INVESTOR PRESENTATION

May 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.

Agenda

I. COMPANY OVERVIEW

Besi Overview

Corporate Profile

- Leading assembly equipment supplier with #1 and #2 positions in key markets
  - ~30%+ addressable market share
- Broad portfolio: die attach, packaging and plating
- Strategic positioning in substrate and wafer level packaging
- ~70% of systems used for advanced packaging applications
- Global operations in seven countries; 1,760 employees*. HQ in the Netherlands

Financial Highlights*

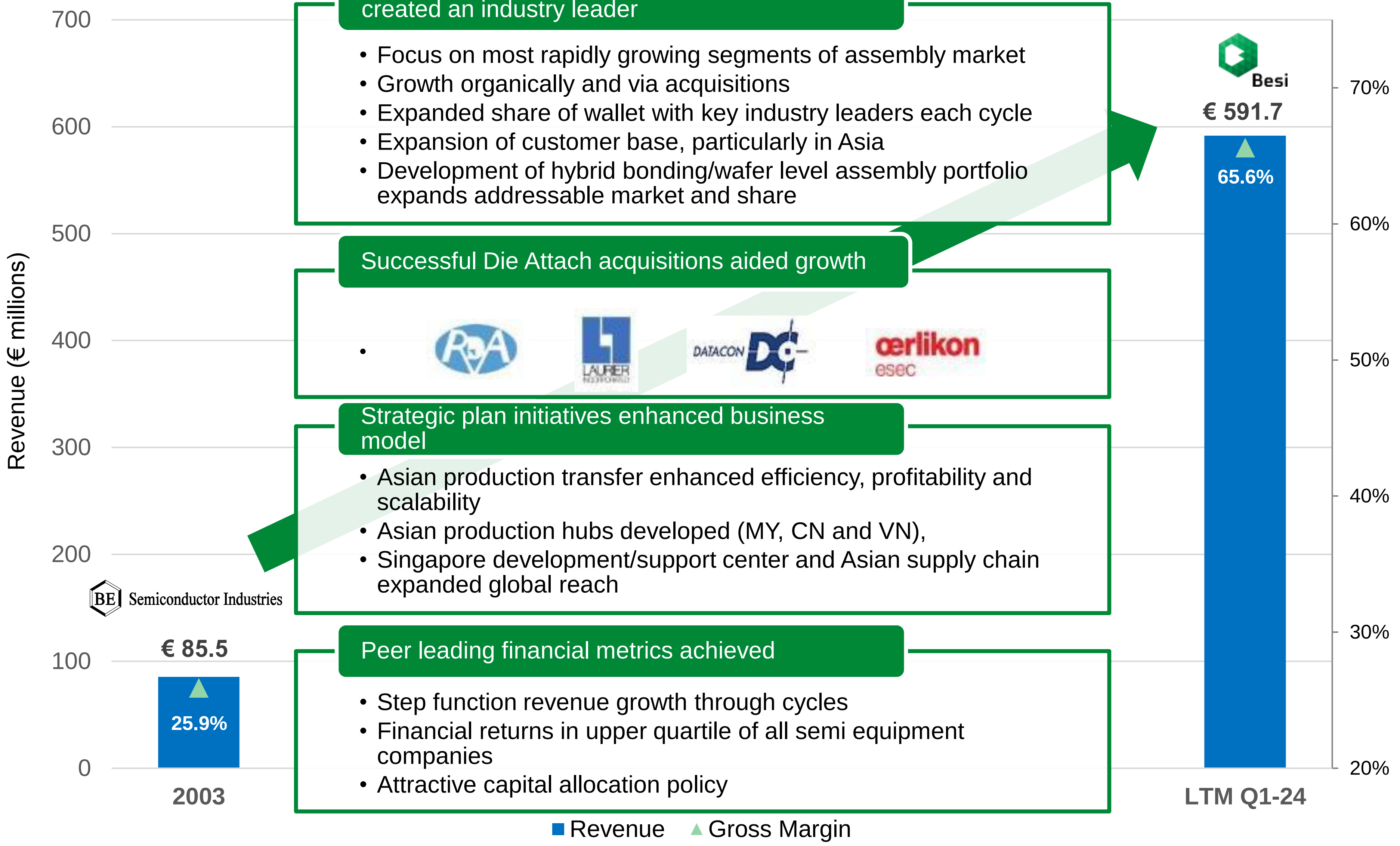
- LTM revenue and net income of € 591.7 million and € 176.5 million
- Cash/deposits: € 447.1 million
- Net cash/deposits: € 180.9 million
- € 2.0 billion dividends/share repurchases since 2011

Investment Considerations

- Leading position in advanced packaging. Ever more critical part of semi value chain
- Peer leading financial metrics
- Multiple growth drivers: AI, digital and cloud infrastructure build, smart everything, 5G, vehicle electrification and autonomous driving
- Hybrid bonding/wafer level assembly expands revenue and profit potential

* As of March 31, 2024

Company History



Consistent focus on Advanced Packaging has created an industry leader

- Focus on most rapidly growing segments of assembly market
- Growth organically and via acquisitions
- Expanded share of wallet with key industry leaders each cycle
- Expansion of customer base, particularly in Asia
- Development of hybrid bonding/wafer level assembly portfolio expands addressable market and share

Successful Die Attach acquisitions aided growth

Strategic plan initiatives enhanced business model

- Asian production transfer enhanced efficiency, profitability and scalability
- Asian production hubs developed (MY, CN and VN),
- Singapore development/support center and Asian supply chain expanded global reach

Peer leading financial metrics achieved

- Step function revenue growth through cycles
- Financial returns in upper quartile of all semi equipment companies
- Attractive capital allocation policy

History of Superior Long-Term Value Creation

Capital Allocation

Attractive capital allocation program

€ 2.0 billion of dividends and share repurchases since 2011*

Represents ~32% of total revenue

Strategic/Financial

Disciplined execution has created leader in advanced packaging

Best in class financial metrics

Superior through cycle financial performance versus peers

Shareholder Return

Superior Total Returns:**

150% (1 year)
210% (3 year)
812% (5 year)

Consistent TSR outperformance versus peers

Upper quartile ranking for all semi-equipment companies

* Includes share repurchases through March 31, 2024
** Through December 31, 2023

Industry Leading Equipment Portfolio

Besi

Die Attach (77% of 2023 Revenue)

Multi-Module Attach

- 2200 evo
- 2200 evo $^{\text{plus}}$
- 2200 evo $^{\text{hS}}$
- 2200 evo $^{\text{advanced}}$
- 2200 evo $^{\text{hf}}$ New

Epoxy / Soft Solder

- 2100 hS
- 2100 hS $^{\text{i}}$
- 2100 sD *advanced* $^{\text{i}}$
- 2100 hS $^{\text{ix}}$ New
- 2009 SSI
- 2100 SSI New

Flip-chip

- 8800 CHAMEO $^{\text{advanced / TnR}}$ New
- 8800 CHAMEO $^{\text{ultra}}$
- 8800 FC Quantum $^{\text{adv / sigma}}$
- 8800 FC Quantum $^{\text{hs}}$
- 2100 FC $^{\text{hS}}$

Direct Lid Attach

- DLA
- TGB 2.0 New

Embedded Bridge Attach

- DBA

Thermo Compression

- 8800 TC $^{\text{advanced}}$ *(Chip to Substrate)*
- 9800 TC $^{\text{NEXT}}$ *(Chip to Wafer)* New

Hybrid Bonding

- 8800 CHAMEO $^{\text{ultra plus}}$
- 8800 CHAMEO $^{\text{ultra plus AC}}$ Q2-24

Packaging & Plating (23% of 2023 Revenue)

Leadframe Molding

AMS-i
- MEMS
- Sensors

AMS-X New
- HD Leadframe
- Power Devices

Substrate Molding

AMS-LM mk3 New
- Exposed die
- SIP packages
- Factory Automation New

Wafer & Panel Molding

FML
- Wafer molding
- Panel molding

Trim and Form

FCL-X/P
- Leadframe trim & form
- Sorting New
- AGV handling
- IGBT handling

Singulation

FSL
- Substrate strip singulation
- Sorting
- Stepcut New

Plating

- Leadframe Sn plating
- Ag-spot plating
- Connector plating
- Film & Foil

Wet Processing

- Mold adhesion
- Flux cleaning New
- Chemical Deflash New
- Wettable Flank New

Customer Ecosystem

Customers

IDMs

BOSCH, fabrinet, hp, Infineon technologies, LUMILEDS, Micron, NXP, OSRAM, qorvo, RENESAS, SAMSUNG, SKYWORKS, ST, TDK, Texas Instruments, tsmc

Subcontractors

ASE GROUP, Amkor Technology, FOXCONN, HUA TIAN, INNOLIGHT Innovation Lights Our Future, JCET, SHARP, LG Innotek, PTI, SPIL, TF · AMD, UTAC

OEMs

AMD, BROADCOM, DELL, DELPHI, FUJITSU, lenovo, LG, MEDIATEK, MOTOROLA MOBILITY, NVIDIA, QUALCOMM, SAMSUNG

End Products

- Diversified, blue chip customer base, top 10 = ~52% of 2023 revenue
- Leading IDMs and subcontractors. 52%/48% order split in 2023
- Also supply leading fabless companies: Qualcomm, AMD, Nvidia, Broadcom, MediaTek via subcontractors
- Long term relationships, some exceeding 50 years

From Processed Wafer to Assembled Chip

Besi

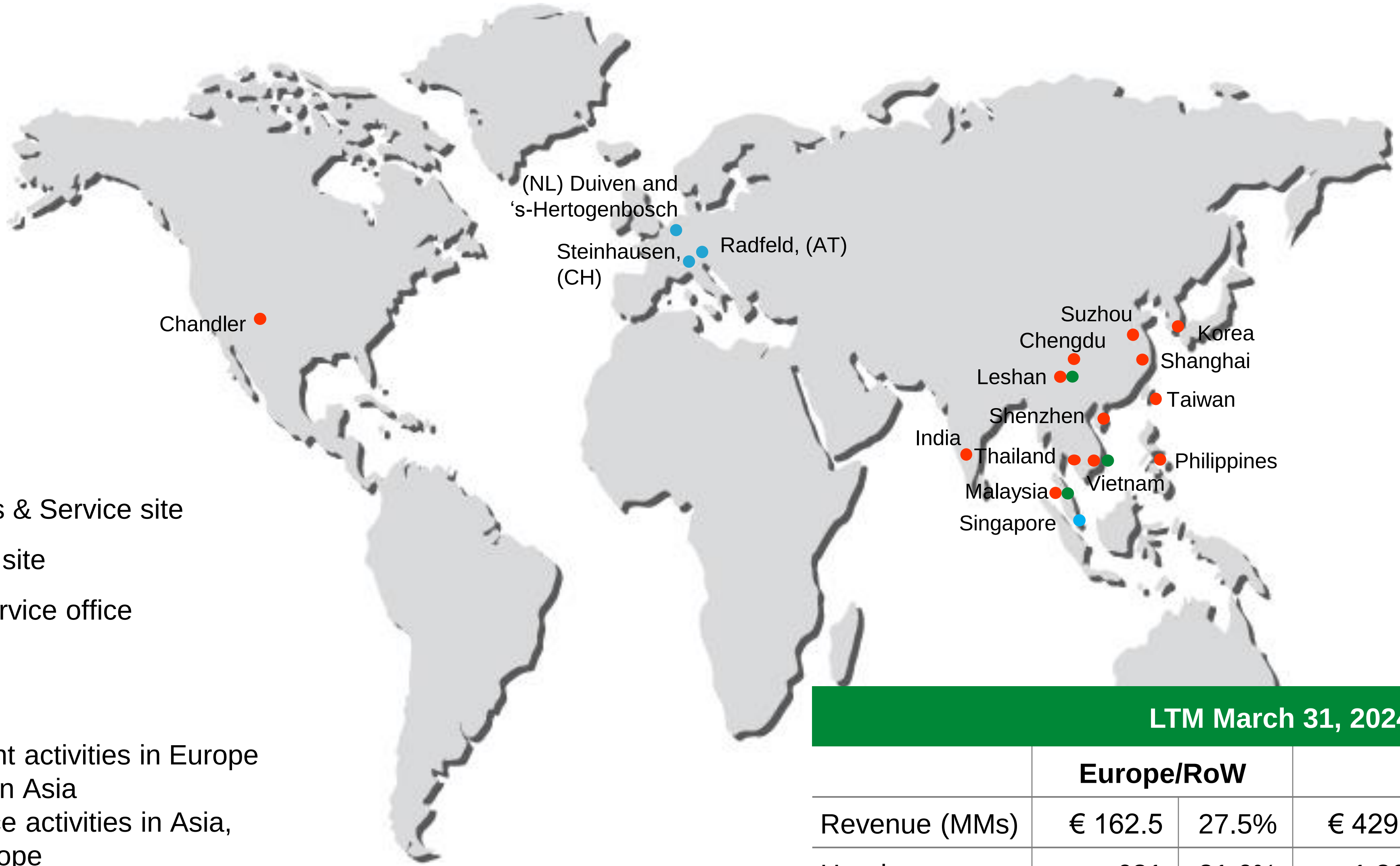
Semiconductor Manufacturing Equipment 2023: $110.2B*		
Front end: $99.0B (90%)	**Assembly: $4.4B (4%)**	Test: $6.8B (6%)

Assembly Process

Dicing	Die Attach	Wire Bond	Packaging	Plating	
	✓		✓	✓	**Leadframe** Wire Bond
	✓		✓		**Substrate** Wire bond
	✓		✓		**Substrate** Flip chip/TCB
	✓		✓		**Wafer Level** Hybrid, EMIB, TCB, Flip Chip, FOWLP

* Source: TechInsights, March 2024

Current Operational Profile



- R&D, Sales & Service site
- Production site
- Sales & Service office

- Development activities in Europe
- Production in Asia
- Sales/service activities in Asia, US and Europe

LTM March 31, 2024				
	Europe/RoW		Asia	
Revenue (MMs)	€ 162.5	27.5%	€ 429.2	72.5%
Headcount	631	31.6%	1,365	68.4%

Summary Financials

Year Ended December 31, (€ millions, ex share data)	**2021**	**2022**	**2023**	**Q1-23**	**Q1-24**
Revenue	749.3	722.9	**578.9**	133.4	**146.3**
% seq. change	*+73%*	*-3.5%*	***-19.9%***	*-3%*	***-8%***
Orders	939.1	663.7	**548.3**	142.0	**127.7**
Gross margin	*59.6%*	*61.3%*	***64.9%***	64.2%	***67.2%***
EBITDA	335.1	317.1	**239.1**	48.2	**47.5**
Pretax income	303.8	275.5	**207.7**	40.2	**40.1**
Net income	282.4	240.6	**177.1**	34.5	**34.0**
Net margin	*37.7%*	*33.3%*	***30.6%***	*25.9%*	***23.2%***
EPS (diluted)	3.39	2.90	**2.23**	0.44	**0.44**
EPS (basic)	3.70	3.03	**2.28**	0.44	**0.44**
Dividend per share	3.33	2.85	**2.15**		
Net cash & Deposits	370.4	346.5	**113.0**	325.8	**180.9**

Long-term, step function growth in cyclical business
- Increased revenue, profitability and market share per cycle

