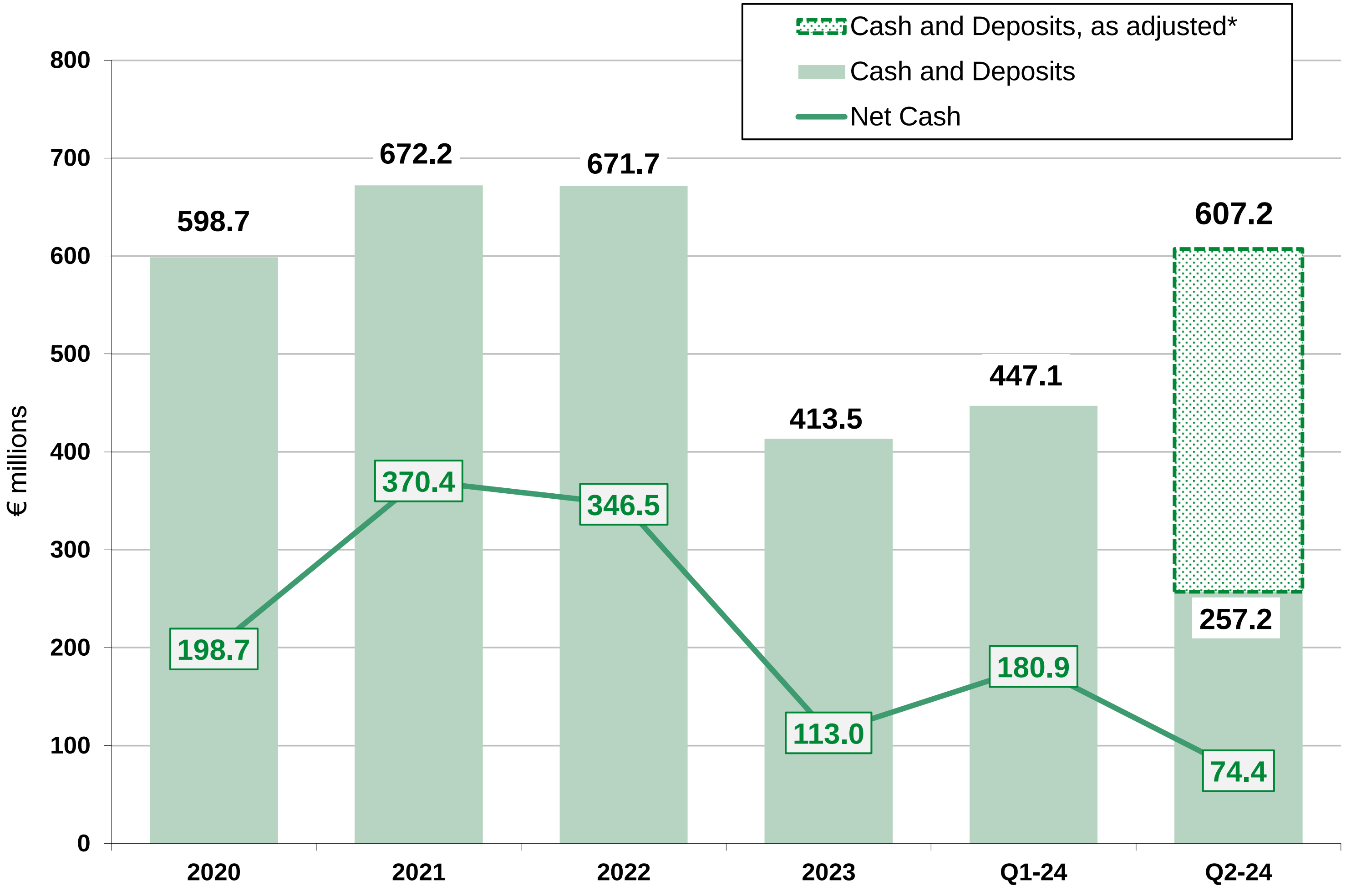
Q1-24/Q2-24



H1-23/H1-24



Strong Liquidity Position Maintained. New Senior Note Offering Provides Funds for Next Decade of Growth



* As adjusted for the Senior Notes issued in July 2024

Q2-24 vs. Q1-24

- Cash and deposits of € 257.2 million
  - - € 189.9 million primarily due to:
    - - € 186.3 million capital allocation
    - + € 4.9 million cash flow from operations
    - - € 4.9 million capitalized R&D
    - - € 3.2 million capex
- Net cash of € 74.4 million = 13% of LTM revenue
  - Reflects € 171.5 million 2023 dividend and conversion of € 89.9 million of Convertible Notes

Q2-24 vs. Q2-23

- Comparable net cash levels

Convertible Notes

- € 200.1 million at June 30, 2024
  - € 128.1 million converted in H1-24

Senior Notes

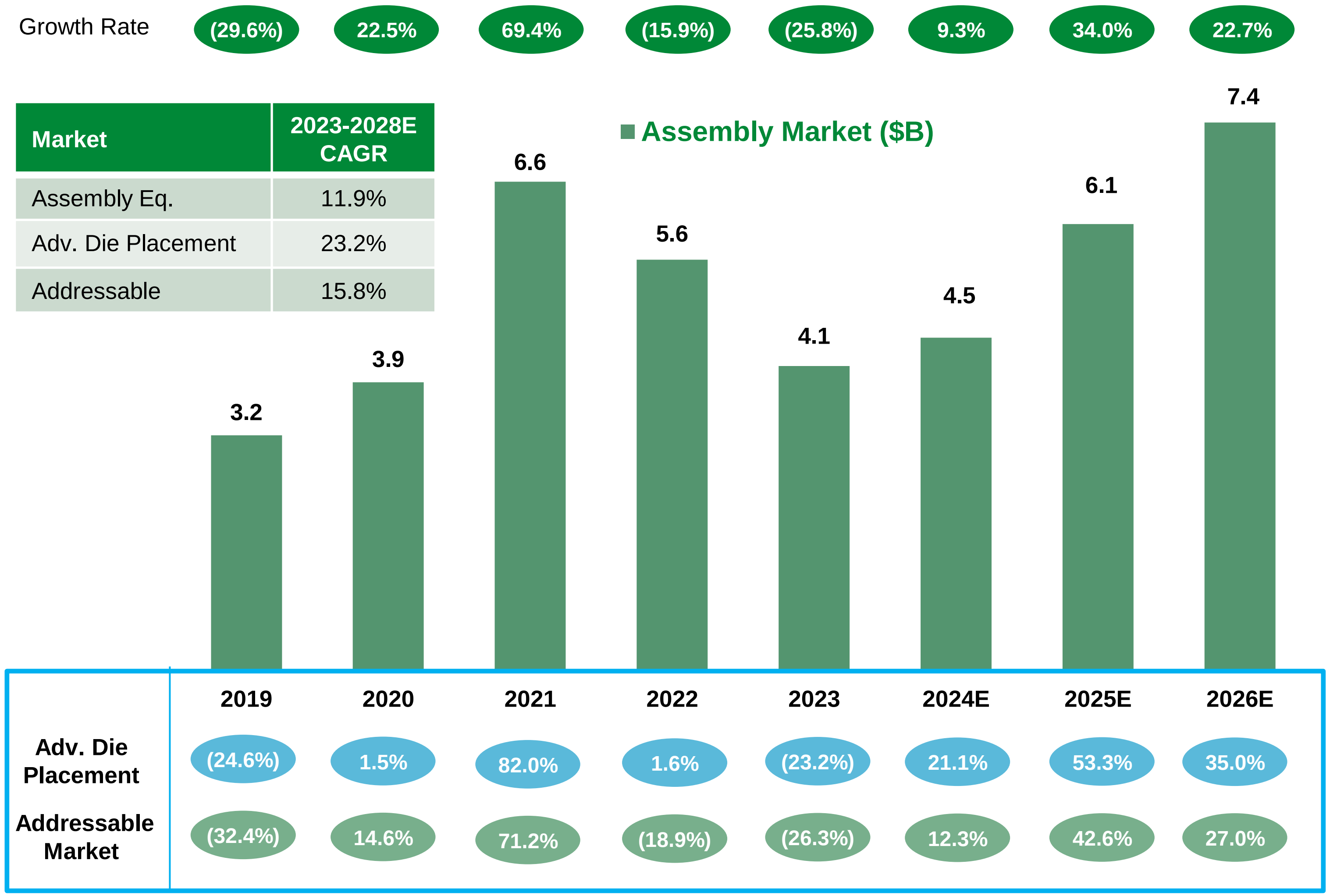
- € 350 million 4.5% Senior Notes due 2031 issued in July 2024.
- Net proceeds for general corporate purposes including potential acquisitions

