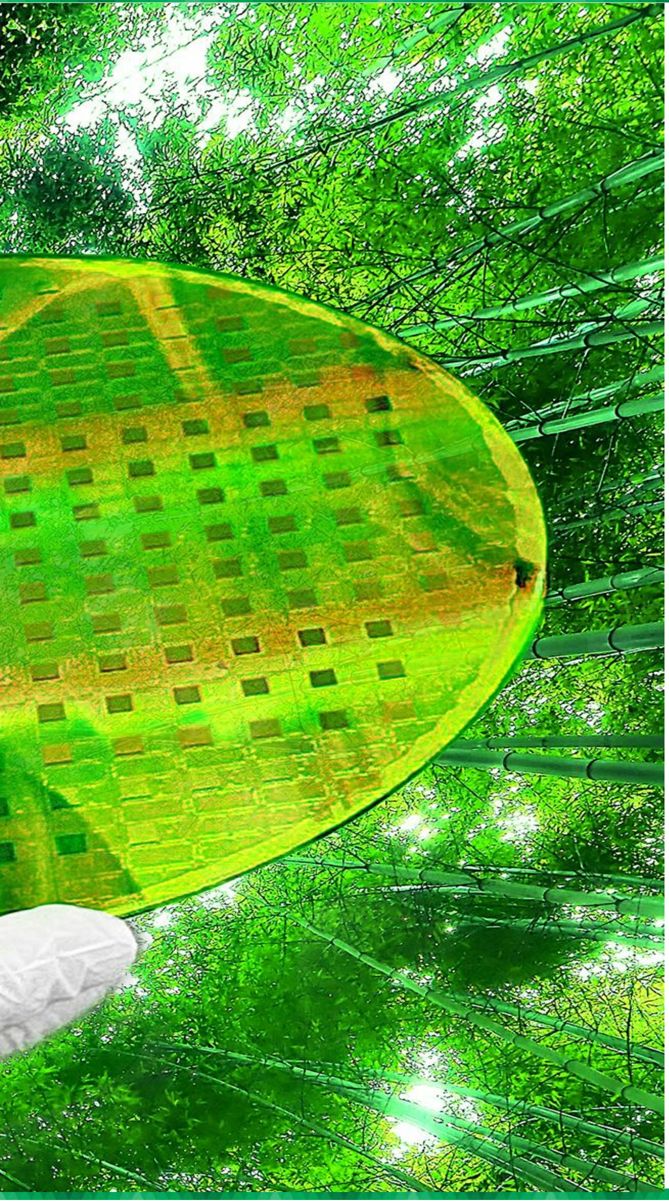


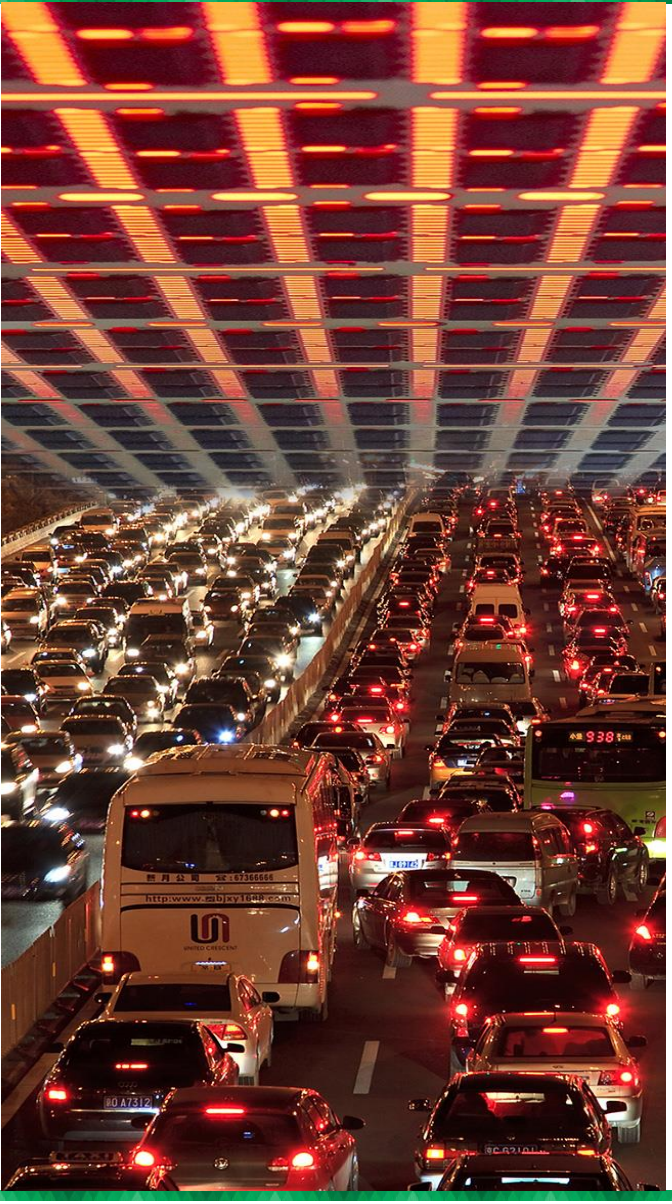
INVESTOR PRESENTATION

March 2023

Safe Harbor Statement

This presentation contains statements about management's future expectations, plans and prospects of our business that constitute forward-looking statements, which are found in various places throughout the presentation, including, but not limited to, statements relating to expectations of orders, net sales, product shipments, expenses, timing of purchases of assembly equipment by customers, gross margins, operating results and capital expenditures. The use of words such as “anticipate”, “estimate”, “expect”, “can”, “intend”, “believes”, “may”, “plan”, “predict”, “project”, “forecast”, “will”, “would”, and similar expressions are intended to identify forward looking statements, although not all forward-looking statements contain these identifying words. The financial guidance set forth under the heading “Outlook” contains such forward-looking statements. While these forward looking statements represent our judgments and expectations concerning the development of our business, a number of risks, uncertainties and other important factors could cause actual developments and results to differ materially from those contained in forward looking statements, including any inability to maintain continued demand for our products; failure of anticipated orders to materialize or postponement or cancellation of orders, generally without charges; the volatility in the demand for semiconductors and our products and services; the extent and duration of the COVID-19 pandemic and measures taken to contain the outbreak, and the associated adverse impacts on the global economy, financial markets, global supply chains, inflationary pressures 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, hostilities 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.

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
- ~75% of systems used for advanced packaging applications
- Global operations in 6 countries; 1,819 employees. HQ in the Netherlands

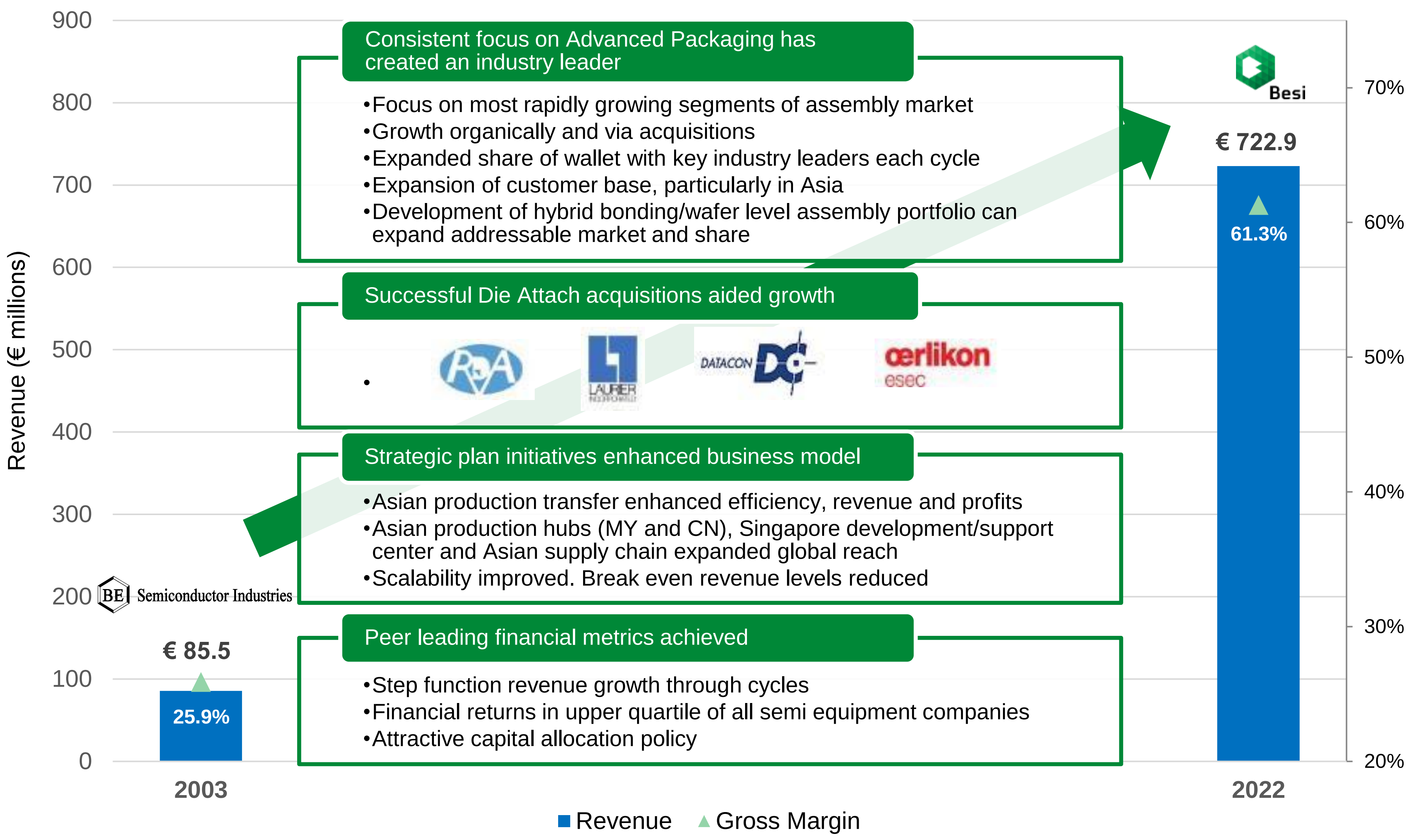
Financial Highlights

- 2022 revenue and net income of € 722.9 million and € 240.6 million
- Cash/deposits: € 671.7 million
- Net cash/deposits: € 346.5 million
- € 1.6 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

Company History



History of Superior Long-Term Value Creation

Capital Allocation

Attractive capital allocation program

€ 1.6 billion of dividends and share repurchases since 2011*

Represents ~25% 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:
84% (3 year)
108% (5 year)

Consistent TSR outperformance versus peers

Upper quartile ranking for all semi-equipment companies

* Includes proposed 2022 dividend for approval at 2023 AGM.