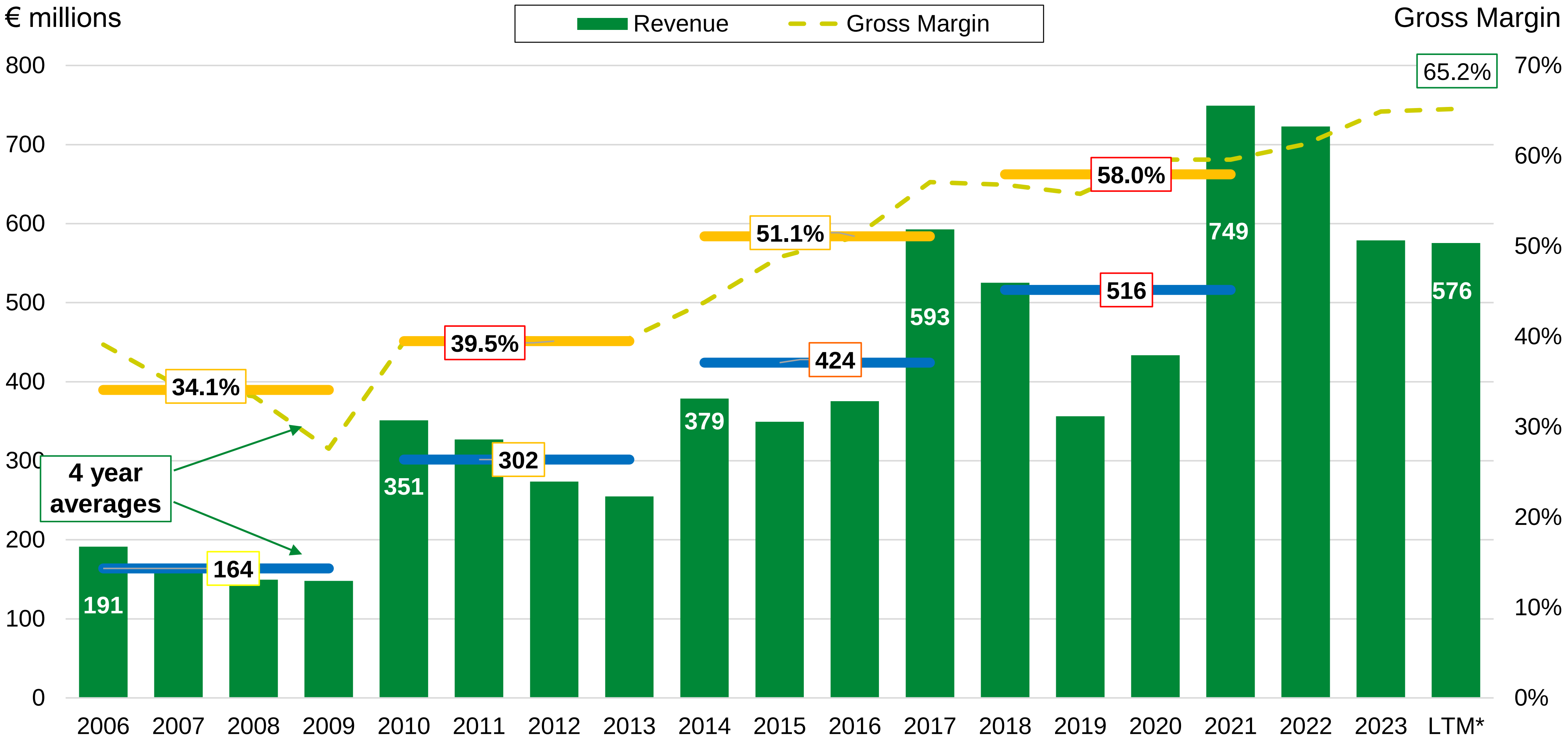
Q1-24 revenue +9.7% and net income -1.4% vs. Q1-23
- Higher shipments for 2.5D and 3D applications
- Gross margins reach 67.2%
- Higher share-based compensation expense

Slow recovery of assembly equipment market limits order development
- Orders down 10.1% vs. Q1-23 due to ongoing weakness in smart phone and automotive

Strong margins and profitability
- Attractive gross and net margins maintained due primarily to favorable product mix, cost control efforts

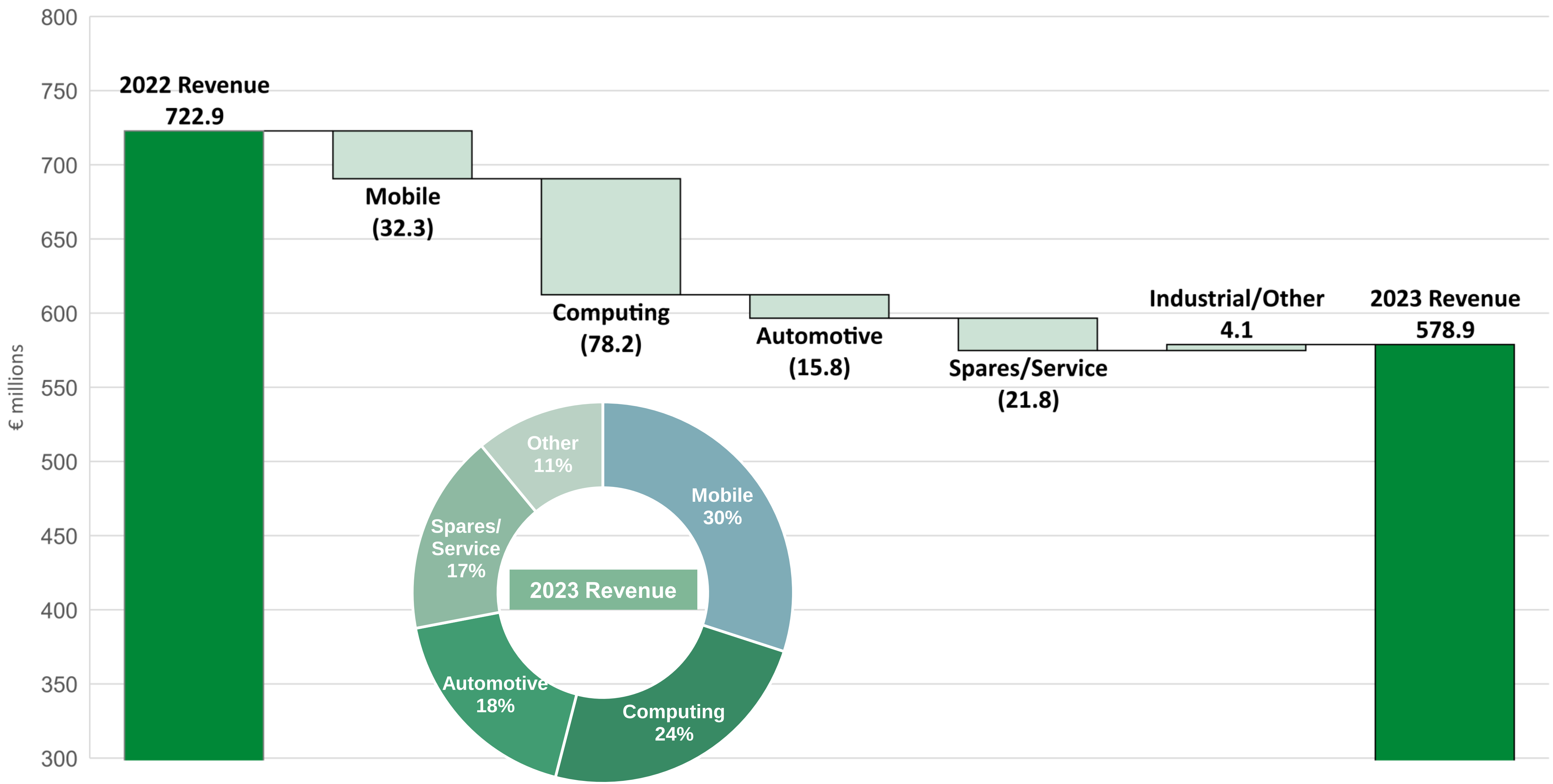
Strong cash generation supports shareholder friendly capital allocation policy

Through Cycle Revenue and Gross Margin Trends



* LTM including midpoint of guidance for Q2-24

End-User Market Trends 2022/2023

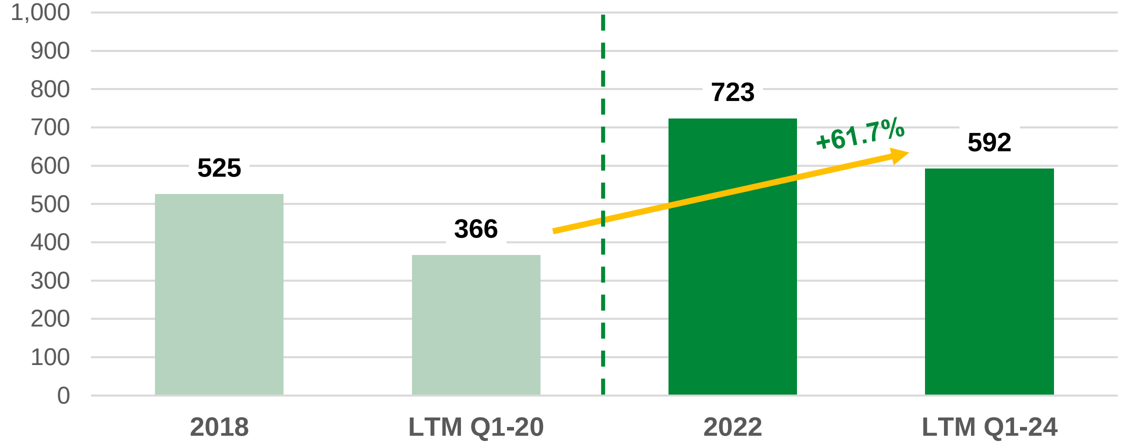


Source: Company estimates

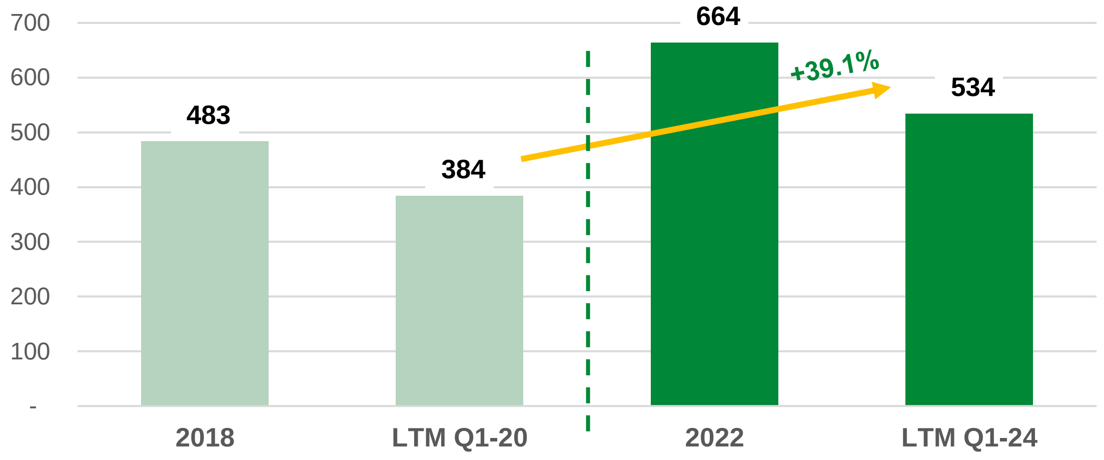
Performance Significantly Above Last Industry Downturn

Besi

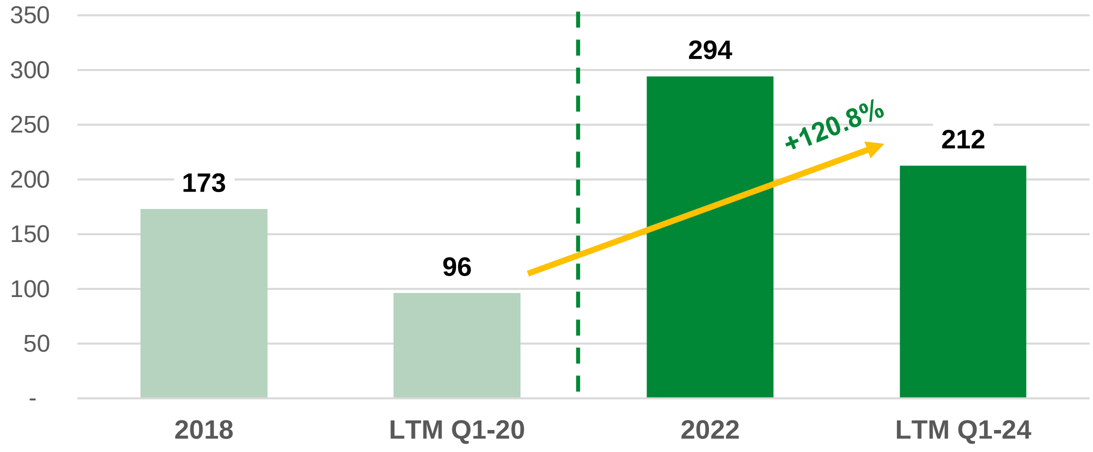
Revenue (€MM)



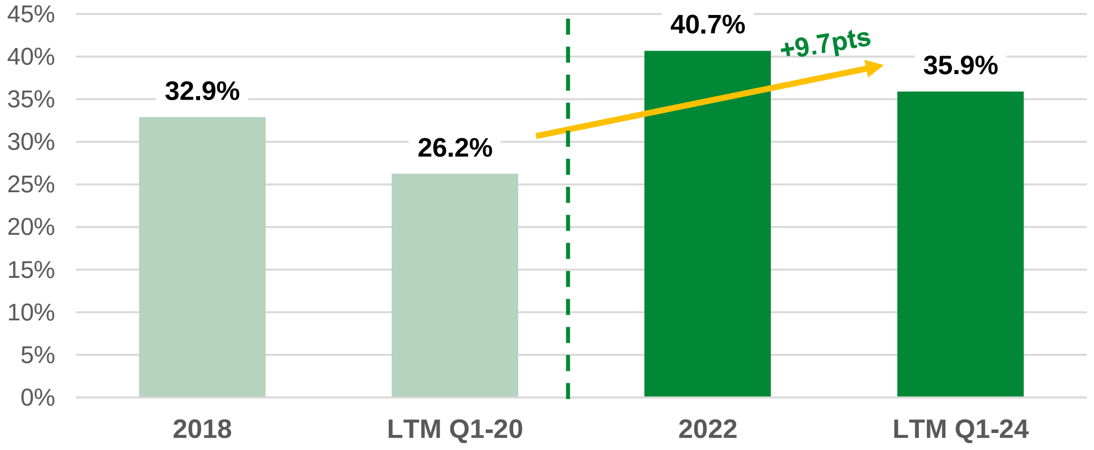
Orders (€MM)



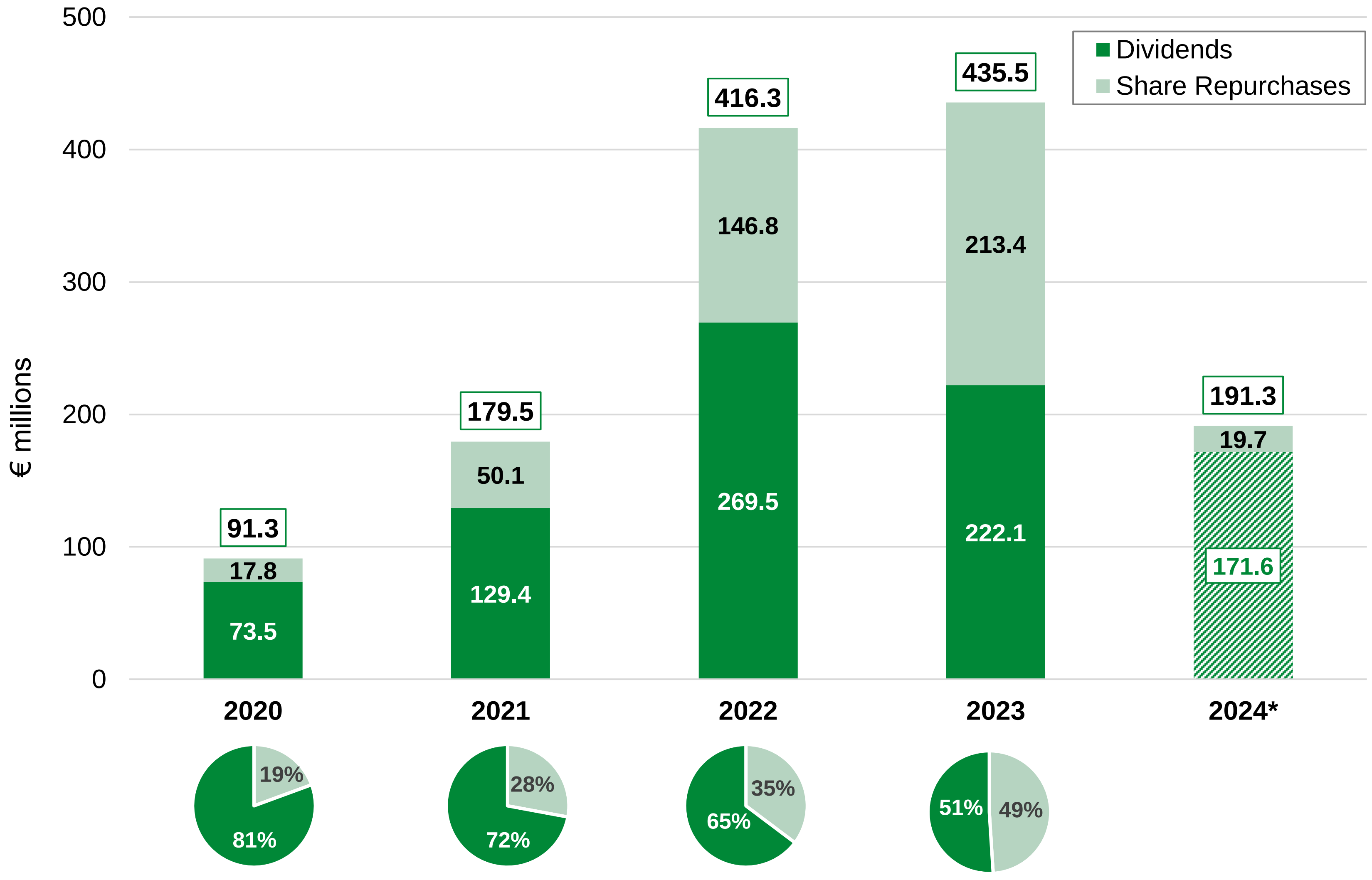
Operating Profit (€MM)