II. MARKET & STRATEGY

Assembly Equipment Expected to Rebound Strongly Post 2023 Trough
Besi Addressable Market Segments Expected to Outperform

Besi

Market	2023-2028E CAGR
Assembly Eq.	11.9%
Adv. Die Placement	23.2%
Addressable	15.8%



2024 growth revised downwards reflecting slow mainstream recovery
- 2024 forecast expects 9.3% increase
  - Down from original forecast of 31%
  - Driven by AI

Market expected to recover strongly in 2025/2026
- Forecast $ 7.4 billion in 2026
  - +80% 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

Source: TechInsights, June 2024. Assembly equipment revenue excludes service revenue

Strategy Update

Business

- Contrasting assembly market order trends past 12 months
  - **Accelerating AI demand driven by 2.5/3D and photonics applications**
    - AI-related advanced packaging orders ~50% of total for past 12 months
  - **Slow recovery for mainstream assembly markets:**
    - Smartphones and automotive still weak
    - Although inventory levels reducing, pockets of excess capacity still exist

Development

- Expanded R&D investment continues. H1-24 spending up 24.3% vs. H1-23
- 29 hybrid bonding orders received in Q2-24 from two customers
  - Shipped first group of 100nm HB systems for HVM
- Received order for TCB Next system (TCB C2W)

Operations

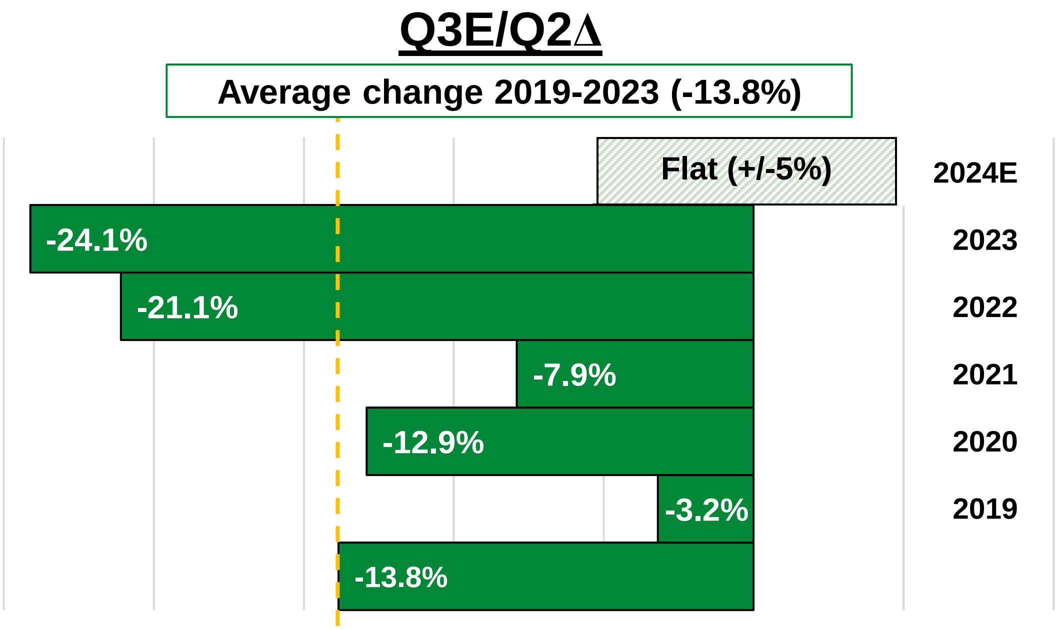
- Effectively navigating extended downturn at high levels of profitability
- High gross margins maintained given favorable advanced packaging product mix
- Temporary Asian production HC being added to support Q2-24 order book growth

III. OUTLOOK

Guidance Q3-24

€ in millions	Q2-24	Q3-24
Revenue	€ 151.2	+5 to -5%
Gross Margin	65.0%	64% - 66%
Operating Expenses	€ 49.0	0 - -5%

