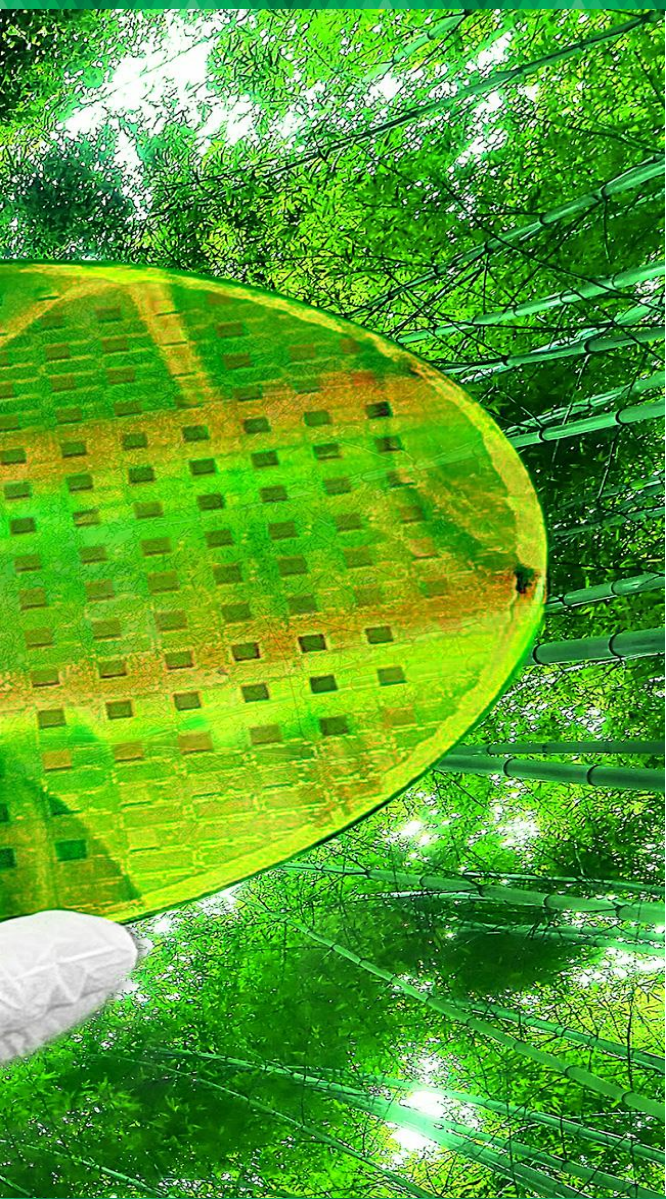




INVESTOR PRESENTATION

July 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. Company Overview
- II. Market Overview
- III. End-User Market Trends
- IV. Strategy
- V. Financial Update and Summary



I. COMPANY 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 advanced substrate and wafer level packaging
- ~75% of systems used for advanced packaging applications
- Global operations in 7 countries; 1,968 employees. HQ in the Netherlands

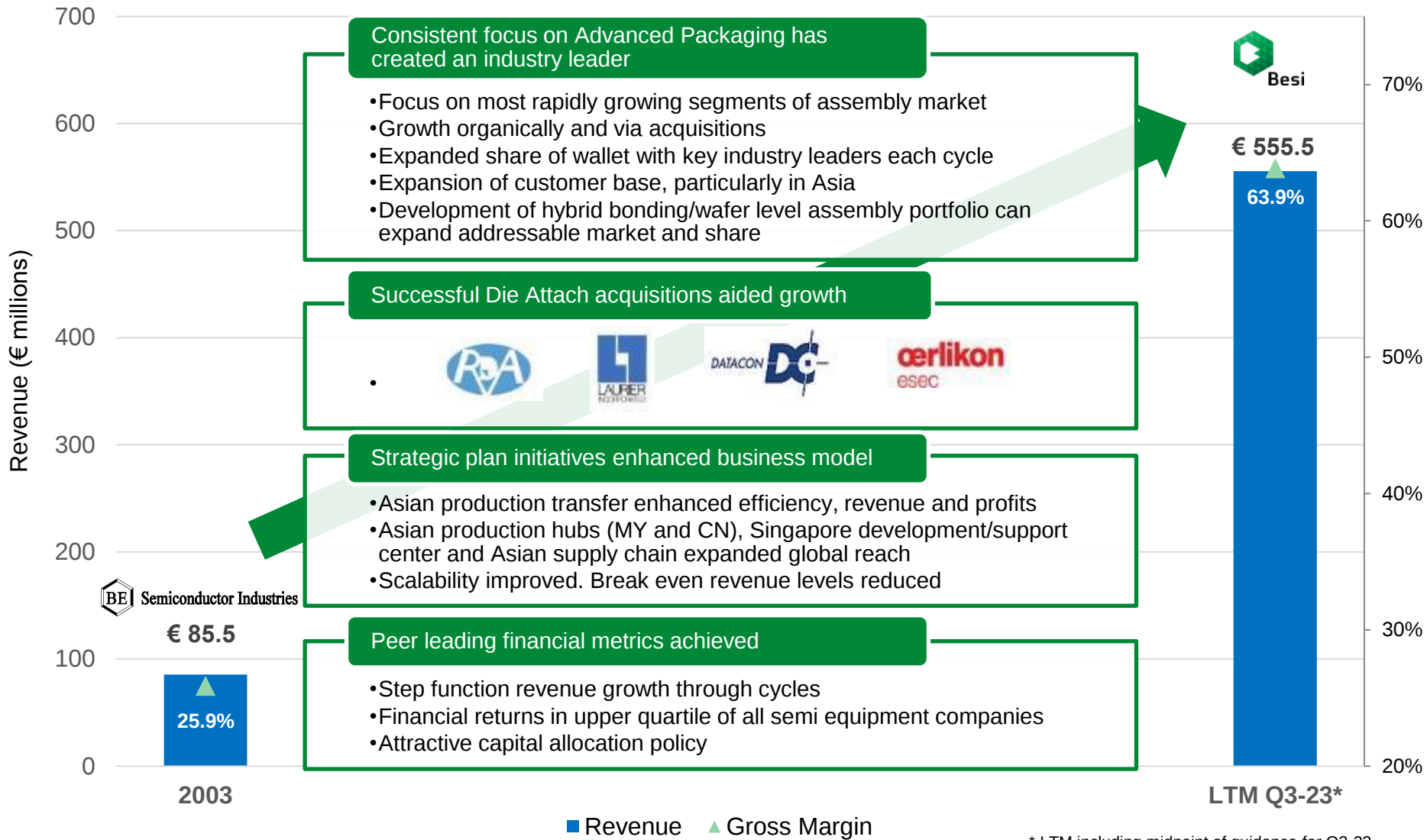
Financial Highlights*

- LTM revenue and net income of € 602.4 million and € 184.6 million
- Cash/deposits: € 378.3 million
- Net cash/deposits: € 74.0 million
- € 1.7 billion dividends/share repurchases since 2011 including 2022 dividend

Investment Considerations

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

* As of June 30, 2023.



Capital Allocation

Attractive capital allocation program

€ 1.7 billion of dividends and share repurchases since 2011*

Represents ~30% 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**:
182% (3 year)
429% (5 year)

Consistent TSR outperformance versus peers

Upper quartile ranking for all semi-equipment companies

* Includes share repurchases through July 27, 2023

** Through June 30, 2023

Industry Leading Equipment Portfolio

Die Attach (79% of 2022 Revenue)

Multi-Module Attach



- 2200 evo
- 2200 evo *plus*
- 2200 evo *hs*
- 2200 evo *advanced*
- 2200 evo *hf* **New**

Epoxy / Soft Solder



- 2100 hS
- 2100 hS *i*
- 2100 sD *advanced i*
- 2100 hS *ix*
- 2009 SSI
- 2100 SSI **New**

Flip-chip



- 8800 CHAMEO *advanced / PLP*
- 8800 CHAMEO *ultra* **New**
- 8800 FC Quantum *adv / sigma*
- 8800 FC Quantum *hs*
- 2100 FC *hs*

Direct Lid Attach



- DLA
- TGB 2.0 **New**

Embedded Bridge Attach



- DBA **New**

Thermo Compression



- 8800 TC *advanced* (Substrate)
- 8800 TC *NEXT* (Chip to Wafer) **New**

Hybrid Bonding



- 8800 CHAMEO *ultra plus*
- 8800 CHAMEO *ultra plus AC* **Q1-23**

Packaging & Plating (21% of 2022 Revenue)

Leadframe Molding



- AMS-i**
 - MEMS
 - Sensors
- AMS-X** **New**
 - HD Leadframe
 - Power Devices

Substrate Molding



- AMS-LM**
 - Substrate strip format
 - Exposed die
 - SIP packages **New**

Wafer & Panel Molding



- FML**
 - Wafer molding
 - Panel molding

Trim and Form



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

Singulation

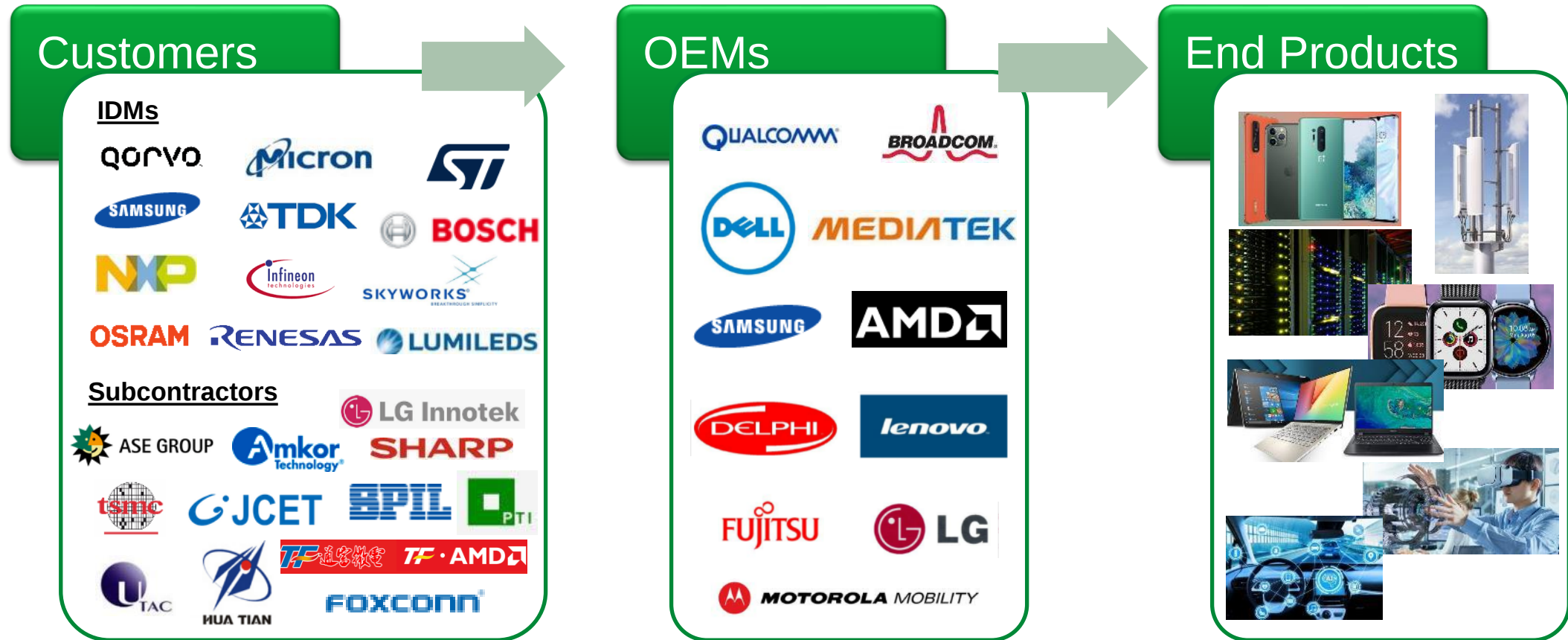


- FSL**
 - Substrate strip singulation
 - Sorting
 - Stepcut **New**

Plating



- Leadframe
- Power Modules **New**
- Film & Foil
- Chemical Deflash
- Wettable Flank **New**
- Flux cleaning **New**



- Diversified, blue chip customer base, top 10 = ~54% of 2022 revenue
- Leading IDMs and subcontractors. 55%/45% order split in 2022
- Also supply leading fabless companies: Qualcomm, AMD, Broadcom, MediaTek via subcontractors
- Long term relationships, some exceeding 50 years

From Processed Wafer to Assembled Chip

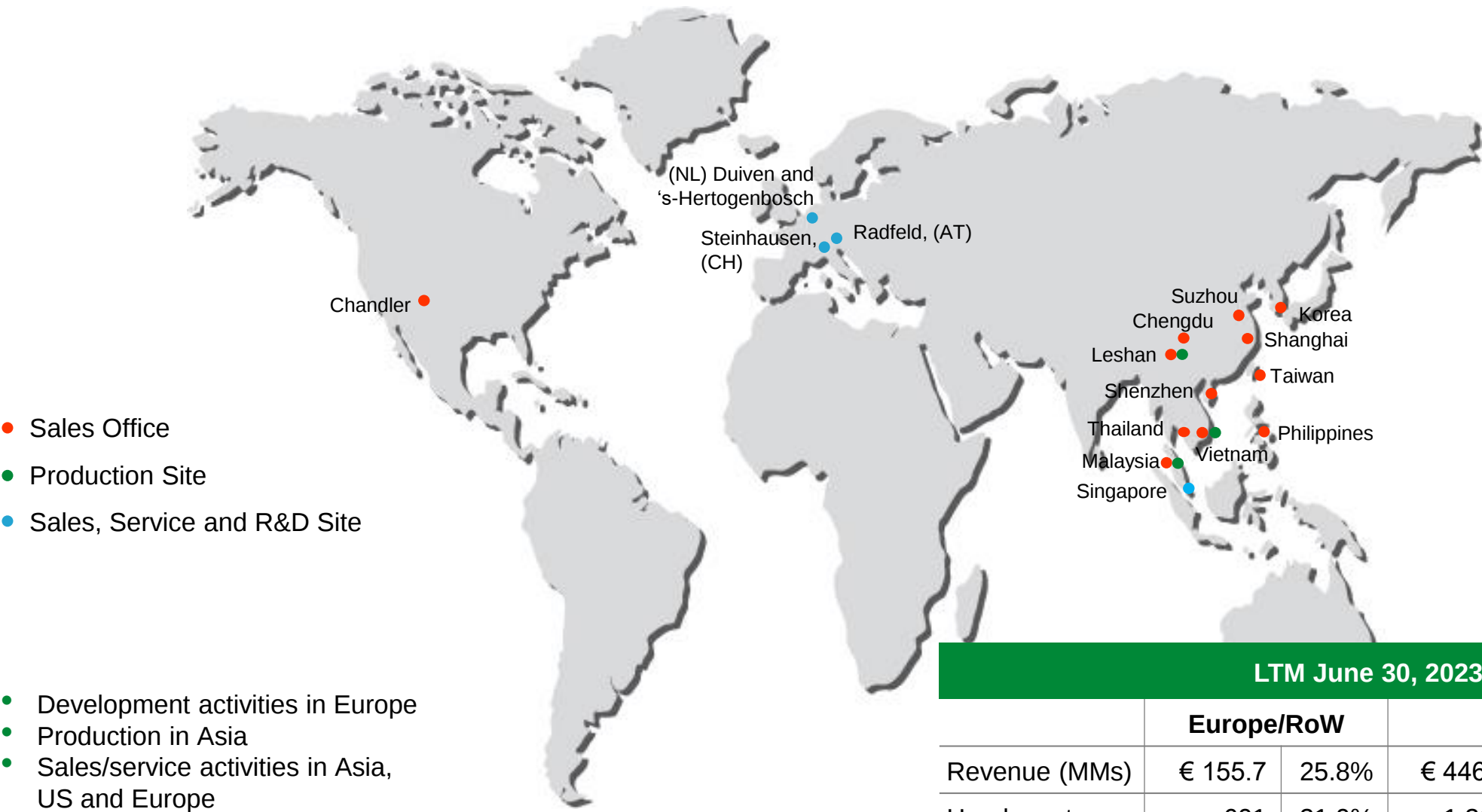
Semiconductor Manufacturing Equipment 2022: \$111.4B*		
Front end: \$97.7B (88%)	Assembly: \$5.5B (5%)	Test: \$8.2B (7%)

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, July 2023

Current Operational Profile



LTM June 30, 2023				
	Europe/RoW		Asia	
Revenue (MMs)	€ 155.7	25.8%	€ 446.7	74.2%
Headcount	601	31.0%	1,367	69.0%

Summary Financials

Year Ended December 31, (€ millions, ex share data)	2020	2021	2022	H1-22	H1-23
Revenue	433.6	749.3	722.9	416.4	295.9
% seq. change	+22%	+73%	-3.5%	+13%	-29%
Orders	472.1	939.1	663.7	357.9	254.6
Gross margin	59.6%	59.6%	61.3%	60.5%	65.0%
EBITDA	169.0	335.1	317.1	185.2	117.5
Pretax income	137.5	303.8	294.1	164.7	101.4
Net income	132.3	282.4	240.6	143.2	87.1
Net margin	30.5%	37.7%	33.3%	34.4%	29.5%
EPS (diluted)	1.67	3.39	2.90	1.81	1.12
EPS (basic)	1.82	3.70	3.03	1.71	1.09
Dividend per share	1.70	3.33	2.85		
Net cash & Deposits	198.7	370.4	346.5	284.0	74.0

Long-term, step function growth in cyclical business

- Increased revenue, profitability and market share per cycle

H1-23 Revenue and Net Income -28.9% and -39.2% vs. H1-22

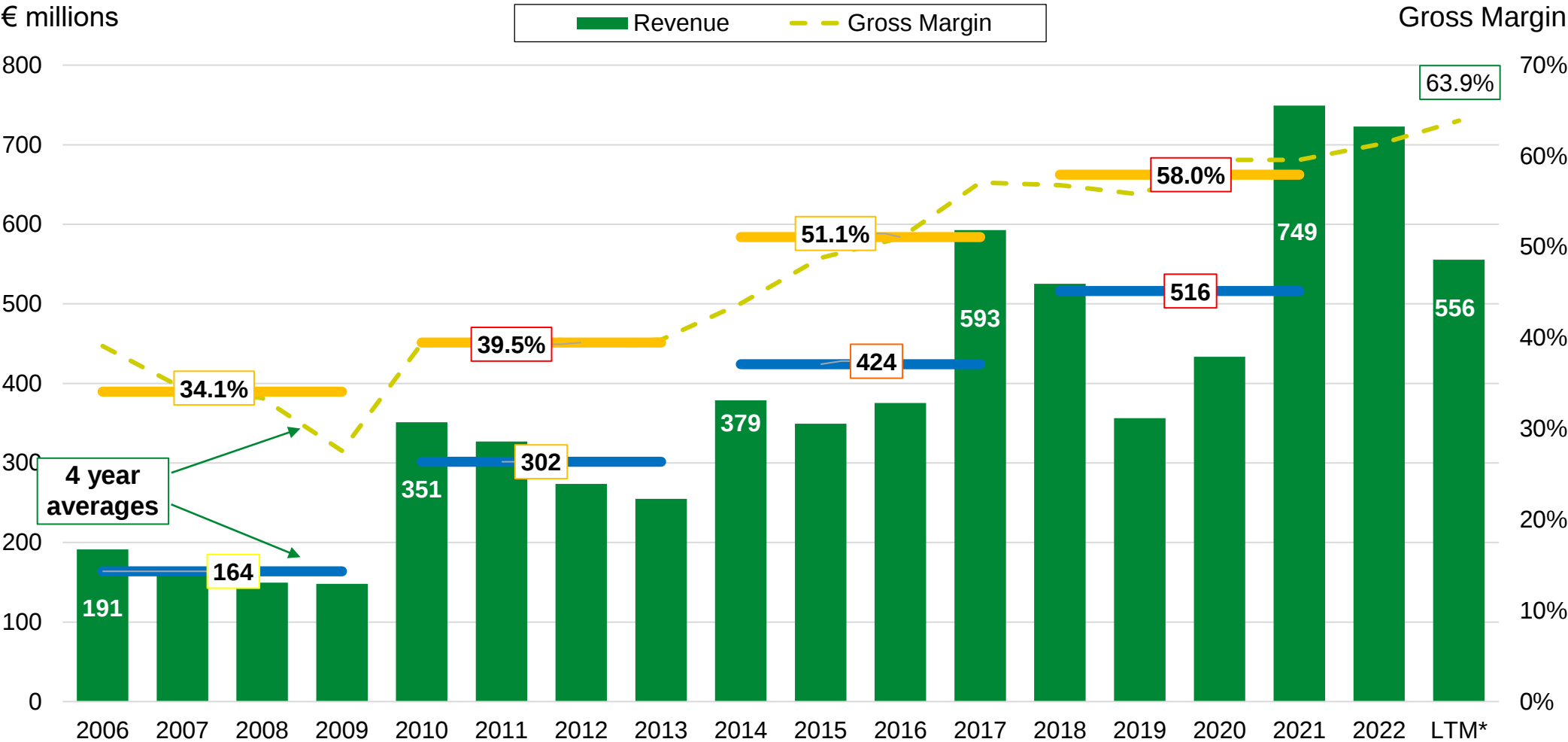
- Industry downturn continues
- Order trends primarily reflect broad based weakness in computing end user markets