Operating Margin



Attractive Capital Allocation Policy Continues



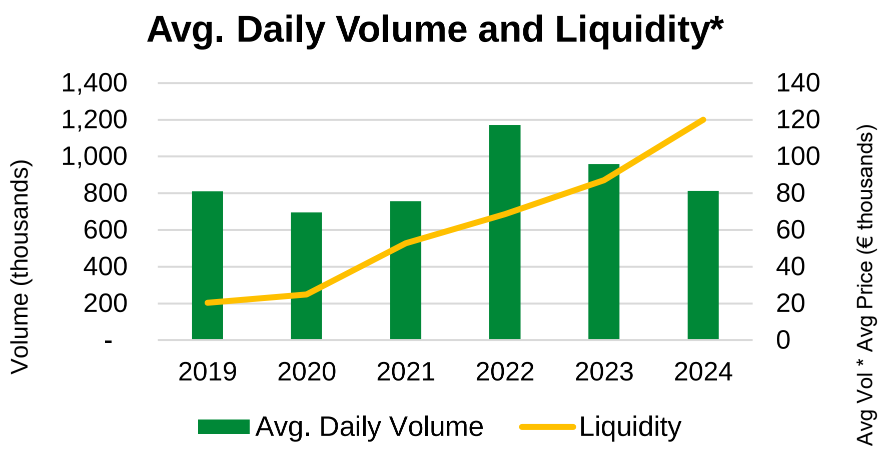
- **€ 2.0 billion distributions since 2011**
  - ~€ 190 million distributed in 2024 through April 30, 2024 including 2023 dividend
- **Current € 60 million share repurchase program:**
  - € 29.3 million purchased through April 30, 2024 at avg price of € 137.13

* Includes share repurchases through April 30, 2024.

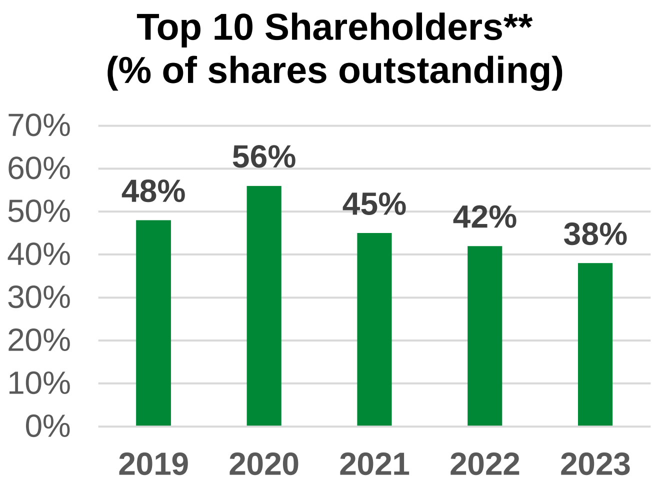
Besi Market Cap and Liquidity Has Expanded
Shareholdings Have Migrated to US/UK

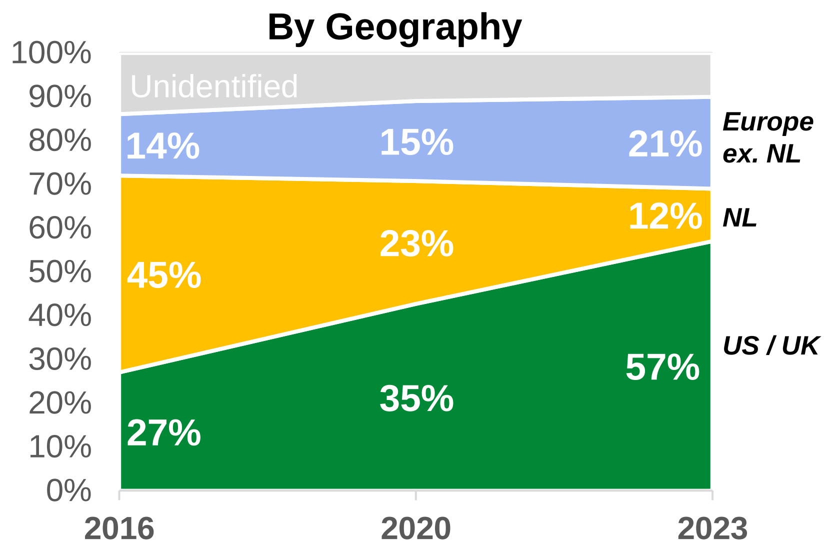
Market Profile

Symbol/ Index	• BESI • Euronext AEX
Market Cap*	• € 11.0 billion ($ 11.9 billion)
Dividend Policy	• Pay out 40-100% of net income per annum



Share Ownership





Share ownership is based on information per AGM of presented year.

* As of March 31, 2024 ** Besi estimates

Business Model

Business Model

Revenue	€ 1 billion+++
Addressable Market Share	40%+
Gross Margin	60-64%
Operating Margin	30-45%
Headcount Split	80% Asia/20% Europe/NA
Scope 1 & 2 Emissions	62% reduction
Global Energy Needs	75% from renewable sources

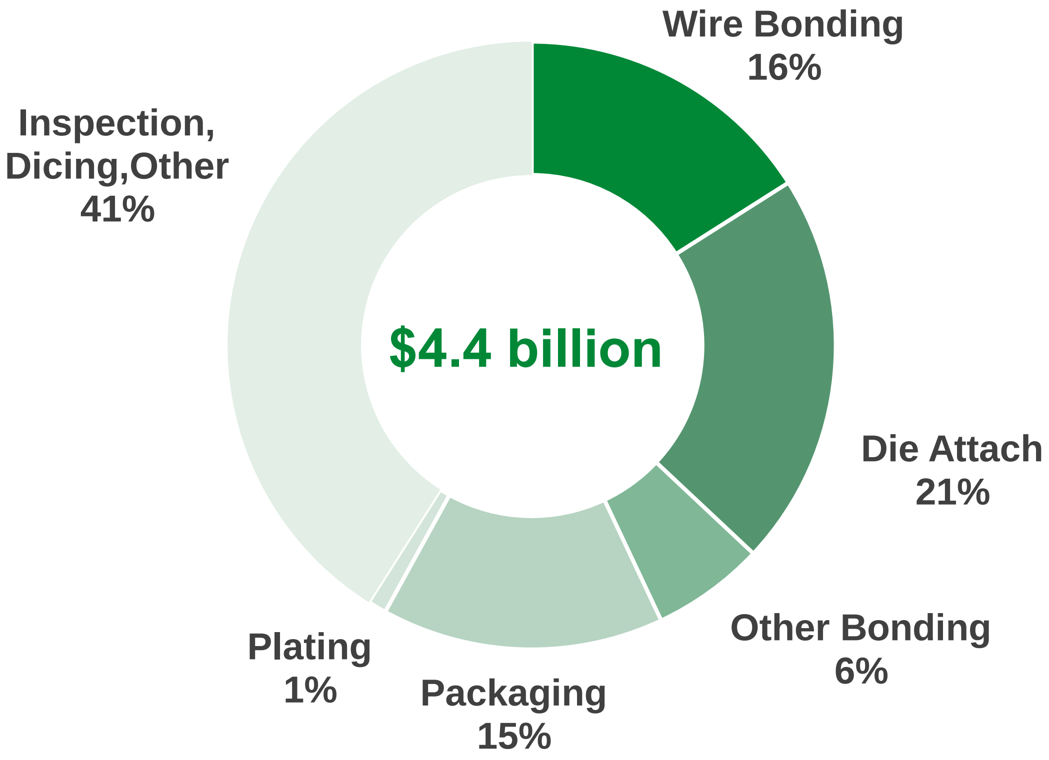
II. MARKET OVERVIEW

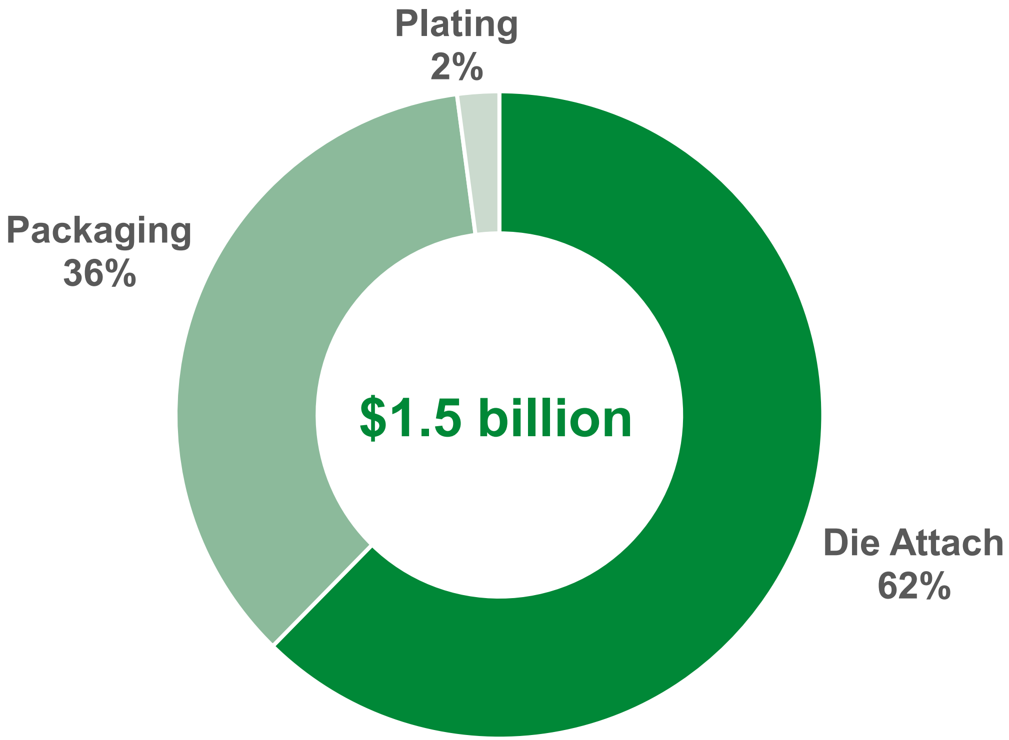
What Drives Besi's Business?

Macro GDP trends	Selection of IDM and supply chain partners	Timing of customer roadmaps
Meeting demanding technical specs	Performance in 24/7 production environments	Competitive cycle times and scalability

Assembly Equipment Market Composition

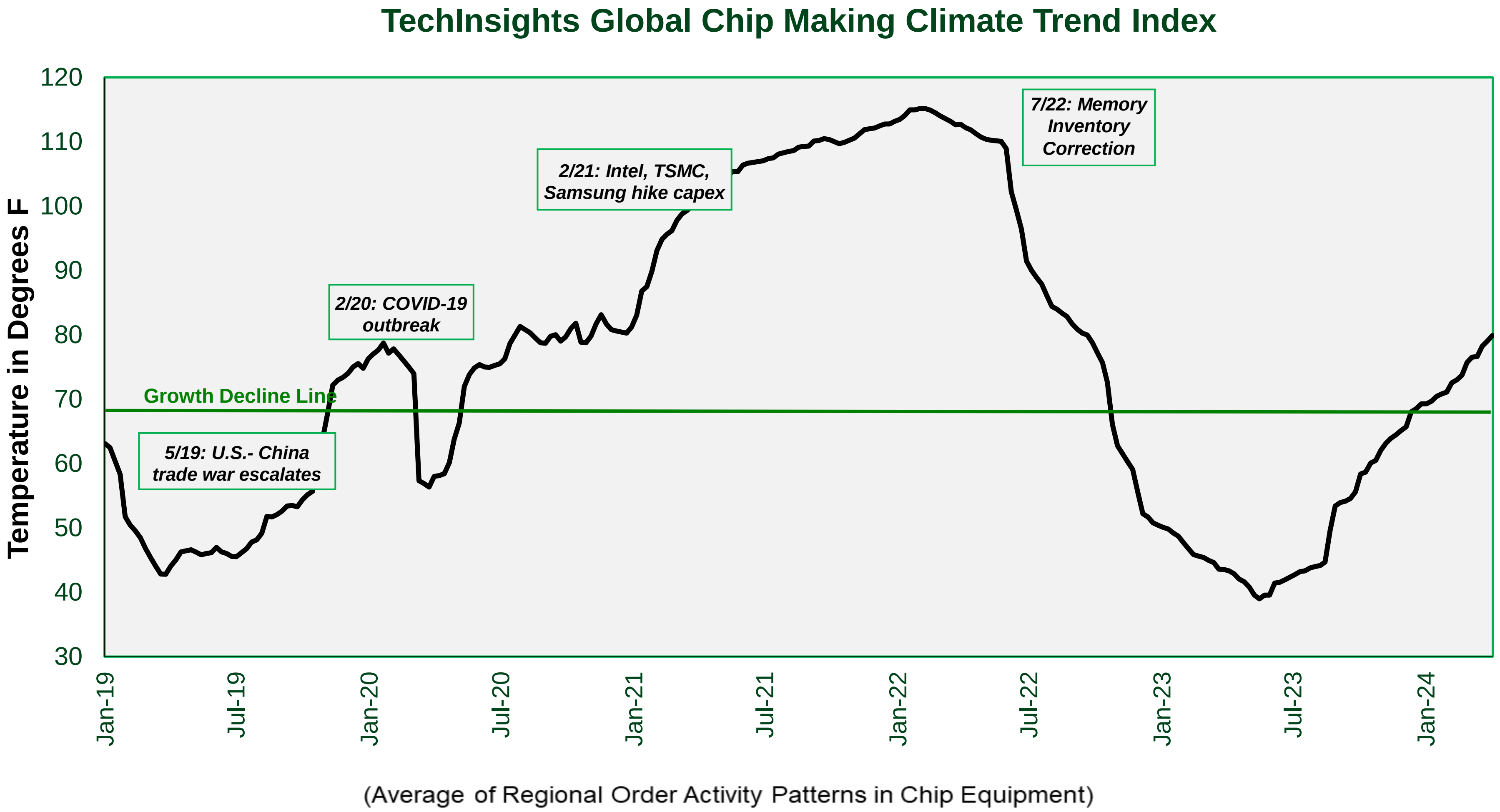
Assembly Equipment Market (2023)	Besi Addressable Market (2023)