Industry Leading Equipment Portfolio

Besi

Die Attach (82% of 2022 Revenue)

Multi-Module Attach

- 2200 evo
- 2200 evo ^{plus}
- 2200 evo ^{hS}
- 2200 evo ^{advanced}
- 2200 evo ^{hf} Q1-22

Epoxy / Soft Solder

- 2100 hS
- 2100 hS ^{i}
- 2100 sD *advanced* ^{i}
- 2100 hS ^{ix} Q4-21
- 2009 SSI
- 2100 SSI Q2-22
- 2100 DS

Flip-chip

- 8800 CHAMEO $^{advanced\ /\ PLP}$
- 8800 CHAMEO ^{ultra} Q2-22
- 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)* Q4-21

Hybrid Bonding

- 8800 CHAMEO $^{ultra\ plus}$ New

Packaging & Plating (18% 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

Wafer & Panel Molding

FML
- Wafer molding
- Panel molding

Trim and Form

FCL-X/P
Leadframe trim & form
Sorting

Singulation

FSL
Substrate strip singulation
Sorting
Stepcut New

Plating

- Leadframe
- Solar
- Film & Foil
- Chemical Deflash Q3-21
- Wettable Flank New

Customer Ecosystem

Besi

Customers

IDMs

Qorvo, Micron, ST, Samsung, TDK, Bosch, NXP, Infineon, Skyworks, OSRAM, Renesas, Lumileds

Subcontractors

LG Innotek, ASE Group, Amkor Technology, Sharp, tsmc, JCET, SPIL, PTI, TF 通富微电, TF·AMD, UTAC, Hua Tian, Foxconn

OEMs

Qualcomm, Broadcom, Dell, MediaTek, Samsung, AMD, Delphi, Lenovo, Fujitsu, LG, Motorola Mobility

End Products

- 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

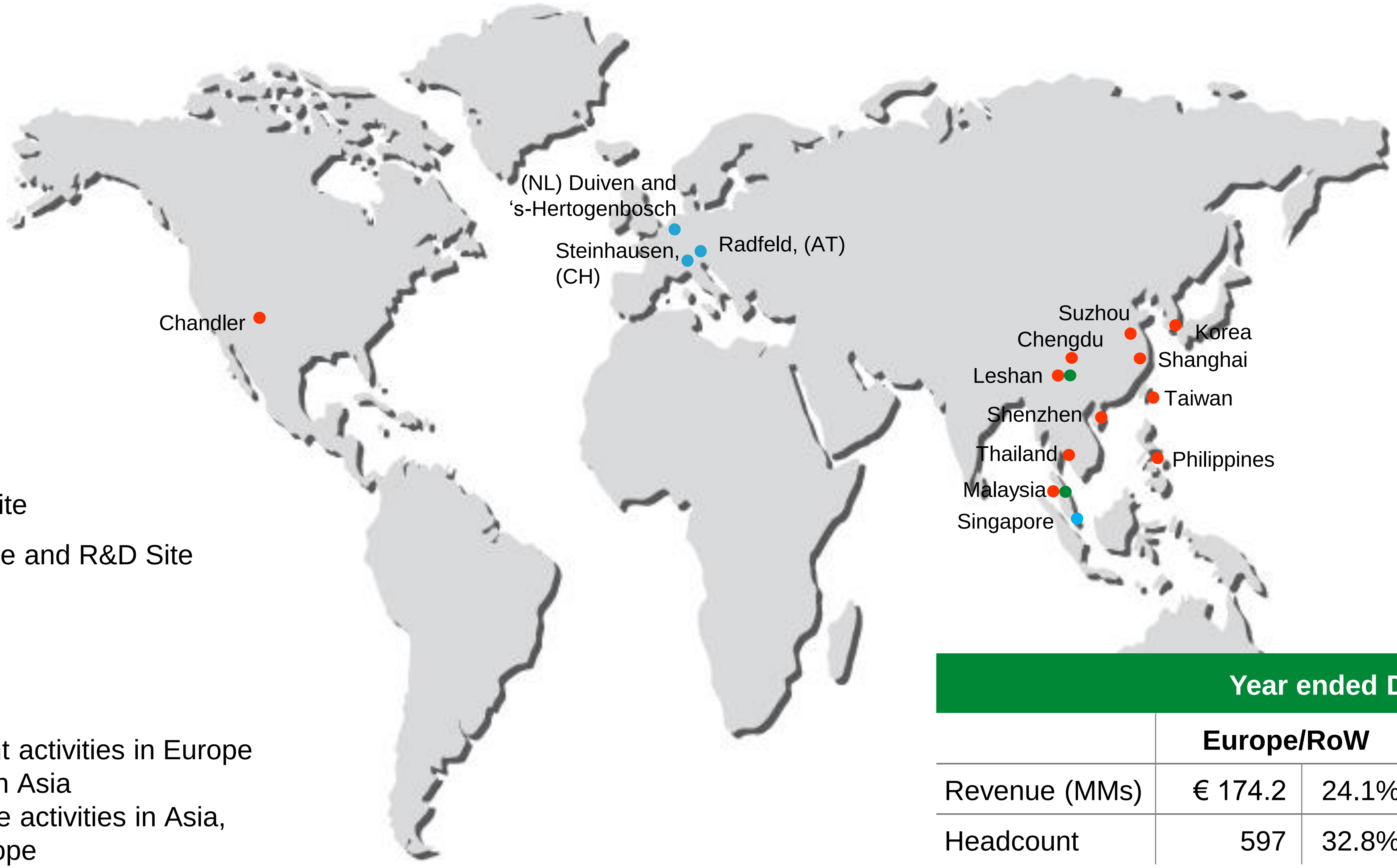
Semiconductor Manufacturing Equipment 2022: $112.5B*		
Front end: $96.7B (87%)	Assembly: $5.8B (5%)	Test: $8.2B (8%)

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, December 2022

Current Operational Profile



- Sales Office
- Production Site
- Sales, Service and R&D Site

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

	Year ended December 31, 2022			
	Europe/RoW		**Asia**	
Revenue (MMs)	€ 174.2	24.1%	€ 548.7	75.9%
Headcount	597	32.8%	1,222	67.2%

Summary Financials

Year Ended December 31, (€ millions, ex share data)	**2020**	**2021**	**2022**
Revenue	433.6	749.3	**722.9**
% seq. change	*+22%*	*+73%*	***-3.5%***
Orders	472.1	939.1	**663.7**
Gross margin	*59.6%*	*59.6%*	***61.3%***
EBITDA	169.0	335.1	**317.1**
Pretax income	137.5	303.8	**294.1**
Net income	132.3	282.4	**240.6**
Net margin	*30.5%*	*37.7%*	***33.3%***
EPS (diluted)	1.67	3.39	**2.90**
EPS (basic)	1.82	3.70	**3.03**
Dividend per share	1.70	3.33	**2.85**
Net cash & Deposits	198.7	370.4	**346.5**

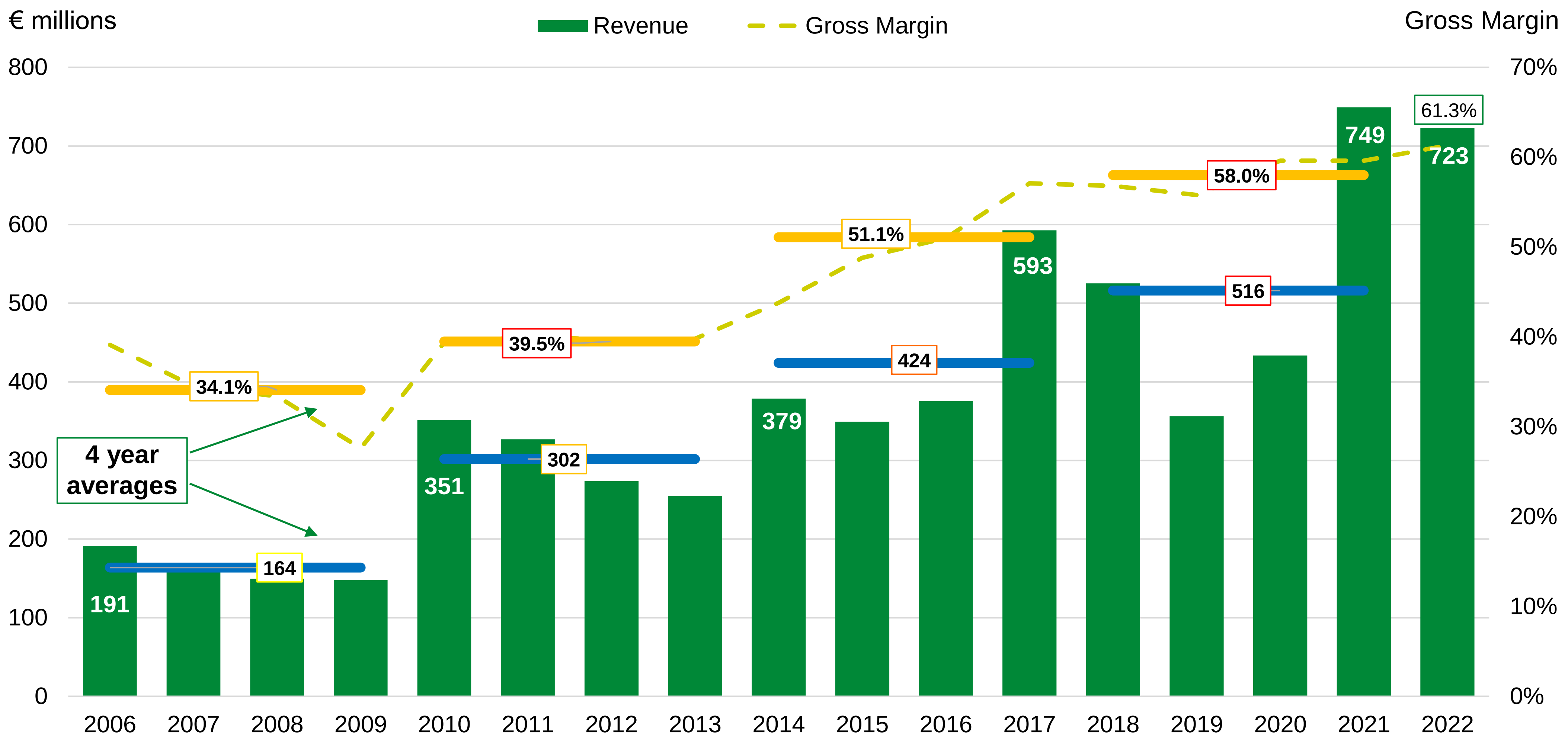
Long-term, step function growth in cyclical business
- Increased revenue, profitability and market share per cycle