Strong margins and profitability

- Attractive gross and net margins maintained due to overhead alignment with market conditions and favorable product mix

Strong cash generation supports shareholder friendly capital allocation policy

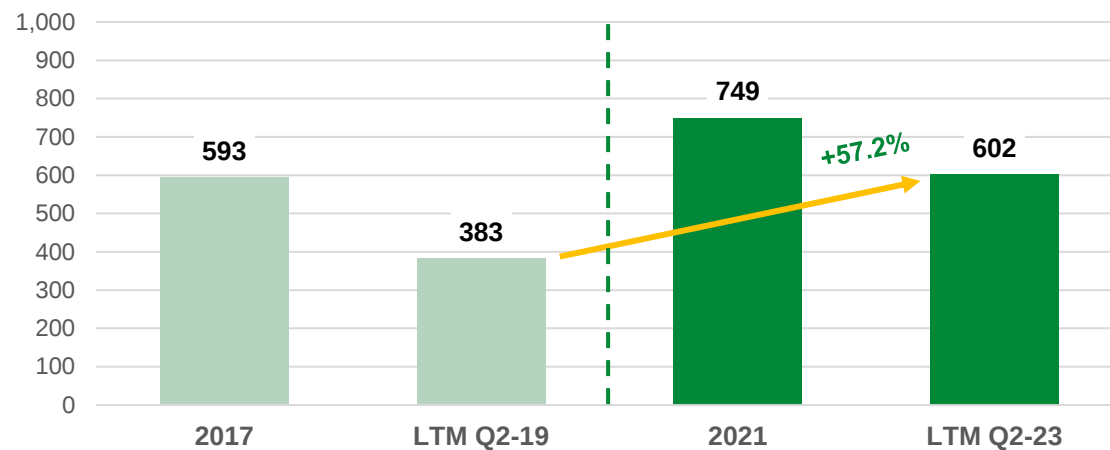
Through Cycle Revenue and Gross Margin Trends



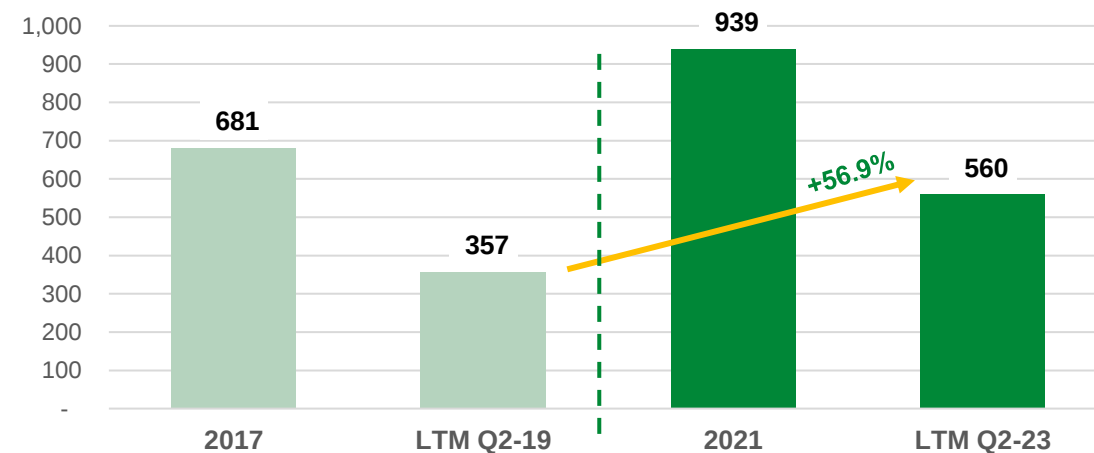
* LTM including midpoint of guidance for Q3-23.

Continued Outperformance vs. Last Industry Downturn

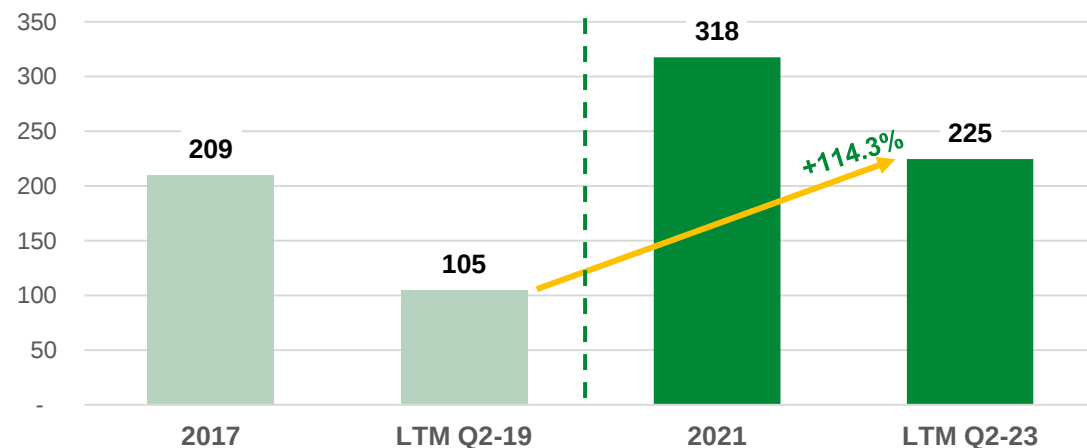
Revenue (€MM)



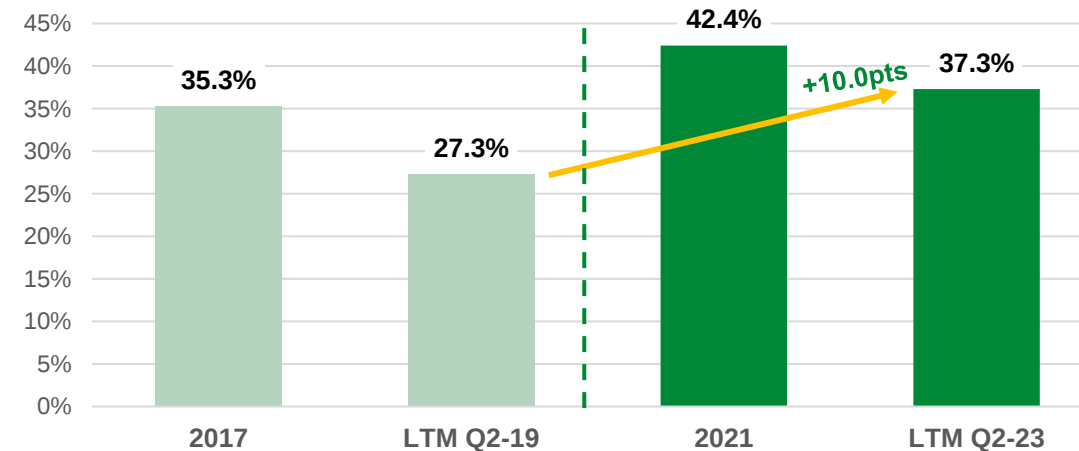
Orders (€MM)



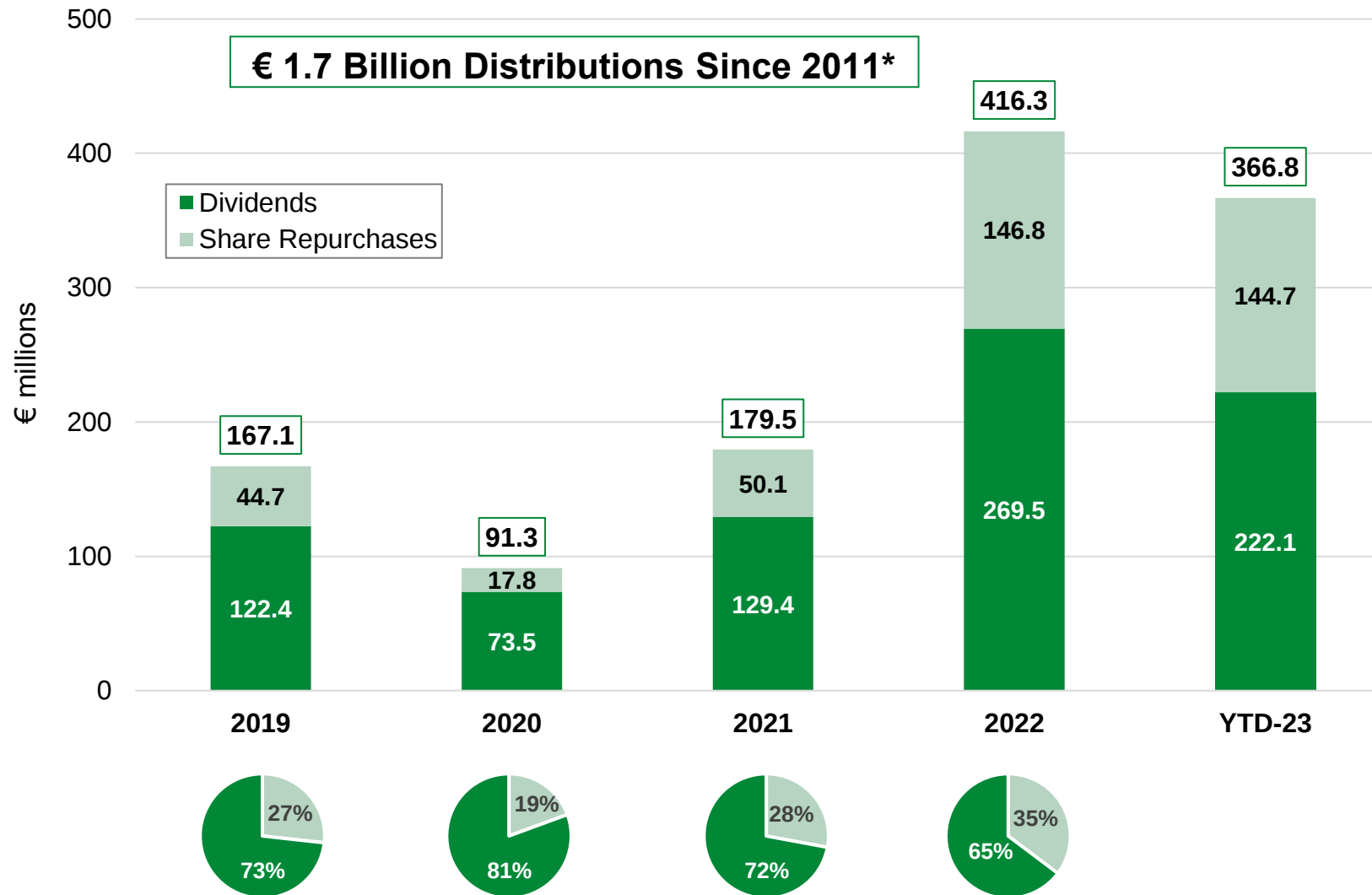
Operating Profit (€MM)



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

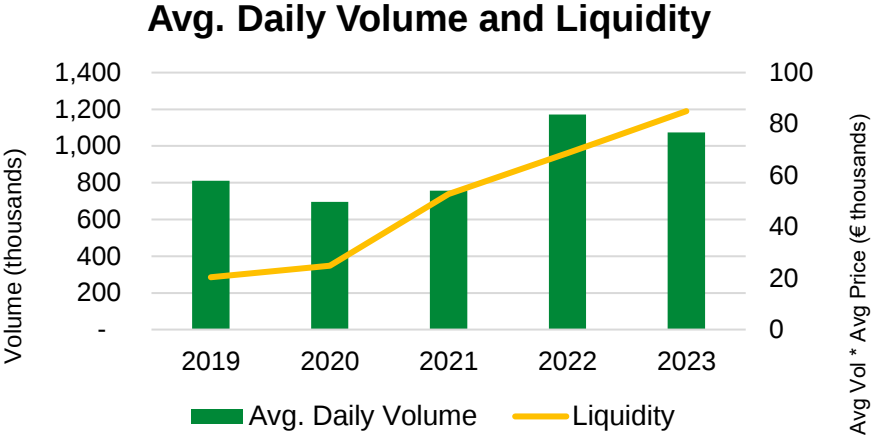
* Includes share repurchases through June 30, 2023

Besi Market Cap and Liquidity Has Expanded Shareholdings Migrated from NL to US/UK over Past Years

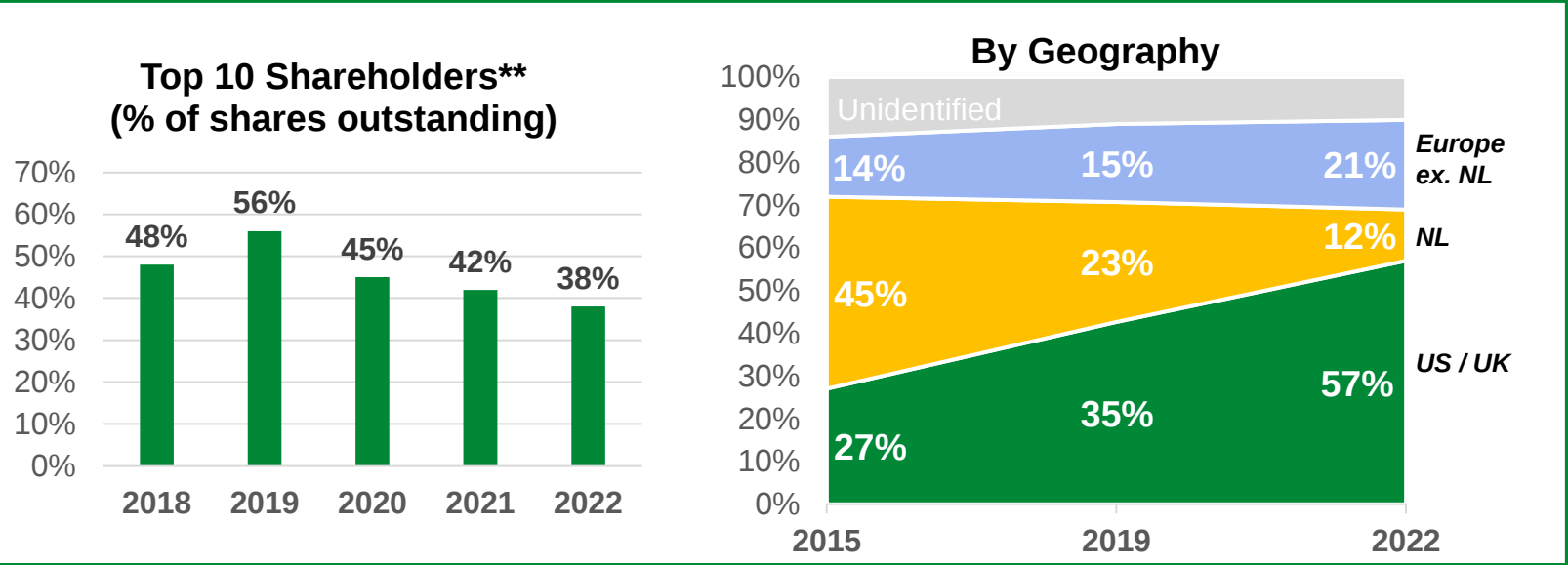


Market Profile

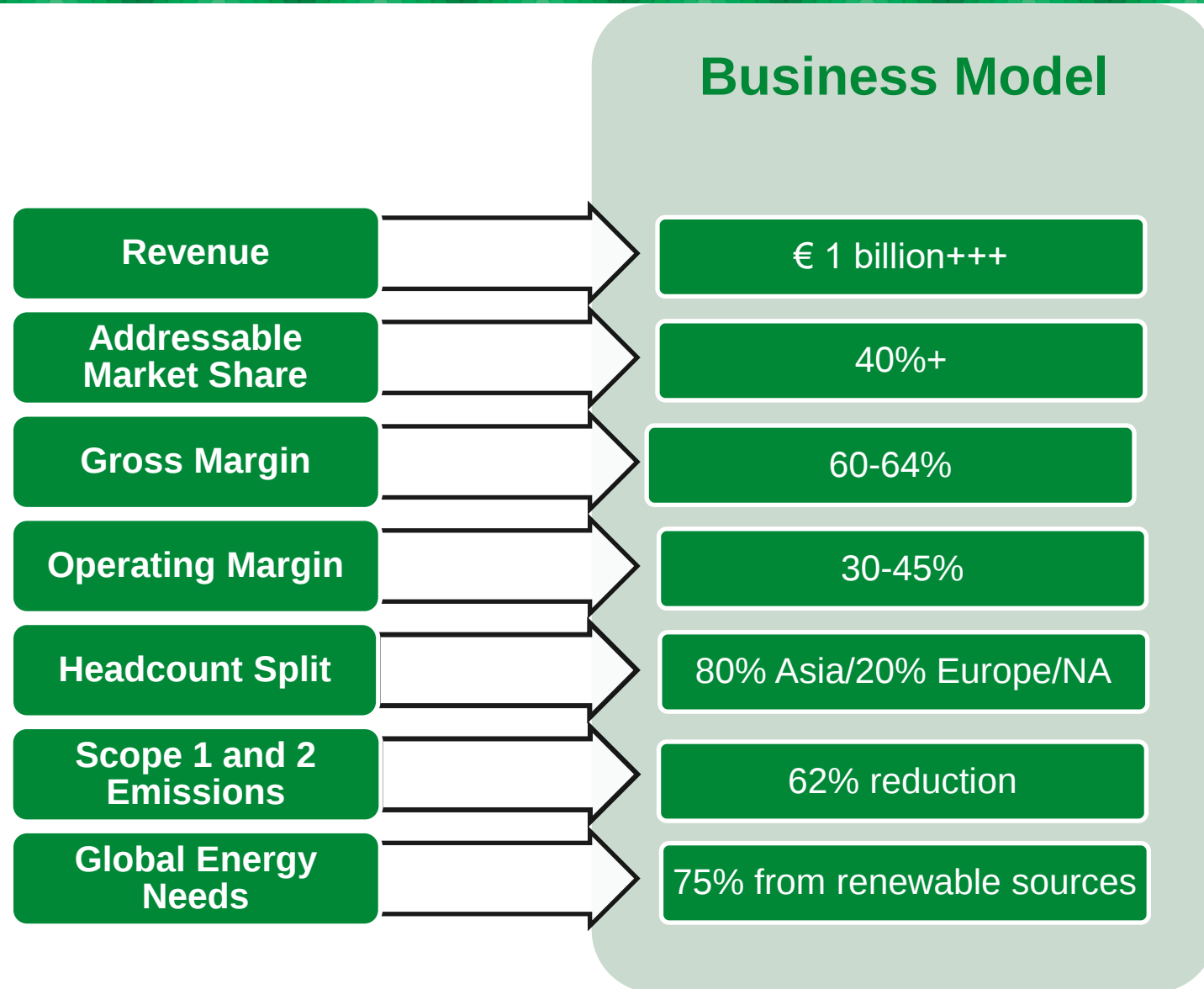
Symbol/ Index	• BESI • Euronext AEX
Market Cap*	• € 7.7 billion (\$ 8.4 billion)
Dividend Policy	• Pay out 40-100% of net income per annum