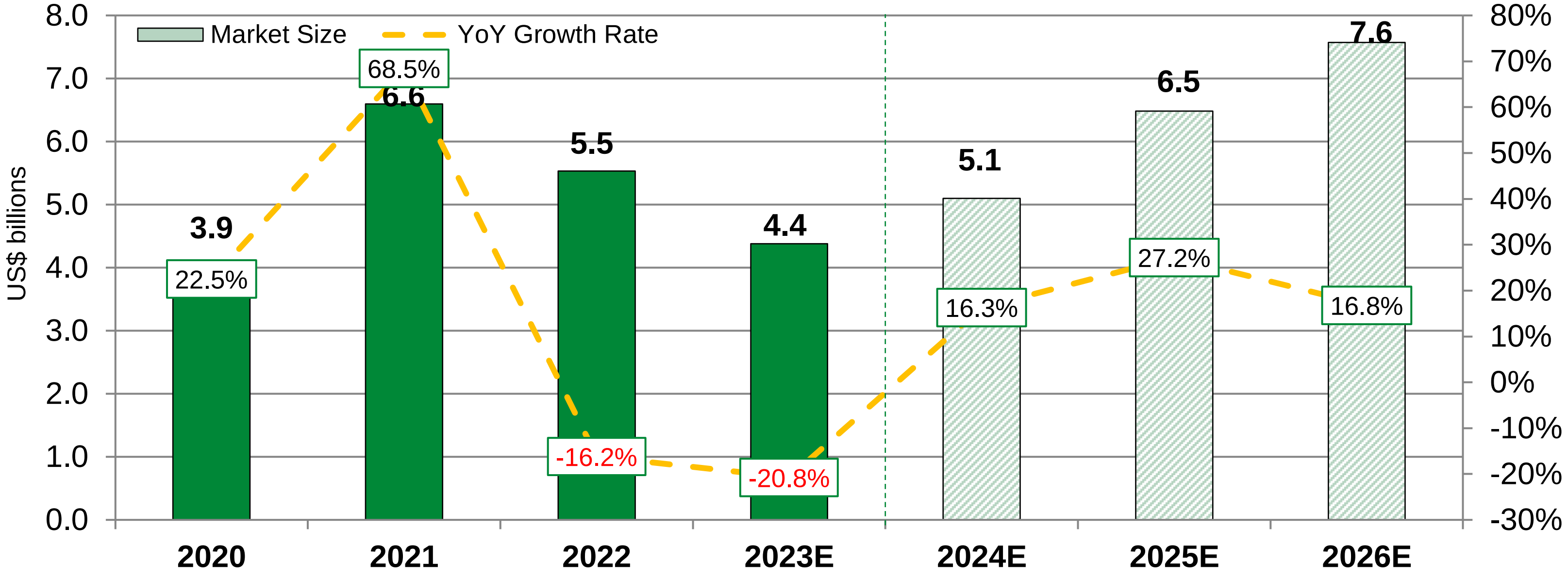
Source: TechInsights, March 2024

Market Conditions Reached Trough in 2023
Slow Assembly Equipment Market Recovery

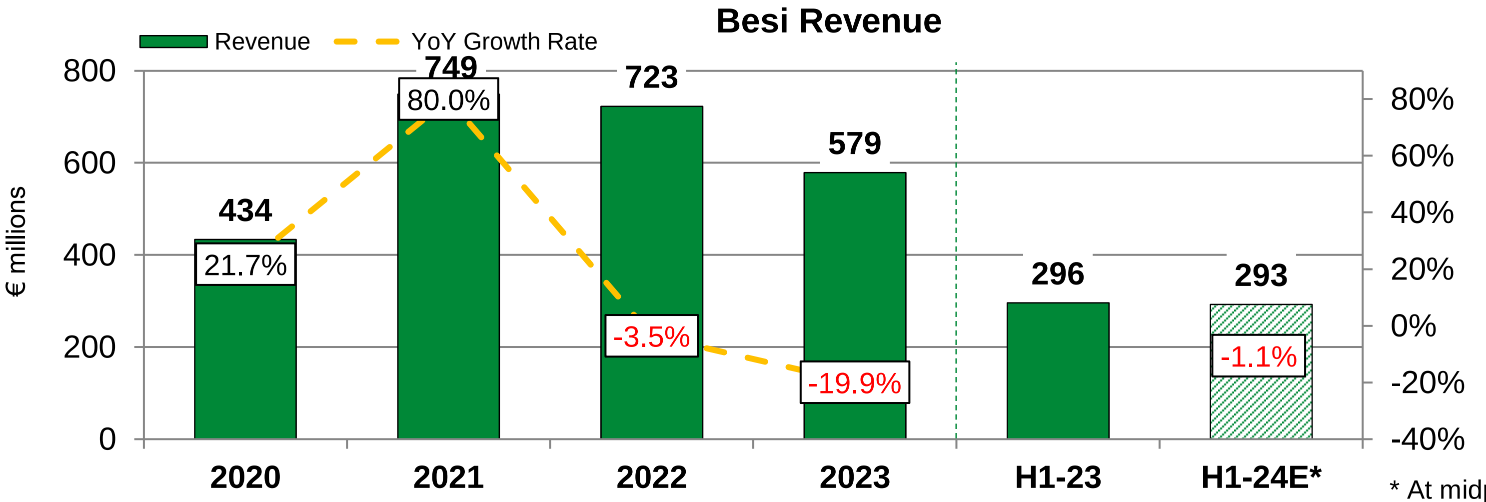


Source: TechInsights, April 2024

Assembly Equipment Market Trends 2020-2026E



Source: TechInsights, March 2024. Assembly equipment revenue excludes hybrid bonding and service revenue.



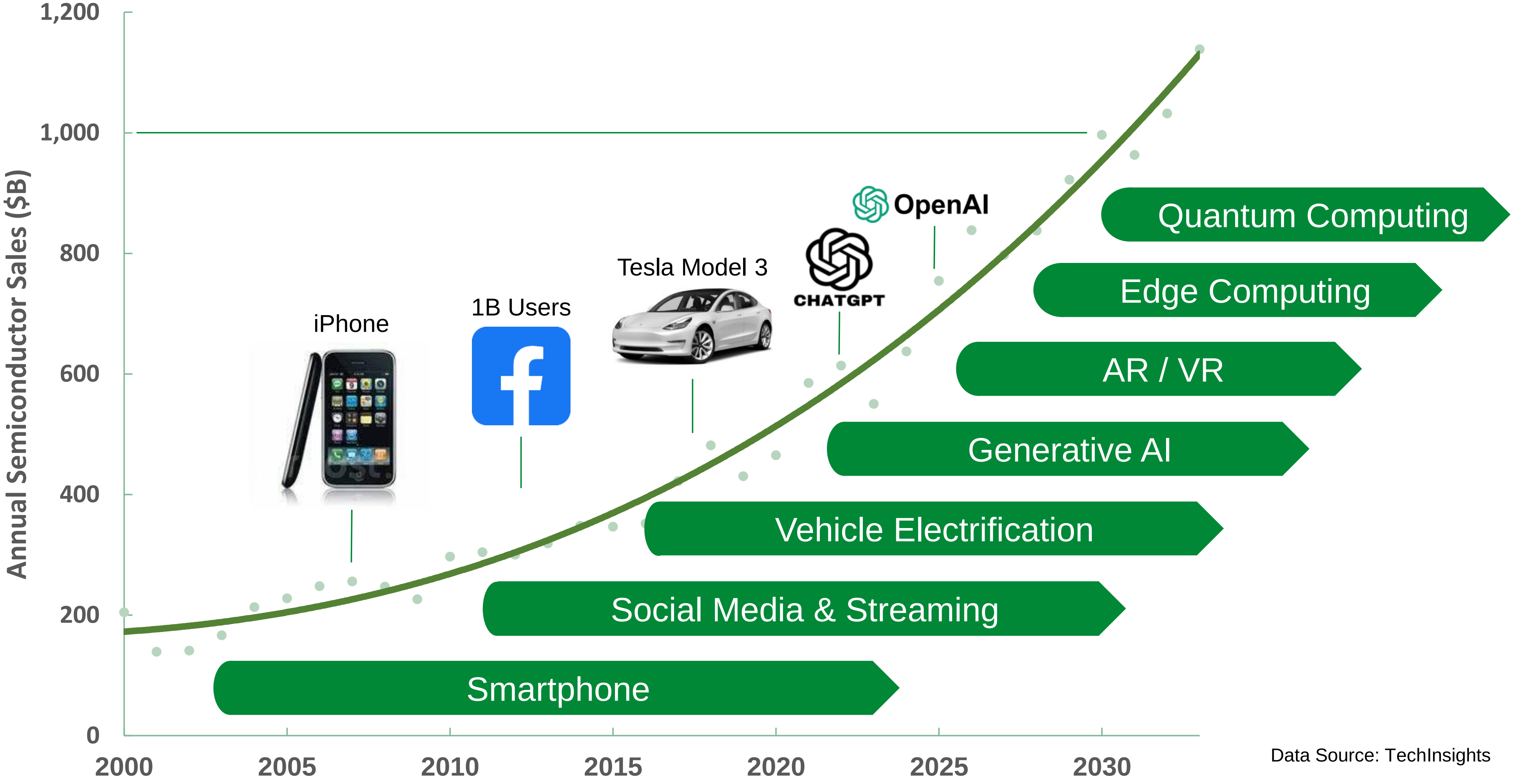
* At midpoint of Q2-24 guidance

TechInsights now forecasts 21% decrease in in 2023
- Versus -26% last forecast
- ~34% decrease from 2021 peak

Strong rebound anticipated
- 2024 forecast to grow 16.3%.
  - Down from original forecast of 31%
  - Driven by AI
  - Mainstream market slow to recover
- Forecast $ 7.6 billion in 2026
  - +73% 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

Semiconductor Sales Expected to Reach $1 Trillion by 2030



Data Source: TechInsights

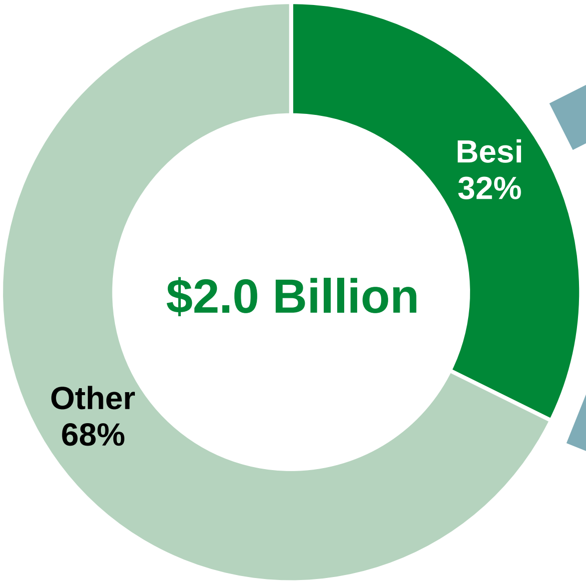
Besi Addressable Market Share Increasing Particularly in Key Die Attach Markets

	2016	2018	2020	2021	2022	∆ '22/'21	∆ '22/'16
Assembly Market ($MM)	3,587	4,542	3,916	6,597	**5,540**	-16.0%	+54.5%
Besi Market Share	9.9%	11.2%	10.5%	11.7%	**11.5%**	**-0.2pts**	**+1.6pts**
Addressable Market ($MM)	1,507	1,859	1,439	2,444	**1,966**	-19.6%	+30.5%
Besi Market Share	23.7%	27.3%	28.5%	31.7%	**32.3%**	**+0.6pts**	**+8.6pts**
Die Attach	30.4%	33.2%	35.4%	39.4%	**39.7%**	**+0.3pts**	**+9.3pts**
Packaging & Plating	13.6%	17.0%	15.3%	15.7%	**18.3%**	**+2.6pts**	**+4.7pts**
% of Besi Revenue	**2016**	**2018**	**2020**	**2021**	**2022**	**∆ '22/'21**	**∆ '22/'16**
Die Attach	75%	76%	82%	82%	**79%**	-3pts	**+4pts**
Packaging & Plating	25%	24%	18%	18%	**21%**	**+3pts**	-4pts

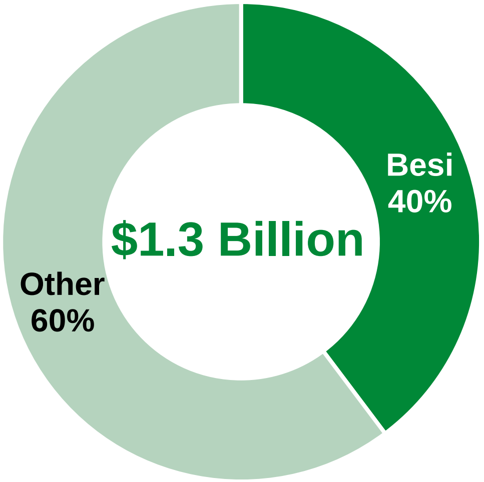
Source: TechInsights, July 2023

Leader in Addressable Market, Die Attach Market and Advanced Die Placement

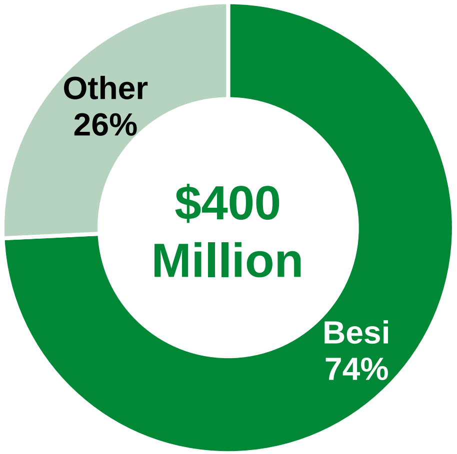
2022 Addressable Market*



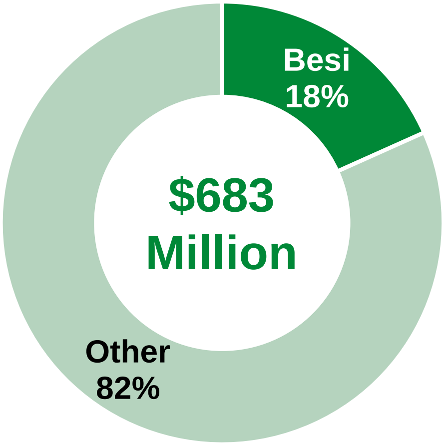
Die Attach
(79% of Revenue)



Advanced Die Placement**



Packaging & Plating
(21% of Revenue)

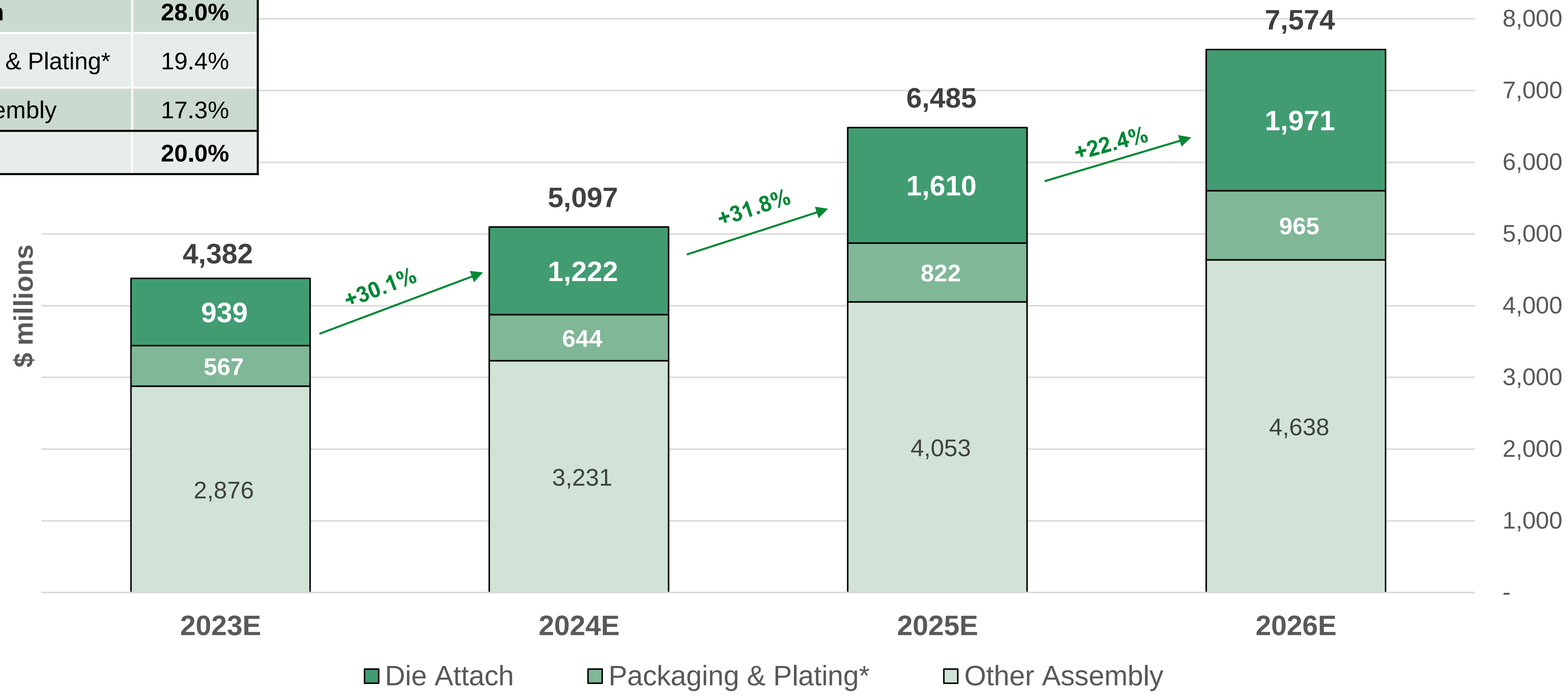


* Excludes wire bonding, dicing, and other.
** Advanced die placement defined as < 7 micron accuracy per TechInsights.