2022 Revenue -3.5% and Net Income -14.8% vs. 2021
- Industry downturn began in Q2-22
- Order weakness reflected lower demand for smartphones and by Chinese end-user markets
- Gross and net margins maintained at high levels due to timely response to changing market conditions

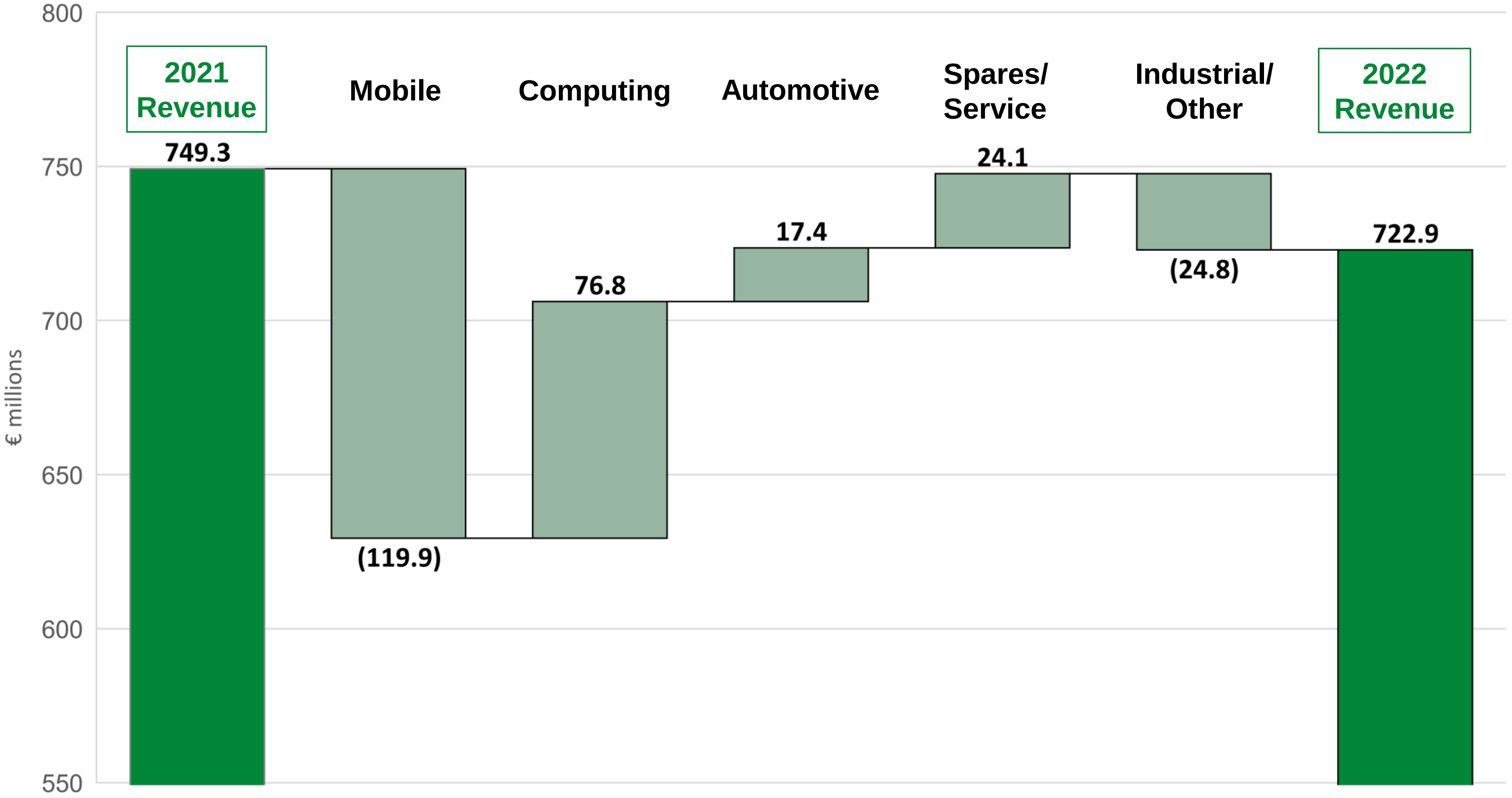
Strong margins and profitability
- Peer leading gross and net margins due to strong market position and flexible Asian production/workforce
- Cost control efforts lead to significant operating leverage

Strong cash generation supports shareholder friendly capital allocation policy

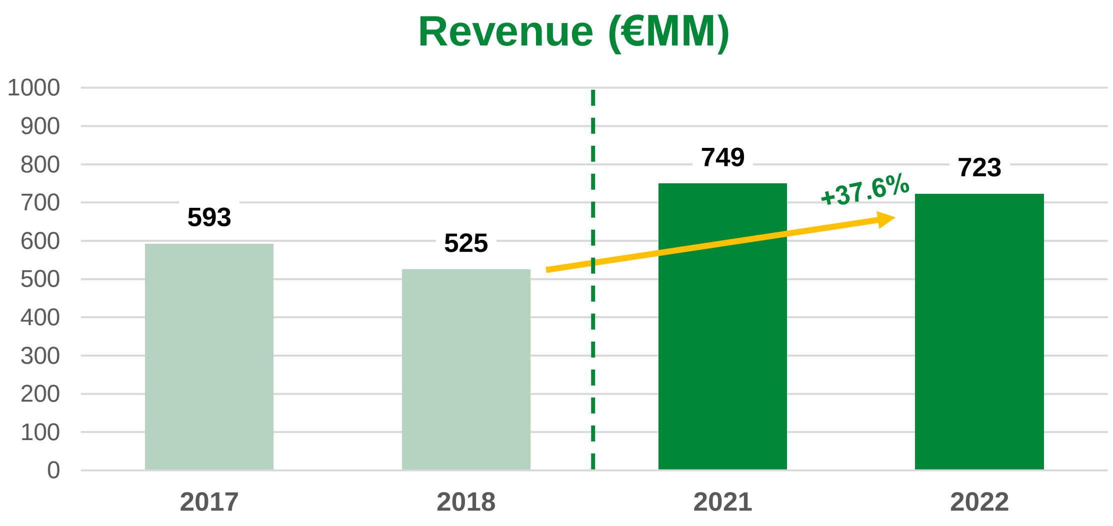
Through Cycle Revenue and Gross Margin Trends