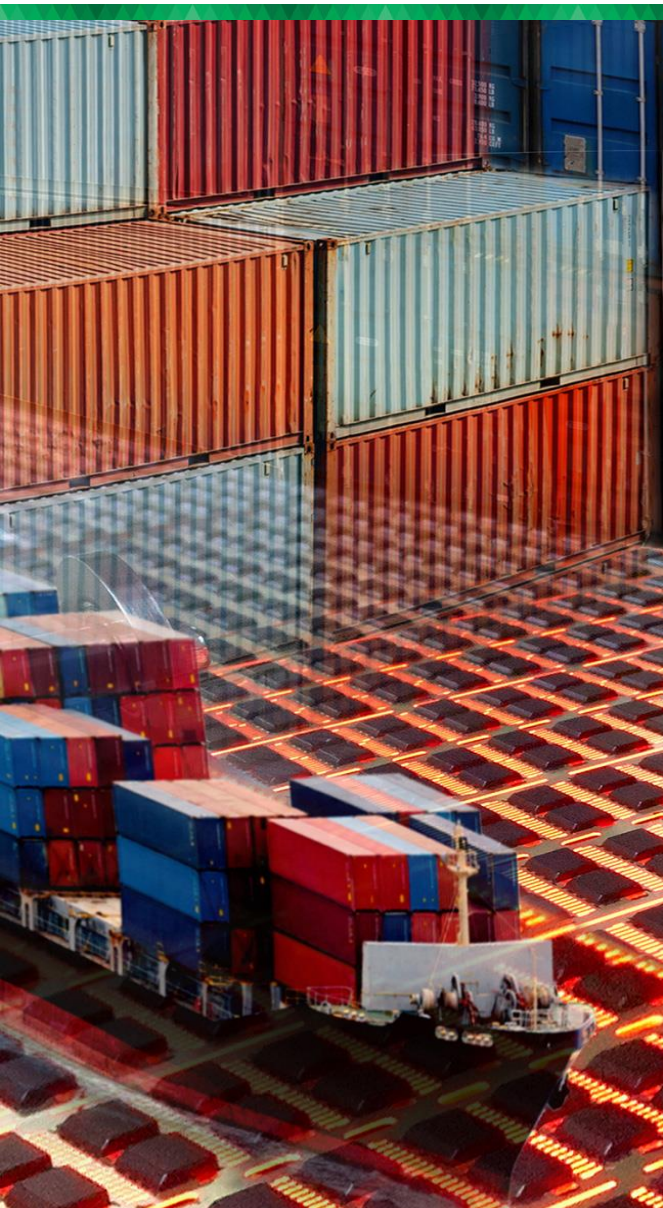


Share Ownership



* As of June 30, 2023 ** Besi estimates





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

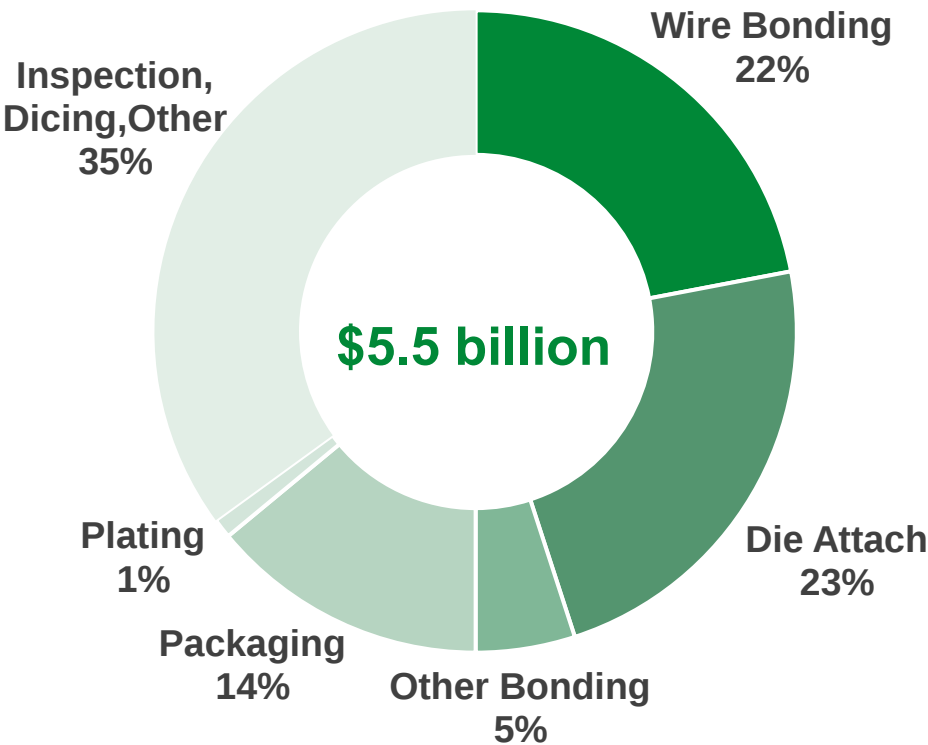
Performance in
24/7 production
environments

Competitive
cycle times and
scalability

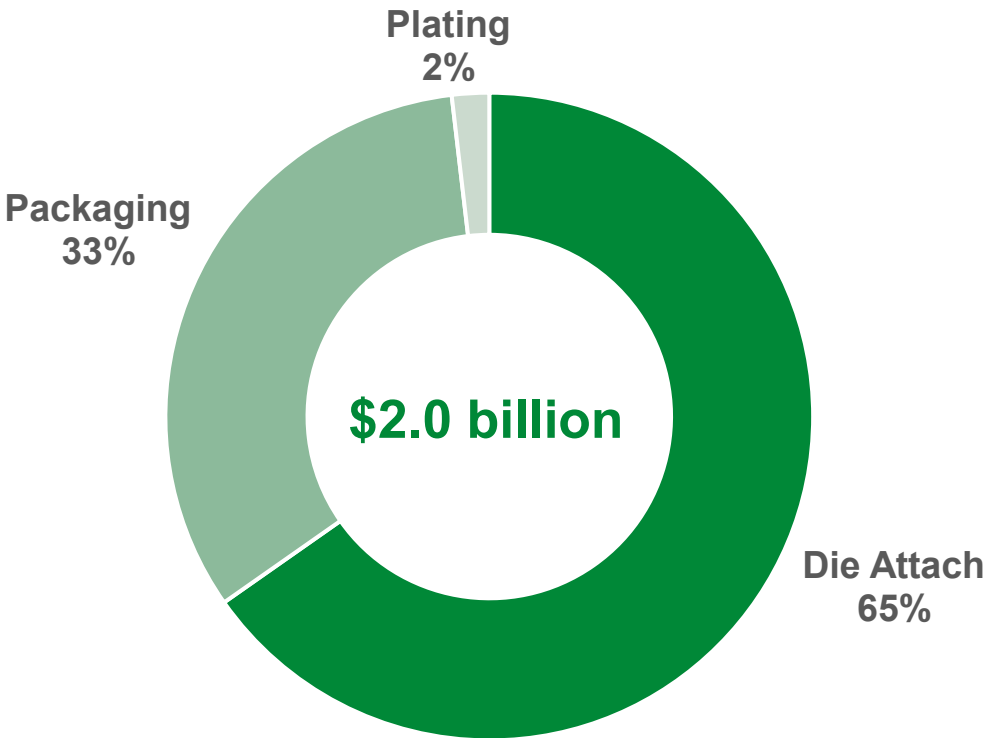
Assembly Equipment Market Composition



Assembly Equipment Market (2022)

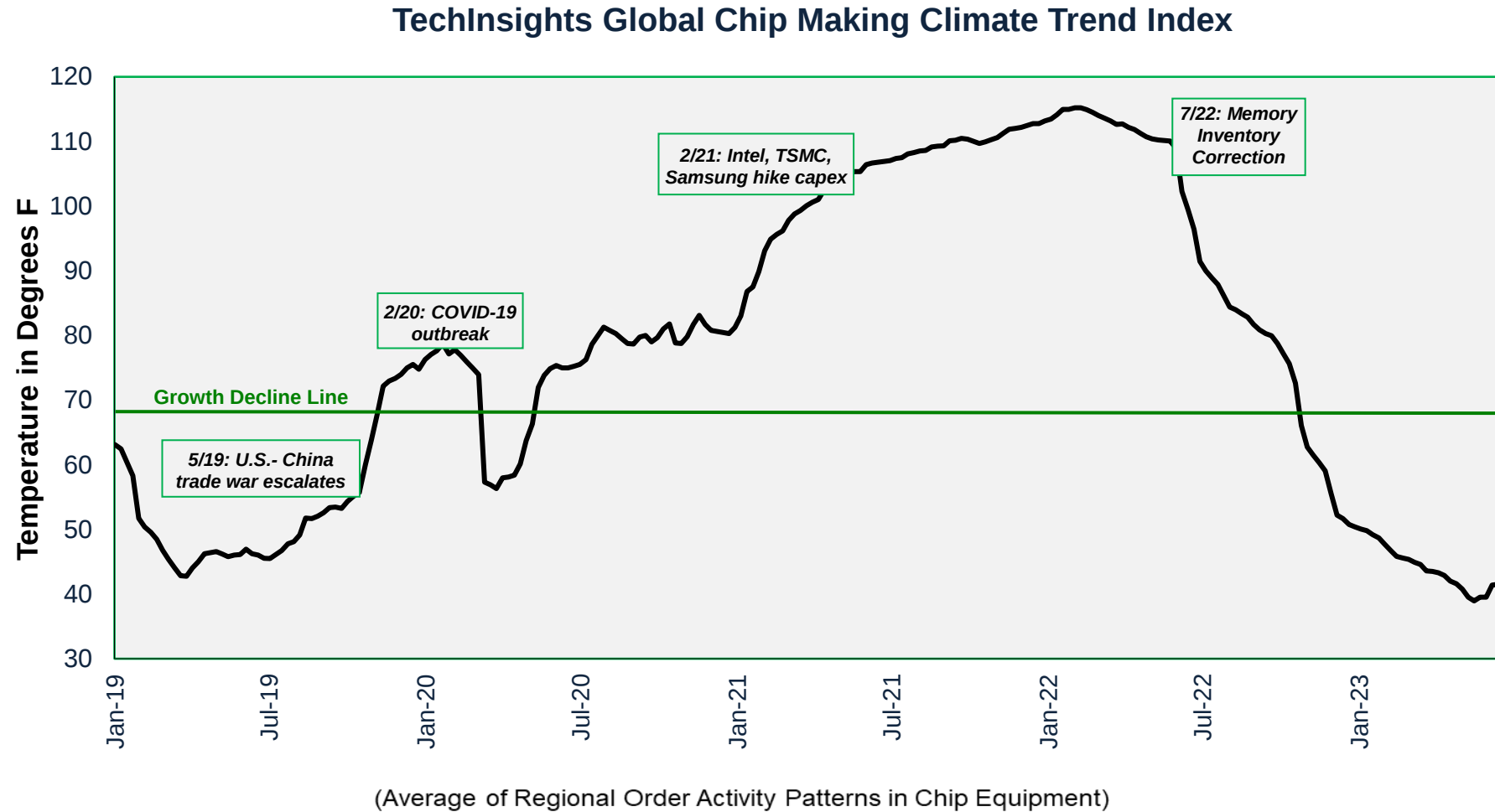


Besi Addressable Market (2022)



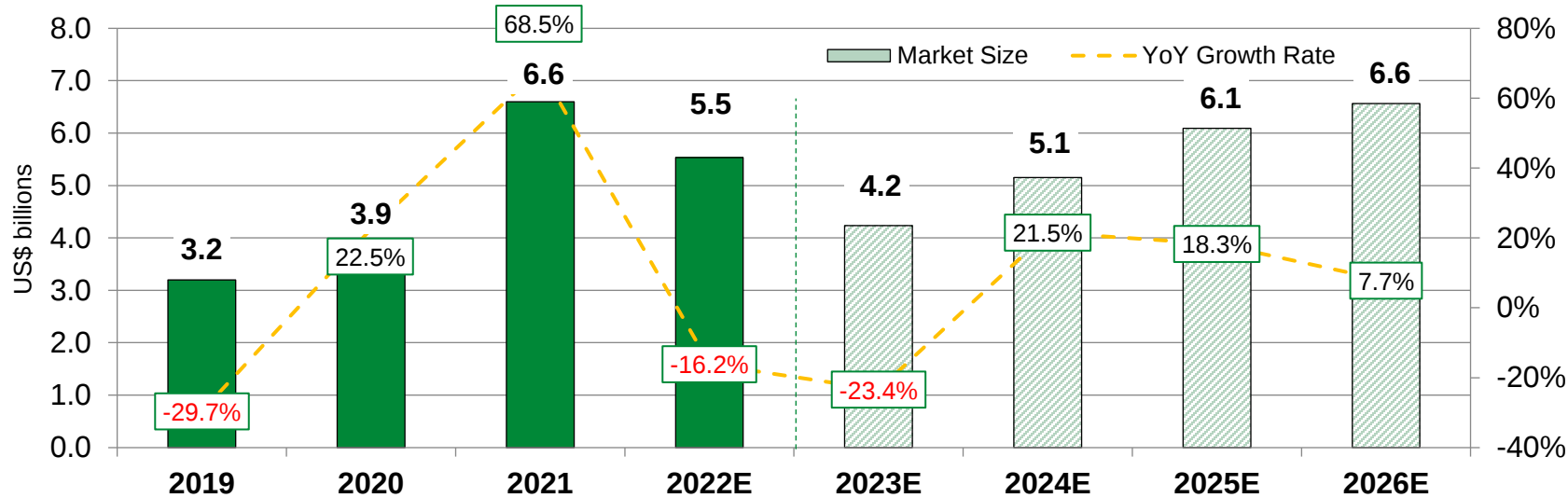
Source: TechInsights, July 2023

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.

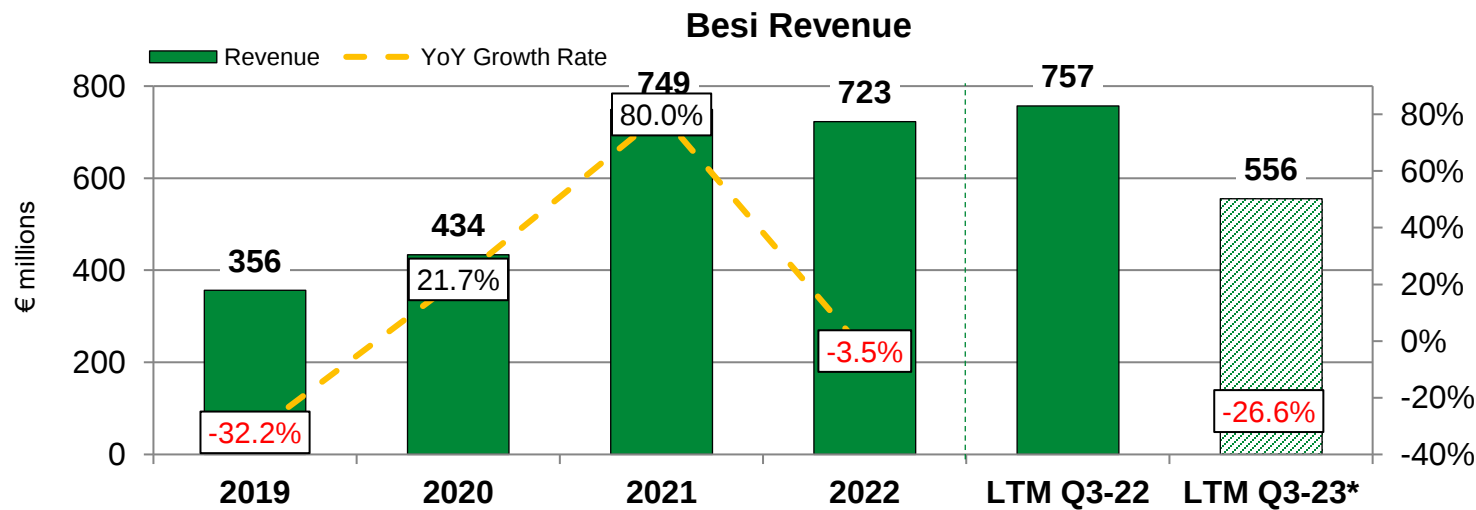
TechInsights forecasts 23.4% downturn in 2023

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

Strong rebound anticipated in 2024 and 2025

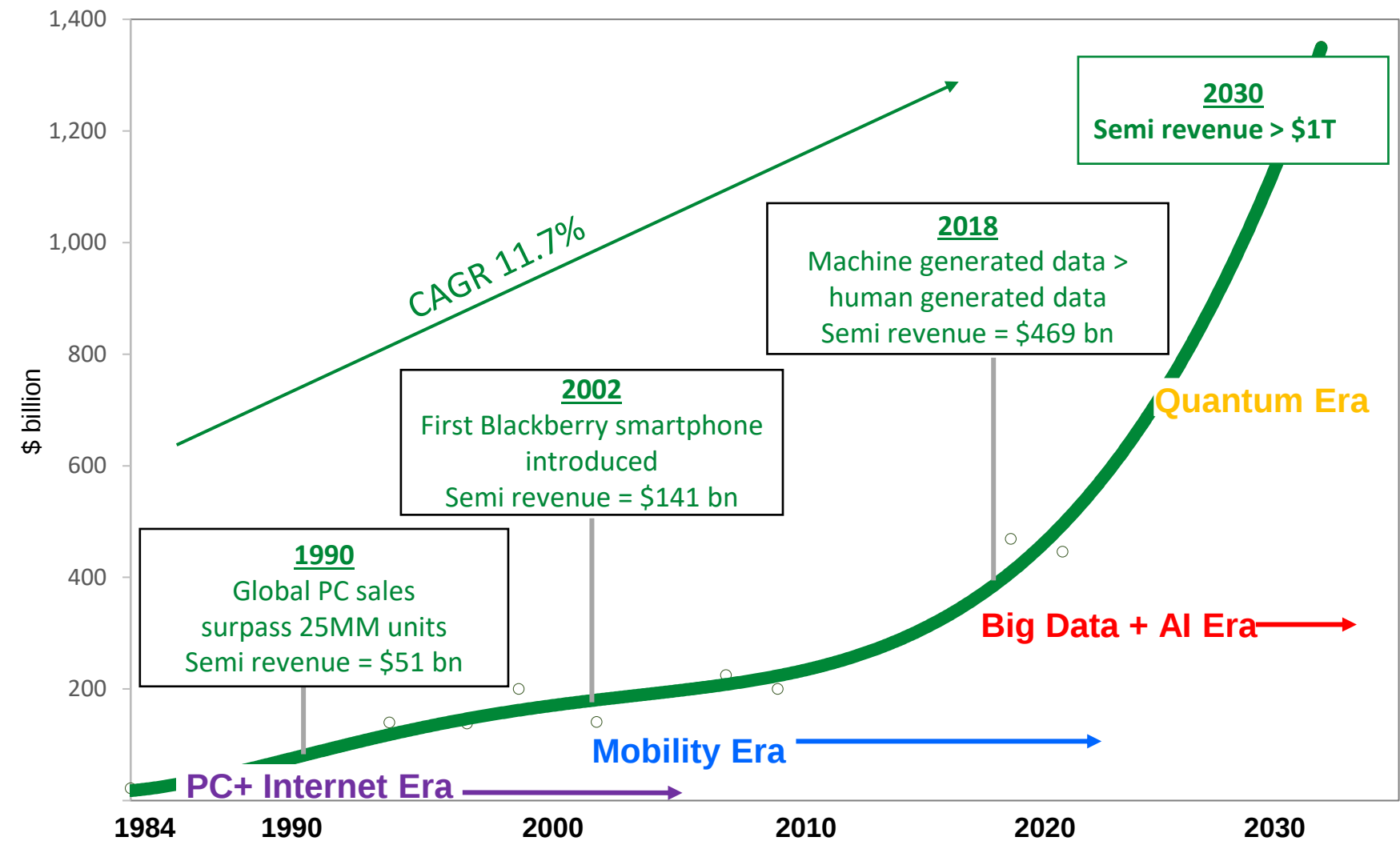
Secular fundamentals intact:

- 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

Long-Term Semiconductor Demand Growth Continues



- Market required ~50 years to reach \$500 billion in sales
- Estimates call for > \$1 trillion in sales within next 10 years

Data source: SEMI 2022

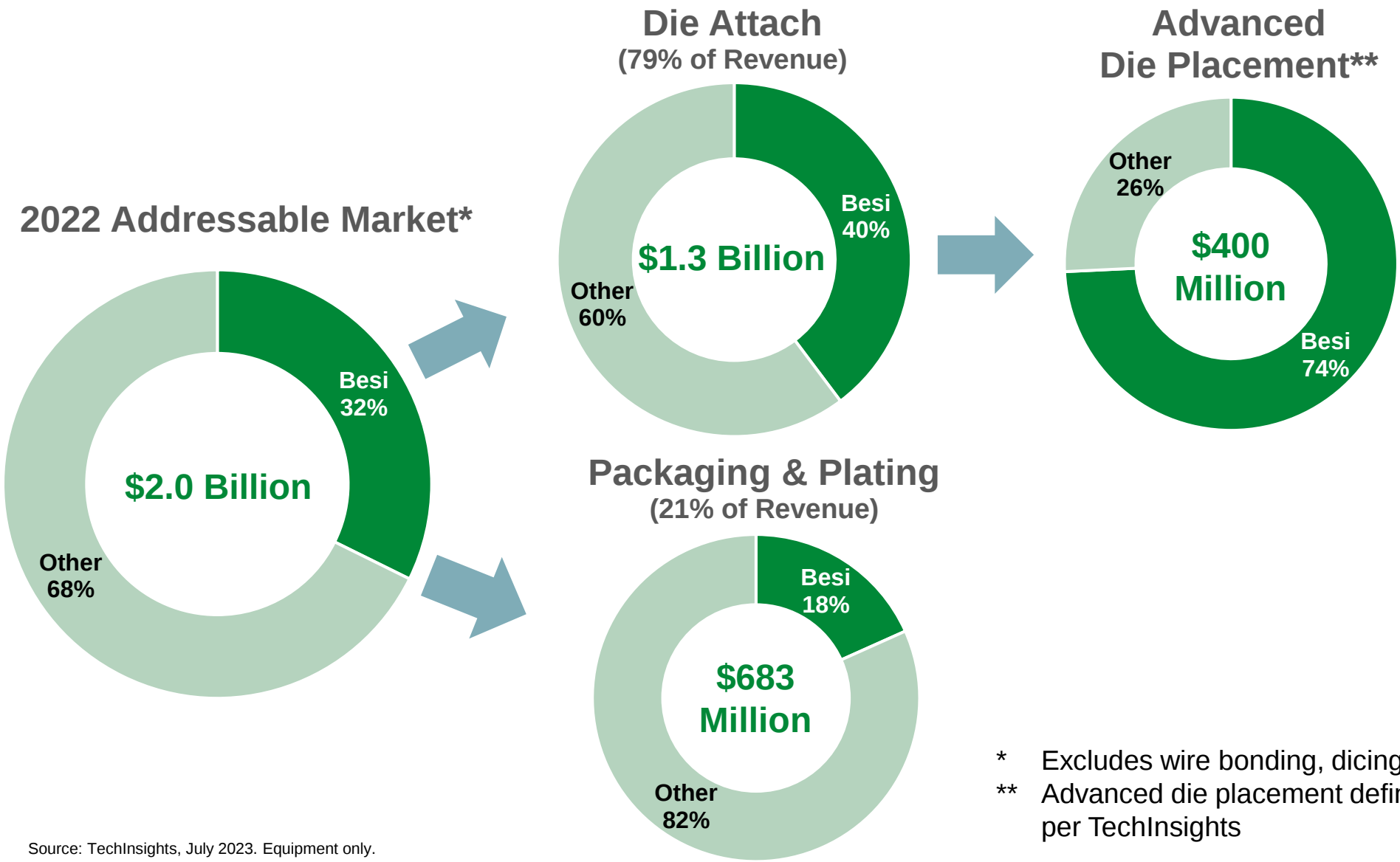
Besi Addressable Market Share Increasing Particularly in Key Die Attach Markets



	2016	2018	2020	2021	2022	Δ '22/'21	Δ '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	Δ '22/'21	Δ '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



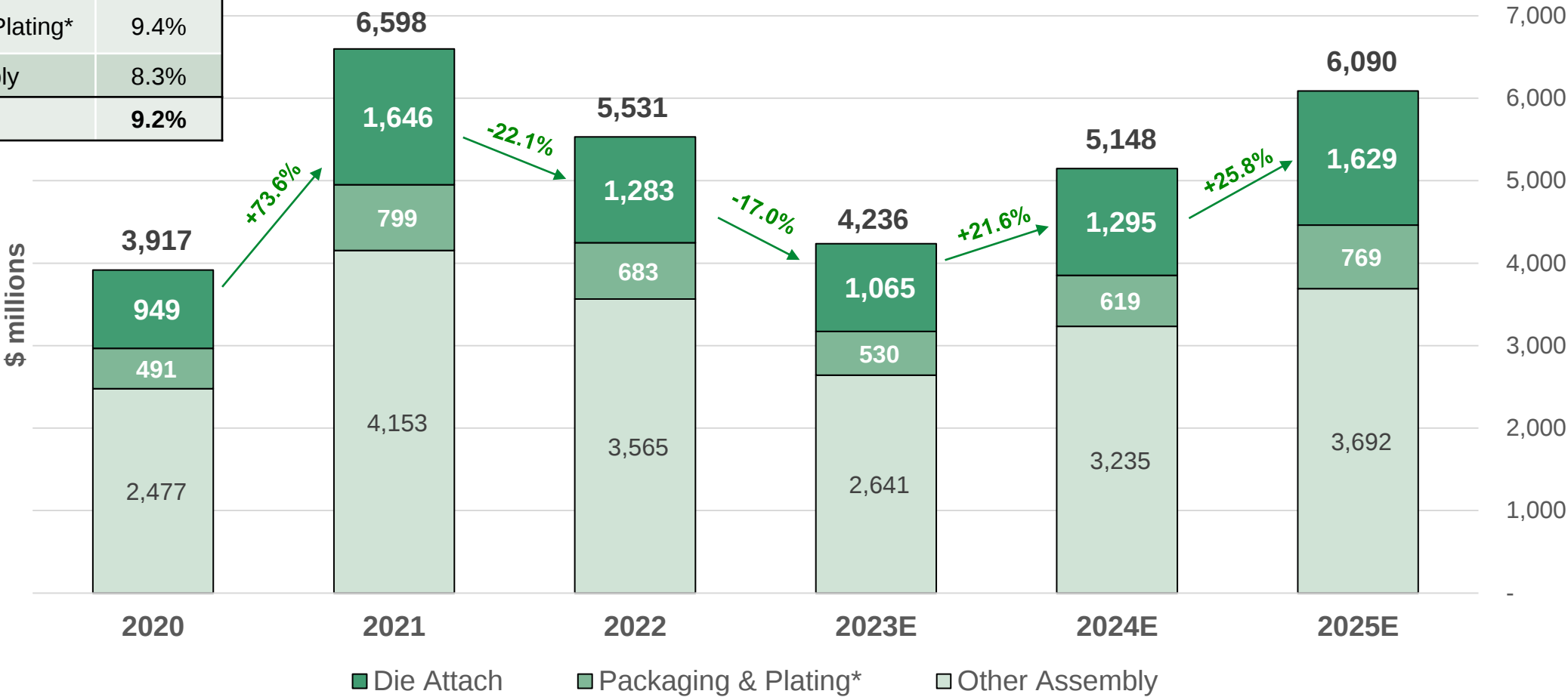
* Excludes wire bonding, dicing, and other.
** Advanced die placement defined as < 7 micron accuracy per TechInsights

Source: TechInsights, July 2023. Equipment only.

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

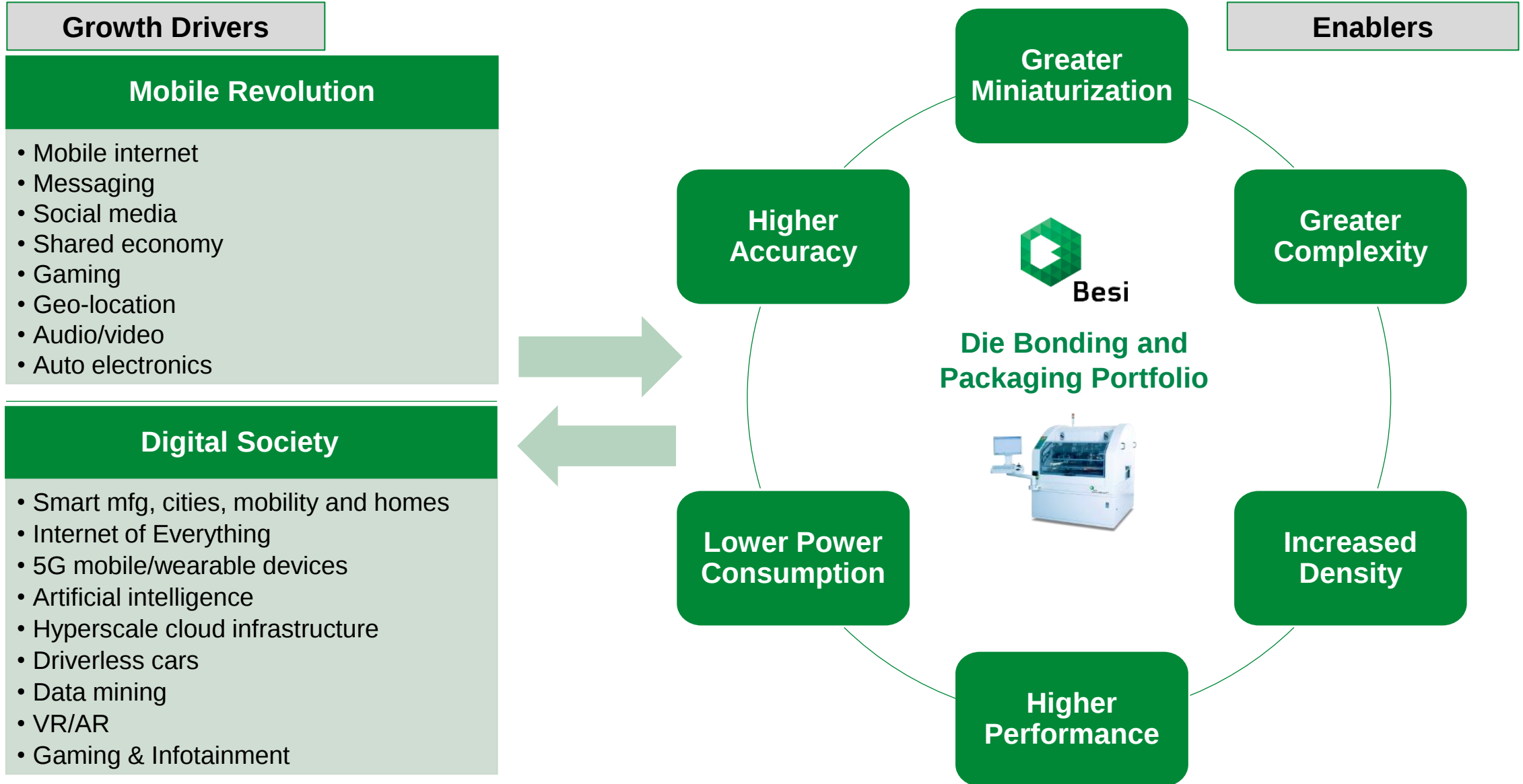


CAGR (2020-2025)	
Die Attach	11.4%
Packaging & Plating*	9.4%
Other Assembly	8.3%
Total	9.2%

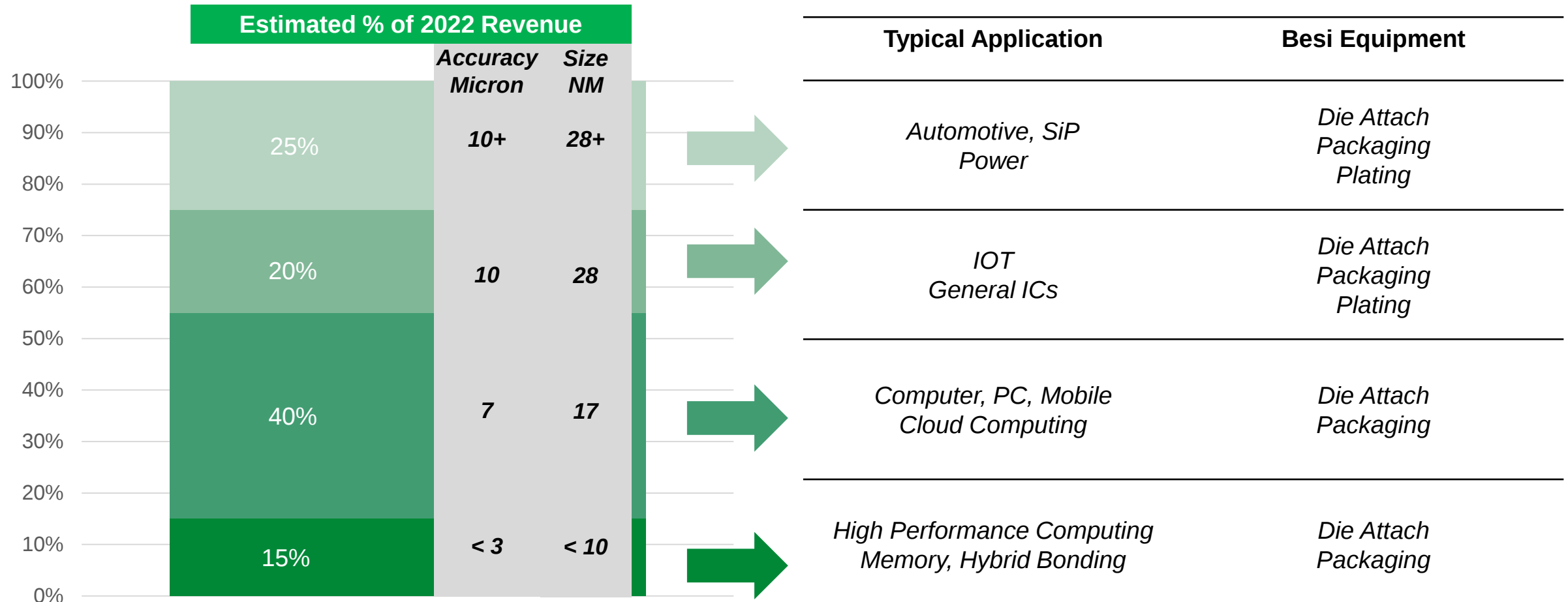


Source: TechInsights, July 2023. Addressable market revenue excludes hybrid bonding contribution.
* Packaging & Plating includes only Besi's addressable segments. Non-addressable reported in other assembly market.