Source: TechInsights, July 2023. Equipment only.

Growth Expected to Favor Besi's Product Portfolio, Particularly Die Attach

CAGR (2023-2026)	
Die Attach	**28.0%**
Packaging & Plating*	19.4%
Other Assembly	17.3%
Total	**20.0%**



Source: **TechInsights, March 2024. Addressable market excludes hybrid bonding**.
* Packaging & Plating includes only Besi's addressable segments. Non-addressable reported in other assembly market.

Advanced Packaging Solutions Critical to Next Generation Applications

Besi

Greater Miniaturization

Higher Accuracy

Greater Performance

Besi Solutions

- Hybrid bonding
- TCB chip to wafer
- Embedded bridge die attach
- EVO multi module die attach
- Advanced flip chip
- Wafer/substrate molding

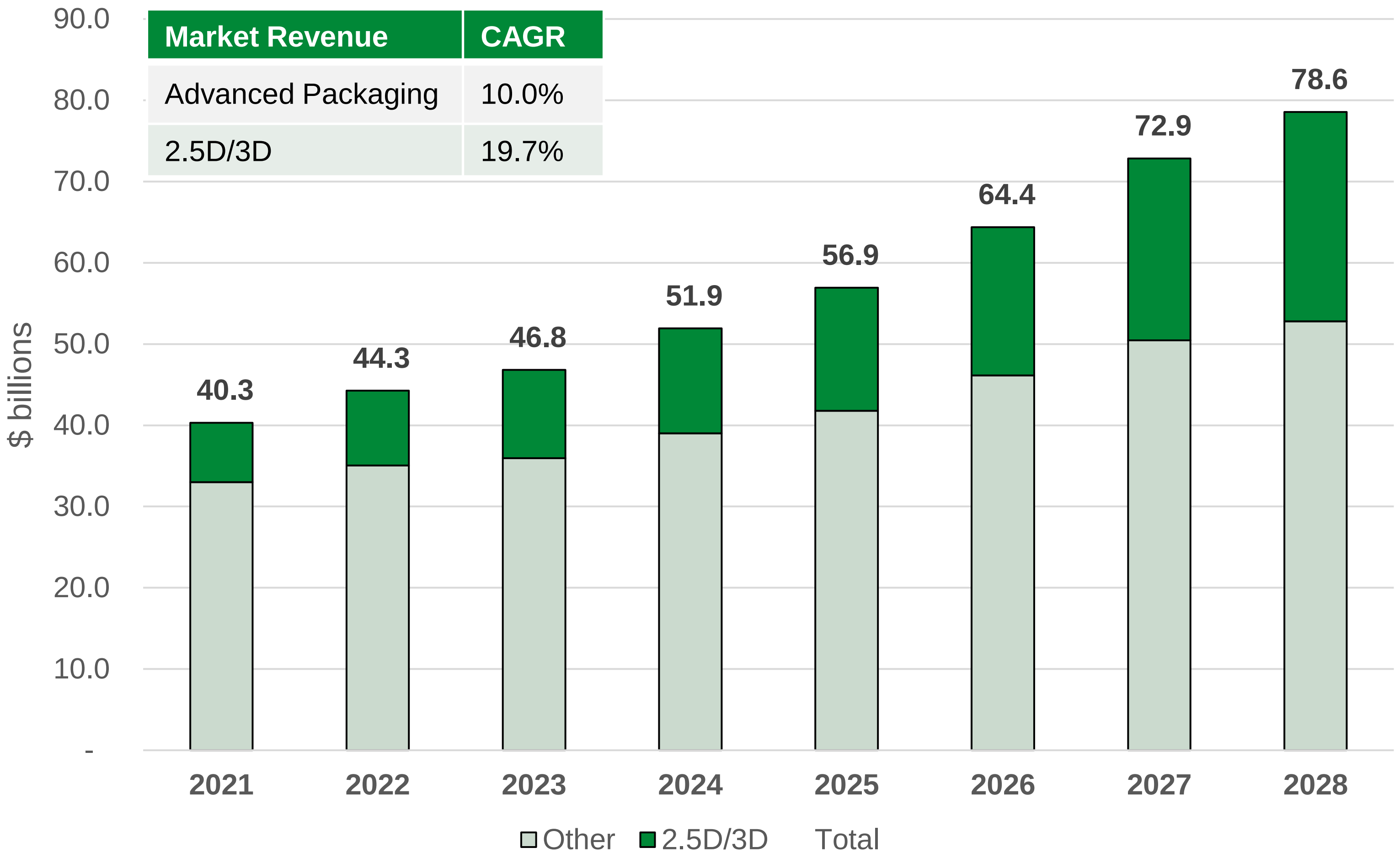
Lower Power Consumption

Increased Density

Higher Complexity

Advanced Packaging Revenue Growing Rapidly
2.5D/3D Fastest Growing Segment

Market Revenue	CAGR
Advanced Packaging	10.0%
2.5D/3D	19.7%



Besi portfolio well positioned by node size and accuracy

- 70% of Besi equipment revenue defined as advanced packaging
- 50% equipment revenue advanced die placement (< 7 micron accuracy)
- Most rapidly growing market segment

Source: Yole. November 2023

Besi's Advanced Packaging Systems Critical for Next Generation Applications

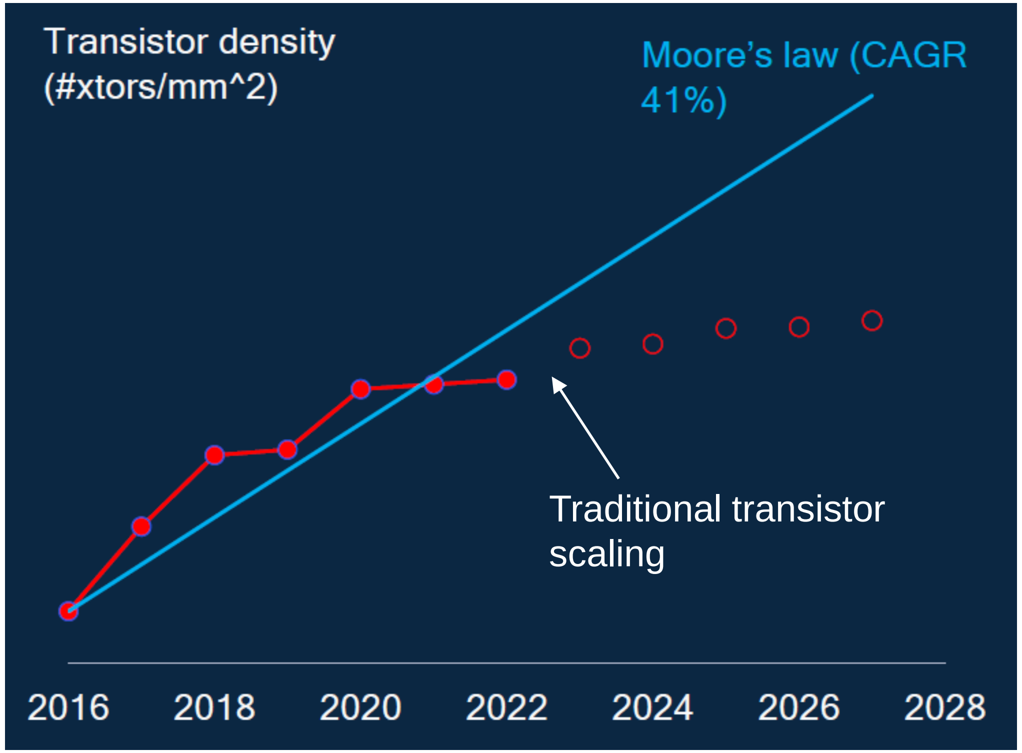
Mobile	• New generative AI engines • Edge/AI Enabled Phones • Advanced Cameras and 3D imaging • Under display biometric ID • New AR/VR devices • 5G advanced devices
Computing	• New generative AI engines • Supercomputers • Datacenters • Edge AI tables, PCs, laptops • Gaming and infotainment
Auto/Industrial	• EV adoption • Edge AI enhanced features • SiC and GaN power devices • Advanced camera modules and sensors • Autonomous driving • Factory automation 4.0

Besi Solutions

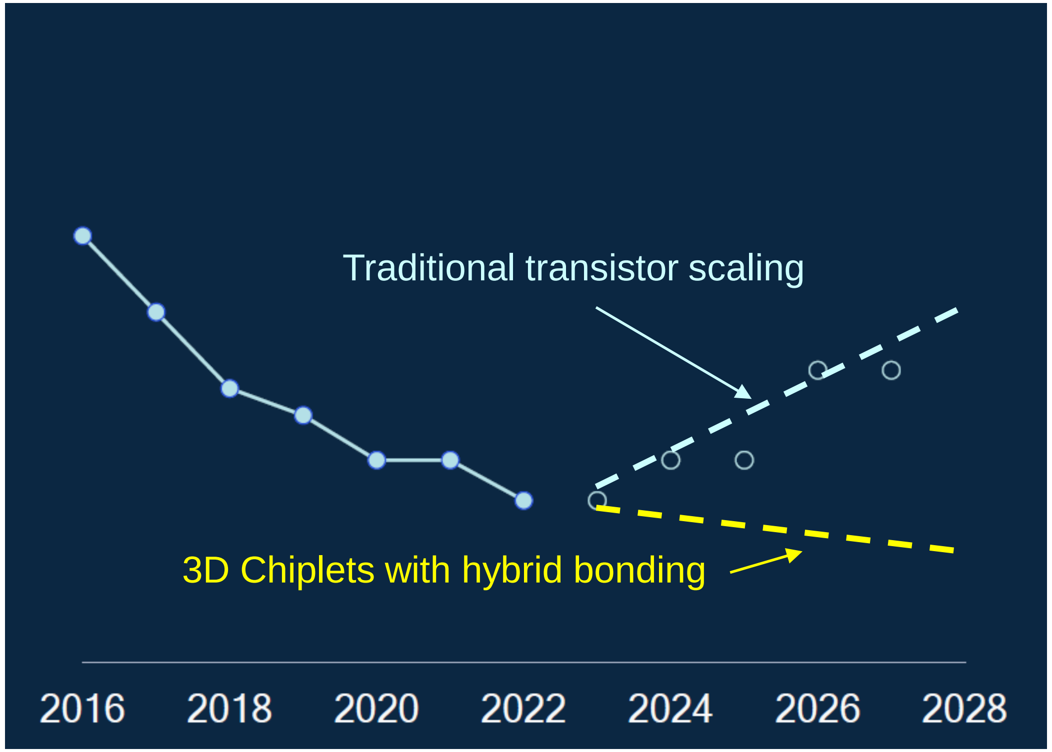
- **Hybrid bonding**
- **TCB chip to wafer**
- **Embedded bridge die attach**
- **EVO multi module die attach**
- **Advanced flip chip**
- **Wafer/substrate molding**

New Wafer Level Assembly Technologies Extend Moore's Law

Moore's Law Scaling Is Slowing



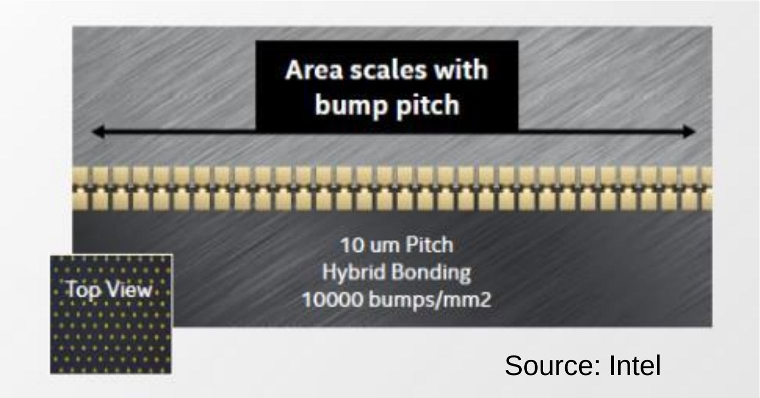
Cost Per Transistor Is Increasing



Source: Qualcomm and Besi

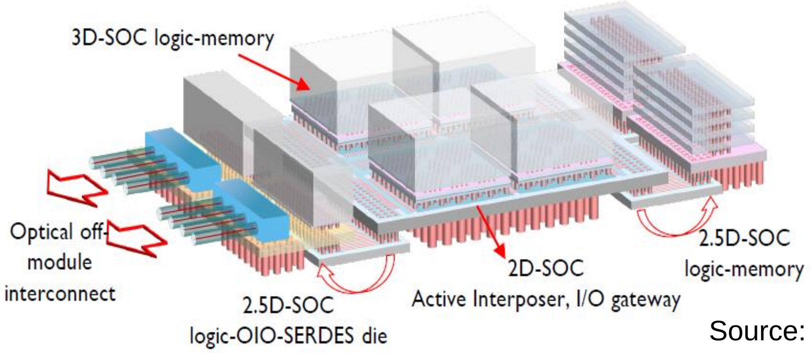
Hybrid Bonding Enables Faster, More Complex Devices With Submicron Placement Accuracy

Direct Cu-Cu 3D Interconnect



1,000x increase in contact density

Heterogeneous Chiplet Integration



Source: IMEC

More transistors per package

New Chip Architectures

- Quasi-monolithic 3D
- Optimal use of nodes
- Customized designs
- Highly configurable

Increased Performance

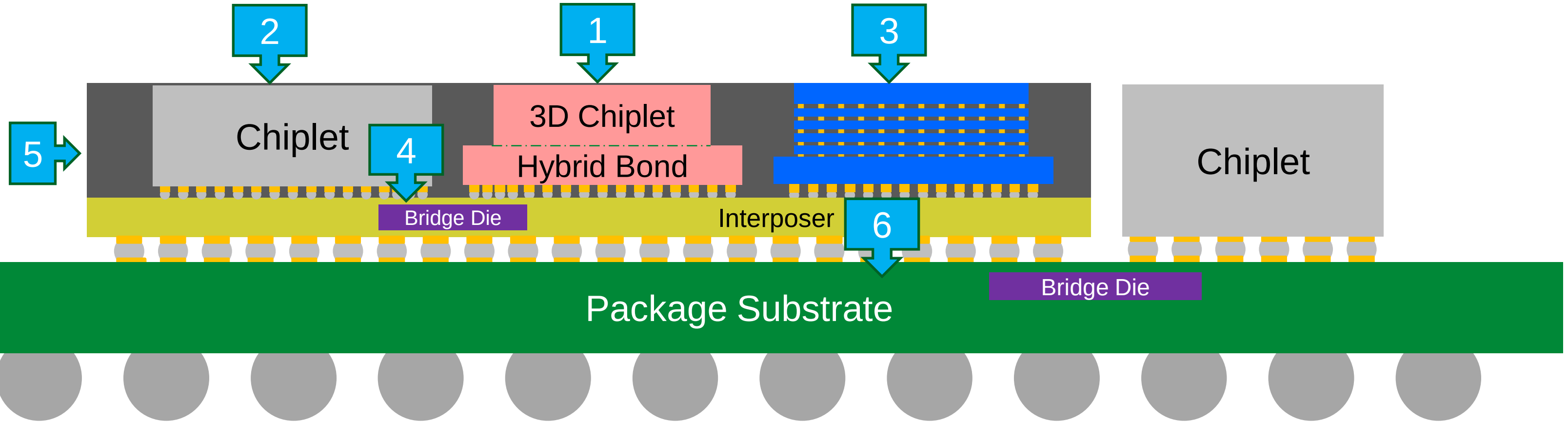
- Highest compute power
- Increased data transfer
- Higher bandwidth
- Higher speed