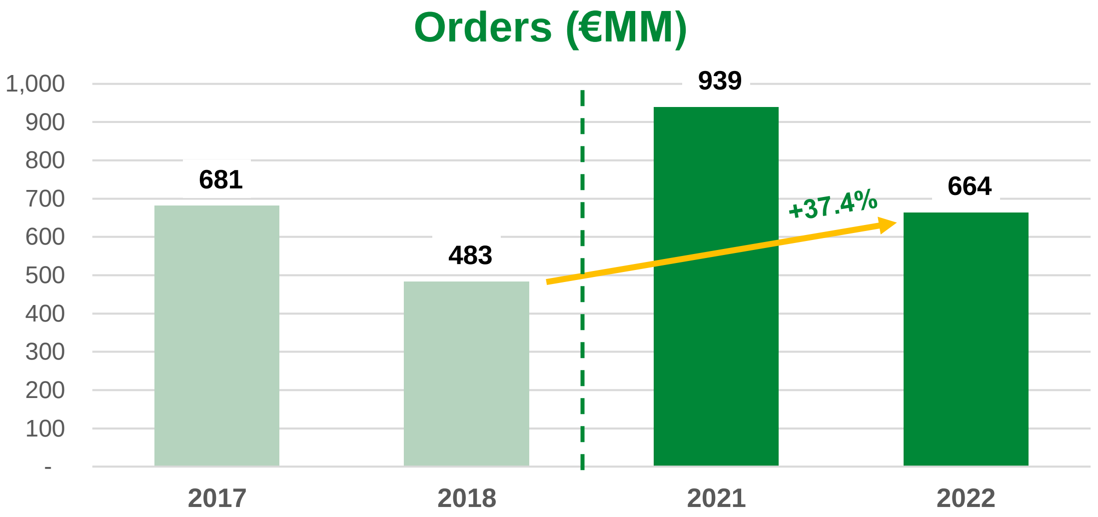


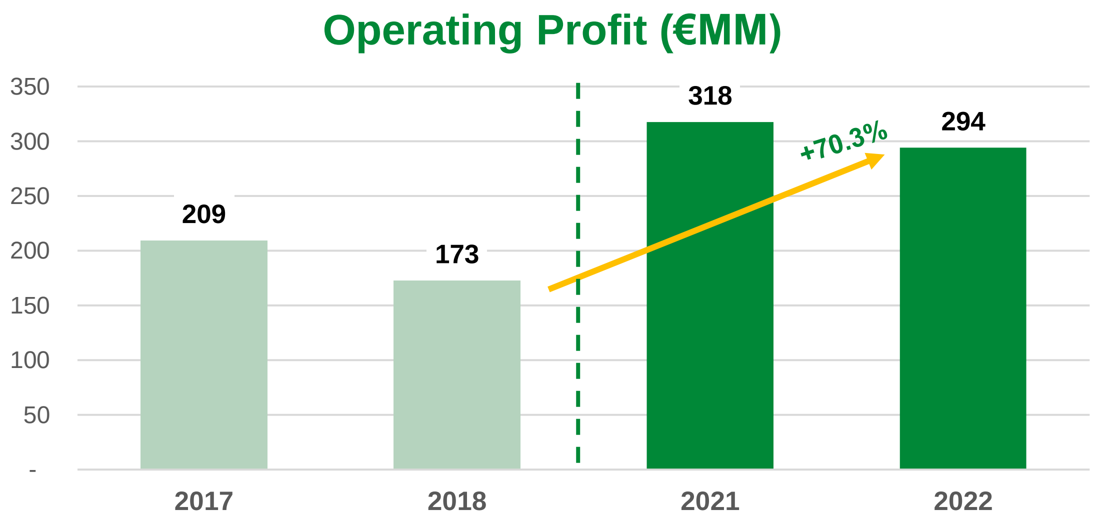
End-User Market Trends 2021/2022

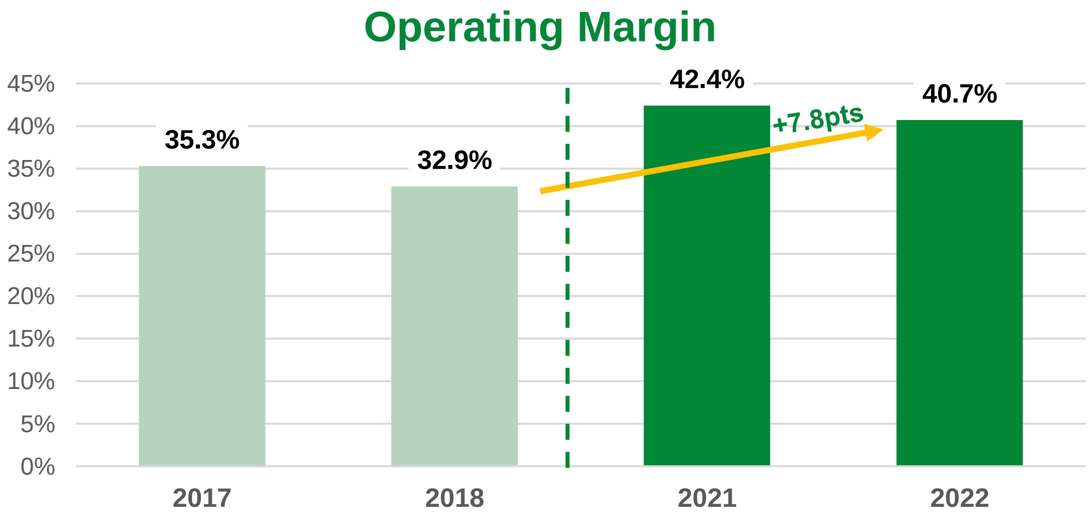


Performance Significantly Above Last Industry Downturn

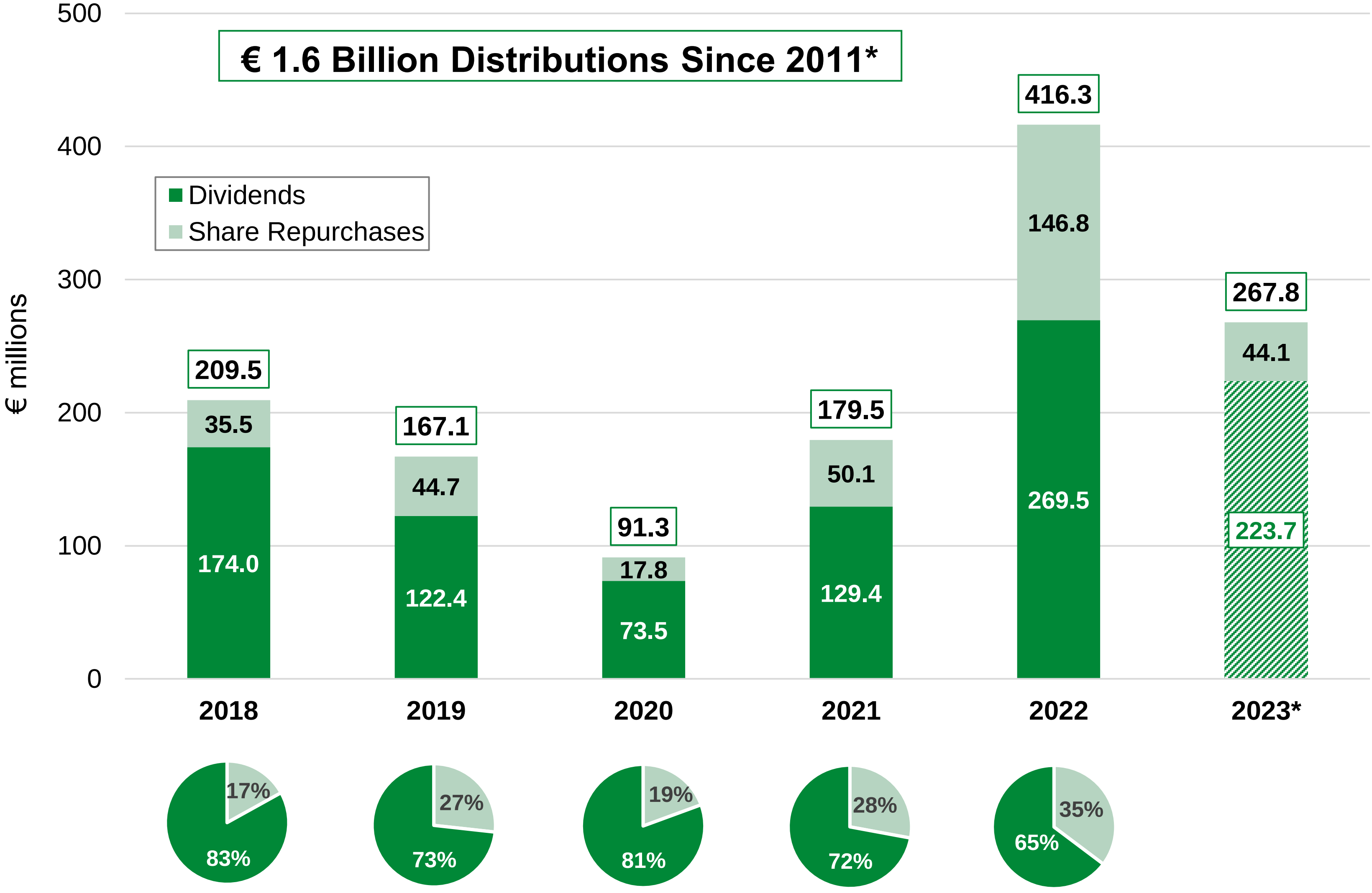








Capital Allocation Trends



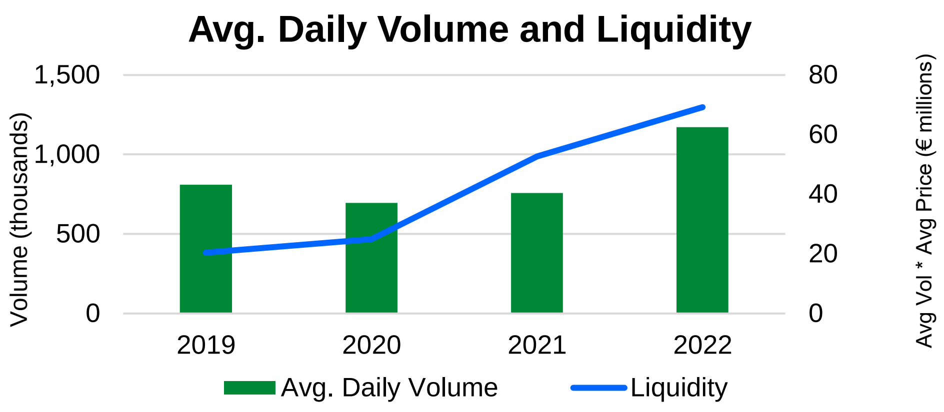
- **Record € 416.3 million distributed 2022**
  - Up 132% vs. 2021
- **New € 300 million buyback program:**
  - Started August 1, 2022
  - Expected completion October 2023
  - ~1.8 million shares purchased through year end for € 96.4 million
  - Additional ~670k shares purchased in Q1-23 through Feb 21, 2023

* Includes proposed dividend of € 2.85 per share for approval at 2023 AGM and repurchases up to February 21, 2023

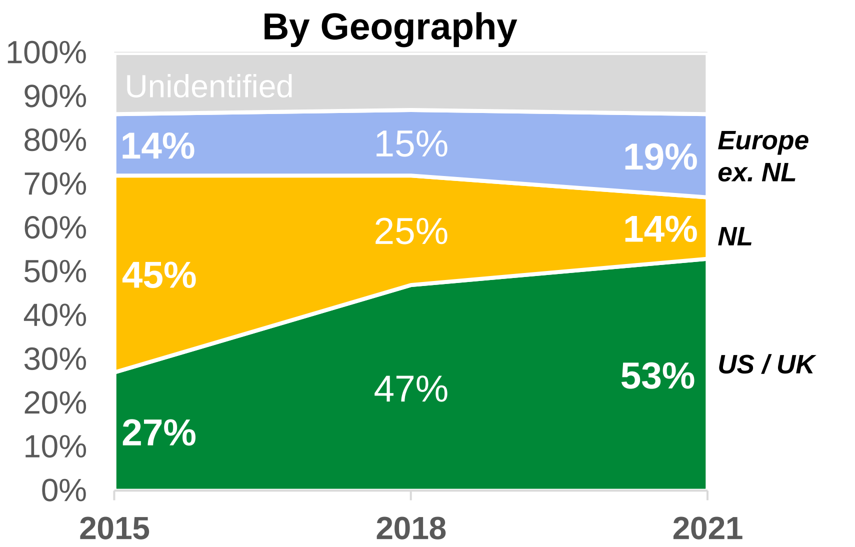
Besi Market Cap and Liquidity Has Expanded
Shareholdings Migrated from NL to US/UK over Past 5 Years

Market Profile

Symbol/ Index	• BESI • Euronext AEX
Market Cap*	• € 4.5 billion ($ 4.8 billion)
Dividend Policy	• Pay out 40-100% of net income per annum