Seasonal Revenue Trends

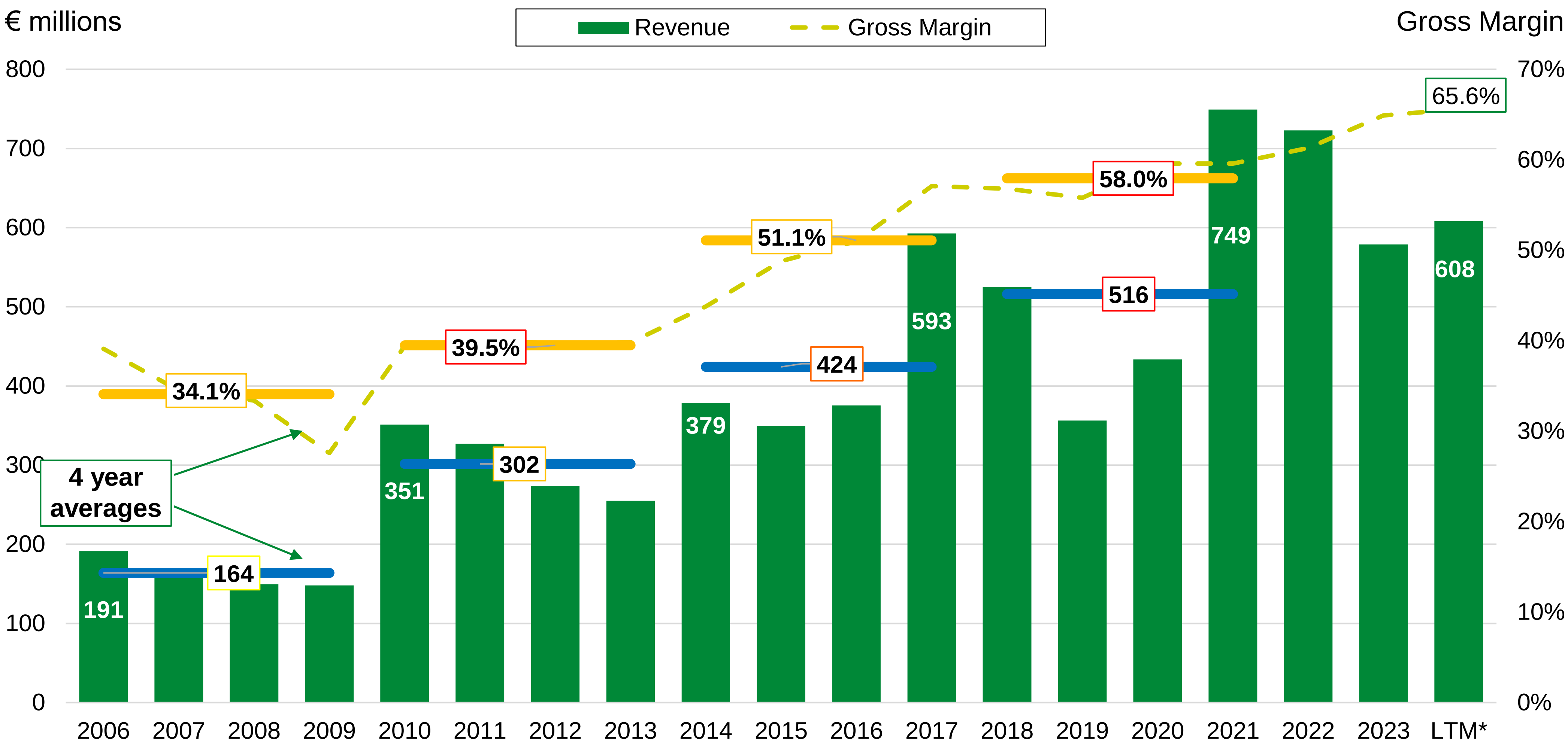


Financial Calendar

30-Jul-24	Panel discussion Advent Global Opportunities (virtual)
01-Aug-24	NDR New York organized by Goldman Sachs
22-Aug-24	26th Annual Needham Semiconductor & SemiCap conference (virtual)
04-Sep-24	Deutsche Bank European TMT Conference, London
11-Sep-24	Kepler Cheuvreux Autumn Conference, Paris
17-Sep-24	Goldman Sachs Communacopia & Technology Conference (virtual)
24-Oct-24	Besi’s 2024 Third Quarter Results
14-Nov-24	KBC’S Global Leaders Conference, Paris
20-Nov-24	Morgan Stanley’s TMT Conference, Barcelona
02-Dec-24	BofA Tech Virtual Field Trip
09-Dec-24	Kepler Cheuvreux Virtual CEO/CFO Tour

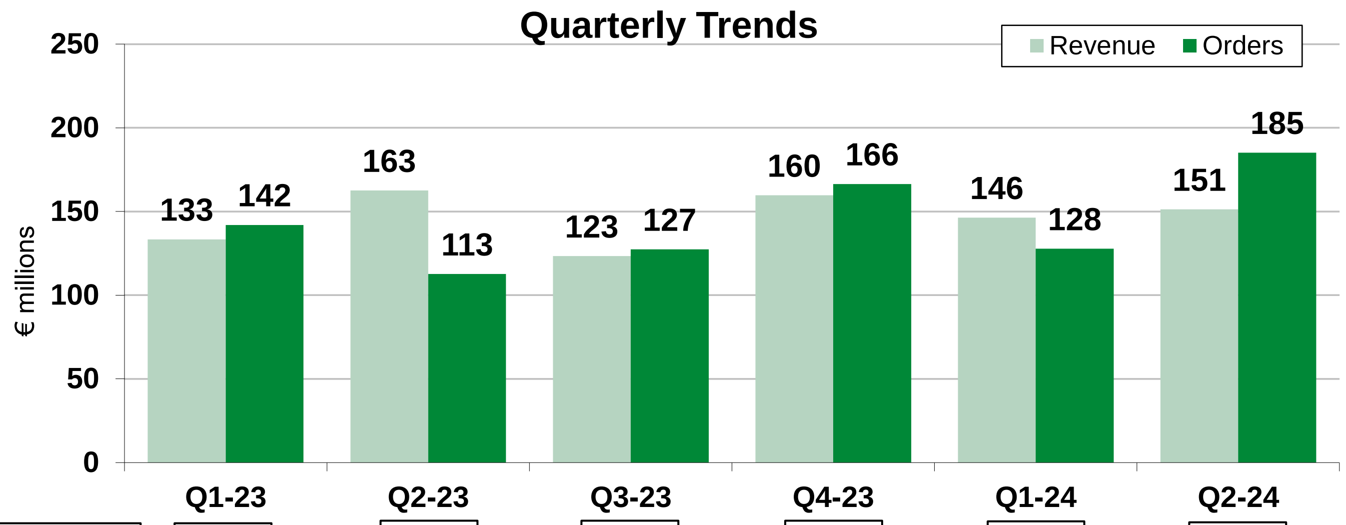
IV. FINANCIAL APPENDIX

Through Cycle Revenue and Gross Margin Trends

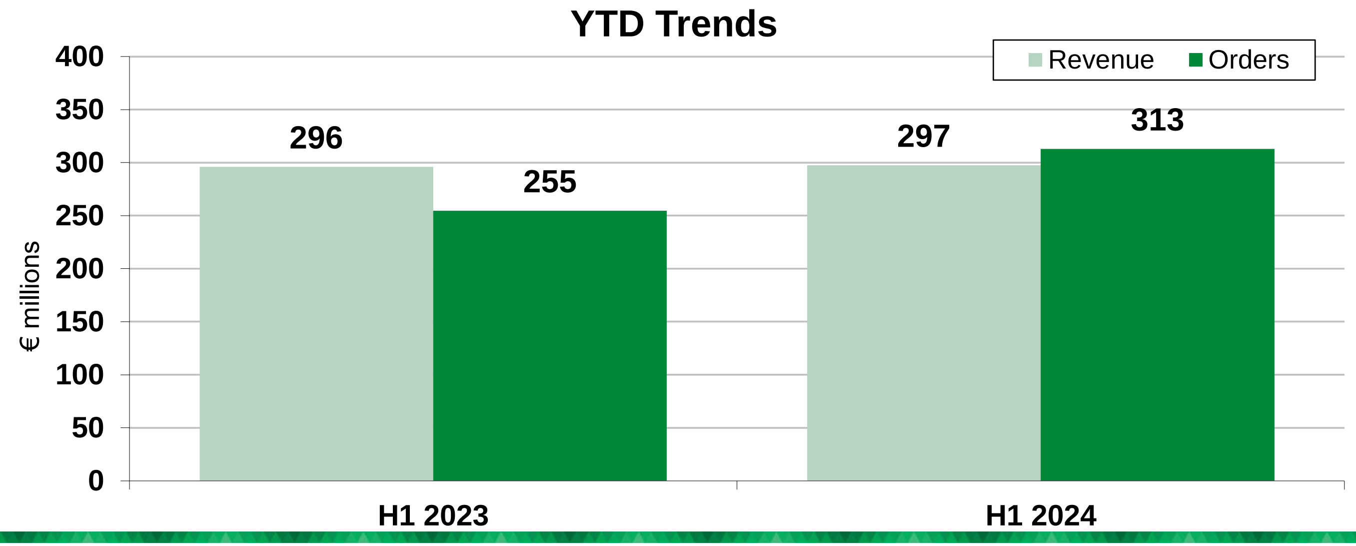


* LTM including midpoint of guidance for Q3-24

Revenue/Order Trends



	Q1-23	Q2-23	Q3-23	Q4-23	Q1-24	Q2-24
Book/Bill	1.1x	0.7x	1.0x	1.0x	0.9x	1.2x



<u>Q2-24 vs. Q1-24</u>

- **Revenue: +€ 4.9 million (+3.3%)**
  - Above mid point of guidance
  - Higher shipments for photonics and 2.5D assembly
- **Orders: +€ 57.5 million (+45.0%)**
  - Hybrid bonding, photonics and 2.5D for AI applications
    - 29 HB orders from leading logic producers
  - Ongoing weakness in automotive