Advanced Packaging Critical to Next Generation Applications



Besi Portfolio Well Positioned by Node Size and Accuracy

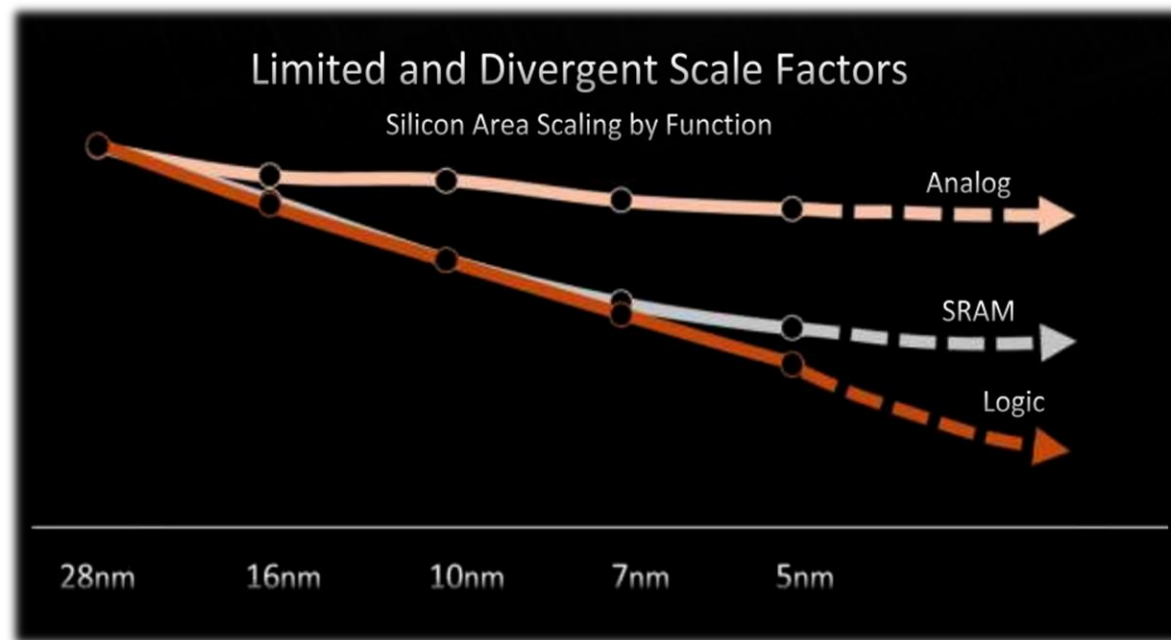


- **75% of Besi equipment revenue defined as advanced packaging (<10 micron accuracy, <28 nano node size)**
- 55% equipment revenue < 7 micron accuracy and < 17 nanometer node size
- Most rapidly growing market segment

Slowing of Moore's Law Drives Adoption of Chiplet Architectures and New Assembly Solutions

Problem

- Moore's Law slowing
- Cost per transistor increasing
- Some circuits don't shrink as node sizes reduce
- Die size increasing beyond reticle limit

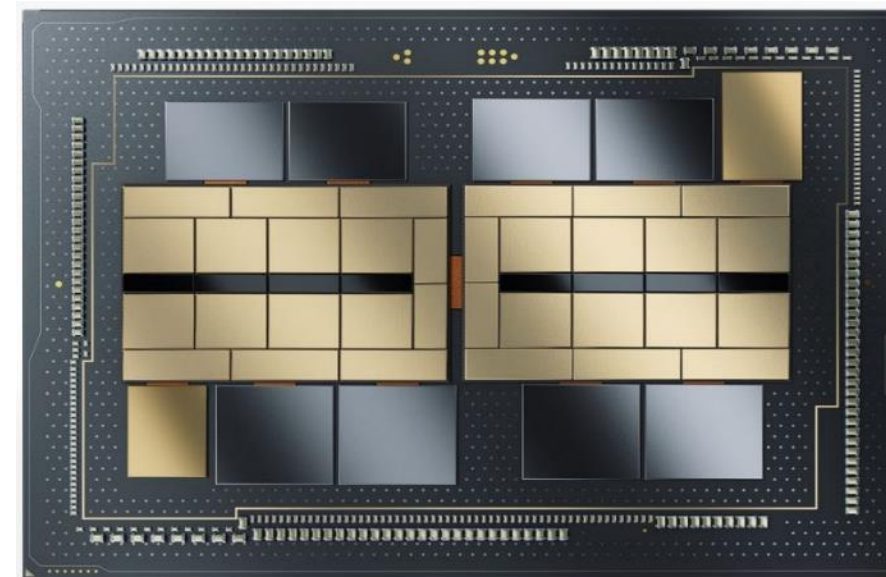


Source: ASML

Solution

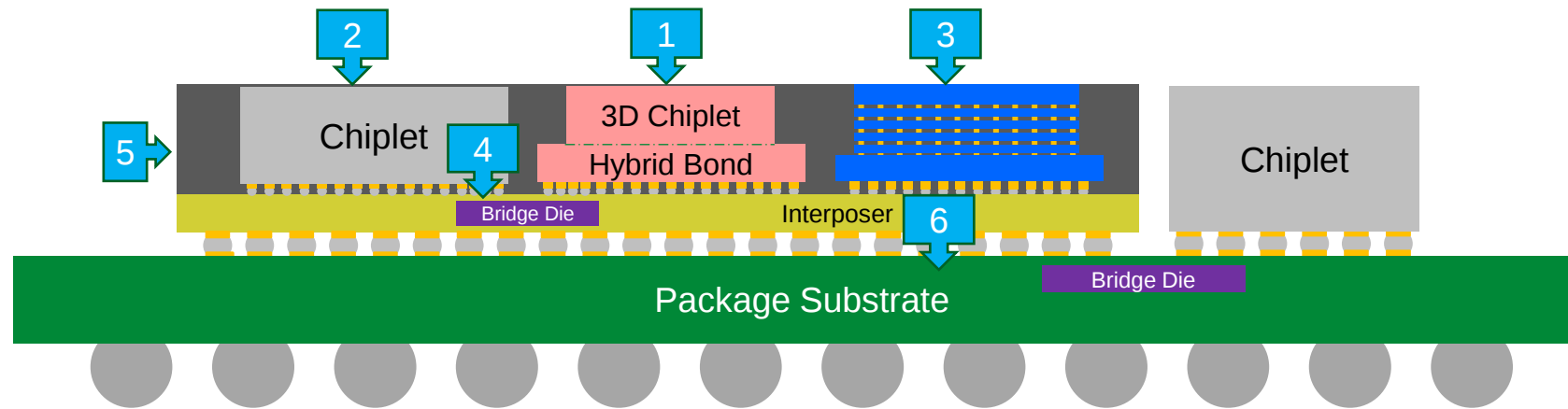
- Split SoC into multiple, smaller **chiplets**
- Optimize scale per function
- Connect chiplets within package utilizing advanced **chip-to-wafer die attach**

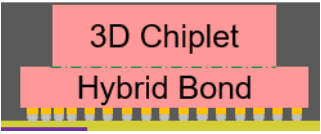
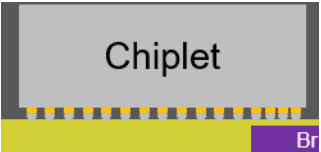
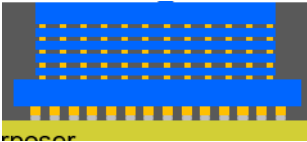
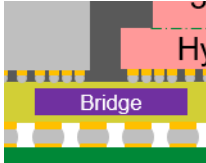
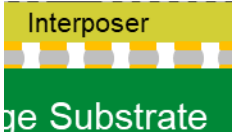
Intel's Ponte Vecchio: 47 Active Chiplets in One Package



Source: Intel

New 3D Chiplet Structures Use Variety of Assembly Processes



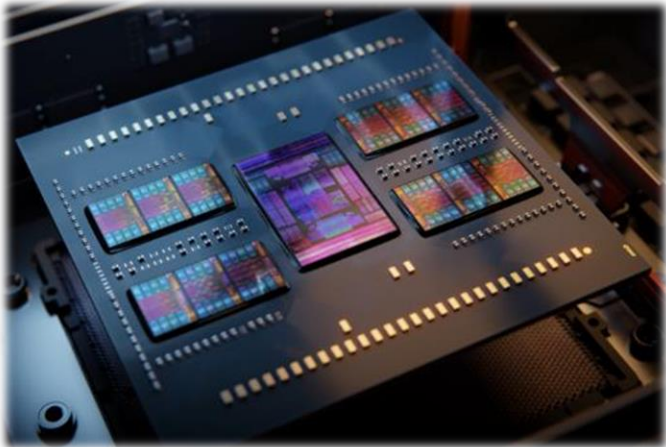
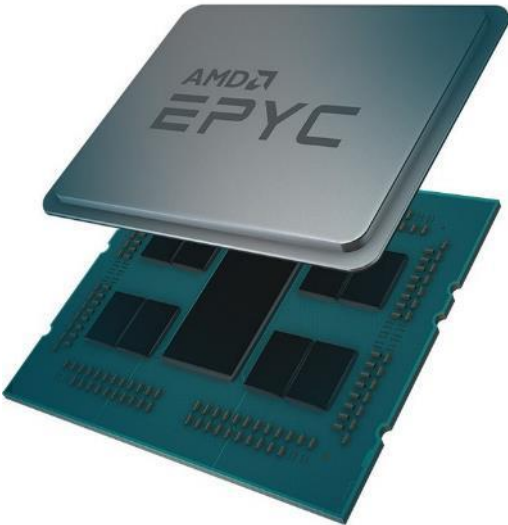
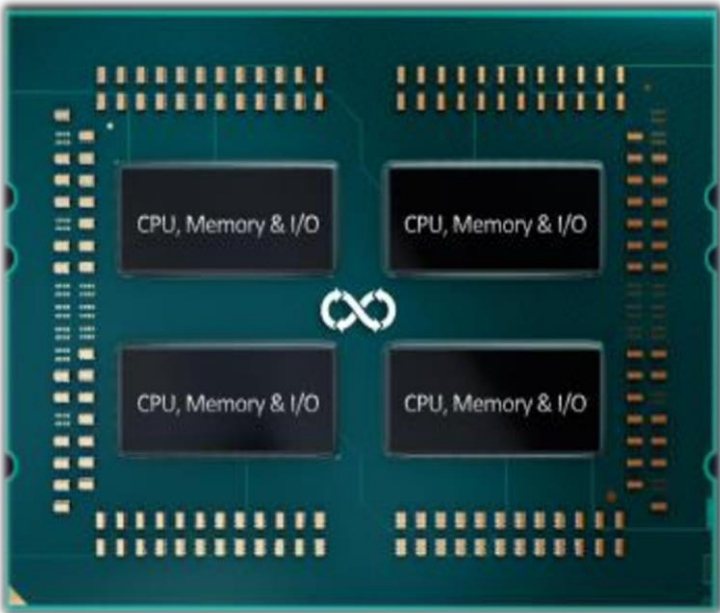
1	2	3	4	5	6
Hybrid Bonding	Chip to Wafer TCB	High Bandwidth Memory Stacking	Embedded Bridge Die Attach	Wafer Level Die Molding	HD Interposer to Substrate
					
8800 CHAMEO Ultra Plus	9800 TC Next C2W	8800 CHAMEO Ultra Plus 8800 TC Advanced	8800 Chameo Ultra	FML	2200 evo

And Will Increase Process Steps/Capital Intensity

2017 → 2019 → 2023

1st Gen EPYC 2nd Gen EPYC 4th Gen EPYC

4 flip-chip placement steps 9 flip-chip placement steps > 50 die placement steps including hybrid and flip-chip



Besi Process Solution:

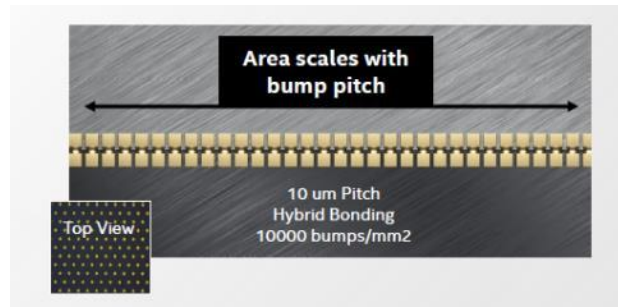
8800 FC Quantum	→	8800 Ultra Accurate C2W Hybrid Bonder:
ASP: \$500k		ASP: \$1.5MM-\$2.5MM
UPH: ~9,000		UPH: ~1,500 → ~2,000

Source: AMD

Hybrid Bonding Extends Moore's Law by Heterogeneous 3D System Scaling

Enables faster, more complex devices with submicron placement accuracy

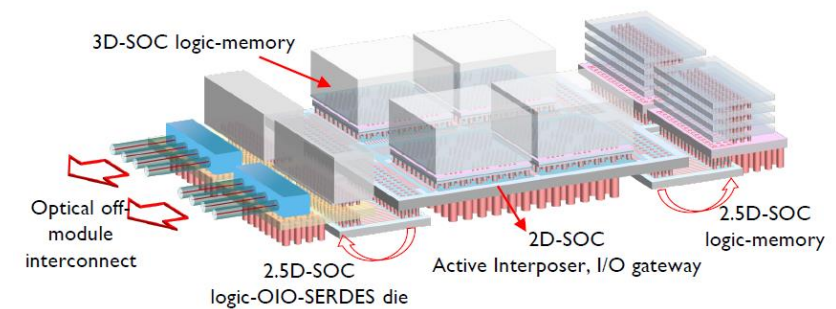
Direct Cu-Cu Interconnect in 3D



1000x increase in contact density



Heterogeneous integration of chiplets



More transistors per package

Increased Performance

- Increased data transfer
- Higher bandwidth
- Higher speed

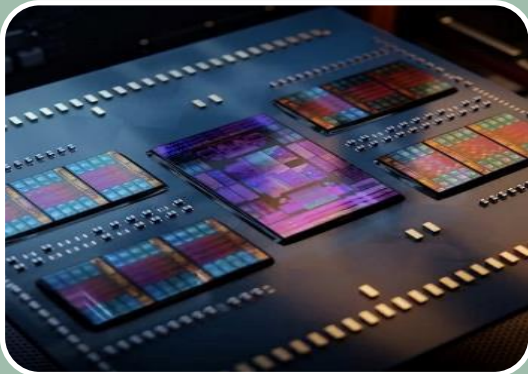
Lower Cost of Ownership

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

Design Flexibility

- New 3D chiplets
- Fab node optimization
- Customized designs
- Highly configurable

High Performance Compute



**Unified
Compute/Memory
Core on Core**

AI
Gaming
Datacenters

Advanced Memory



**Advanced Memory
Stacking**

HBM4
DRAM

Mobile



**Application Processors
mmWave RF**

Smartphones

Sensors & Photonics



**Integrated Silicon
Photonics**

Image Sensors
AR/VR Display

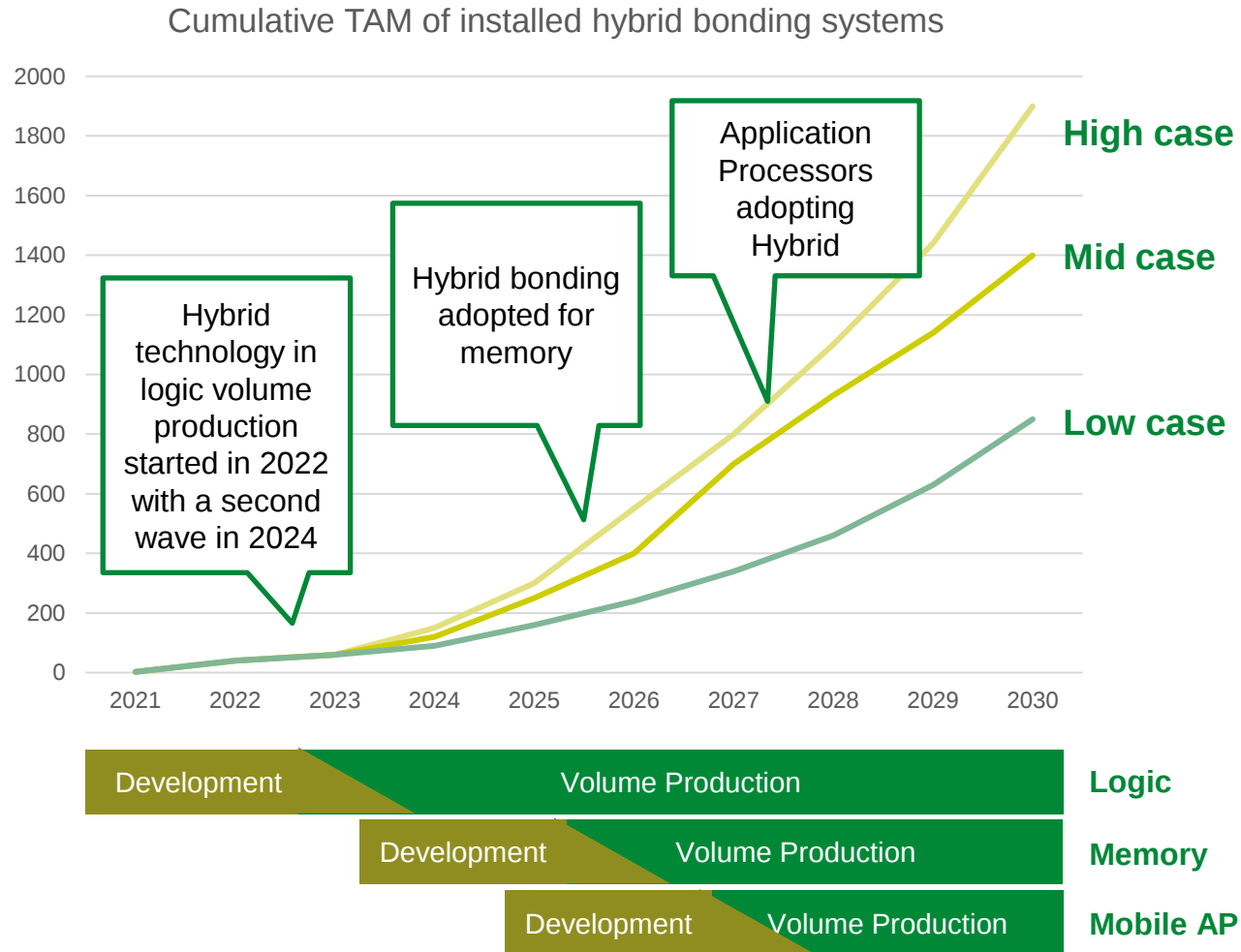
Industry Adoption

- Active development by leading semiconductor producers
- H1-23 activity focused on process qualification and sampling
- Full scale commercial production achieved for high performance CPUs
- Memory applications in R&D phase
- Chiplet interface standards being developed

Besi Progress

- 37 units shipped since Q4-21
- Backlog of 13 units at end of Q2-23
- Production yields increased significantly
- First orders received for HB systems in integrated lines
- Sufficient capacity in place to support near term growth

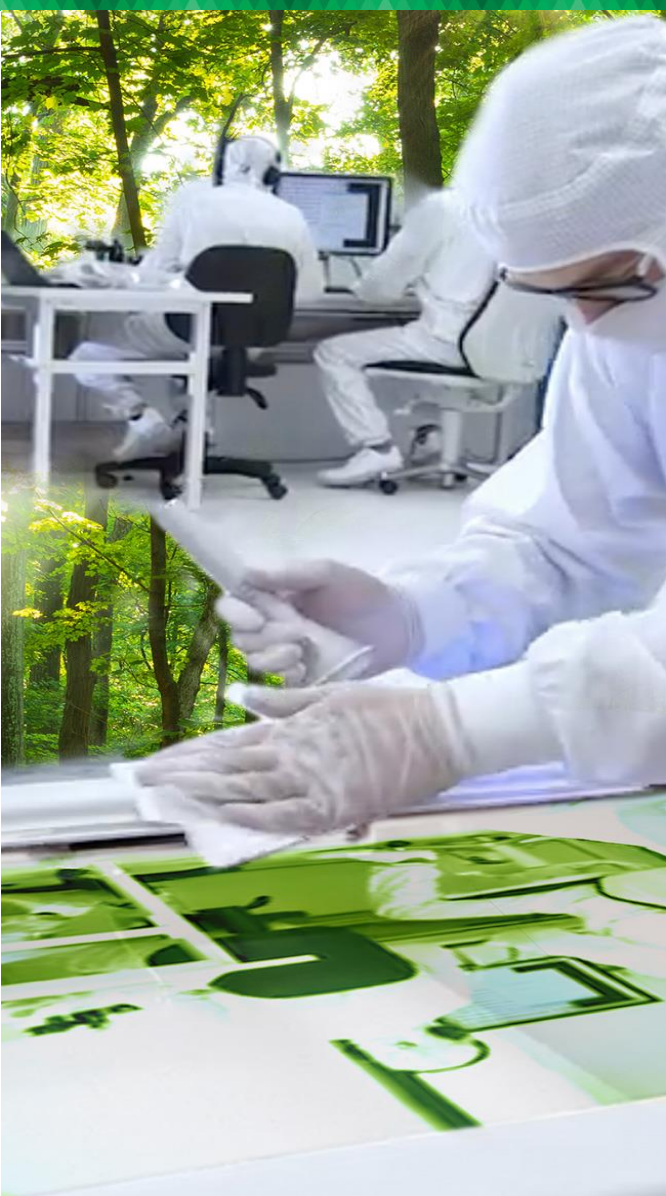
Hybrid Bonding Market Potential



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

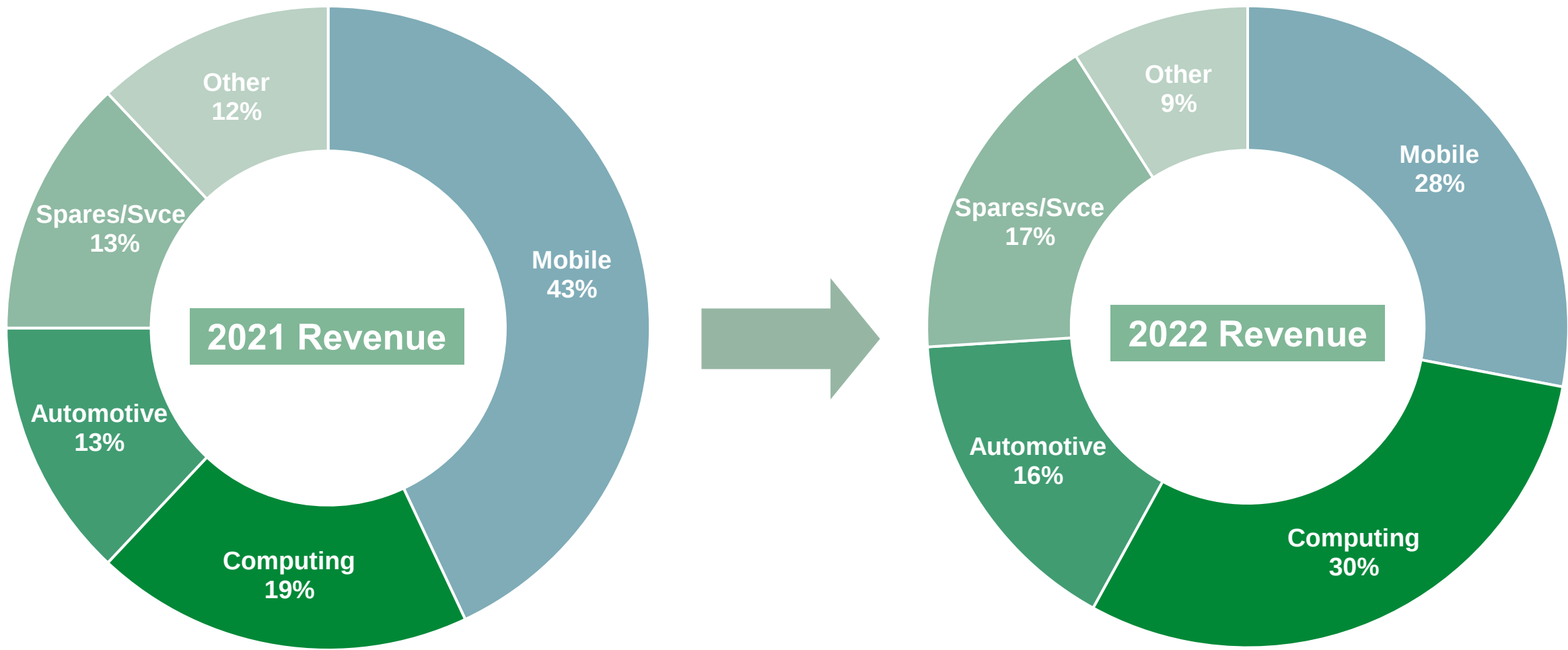
Estimated 800 – 1,900 systems cumulative by 2030