Share Ownership

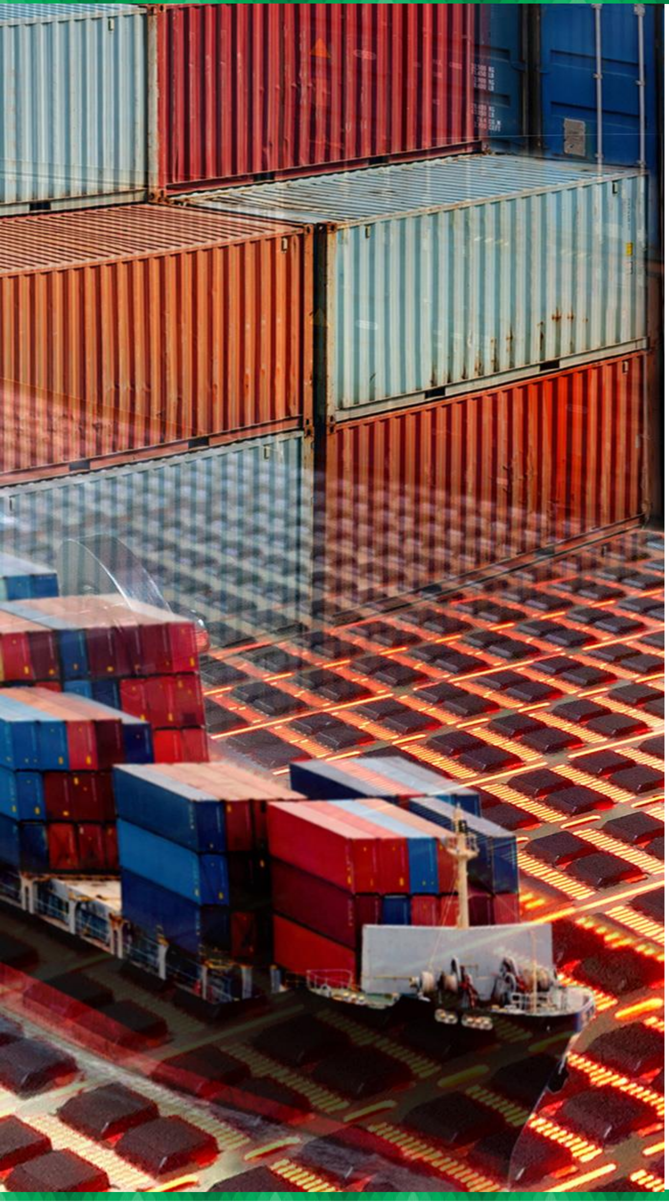


* As of December 31, 2022 ** Besi estimates

Key Business Objectives 2021-2025

Business Model Objectives

Revenue	€ 1 billion++
Addressable Market Share	40%+
Gross Margin	57-62%
Net Margin	30-35%
Headcount Split	80% Asia/20% Europe/NA
Scope 1 and 2 Emissions	62% reduction
Global Energy Needs	75% from renewable sources



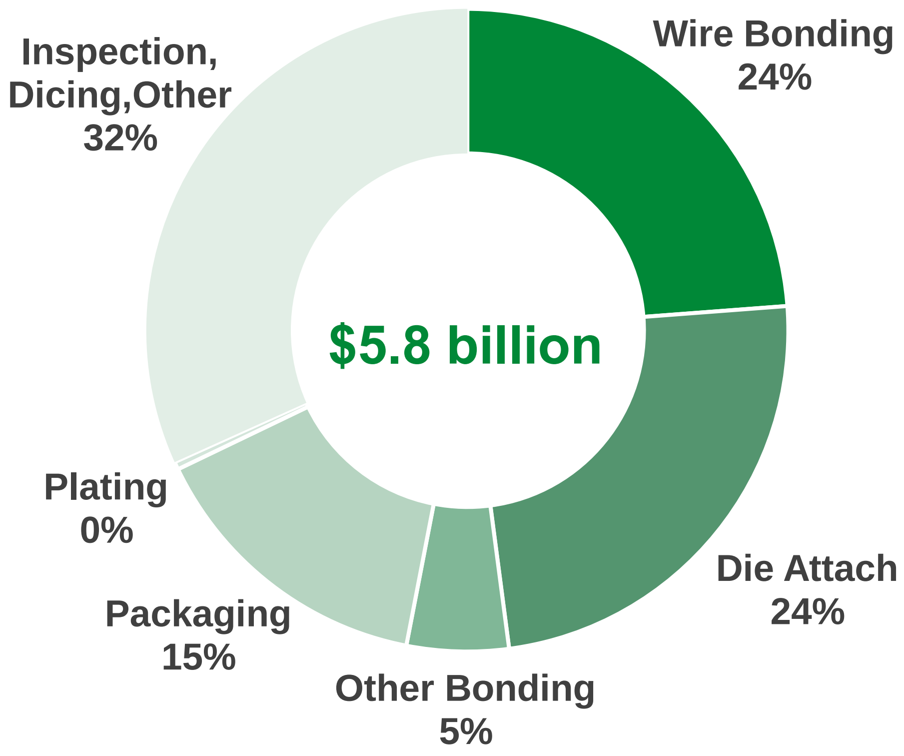
II. MARKET OVERVIEW

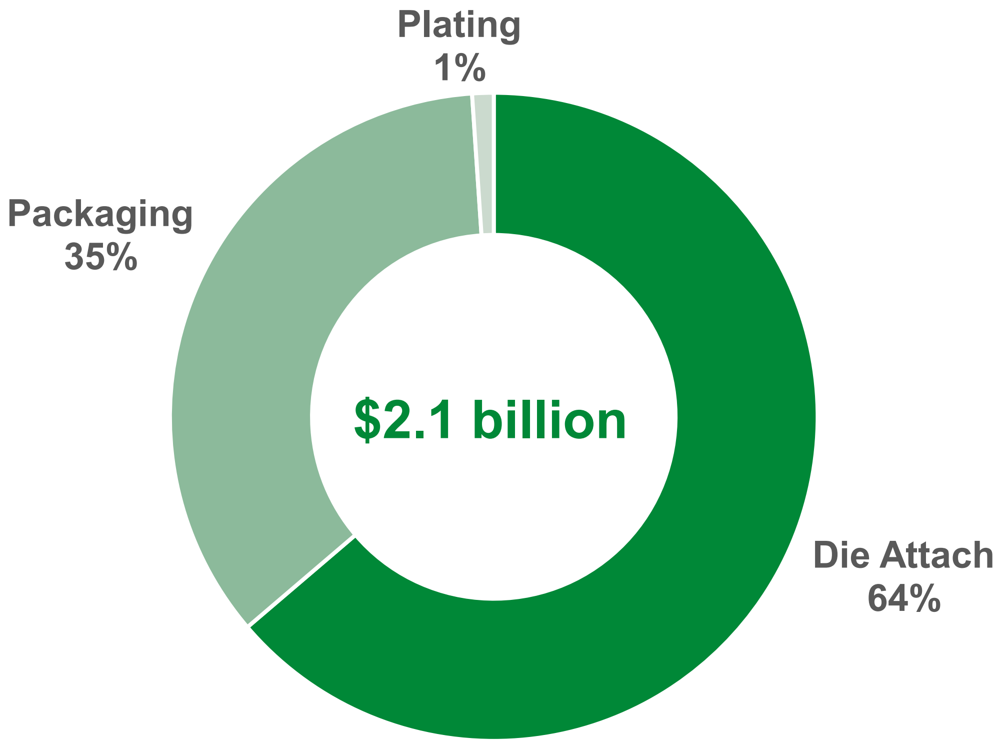
What Drives Besi's Business?

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

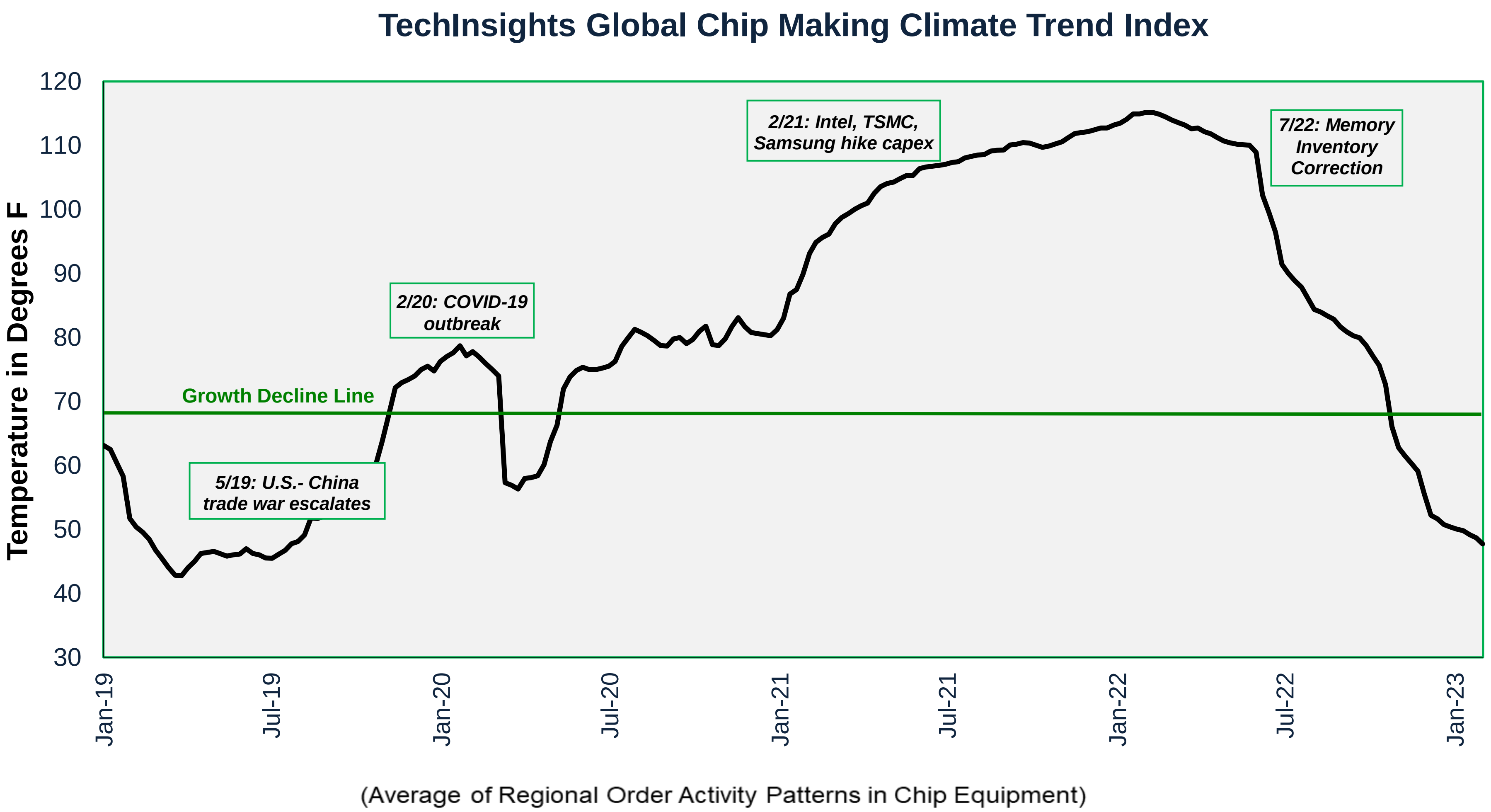
Assembly Equipment Market (2022)	Besi Addressable Market (2022)