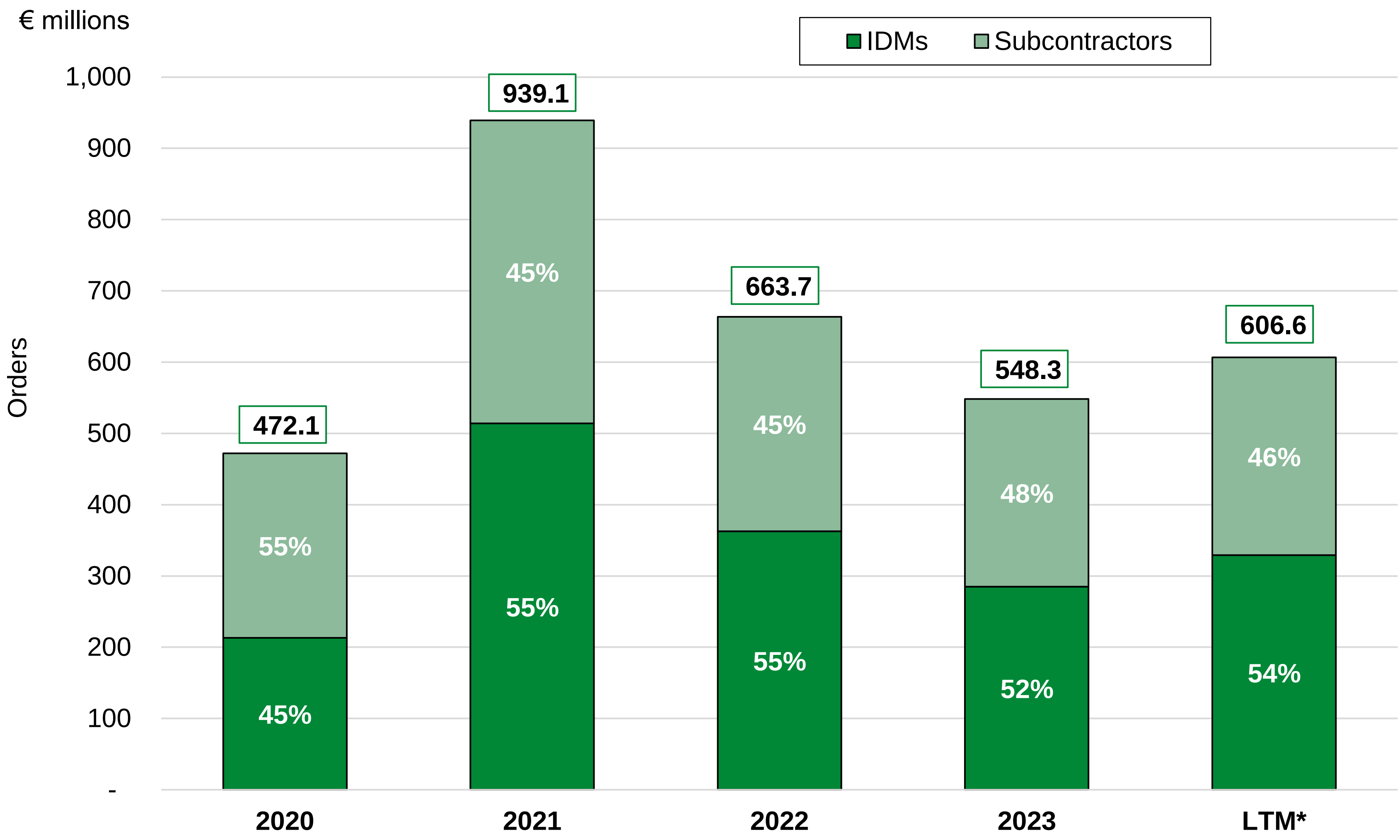
<u>Q2-24 vs. Q2-23</u>

- **Revenue: -€ 11.3 million (-7.0%)**
  - Continued weakness in mobile and automotive
  - Partial offset: AI related advanced packaging applications
- **Orders: +€ 72.6 million (+64.5%)**
  - Growth in HB, photonics and 2.5D assembly

<u>H1-24 vs. H1-23</u>

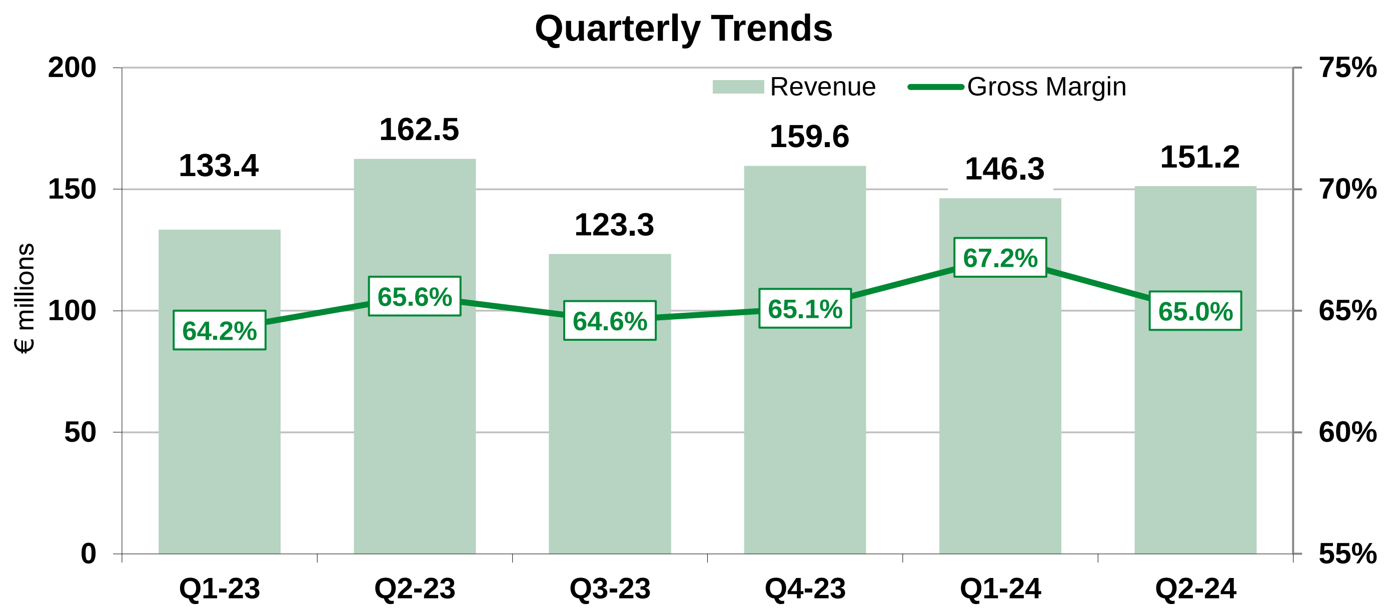
- **Revenue: +€ 1.6 million (+0.5%)**
  - Higher demand for AI related advanced packaging
  - Partial offset: Lower high-end mobile
- **Orders: +€ 58.4 million (+22.9%)**
  - Growth in HB, photonics and 2.5D
  - Continued weakness in mobile and automotive