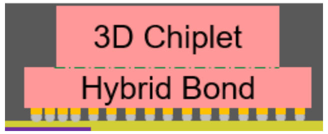
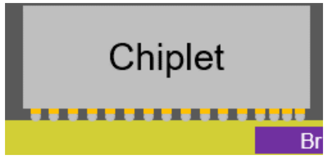
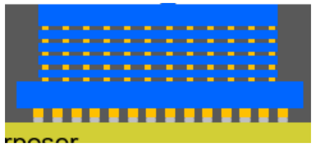
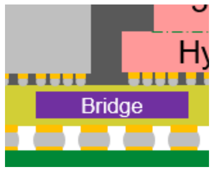
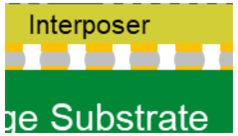
Lower Cost of Ownership

- Higher die yield
- Lower energy per bit
- Lower cost per contact
- Lower heat dissipation

3D Chiplet Structures Use Variety of Assembly Processes

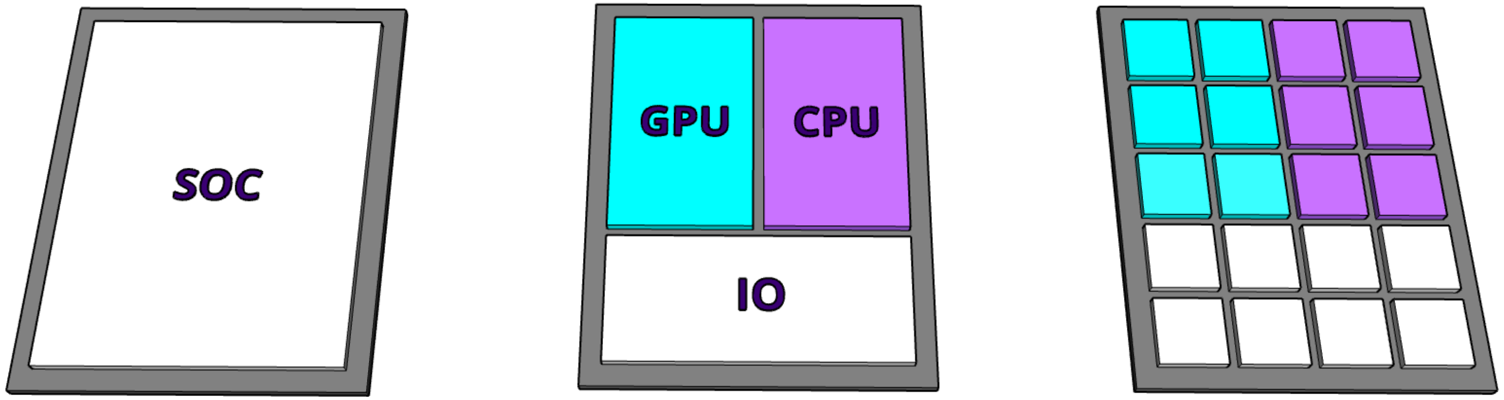
Besi



1 Hybrid Bonding	2 Chip to Wafer TCB	3 High Bandwidth Memory Stacking	4 Embedded Bridge Die Attach	5 Wafer Level Die Molding	6 HD Interposer to Substrate
					
8800 CHAMEO Ultra Plus	**9800 TC Next C2W**	**8800 CHAMEO Ultra Plus** **8800 TC Advanced**	**8800 Chameo Ultra**	**FML**	**2200 evo**

Chiplet Adoption Drives Higher Capital Intensity

Single Chip Design | **Multi Chip Module** | **Multi Chiplet System**



Monolithic: Integrated SoC

Multiple Dies: process optimized

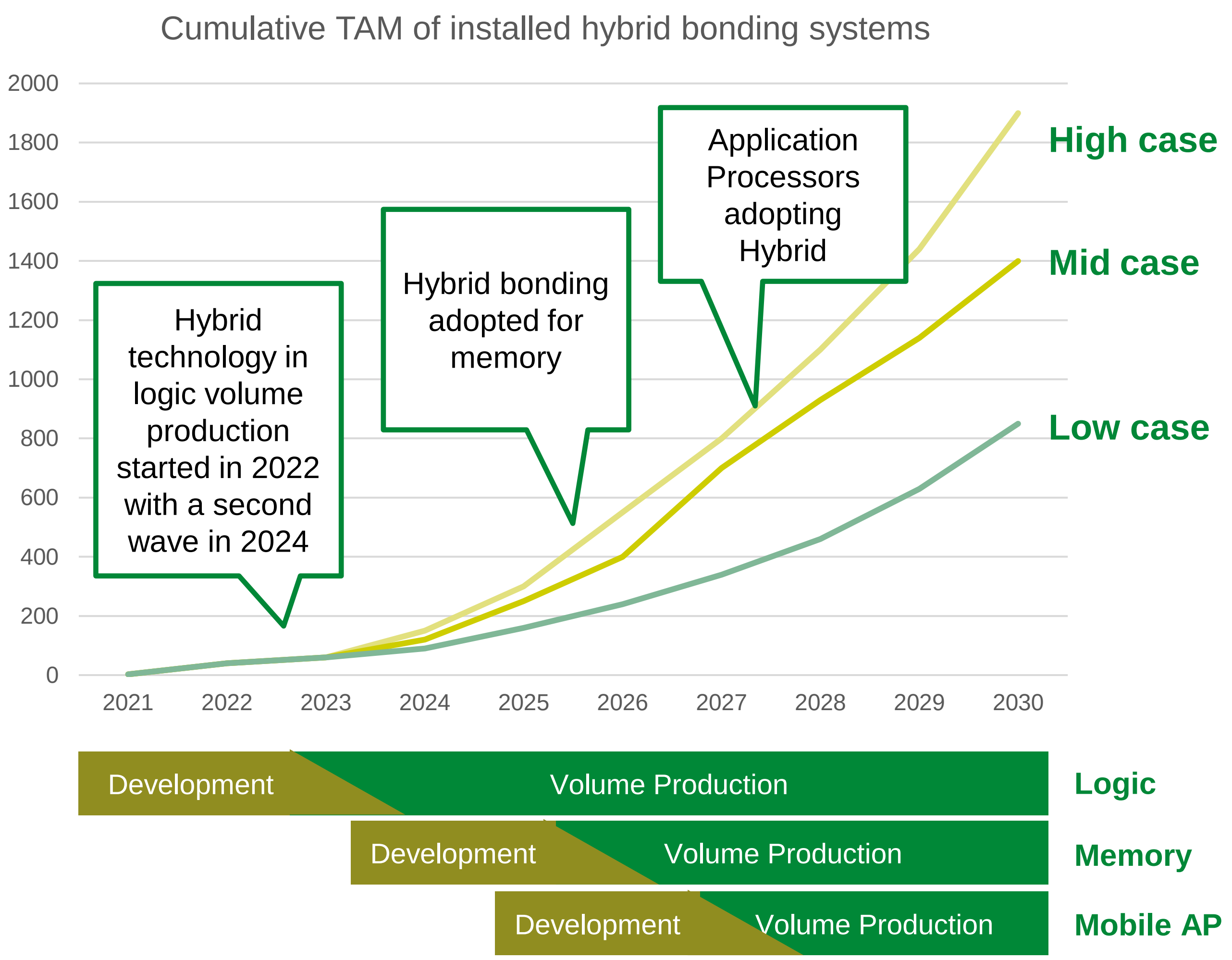
Individual IPs: process optimized

Source: Intel

1 Step → **More die attach steps** → **Dozens**

10µm → **Higher accuracy** → **100nm**

Hybrid Bonding Market Potential



Source: Besi estimates, June 2023
Cases based on potential adoption scenarios.

Estimated 800 – 1,900 systems cumulative by 2030

- Logic device production and adoption continues
- Low case represents adoption in logic only
- Technology adoption coming in waves
- Major memory companies engaged for HBM programs
- Increased interest for HB usage in consumer applications

- **Changes to prior market forecast**
  - **Upside and low case unit potential expanded**
  - **Tracking to mid case currently**
  - **Higher ASPs anticipated due to higher accuracy requirements post 2024**

- <u>Expected rollout sequence:</u>
  1. Logic
  2. Memory
  3. Mobile
  4. Other Applications

III. END-USER MARKET TRENDS

Mobile: Besi's Largest End-User Market
Features/Functionality Key Drivers of Growth

RF Front End
Antennas
GPS

RF
Transceiver
Modem

Local
Connectivity
WiFi/NFC

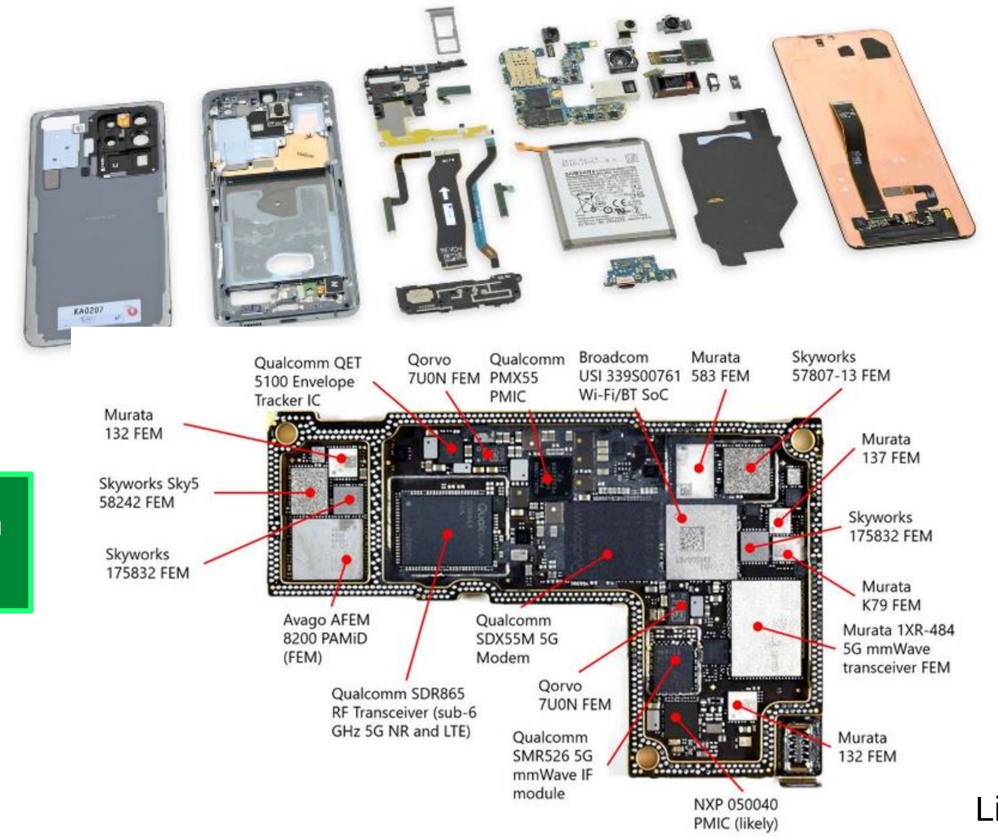
Microphone
Cameras
Sensors

Display
TouchScreen

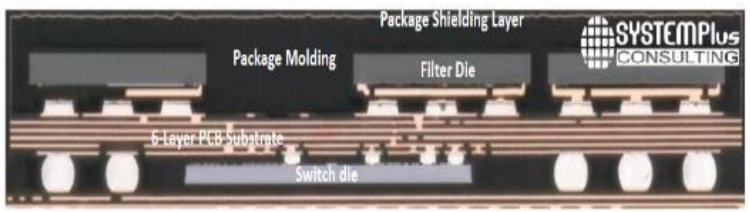
Power
Battery

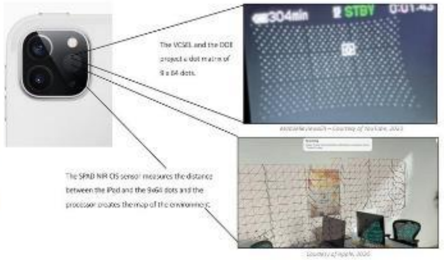
Memory

Application
Processor



Lidar





Besi Involved in Almost All Components

Main Components	Besi system Utilized
Processor	8800CHM, MMS-LM
DRAM Memory	2100sD, FSL, 8800FCQ
NAND Flash	2100sD, AMS-W/LM/8800FCQ
PM IC	2100sD, AMS-W/LM, 2100FC, 8800FCQ
Motion coprocessor	2100sD, AMS-W/LM
Gyroscope	2100xP, 2100sD, AMS-W/LM, FCL
3-ax accelerometer	2200evo
barometric sensor	2200evo
Charging IC	2100xP, 2100sD, AMS-W/LM, FCL
Power Delivery IC	2100xP
Wireless charging IC	2100xP, 2100sD, AMS-W/LM
Communications	**Besi system Utilized**
Wifi/Bluetooth module	AMS-W/LM / 2100HSi
NFC	8800FCQ, AMS-W/LM, 2009SSI
LTE Modem	8800FCQ, AMS-W/LM
Low Band LTE PAD	2200evo, FSL
Mid Band PAD	2200evo, FSL
High Band PAD	2100xP, 2100sD, AMS-W/LM
RF Transceiver	2100xP, 2100sD, AMS-W/LM
RF Receiver	2100xP, 2100sD, AMS-W/LM
Envelop Tracking IC	8800FCQ, AMS-W/LM
Antenna Switch	2100xP, 2100sD
PA	2100xP, 2100sD, AMS-W/LM
PA module	2200evo, 2100sD
GSM PA module	2200evo, 2100sD
Video/Audio	**Besi system Utilized**
Cameras Back side	2200evo
Cameras Front side	2200evo
Face ID	2200evo
Image Sensor	2200evo
Dot Projectors	2200evo
2+4 microphones	2100sD
Audio Codec	2100xP, 2100sD, AMS-W/LM
Touch sreen control	2100sD
Touch Transmitter	FCL
OLED PMIC	2100xP

Source: Unitedlex.com and ifixit.com and System plus

Key Mobile Market Drivers

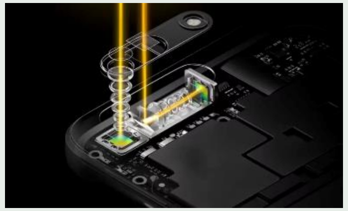
Mobile

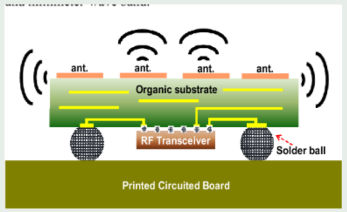
Drivers

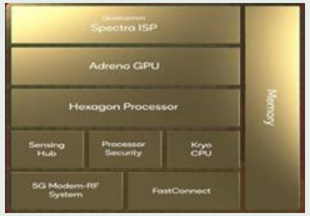
- New generative AI engines
- Edge/AI enabled phones
- Advanced cameras and 3D imaging
- Under display biometric ID
- New AR/VR devices
- 5G advanced devices

Assembly solutions

- Heterogeneous chiplet architectures
- Co-packaged optics
- Periscope camera modules
- Integrated sensing/camera/display
- Optical wave guide assembly
- Antennae in package





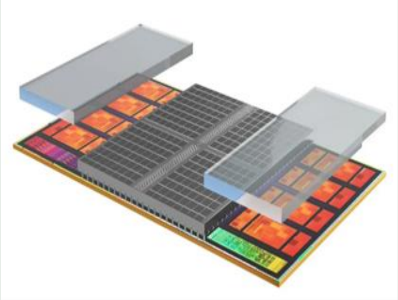
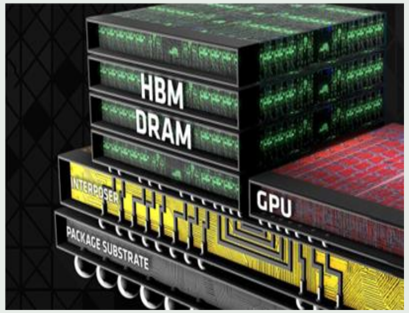