- 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**
- Expected rollout sequence:
 1. Logic
 2. Memory
 3. Mobile
 4. Other Applications

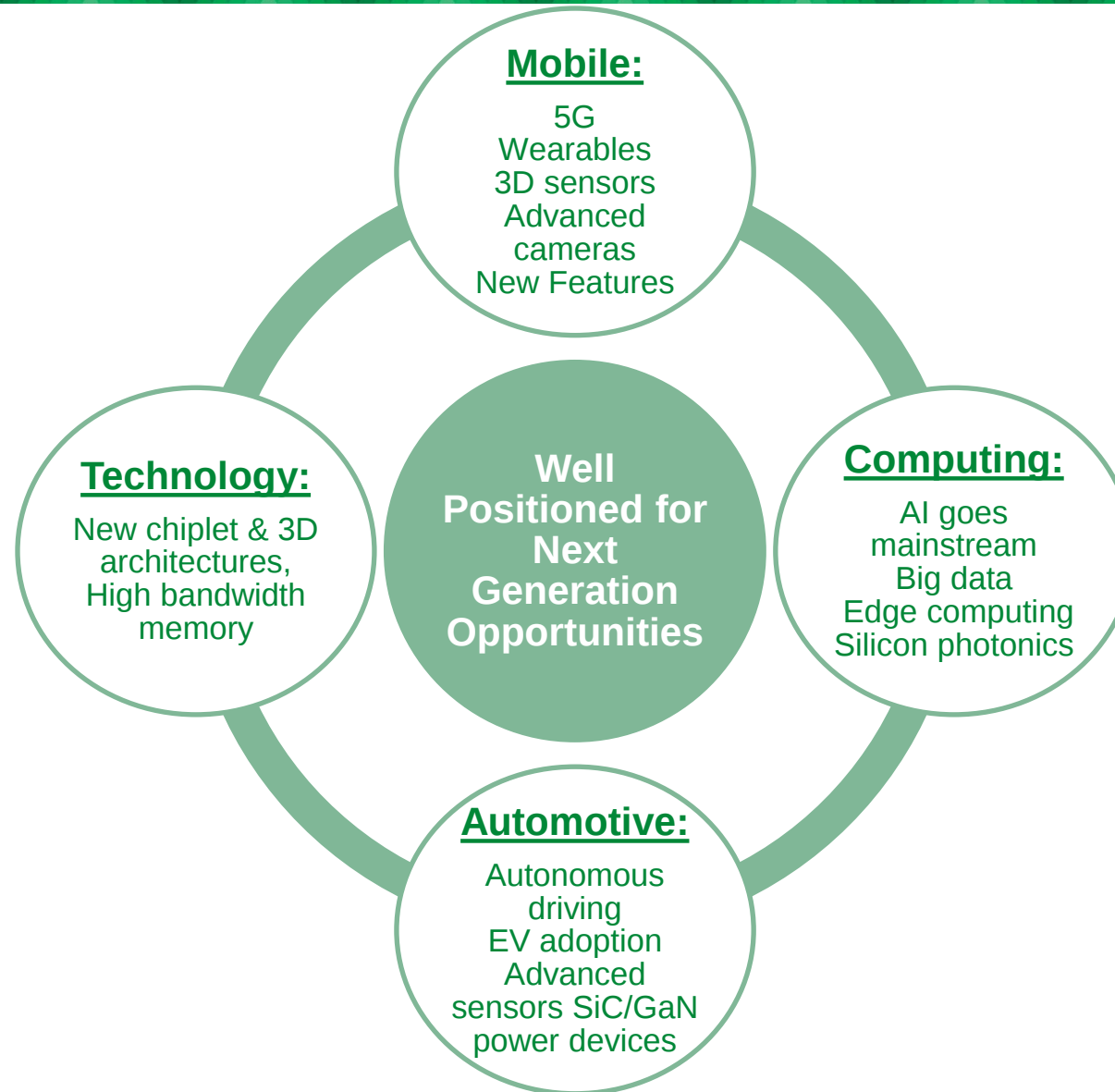


III. END-USER MARKET TRENDS

Besi End-User Market Composition



Source: Company estimates



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

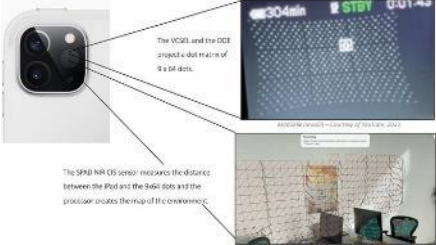
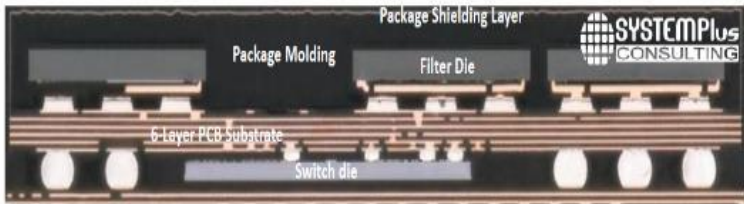
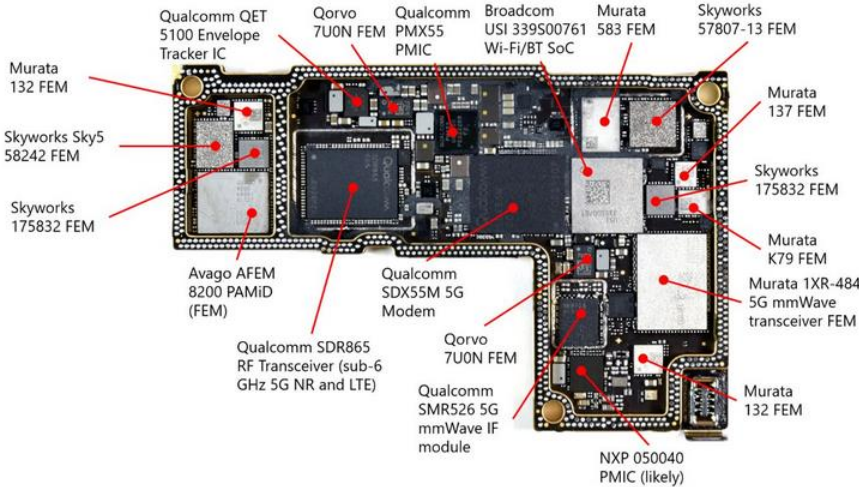
Microphone
Cameras
Sensors

Display
TouchScreen

Power
Battery

Memory

Application
Processor



Besi Involved in Almost All Components

Main Components	Besi system Utilized
Processor	8800CHM, MMS-LM
DRAM Memory	2100sD, FSL
NAND Flash	2100sD, AMS-W/LM/FCQ8800
PM IC	2100sD, AMS-W/LM
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	21000xP
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 screen control	2100sD
Touch Transmitter	FCL
OLED PMIC	2100xP

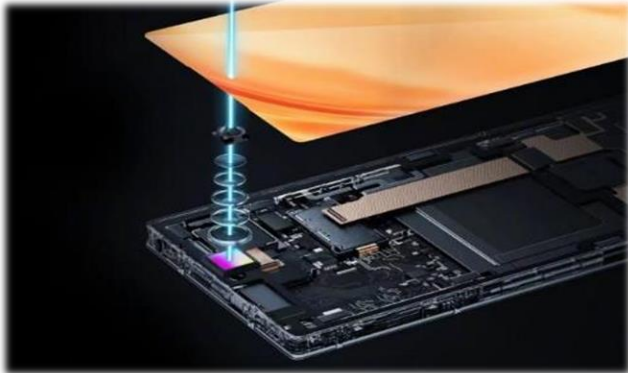
Source: Unitedlex.com and ifixit.com and System plus

What's Next in Mobile? New Features/Functionality in High-End Smartphones and Wearables Drive Long-Term Growth

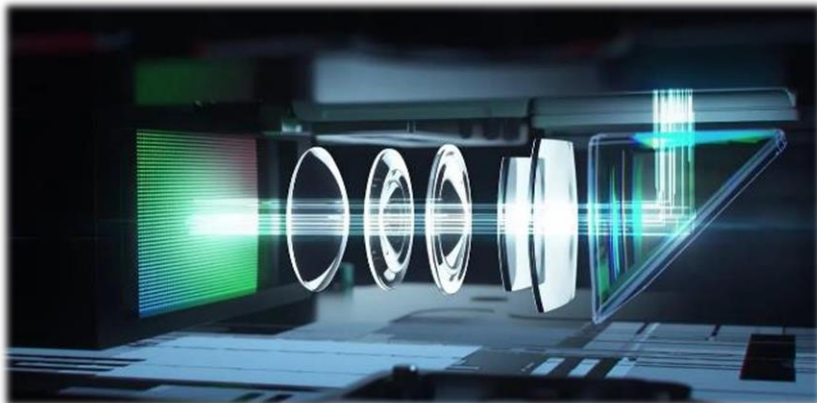
Mobile Data Traffic Growing Rapidly. Continued Deployment Of 5G And Development Of 5G Advanced Drives Need For Advanced Assembly Technologies

Advanced Camera Technology

- Periscope and under display cameras

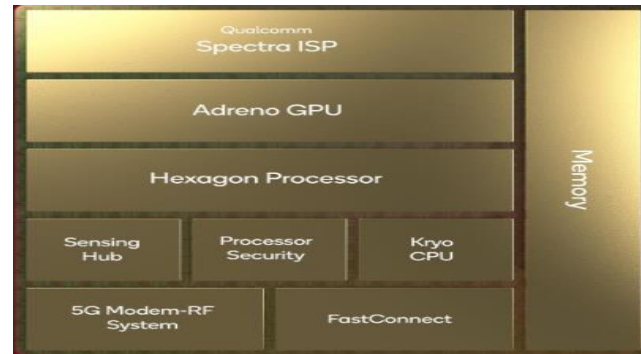


Source: ZTE



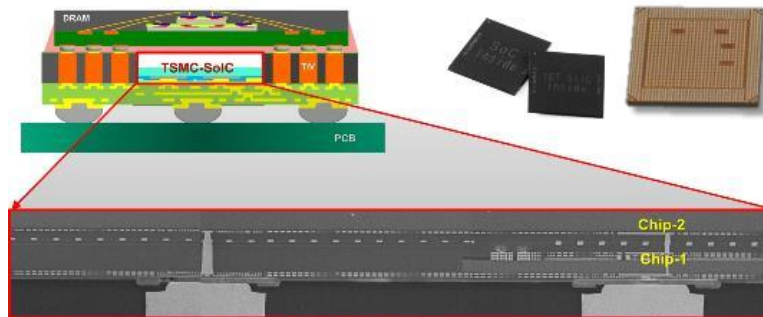
On Device AI

- AP die sizes increasing
- Increased AI capabilities in AP chip



Source: Qualcomm

- 3DIC with **hybrid bonding** for next generation APs



Source: TSMC

AR / VR Headsets

- New product introductions expected 2023 – 2024
- Requires extreme minaturization, 3DIC, TCB, advanced molding



Source: Engaget

Computing Demand Expanding Rapidly

Advanced Computing Expanding To Many Commercial Applications



AI/Vision/Recognition



Medical



Super Computers



Mobile Phones



Industry 4.0



Autonomous Driving

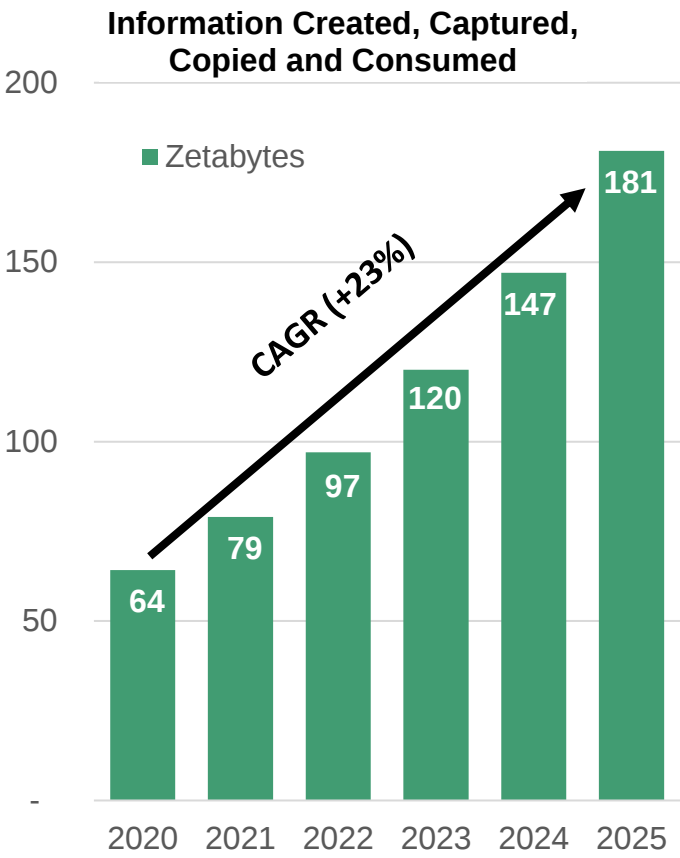


Datacenters



Laptops/Gaming/Engineering

Data Volumes Growing Exponentially

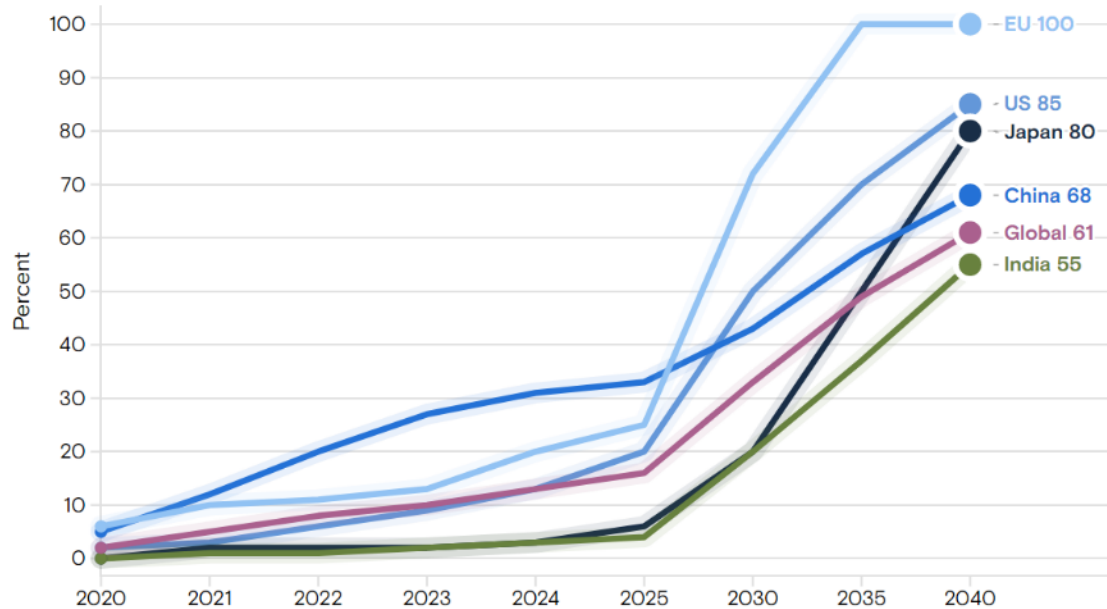


Source: Statista December 2022

Automotive: Growth of EV and Autonomous Driving Will Increase Semiconductor Content and Cost per Car

Electric Vehicle Adoption Forecast to Accelerate

Electric vehicle sales ratio (%)



Source: IHS Global Insight, Goldman Sachs Research • 2022-2040 are forecasts

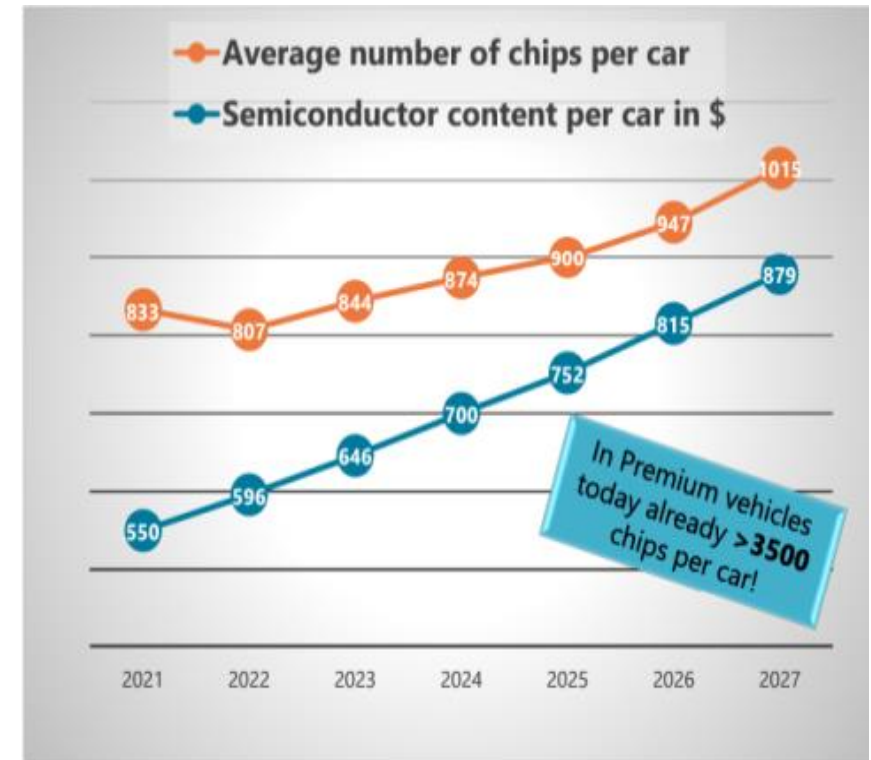
Goldman
Sachs

~12% CAGR in automotive semi sales (2021 – 2030)*

- 61% of global auto sales to be EVs by 2040
- Increased adoption of autonomous driving