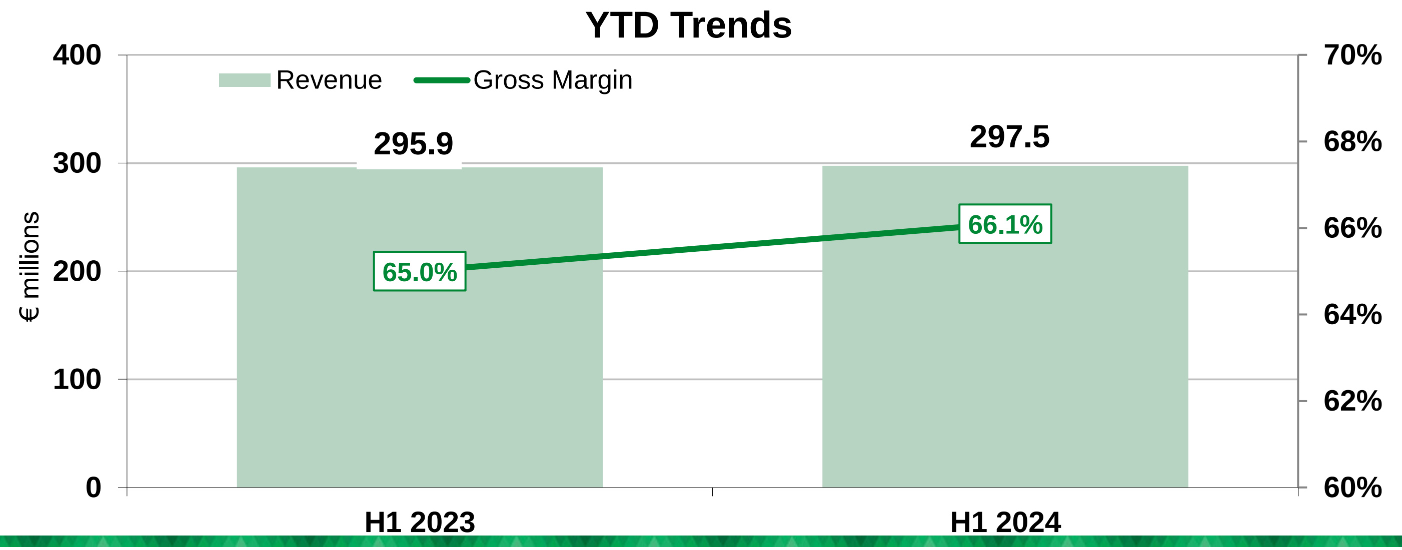
IDM/Subcontractor Order Trends



* Last twelve months ended June 30, 2024

Gross Margin Trends





Q2-24 vs. Q1-24

- **65.0% vs. 67.2% (-2.2 points)**
  - High end of prior guidance
  - Less favorable product mix
  - Net forex negative: Revenue USD vs. EUR neutral
    Costs + MYR/RMB vs. EUR

Q2-24 vs. Q2-23

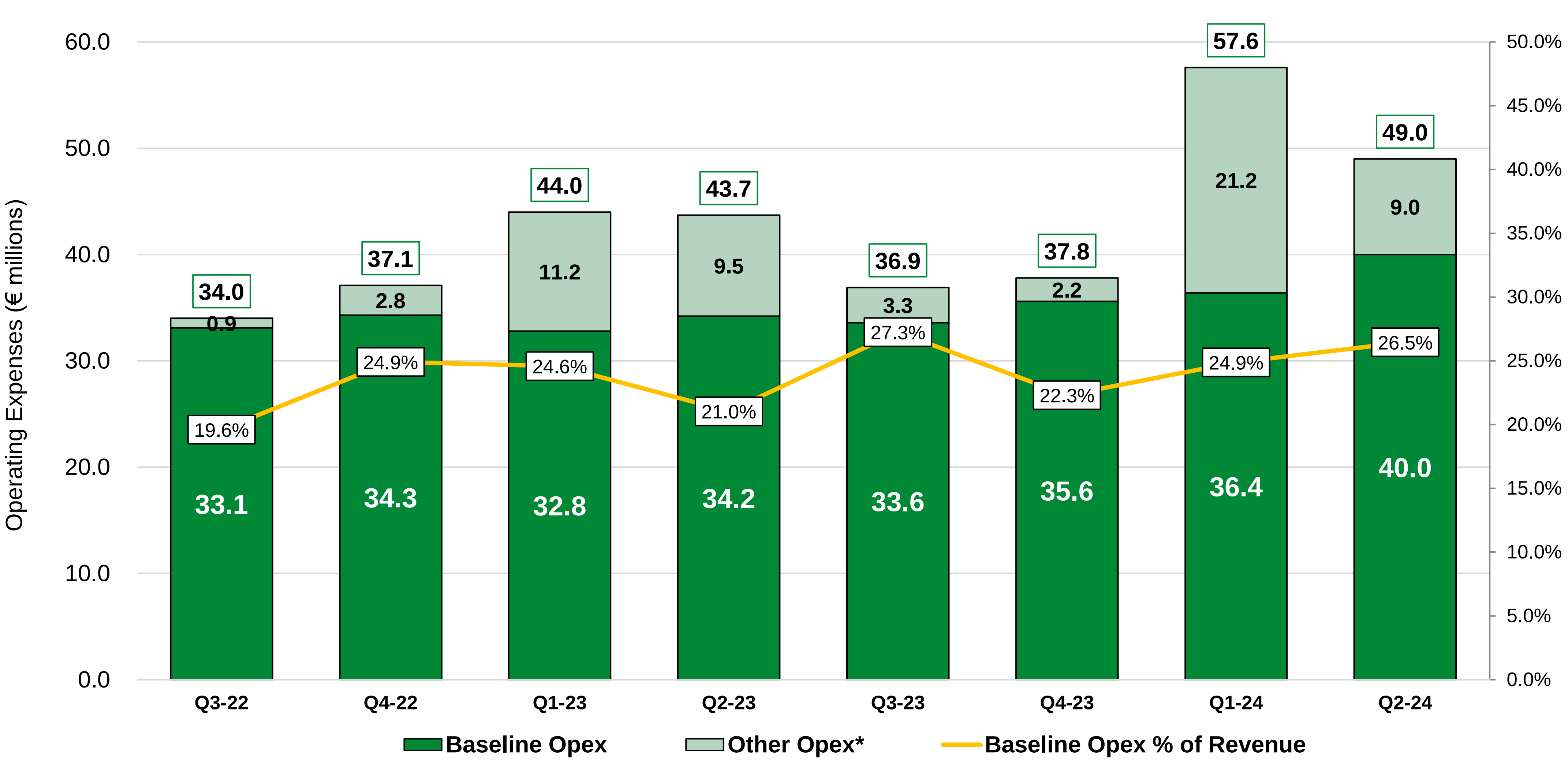
- **65.0 vs. 65.6% (-0.6 points)**
  - Less favorable product mix
  - Net forex positive : Revenue USD vs. EUR neutral
    Costs - MYR/RMB vs. EUR