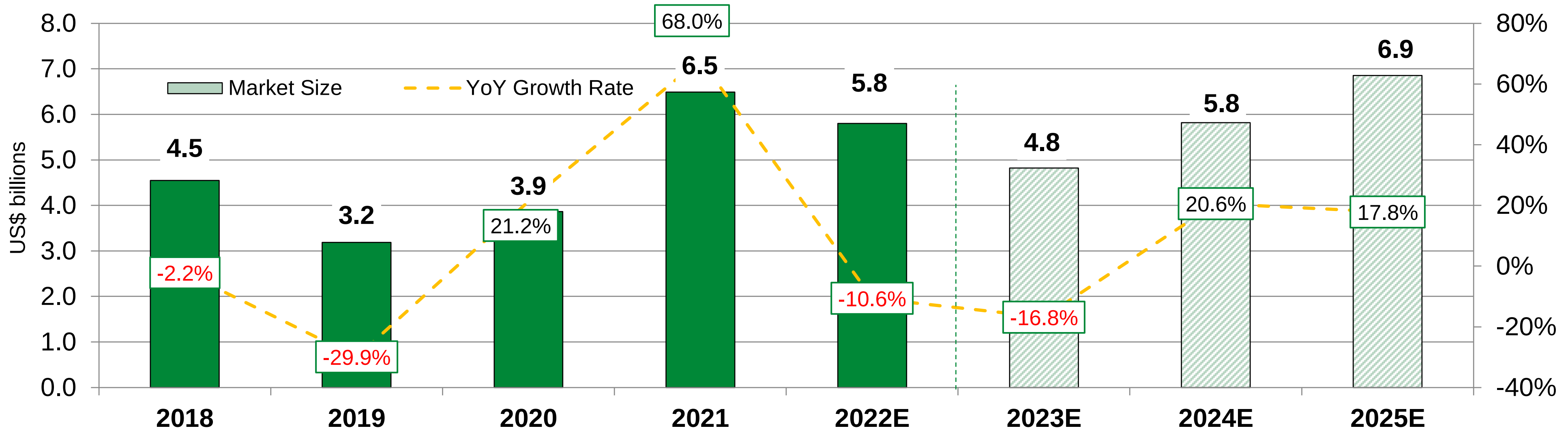
Source: TechInsights, December 2022

Industry Downturn Commenced in Q2-22

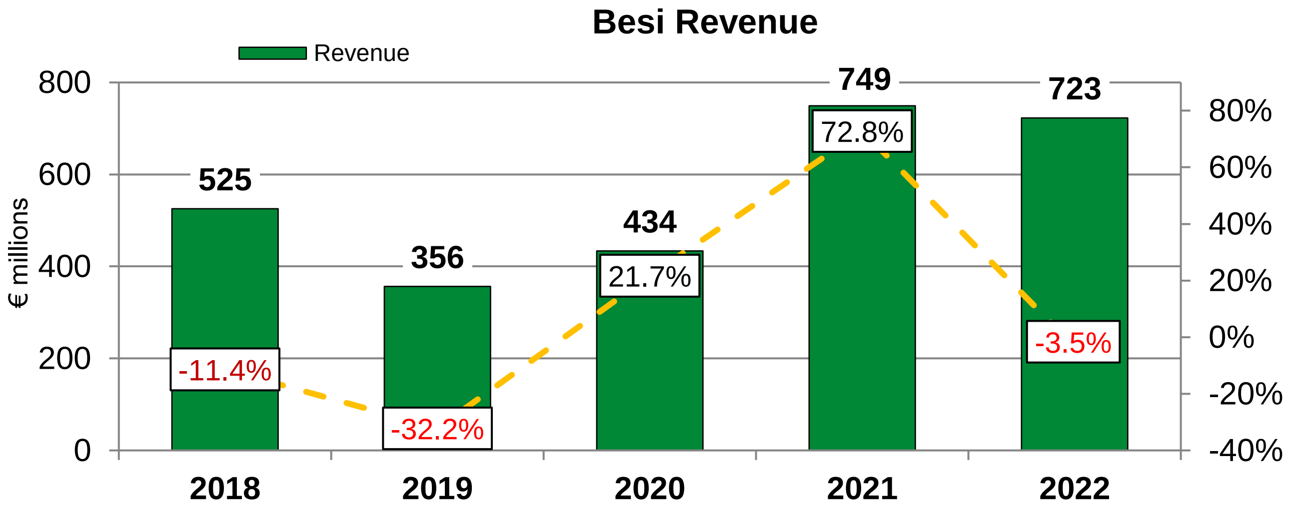


Source: TechInsights, February 2023

Assembly Downturn Expected to Continue in 2023
Rebound Forecast in 2024



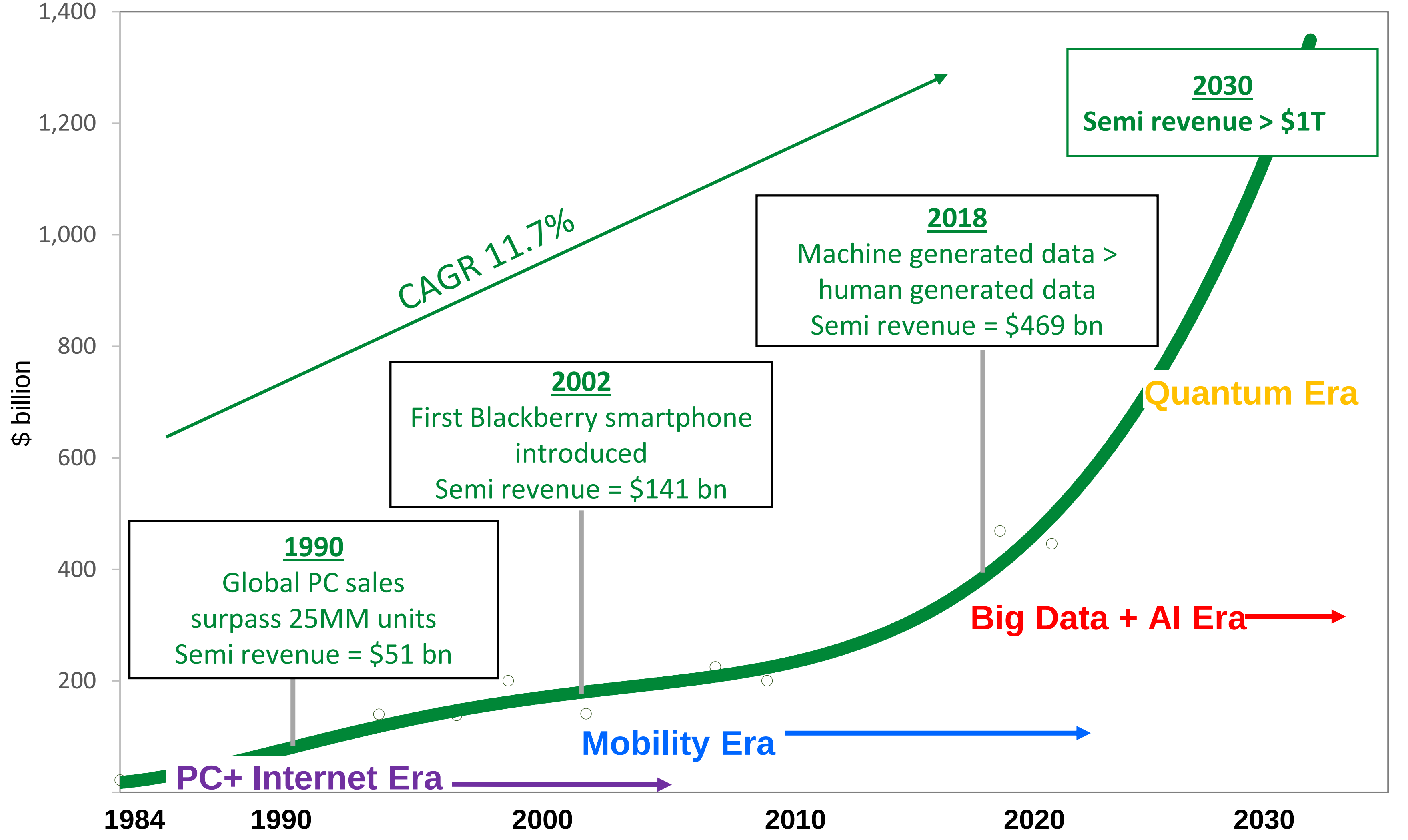
Source: TechInsights, December 2022. Assembly equipment revenue excludes hybrid bonding contribution and service revenue.