* Source: Statista 2023

Semiconductor Content per Car Increasing

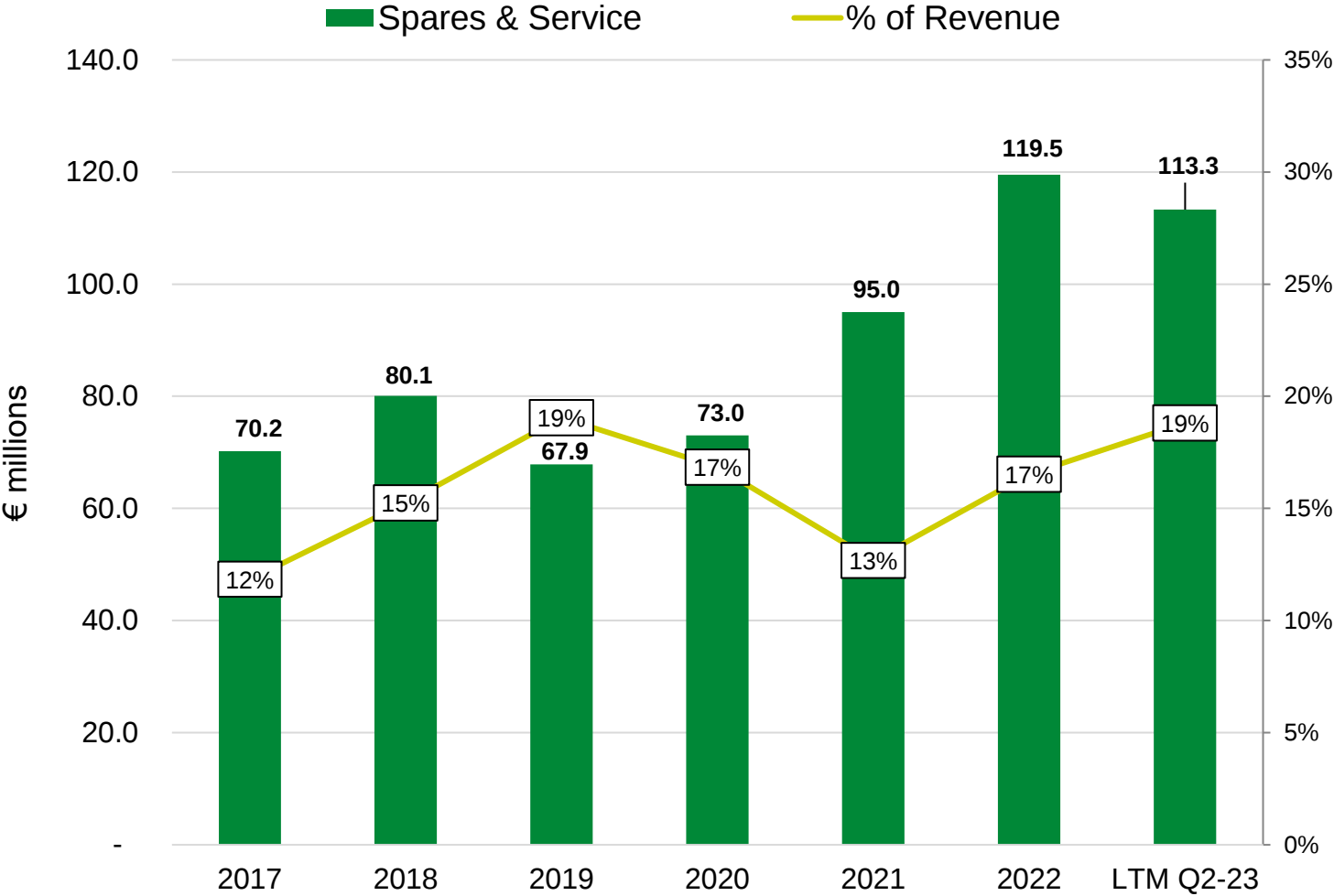


Source: Power Electronics News, January 2023

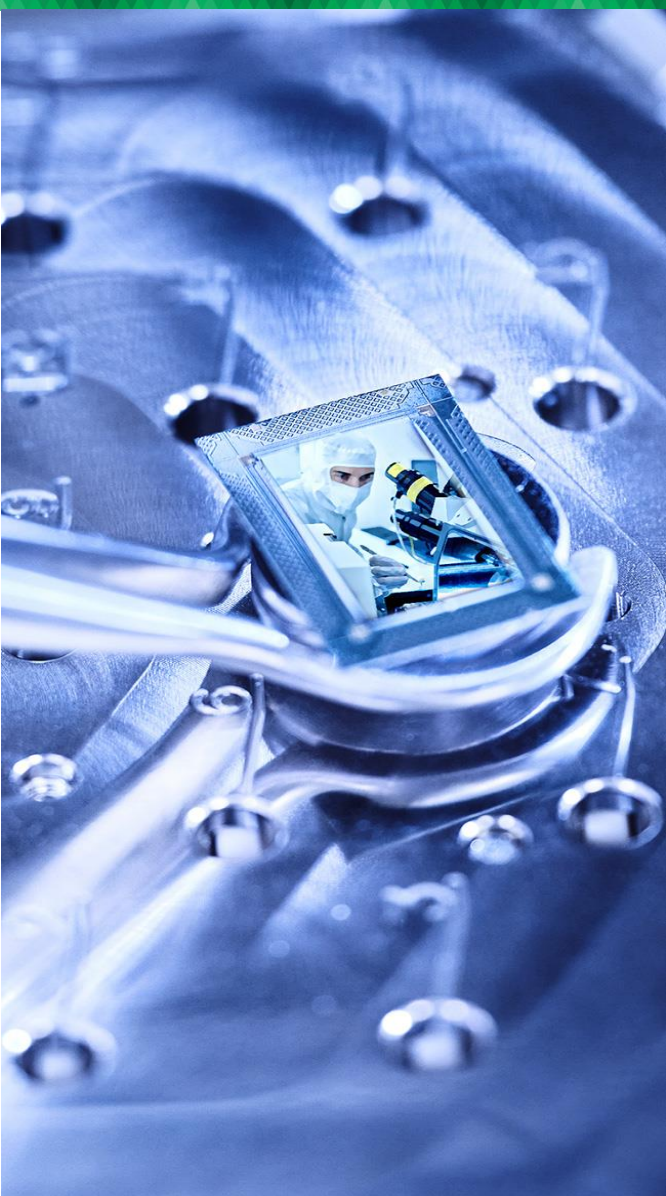
Positive growth trends anticipated to continue

- More sensors: cameras, radar, ultrasonic, LIDAR
- Increased use of AI, V2E connectivity

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**



IV. STRATEGY



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

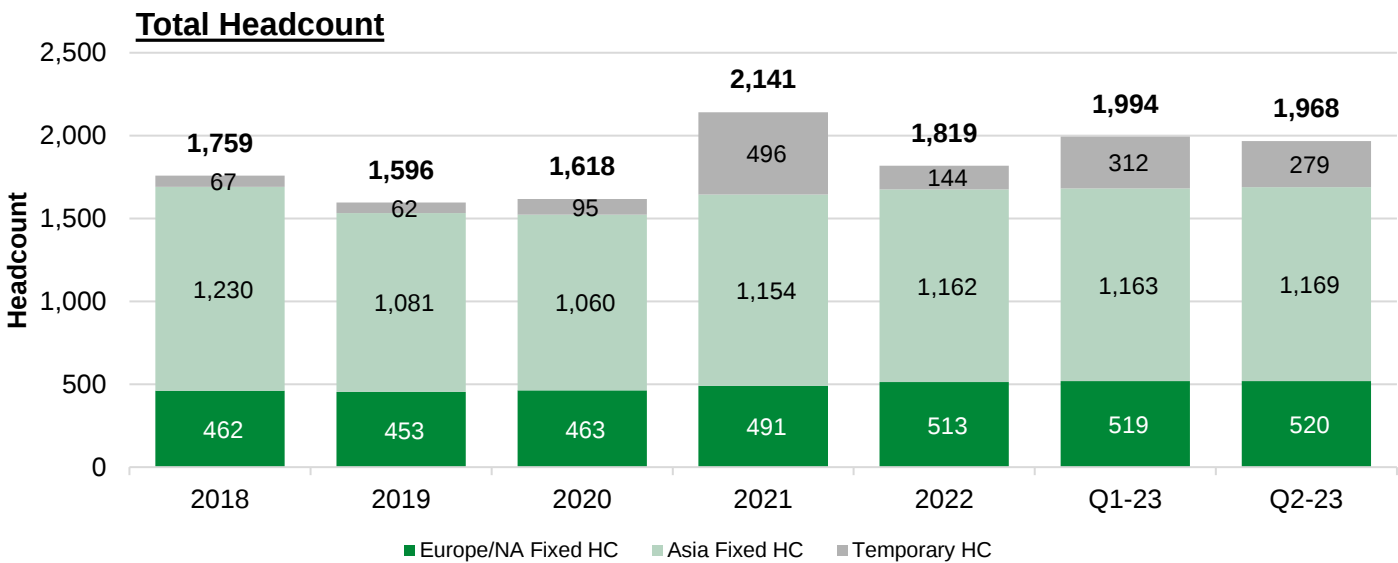
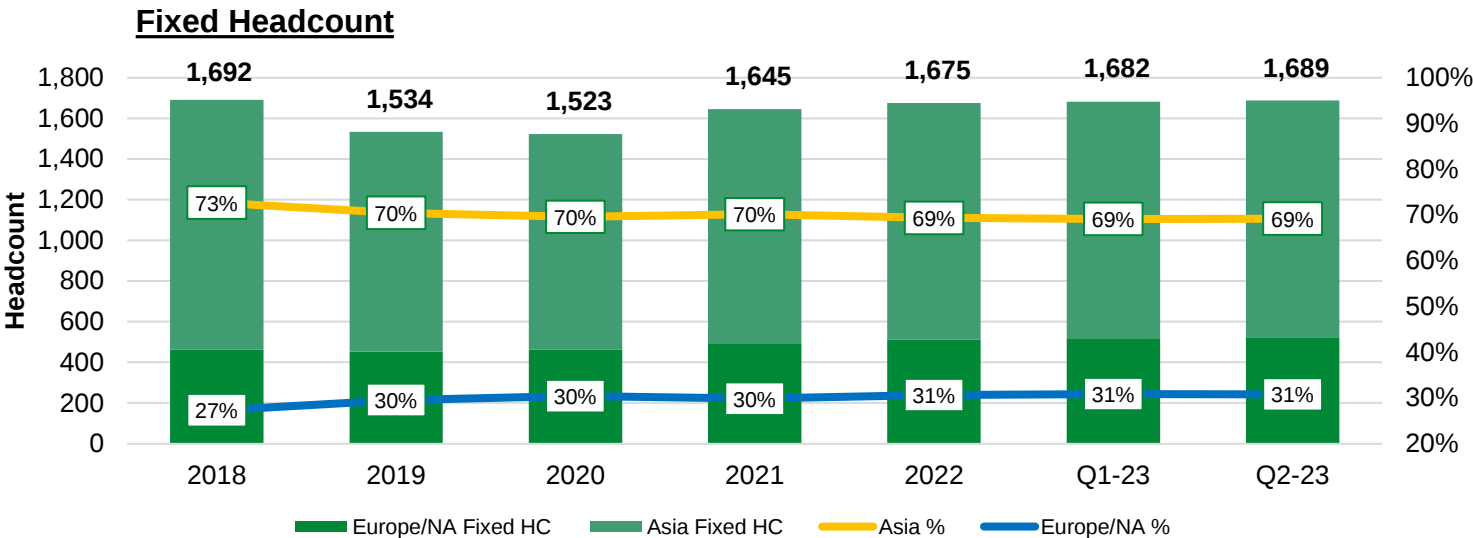
Development

- 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

Flexible Asian Workforce Has Enhanced Scalability



- **Reducing temporary Asian production HC**
 - In alignment with market conditions
- **Increasing European fixed headcount:**
 - To support R&D program growth
 - Service/support for wafer level assembly expansion

Significant ESG Progress. Key Targets Met or Exceeded in 2022



Process Pillar	2022 Target	2022 Progress
Environmental Impact	15% Reduction in Scope 1 & 2 emissions vs. 2019 index	64% Reduction in Scope 1 & 2 emissions intensity vs. 2021
	5% reduction in hazardous waste	Relative and absolute reduction in hazardous waste
	25% energy from renewable sources	Energy generated from renewable sources increased from 20% to 76%
	Develop targets for sustainable design	Initiative developed for 10% reduction in die attach platform energy consumption
People Wellbeing	Increase % local managers to 85%	Increased % local managers to 88%
	Increase % female managers to 20%	Achieved 20% female managers
	Increase training hours by 15%+	19% increase in training hours
Responsible Business	70% Purchasing Volume to sign CFSI	73% Purchasing Volume signed CFSI
	75% Purchasing Volume to sign GWA	77% signed GWA

2024

**75% renewable sources for
global energy needs**

**62% reduction in Scope 1 and 2
carbon emissions***

**12% reduction in Scope 3
carbon emissions***

**Above-benchmark employee
engagement**

Compliance with CSRD

2030

**90% renewable sources for
global energy needs**

**58% reduction in Scope 1 and 2
carbon emissions***

**58% reduction in Scope 3
carbon emissions***

**Decouple carbon footprint from
revenue growth**

**80% vendor compliance with
Conflict Free Sourcing Initiative**

Carbon Neutral By 2050

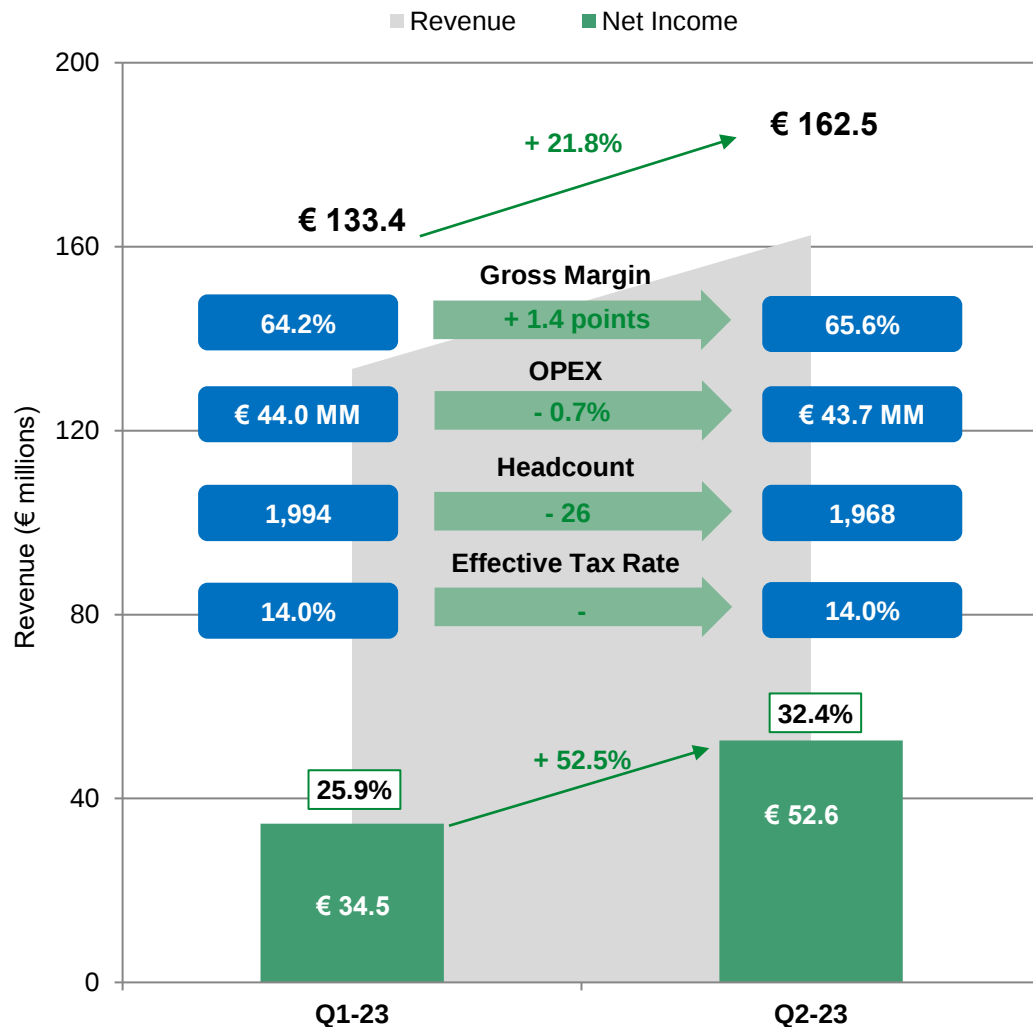
* As per Greenhouse Gas Protocol. Targets relative to 2021 baseline data