H1-24 vs. H1-23

- **66.1 vs. 65.0% (+1.1 points)**
  - Favorable advanced packaging product mix
  - Net forex positive : Revenue USD vs. EUR neutral
    Costs - MYR/RMB vs. EUR

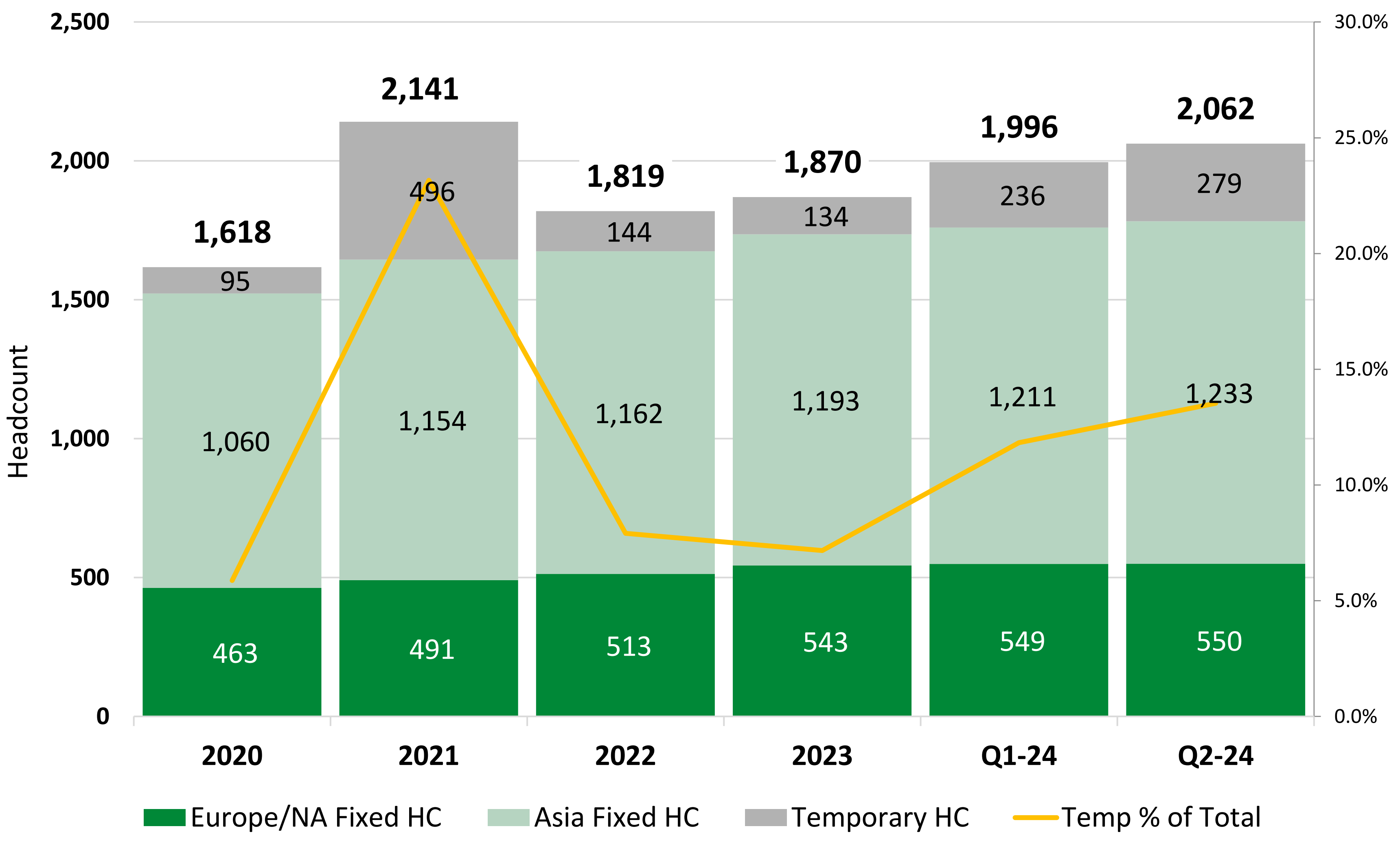
* Favorable impact
Unfavorable impact

Baseline Operating Expense Trends



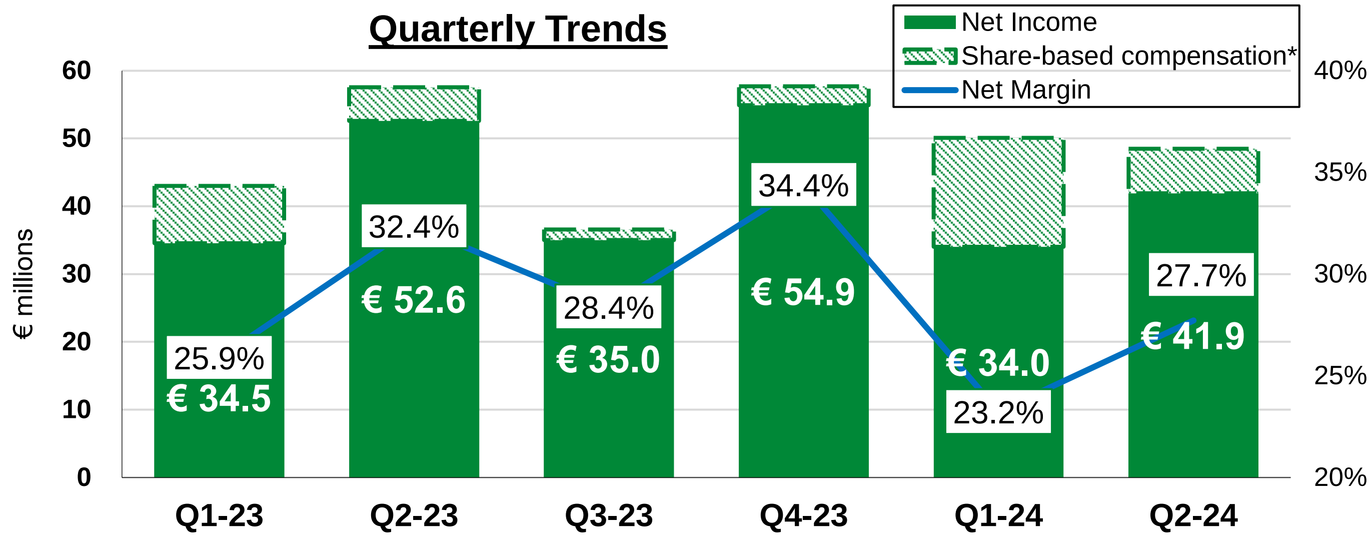
* Other Opex includes both short-term and long-term incentive compensation, restructuring costs, net R&D capitalization/amortization and certain one-time items including strategic consulting costs.