Source: Fonearena, Qualcomm

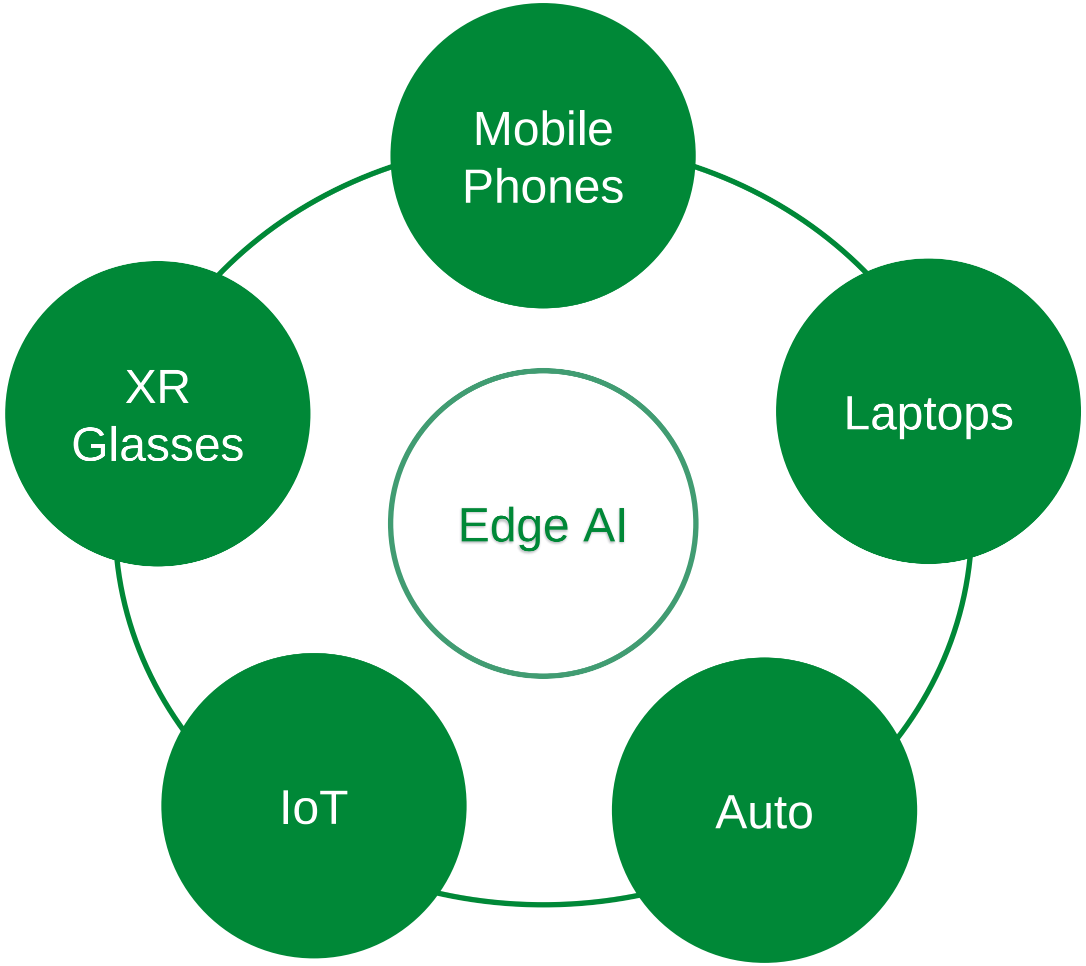
Key Computing Market Drivers

Computing

Drivers	Assembly solutions
• Data volumes growing exponentially • New generative AI engines • Supercomputers • Datacenters • Edge AI tablets, PCs, laptops • Gaming and infotainment	• 2.5D/3D chiplet architectures • HBM memory stacking • Co-packaged optics • Optical transceivers

Edge AI Computing Drives Next Generation Consumer Applications



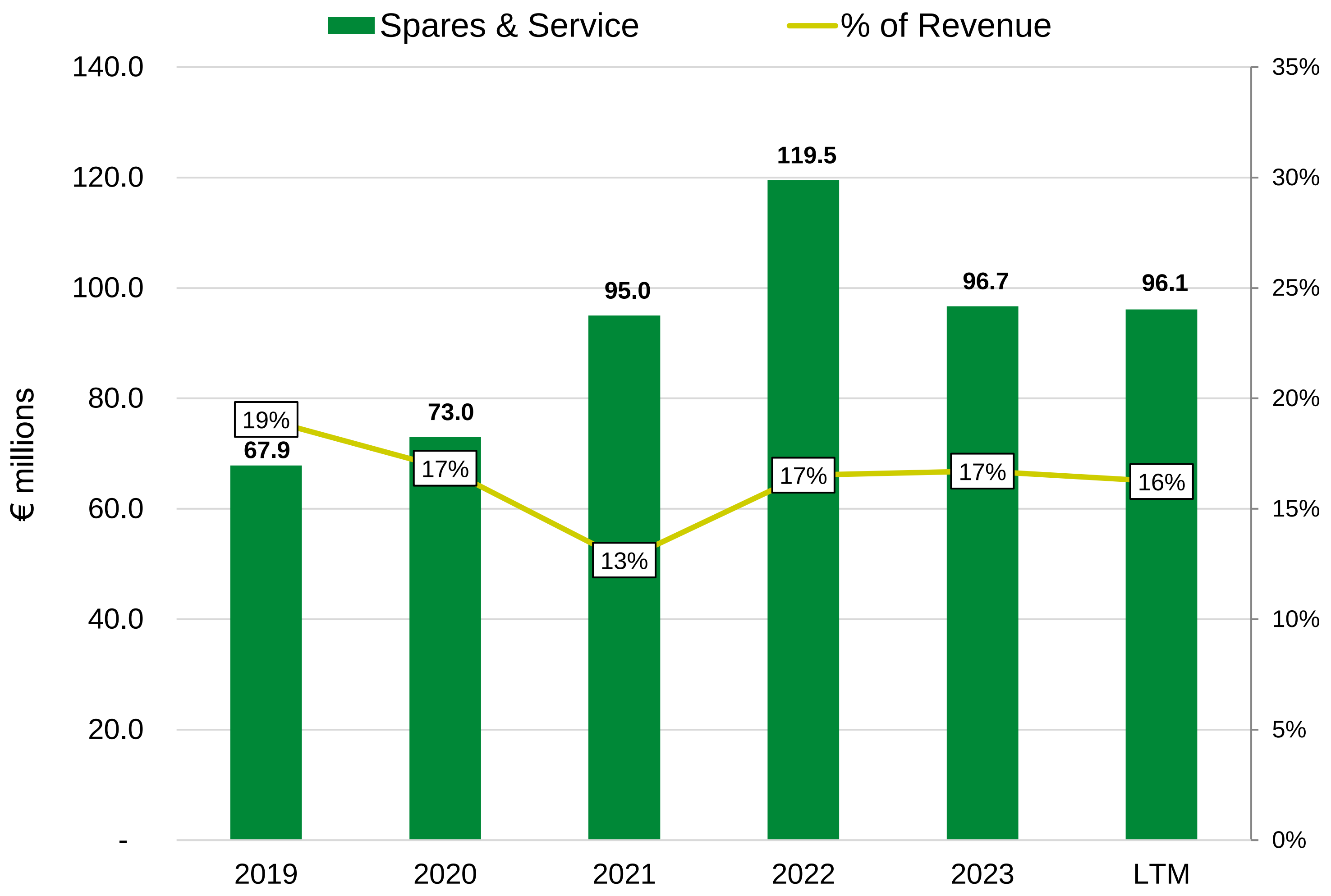
Edge AI Use Cases

- Text Generation
- Audio and Video Creation
- Image and Video Enhancement
- Code Generation
- Medical Diagnostics
- Auto Self-Driving
- Environmental Monitoring

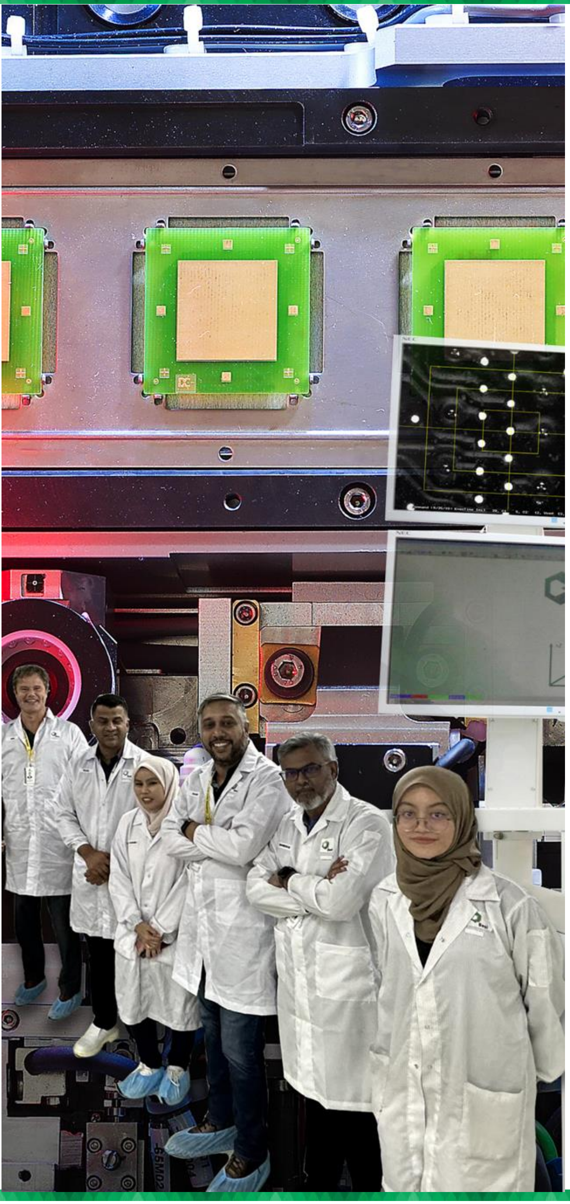
Key Automotive & Industrial Market Drivers

	Drivers	Assembly solutions
Auto/ Industrial	• EV adoption • Edge AI enhanced features • SiC and GaN power devices • Advanced camera modules and sensors • Autonomous driving • Factory automation 4.0	• Sinter bonding • Soft solder die attach • Diffusion bonding • Multi module die attach • Power module molding • Advanced leadframe plating • Wet chemical processing • Extreme high precision trim & form
	 	

Spares/Service Activities Represent Important Area of Growth



- **Increased to 15-20% of revenue since 2017**
  - Diverse customer base
  - Less cyclical part of business
  - Highly profitable
- **Revenue will increase as installed base grows, particularly wafer level**
- 42% growth from 2019 to 2023



IV. STRATEGY

Summary Strategy

Strategy Update

Business

- Effectively navigating industry downturn at peer leading profitability
- Expanded R&D investment
  - Gross R&D spending up 13.1% vs. Q1-23
- Significant progress on wafer level assembly adoption

Development

- Increased resources allocated for 2.5D, 3D and photonics applications
  - Particularly hybrid bonding, TCB C2W, flip chip
- Strong hybrid bonding orders anticipated Q2-24 (25-35 systems), 100nm accuracy
- Second order received for inline flip chip system for 2.5D
- Shipped second TCB Next system for evaluation by a customer. Indications of interest from multiple customers

Operations

- Vietnam tooling support facility completed
  - Commissioning/ramp-up on schedule
- HC being added to support expansion of wafer level assembly activities

Progress Continues on Besi's ESG Agenda

2023 Highlights
✓ Progress continues versus Besi's 2024 ESG targets
✓ Completed 76% of ESG initiatives developed since 2020
✓ Energy from renewable sources increased to 71% versus 20% in 2021
✓ Scope 1 & 2 emissions intensity declined by 38% versus 2021
✓ Set objective of net zero greenhouse gas emissions by 2030 in operations
✓ Launch of Design-to-X initiative to enhance sustainability and reduce cost
✓ Conducted Double Materiality Assessment for European CSRD reporting in 2025
✓ Improved ratings with MSCI, Sustainalytics, ISS ESG and S&P Global

Enhanced ESG Targets

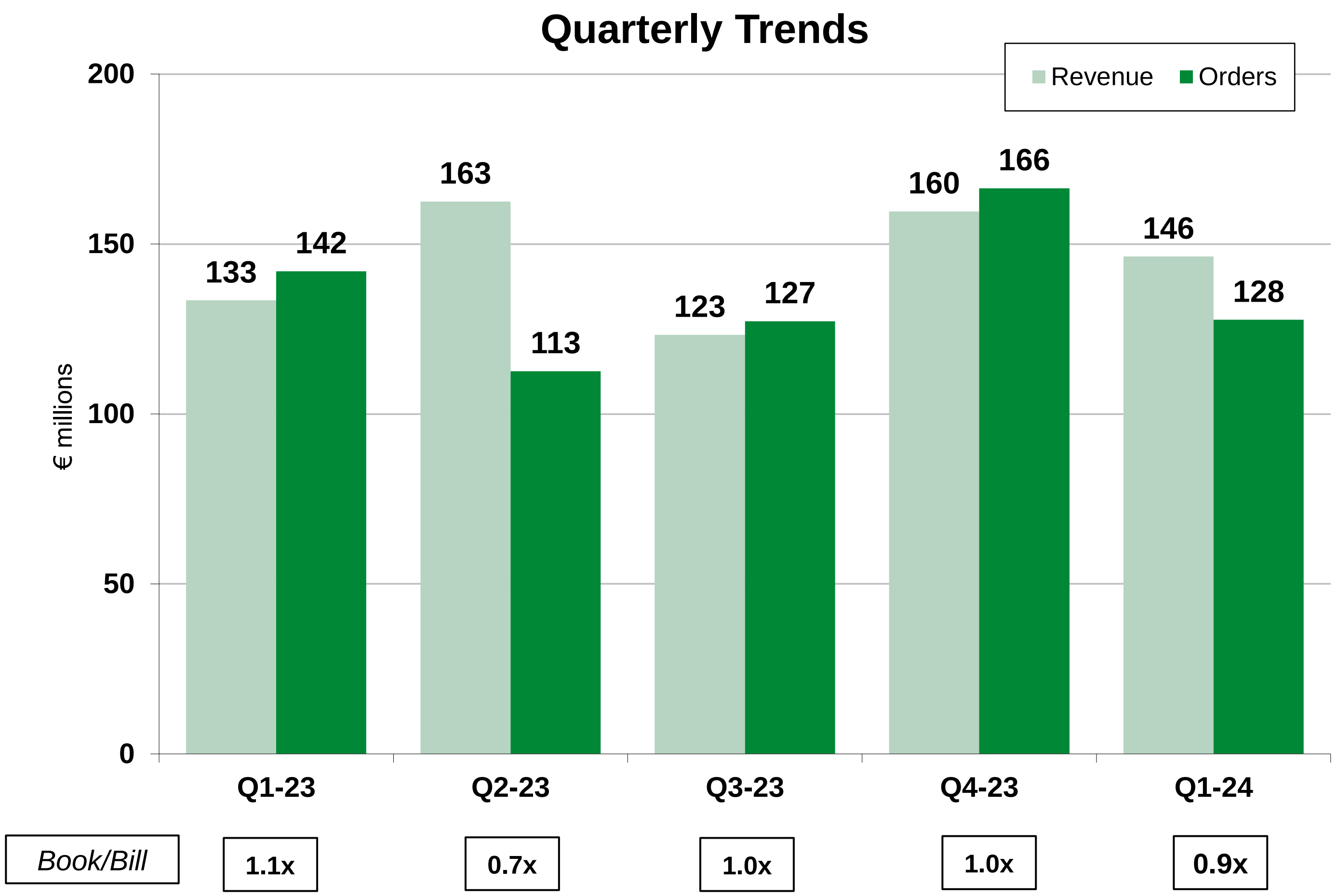
2024	2030
75% renewable sources for global energy needs	100% renewable sources for global energy needs
62% reduction in Scope 1 & 2 emissions*	Carbon neutral for Scope 1 & 2 emissions*
12% reduction in Scope 3 emissions*	20% reduction in Scope 3 emissions*
Above-benchmark employee engagement	Achieve revenue objectives with lower environmental impact
Compliance with CSRD	80% vendor compliance with Conflict Free Sourcing Initiative

Carbon Neutral By 2050

* As per Greenhouse Gas Protocol. Targets relative to 2021 baseline data

V. FINANCIAL UPDATE AND SUMMARY

Revenue/Order Trends



<u>Q1-24 vs. Q4-23</u>

- **Revenue: -€ 13.3 million (-8.3%)**
  - -Lower high-performance computing and automotive
  - Partial offset: +Increased shipments high-end smartphones