TechInsights forecasts 16.8% downturn in 2023
- Market decreases to $4.8 billion
- ~26% decrease from 2021 peak
- Rebound anticipated in 2024 and 2025

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

Long-Term Semiconductor Demand Growth Continues



- **Market required 50 years to reach $500 billion in sales**
- **10 years estimated to reach $1.4 trillion in sales**

Data source: SEMI 2022

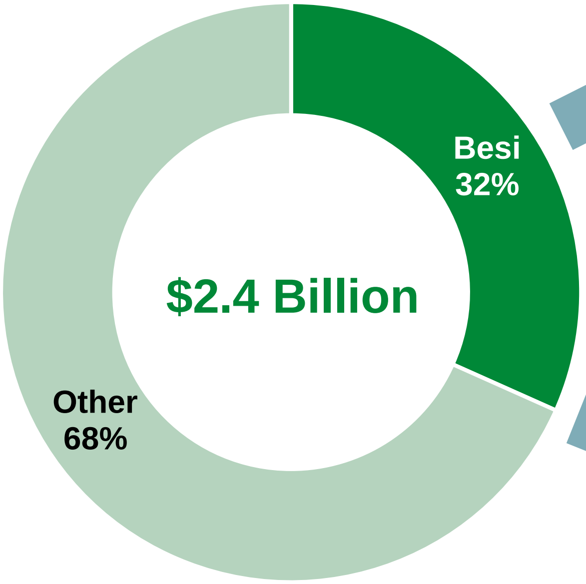
Besi Addressable Market Share Increasing Particularly in Key Die Attach Markets

	2016	2017	2018	2019	2020	2021	Δ '21/'20	Δ '21/'16
Assembly Market ($MM)	3,587	4,648	4,546	3,186	3,863	**6,490**	+68.0%	+80.9%
Besi Market Share	9.9%	12.7%	11.2%	10.1%	11.2%	**11.6%**	**+0.4pts**	**+1.7pts**
Addressable Market ($MM)	1,507	1,948	1,859	1,251	1,403	**2,365**	+68.6%	+56.9%
Besi Market Share	23.7%	30.2%	27.3%	25.8%	29.2%	**31.7%**	**+2.5pts**	**+8.0pts**
Die Attach	30.4%	38.2%	33.2%	30.8%	36.8%	**41.4%**	**+4.6pts**	**+11.0pts**
Packaging & Plating	13.6%	14.7%	17.0%	16.8%	15.3%	**15.8%**	**+0.5pts**	**+2.2pts**
% of Besi Revenue	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Δ 1yr**	**Δ 5yr**
Die Attach	75%	82%	76%	76%	82%	**82%**	**-**	**+7pts**
Packaging & Plating	25%	18%	24%	24%	18%	**18%**	-	-7pts

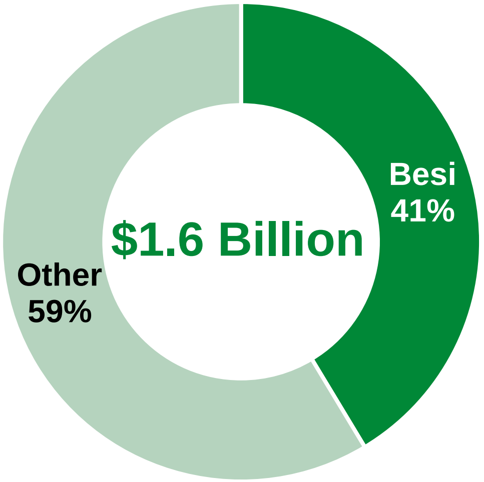
Source: TechInsights, December 2022

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

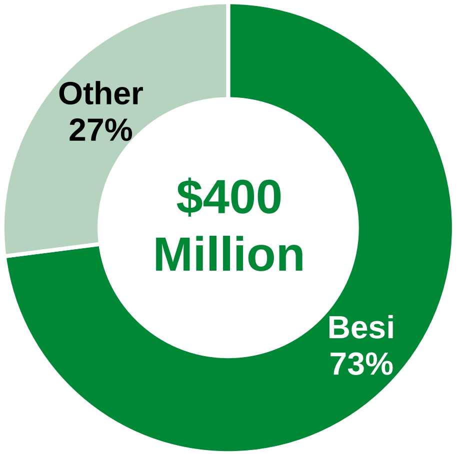
2021 Addressable Market*



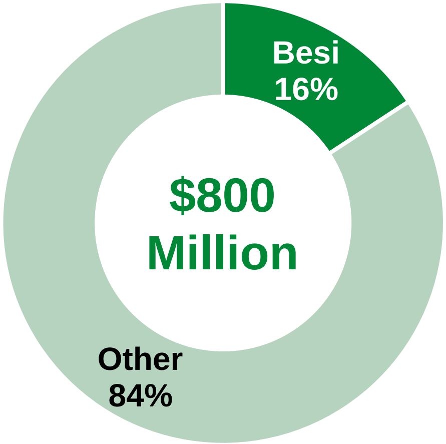
Die Attach
(82% of Revenue)



Advanced Die Placement**



Packaging & Plating
(18% of Revenue)



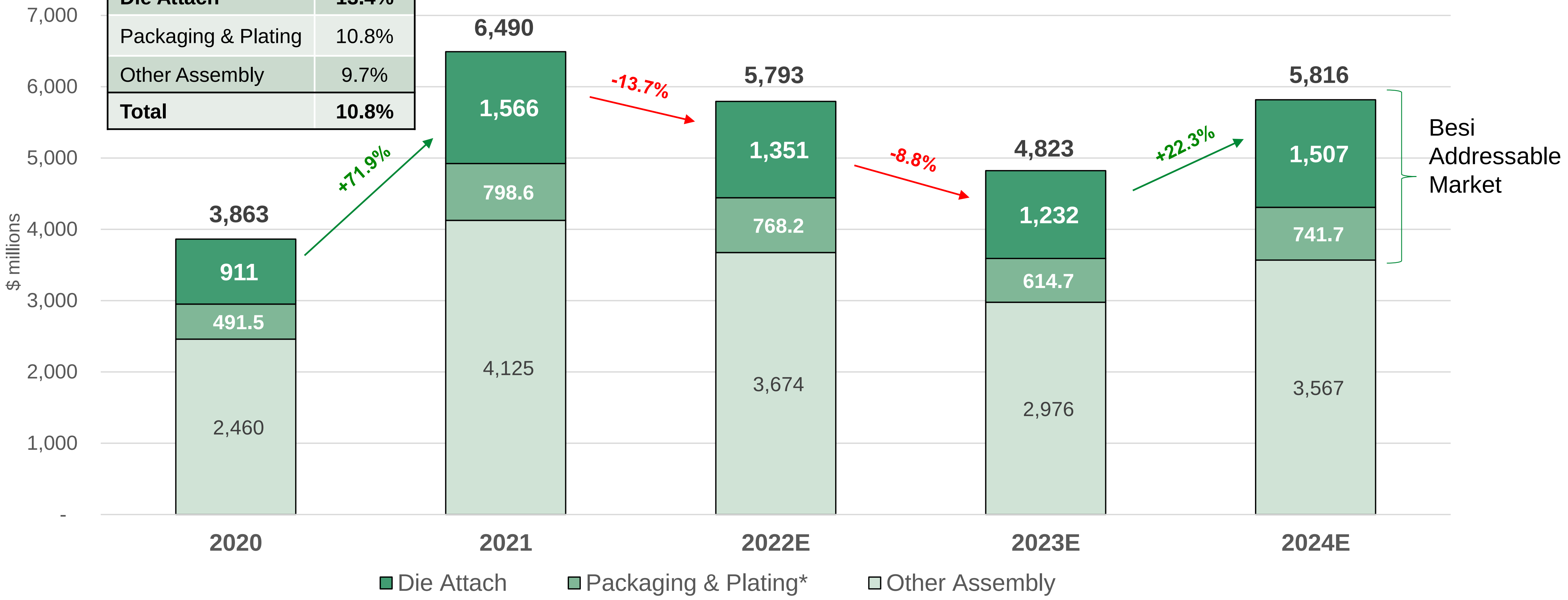
* Excludes wire bonding, dicing, and other.

** Advanced die placement defined as < 7 micron accuracy per TechInsights

Source: TechInsights, December 2022. Equipment only.

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

CAGR (2020-2024)	
Die Attach	**13.4%**
Packaging & Plating	10.8%
Other Assembly	9.7%
Total	**10.8%**



Source: TechInsights, December 2022

- Addressable market excludes hybrid bonding revenue. Packaging & Plating includes only Besi's addressable segments. Non-addressable reported in other assembly market.

Advanced Packaging Critical to Next Generation Applications

Growth Drivers

Mobile Revolution

- Mobile internet
- Messaging
- Social media
- Shared economy
- Gaming
- Geo-location
- Audio/video
- Auto electronics

Digital Society

- Smart mfg, cities, mobility and homes
- Internet of Everything
- 5G mobile/wearable devices
- Artificial intelligence
- Hyperscale cloud infrastructure
- Driverless cars
- Data mining
- VR/AR
- Gaming & Infotainment