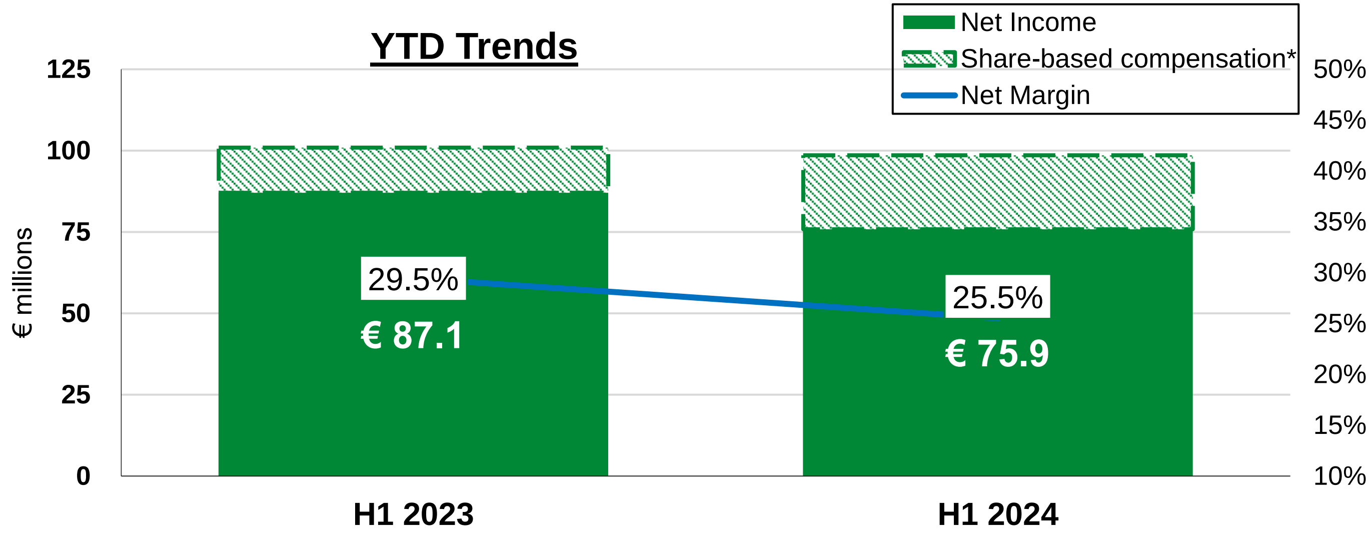
Headcount Trends



- Increasing European and Asian fixed headcount to support wafer level assembly expansion
- Temp Asian HC increase to support order growth

Net Income Trends





34.1%	33.2%	Adj. Net margin*

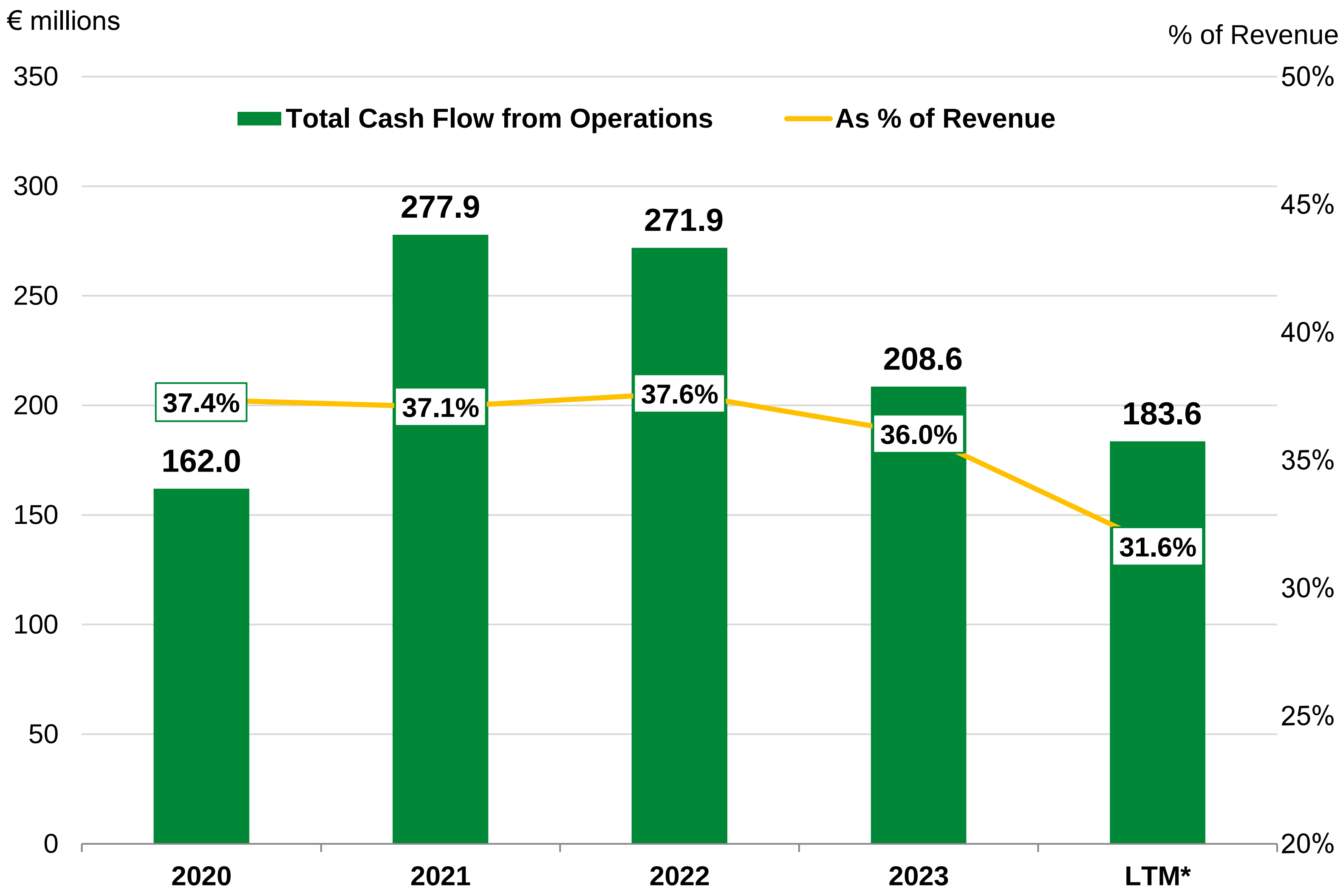
Q2-24 vs. Q1-24
- **€ 41.9 million (+€ 7.9 million)**
  - +€ 10.0 million lower share-based compensation
  - +3.3% higher revenue
  - Adjusted net income* of € 48.5 million vs. € 50.1 million
  - Adjusted net margin* 32.1% vs. 34.2%

Q2-24 vs. Q2-23
- **-€ 10.7 million**
  - -7.0% lower revenue
  - -€ 4.2 million increased R&D spending
  - -€ 1.4 million increased share-based compensation

H1-24 vs. H1-23
- **€ 75.9 million (-€ 11.2 million)**
  - -€ 9.1 million higher share-based compensation
  - -€ 7.1 million increased R&D spending
  - Partial offset:
    - Lower financial expense, net
  - Adjusted net income* of € 98.6 million vs. € 101.0 million
  - Adjusted net margin* 33.2% vs. 34.1%