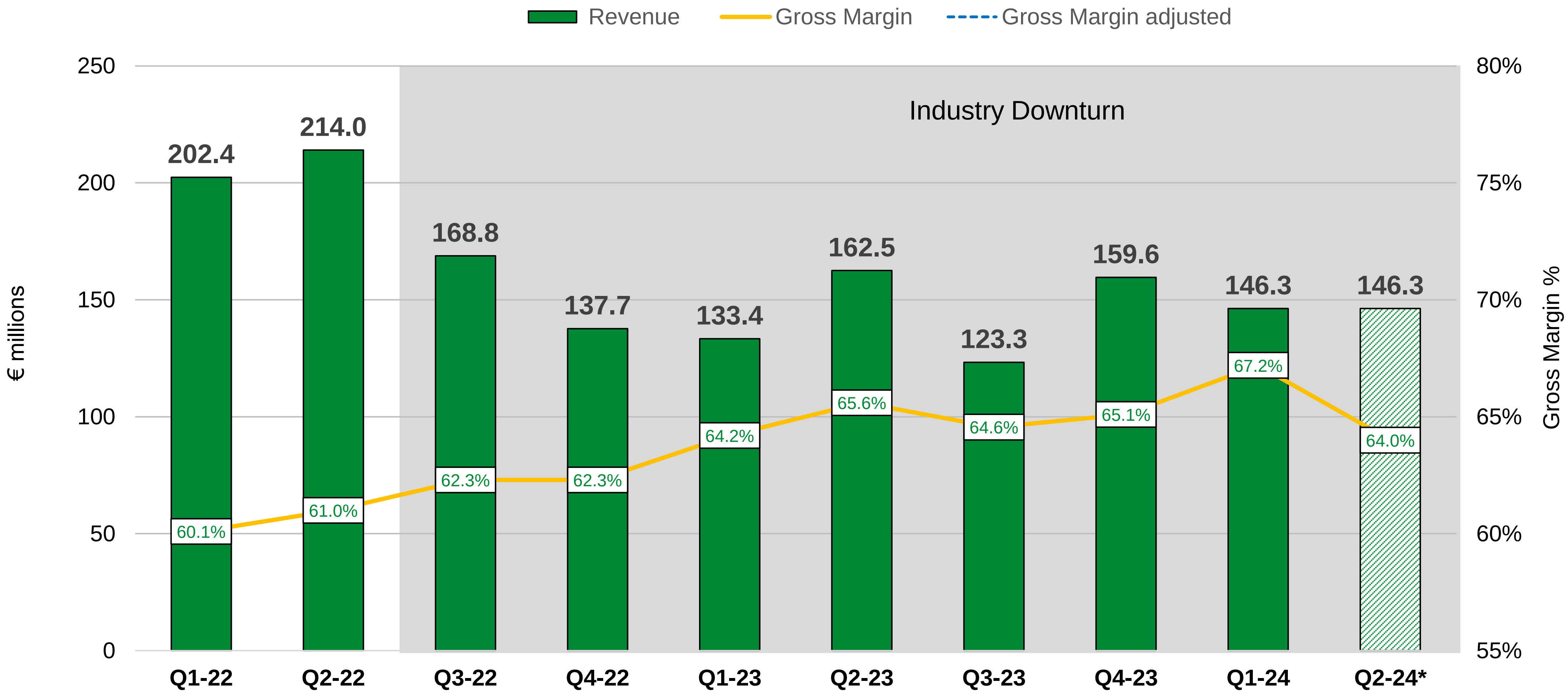
- **Orders: -€ 38.7 million (-23.3%)**
  - -Pause in 2.5D and 3D demand as capacity digested
  - +Continued strength in photonics applications
  - -Ongoing weakness in mainstream assembly

<u>Q1-24 vs. Q1-23</u>

- **Revenue: +€ 12.9 million (+9.7%)**
  - Higher shipments for 2.5D, 3D and photonics
  - Partial offset: lower smartphone demand

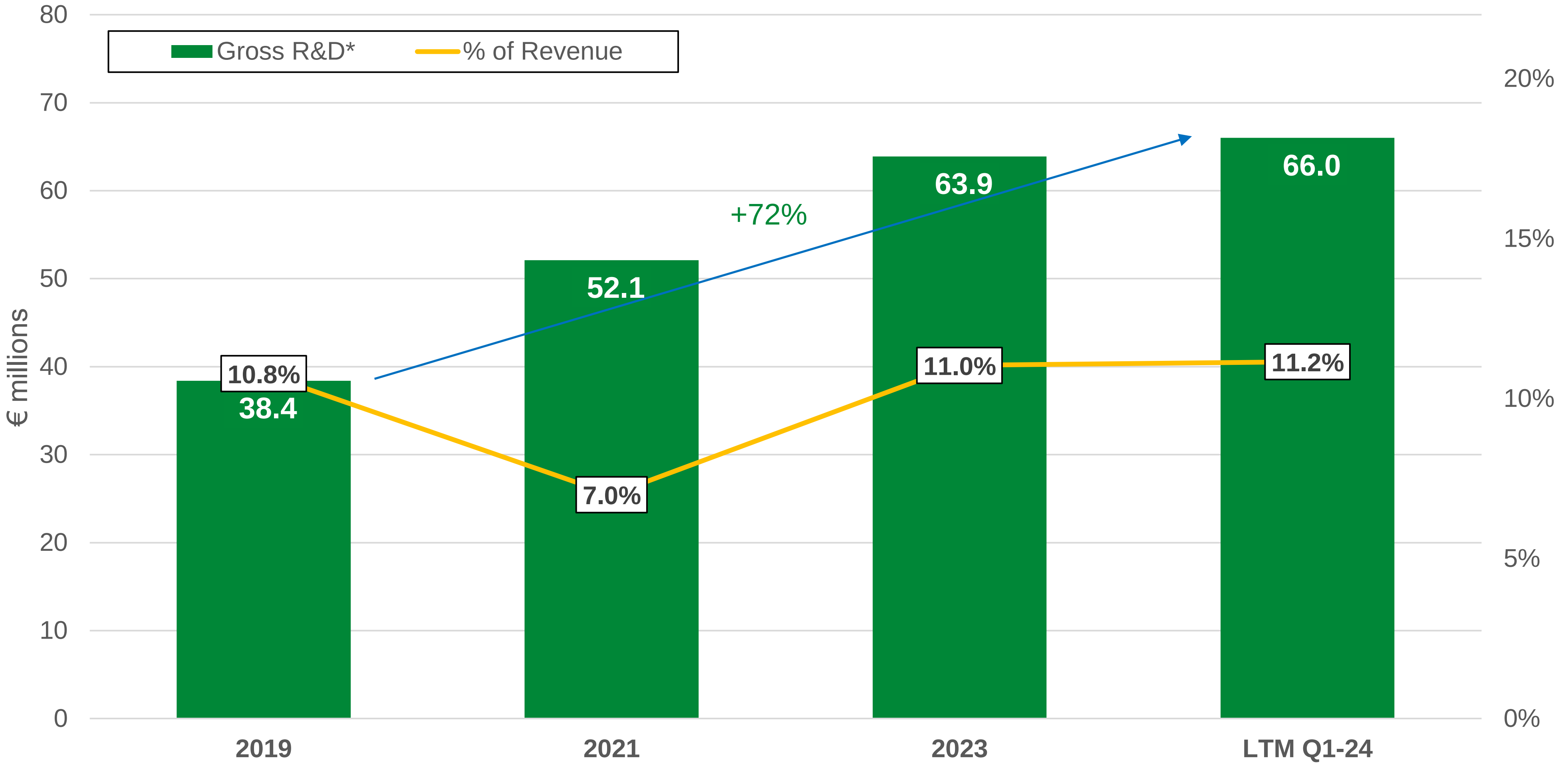
- **Orders: -€ 14.3 million (-10.1%)**
  - Lower bookings for high end mobile and automotive markets

Through Cycle Gross Margin Resilience and Growth



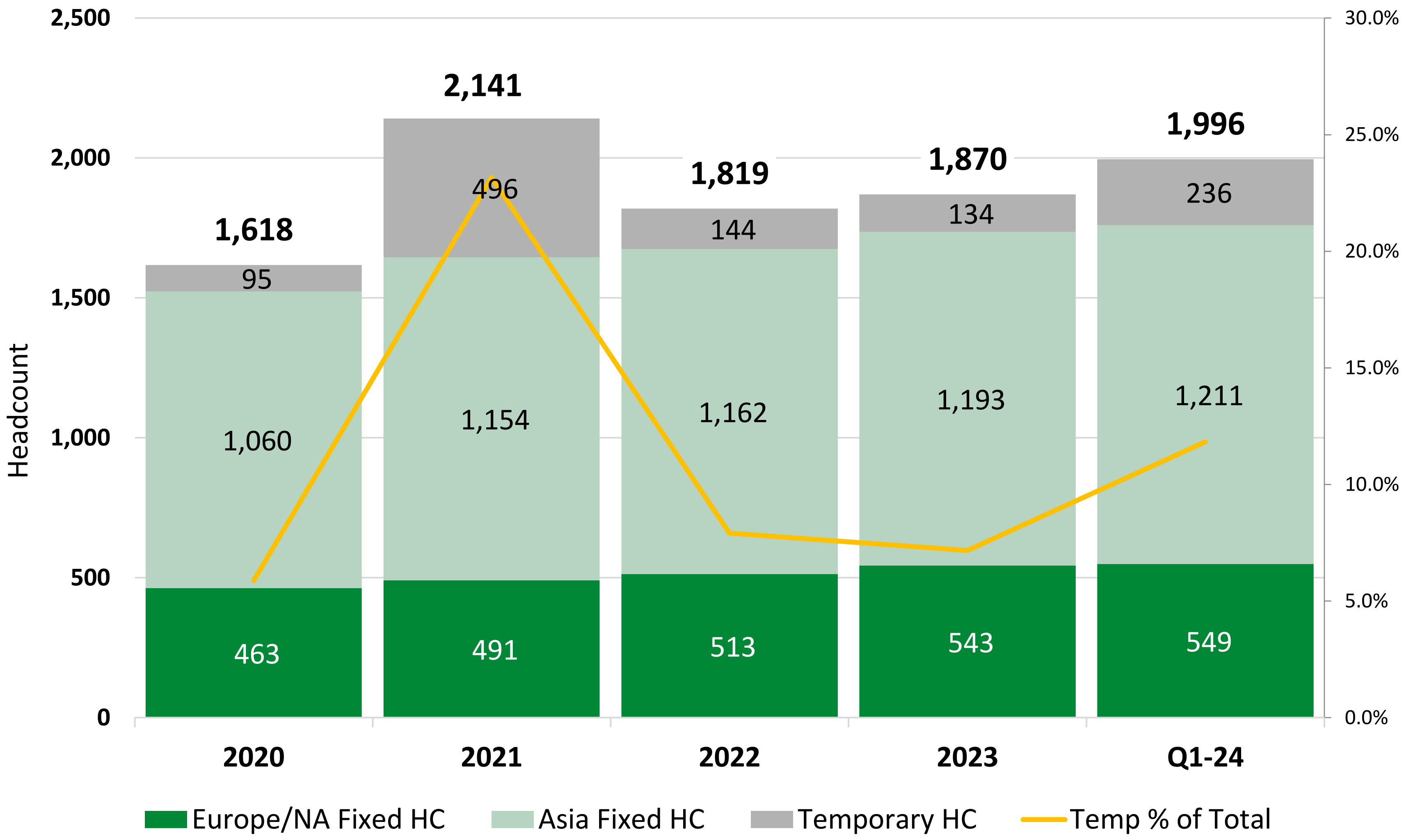
* At midpoint of guidance range.

Significant Expansion of R&D Spending



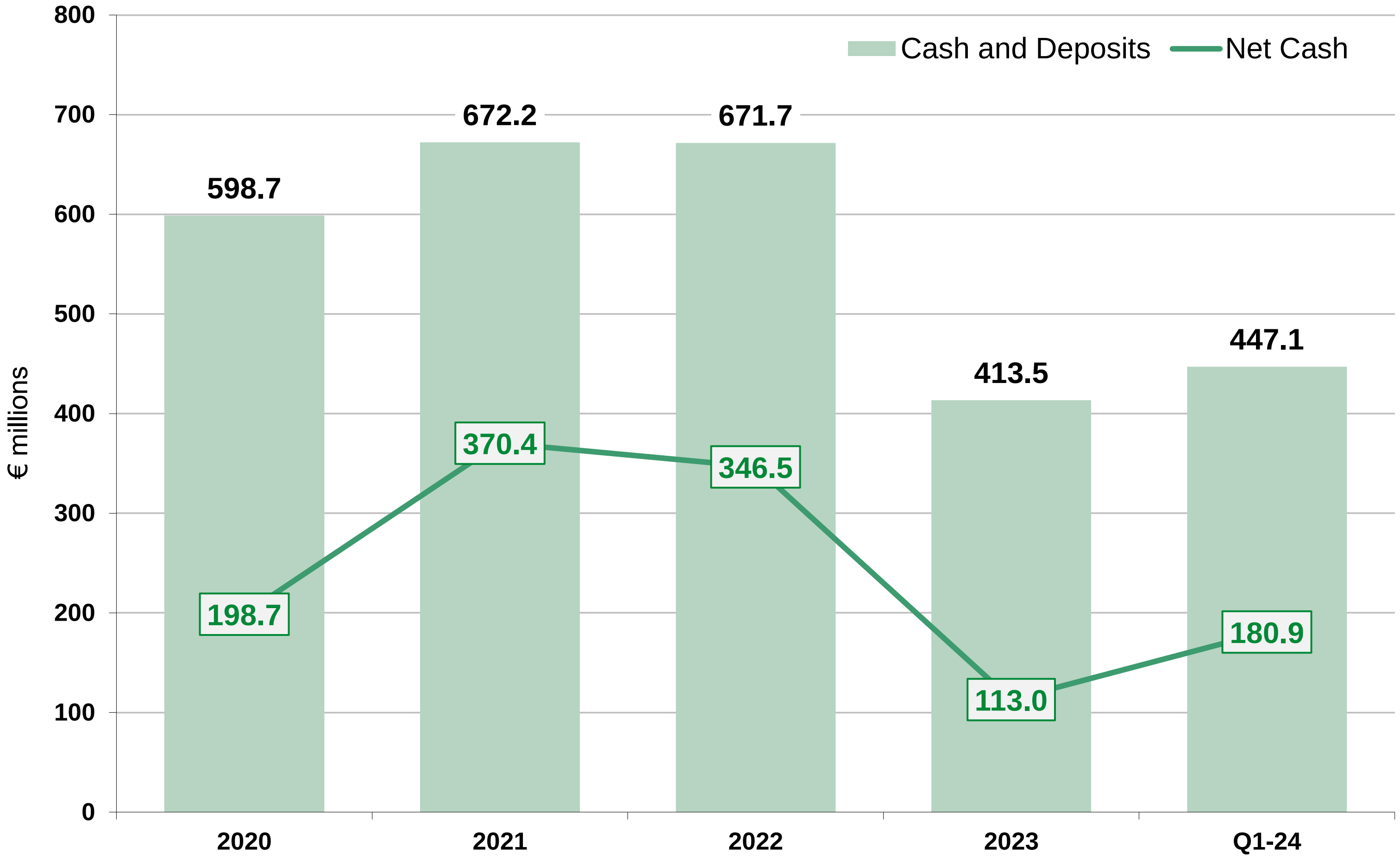
* Gross R&D spending excludes impact from capitalization/amortization of R&D costs

Headcount Trends



- Increasing European and Asian fixed headcount to support wafer level assembly expansion

Strong Liquidity Position Maintained. Cash and Net Cash Increasing



- **Solid cash flow generation:**
  - Net cash of € 113.0 million at year end (-67.4%)
    - Includes outflows of € 435.5 million for dividends and share repurchases (+ € 19.2 million vs. 2022)
- **Attractive funding to help finance growth:**
  - **Convertible debt:**
    - Per April 30, 2024: € 200.5 million outstanding
      - Blended interest rate 1.73%
  - **Revolving credit facility**
    - € 80 million expandable to € 136 million

Guidance Q2-24 & H1-24

€ in millions

Q2-24

	Revenue		Gross Margin		Total Operating Expenses	
	Q1-24	Q2-24	Q1-24	Q2-24	Q1-24	Q2-24
Q2-24	€ 146.3	+5 to -5%	67.2%	63%-65%	€ 57.6	-15% to -20%

HY1-24

	Revenue		Gross Margin		Total Operating Expenses	
	HY1-23	HY1-24*	HY1-23	HY1-24*	HY1-23	HY1-24*
HY1-24	€ 295.6	-1%	65.0%	+0.6pts	€ 87.7	+20%**

* At midpoint of Q2-24 guidance, compared to HY1-23

** Ex share-based compensation operating expenses are expected to increase by 11% at midpoint of guidance

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