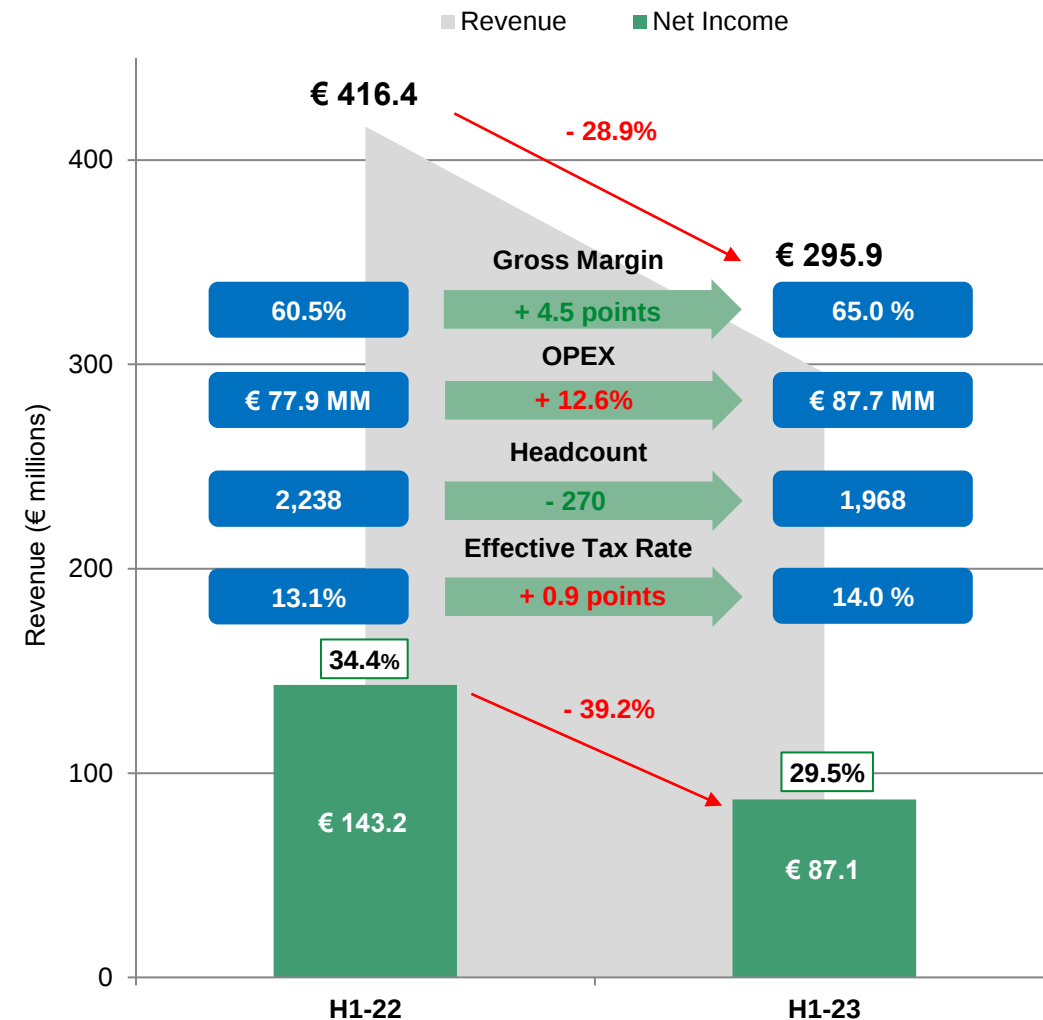
V. FINANCIAL UPDATE AND SUMMARY

H1-23 Affected by Broad Based Weakness in Computing Applications

Q1-23/Q2-23

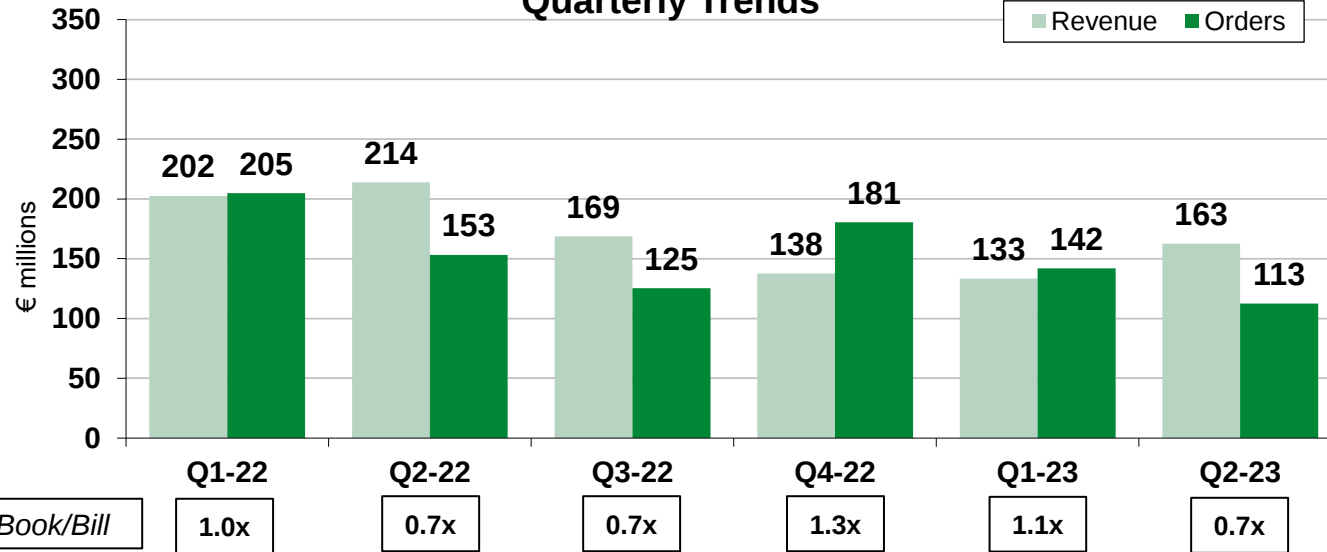


H1-22/H1-23

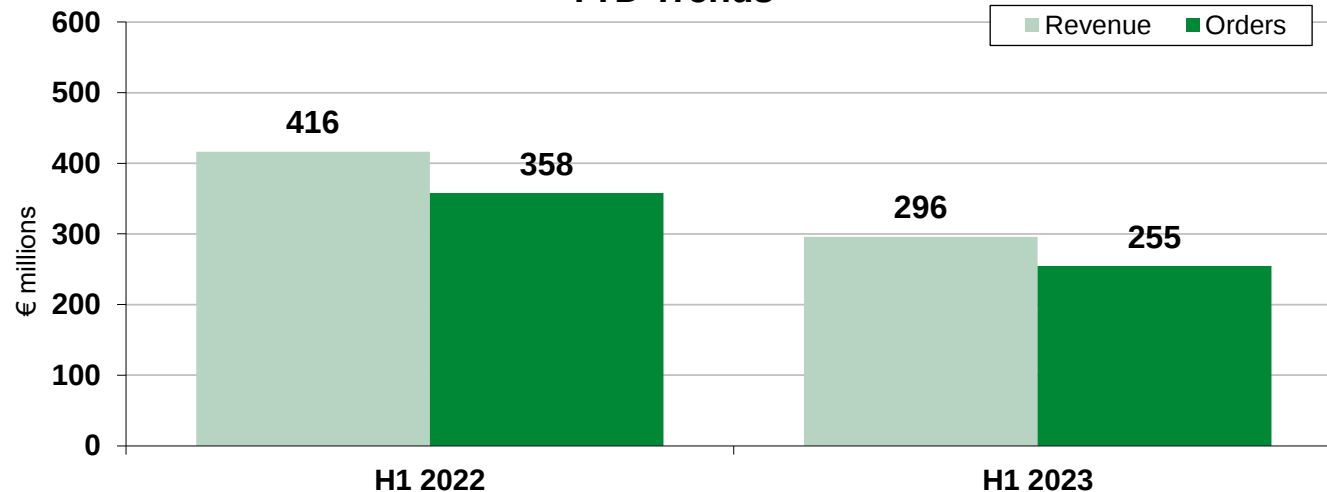


Revenue/Order Trends

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

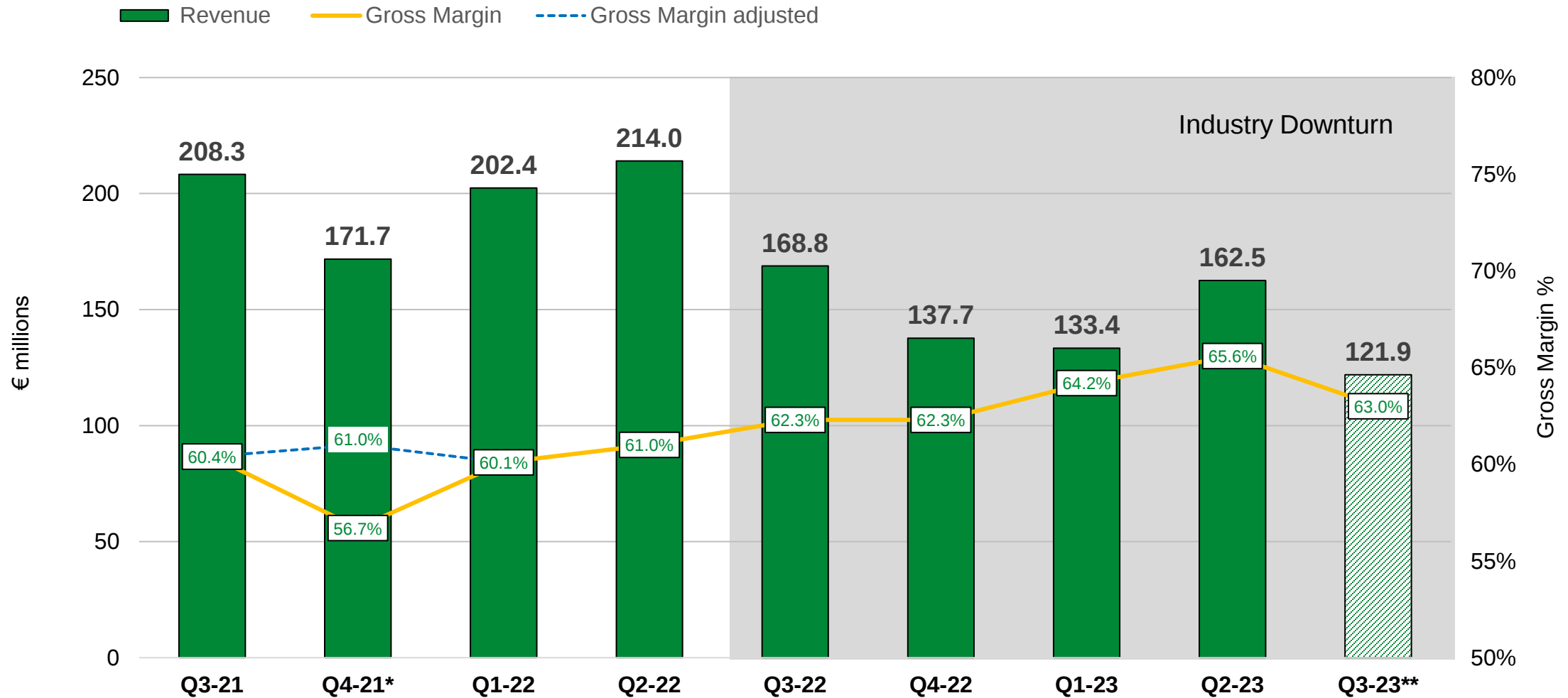
Q2-23 vs. Q2-22

- **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

Through Cycle Gross Margin Resilience



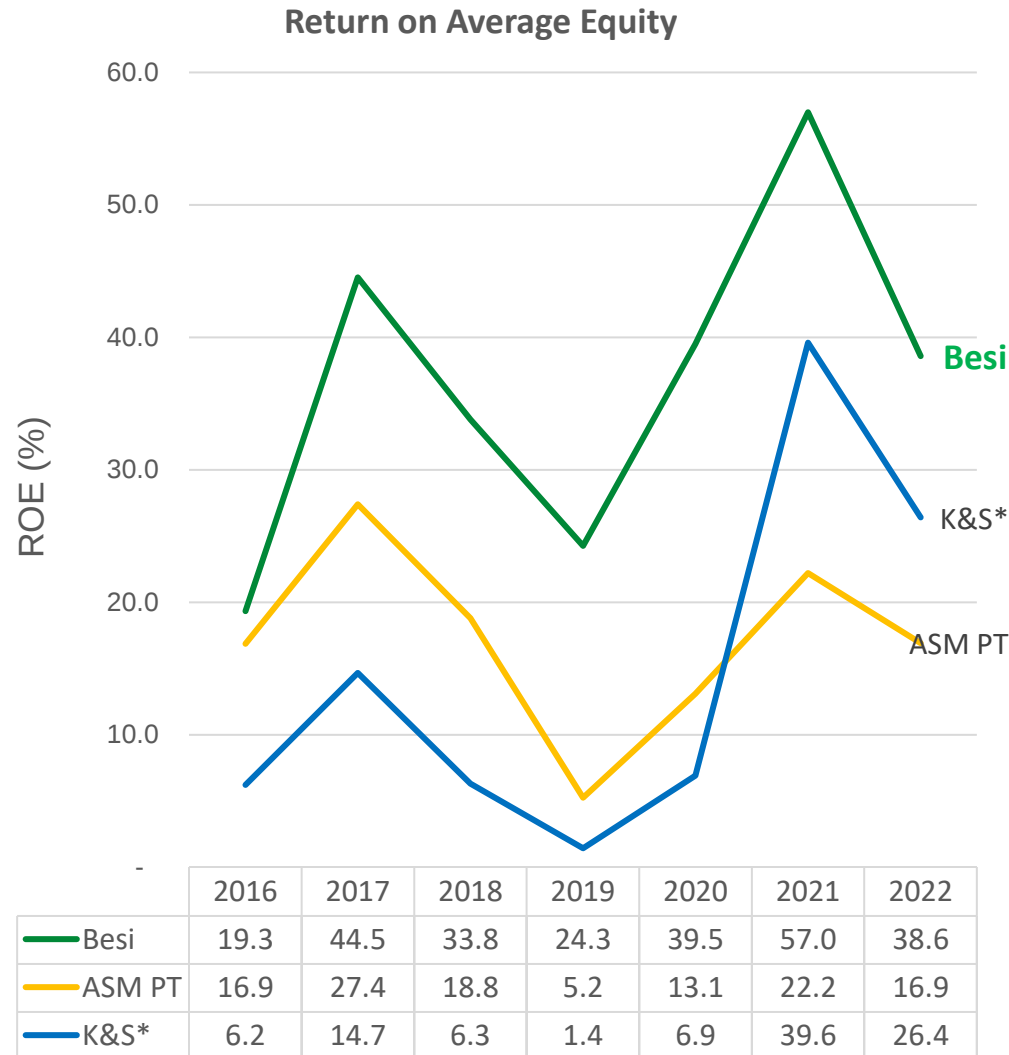
* Adjusted to exclude € 7.4 million (4.3 gross margin point) inventory charge.

** At midpoint of guidance range.

Structural, Through Cycle Outperformance vs. Peers

Gross Margin			
	2016	2022	Δ 2016/ 2022
Besi	51.0%	61.3%	+10.3
ASM PT (Back end)	43.4%	44.6%	+1.2
K&S	44.8%	50.3%	+5.5

Operating Margin			
	2016	2022	Δ 2016/ 2022
Besi	20.0%	40.7%	+20.7pts
ASM PT (Back end)	20.6%	16.4%	-4.2pts
K&S	8.6%	27.1%	+18.5pts

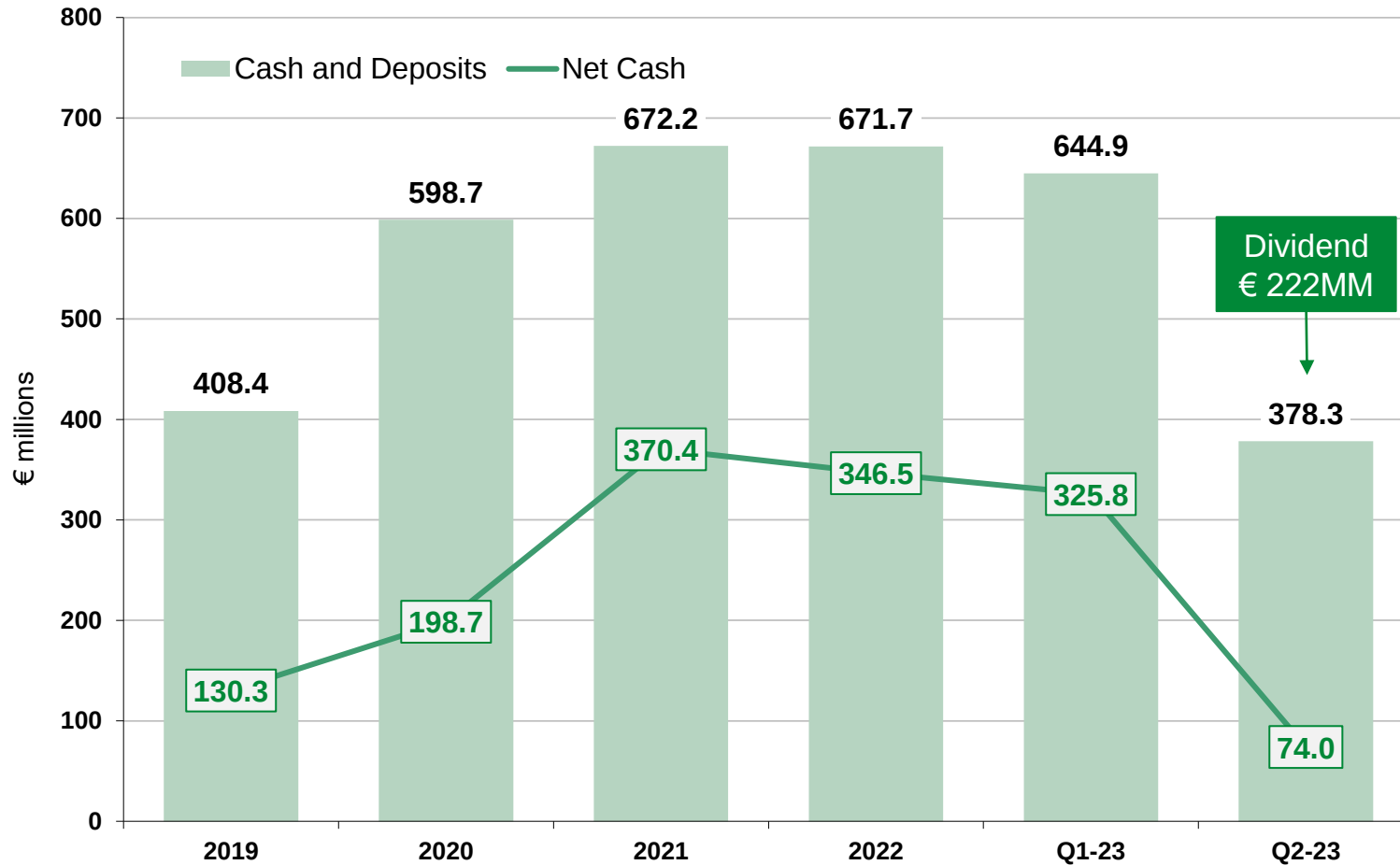


Besi's margins and ROE have exceeded direct peers through cycles:

- Investment in business model has yielded high returns
- Structurally higher gross and operating margins over past five years
- Besi capital allocation strategy has also helped drive ROE outperformance

* K&S ROAE on fiscal year basis.

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

€ in millions

Q2-23

Q3-23

Revenue

€ 162.5

-20%

-

-30%

Gross Margin

65.6%

62% - 64%

Operating Expenses

€ 43.7

-10%

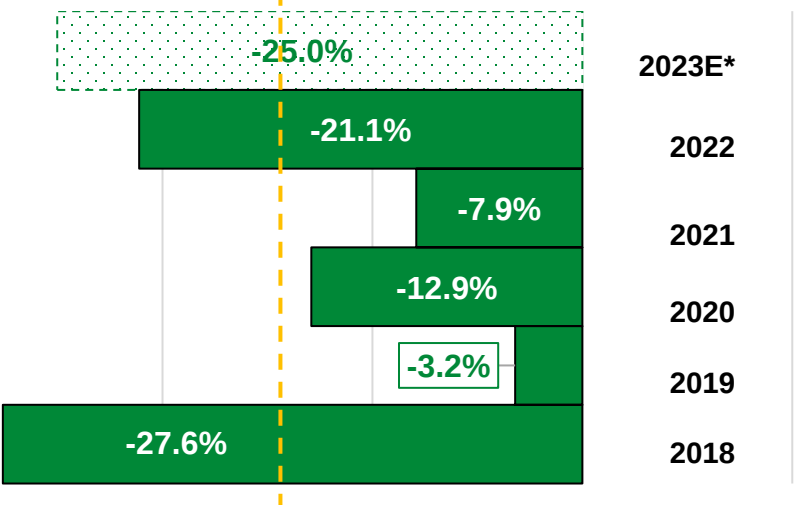
-

-15%

Seasonal Revenue Trends

Q3E/Q2Δ

Average decline 2018-2022 (-14.5%)



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

* Assumes midpoint of guidance for Q3-23

**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**