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

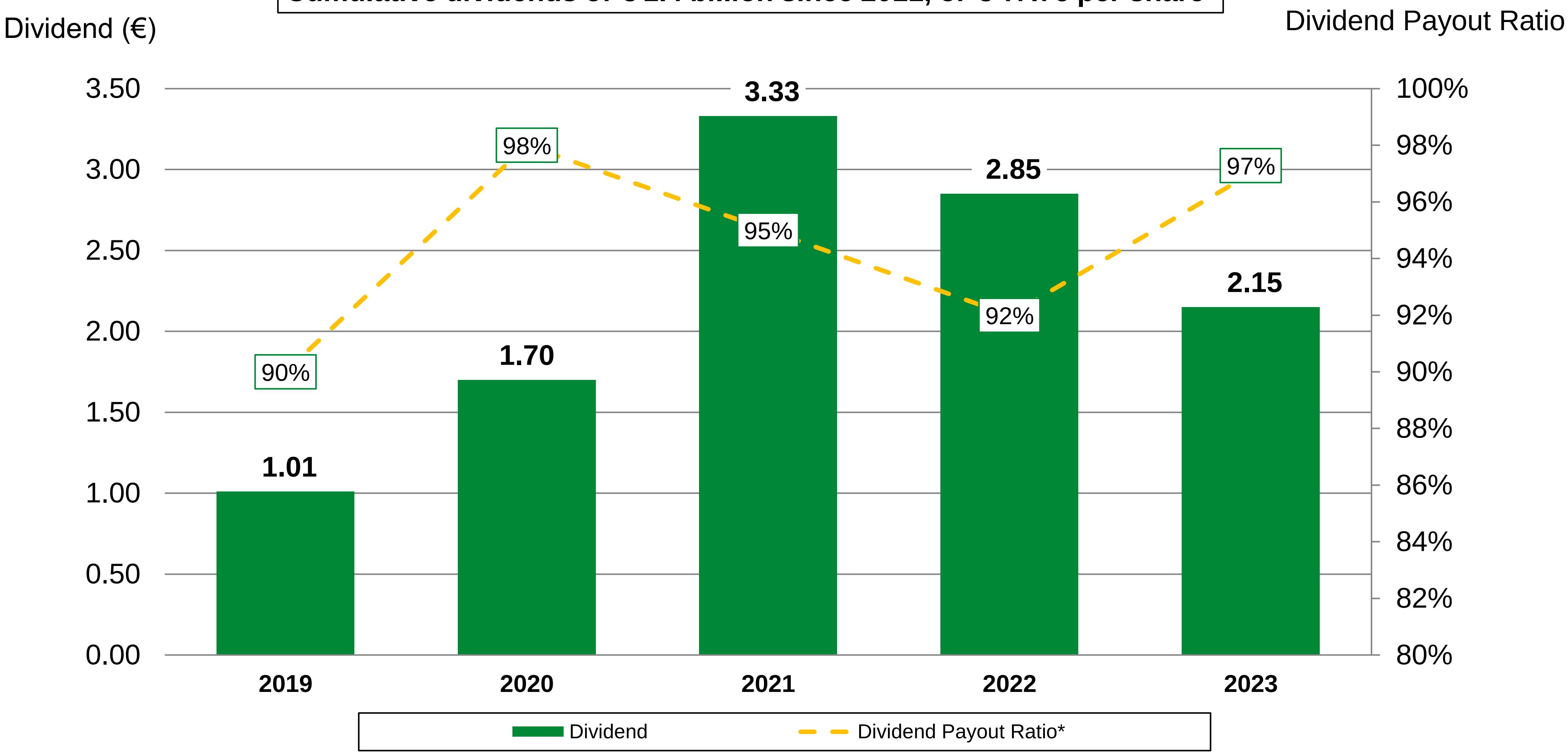
Cash Flow Efficiency Trends



* Last twelve months ended June 30, 2024

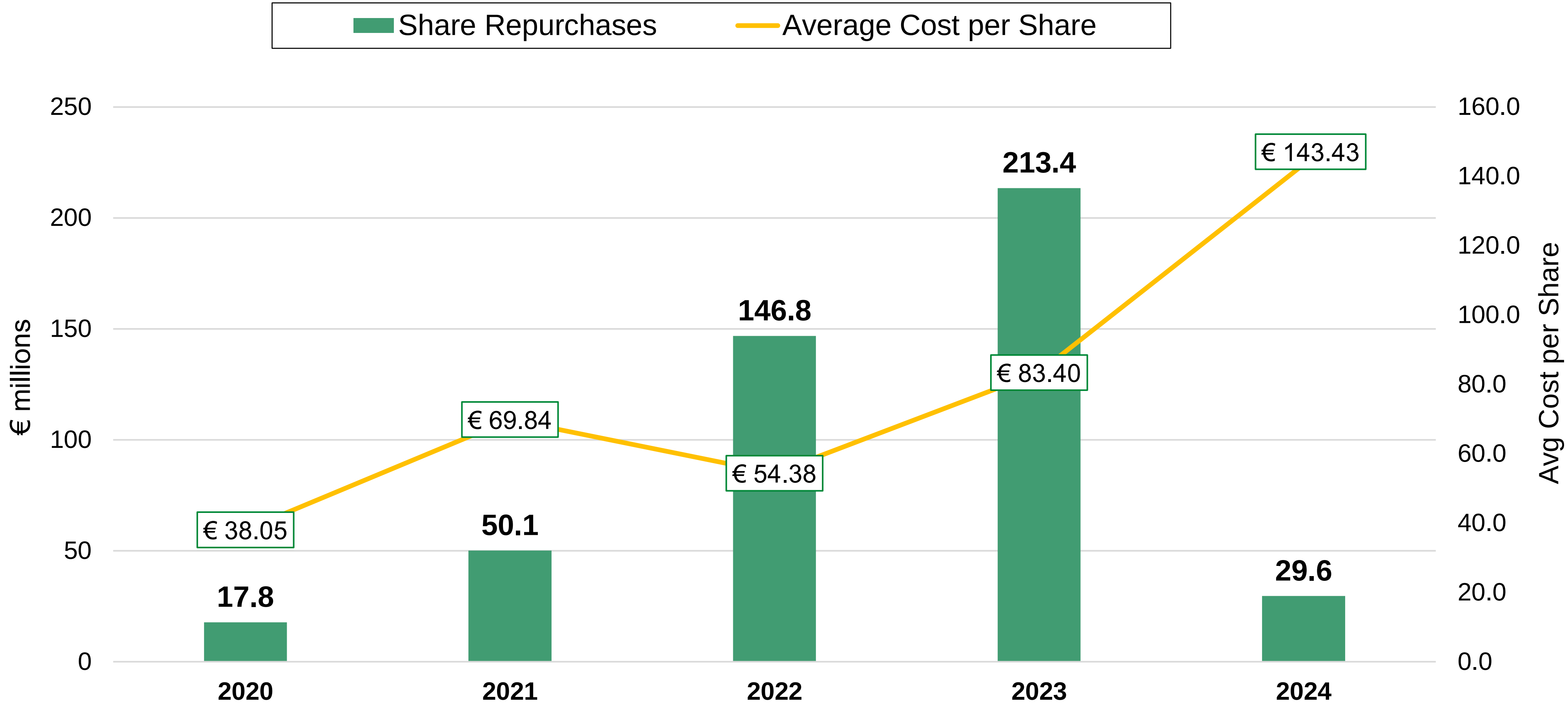
Dividend Trends

Cumulative dividends of € 1.4 billion since 2011, or € 17.78 per share*



* Calculated on Basic EPS.

Share Repurchase Activity



- Approximately 1.4 million treasury shares at June 30, 2024, representing 1.8% of shares outstanding
- 79.7 million shares outstanding at June 30, 2024, 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