Enablers

Greater Miniaturization

Higher Accuracy

Greater Complexity

Lower Power Consumption

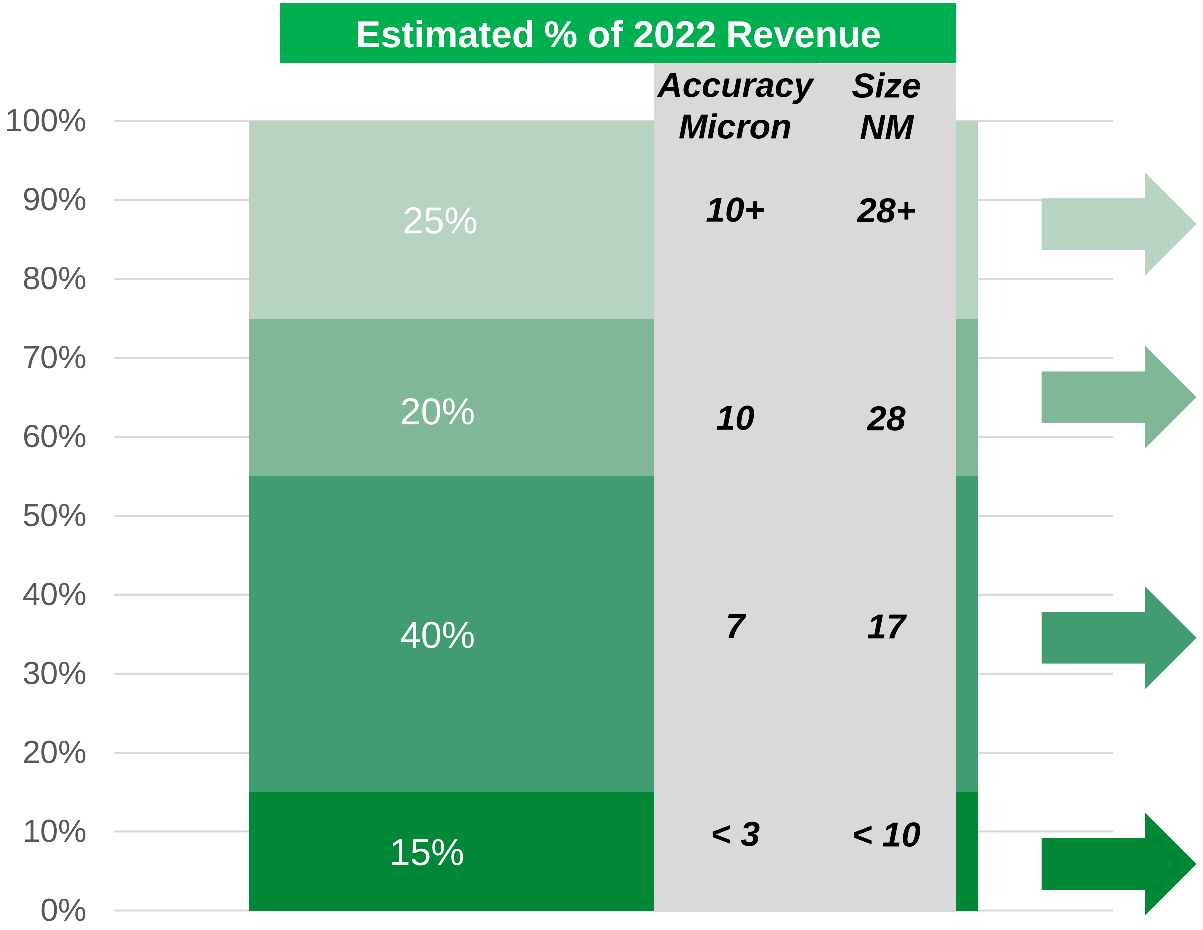
Increased Density

Higher Performance

Besi

Die Bonding and Packaging Portfolio

Besi Portfolio Well Positioned by Node Size and Accuracy



Typical Application	Besi Equipment
Automotive, SiP Power	*Die Attach Packaging Plating*
IOT General ICs	*Die Attach Packaging Plating*
Computer, PC, Mobile Cloud Computing	*Die Attach Packaging*
High Performance Computing Memory, Hybrid Bonding	*Die Attach Packaging*

- **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

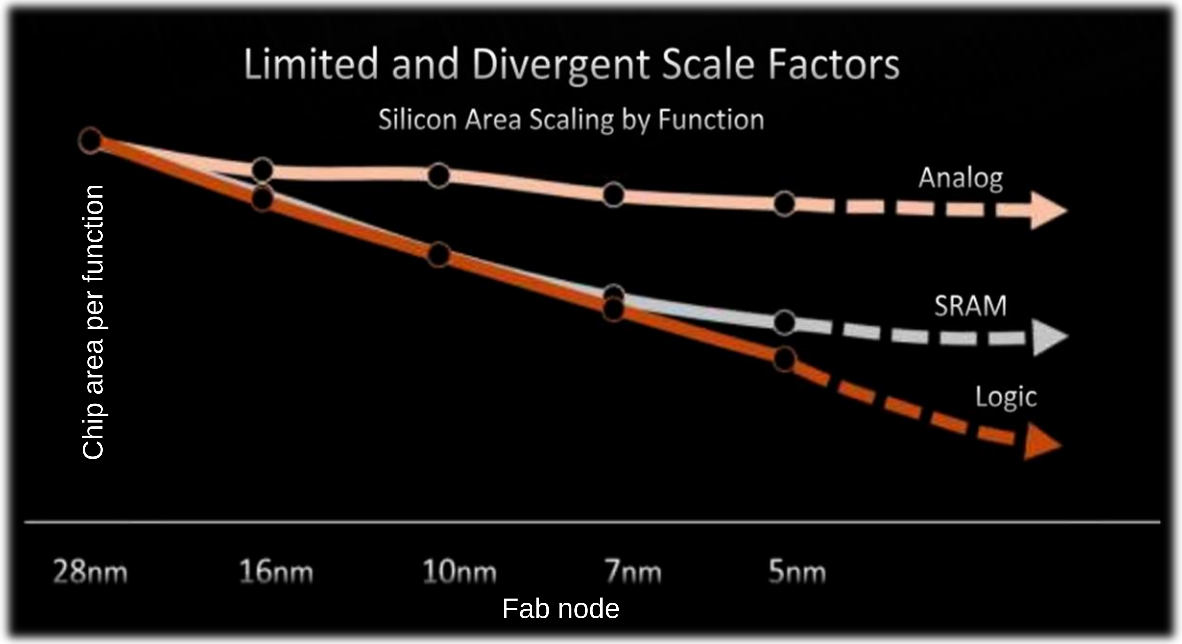
Slowing of Moore's Law Drives Adoption of Chiplet Architectures and New Assembly Solutions

Problem

- Moore's Law is slowing
- Some functions don't shrink as node sizes reduce
- Die sizes are increasing beyond reticle limit

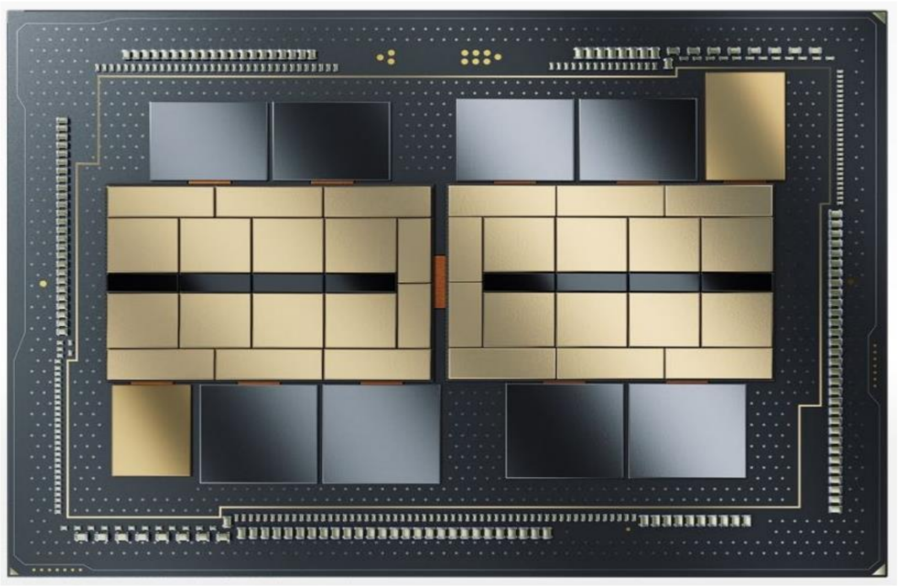
Solution

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



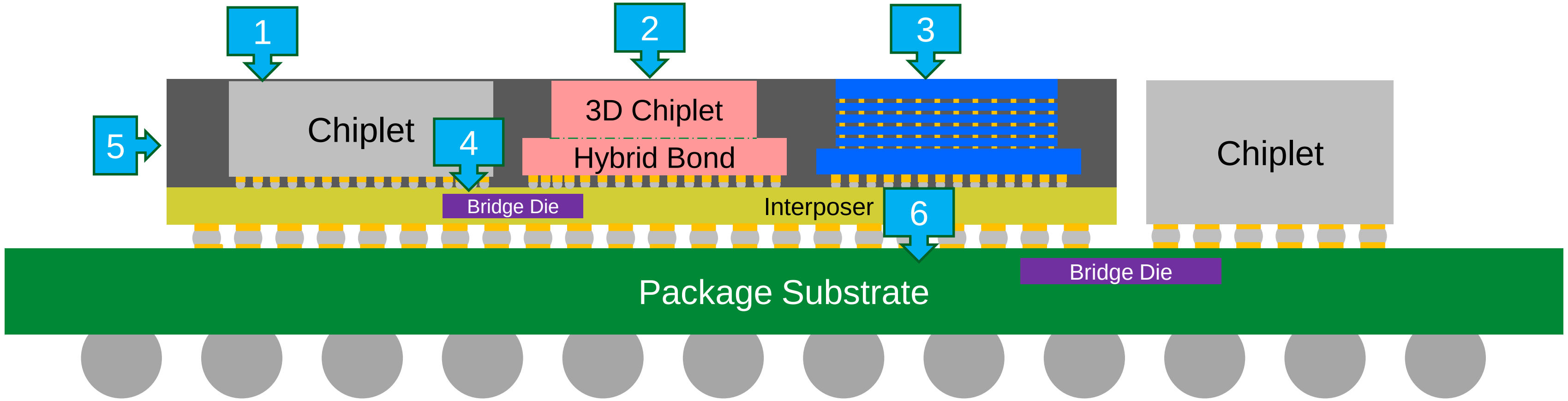
Source: AMD

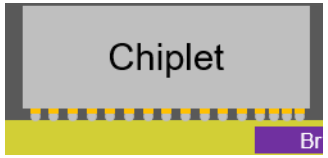
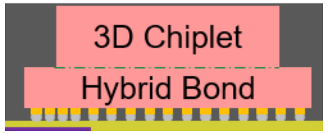
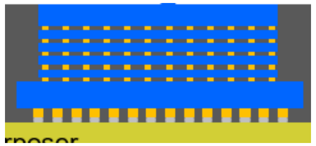
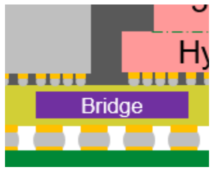
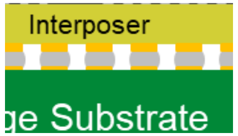
Intel's Ponte Vecchio: 47 Chiplets in One Package



Source: Intel

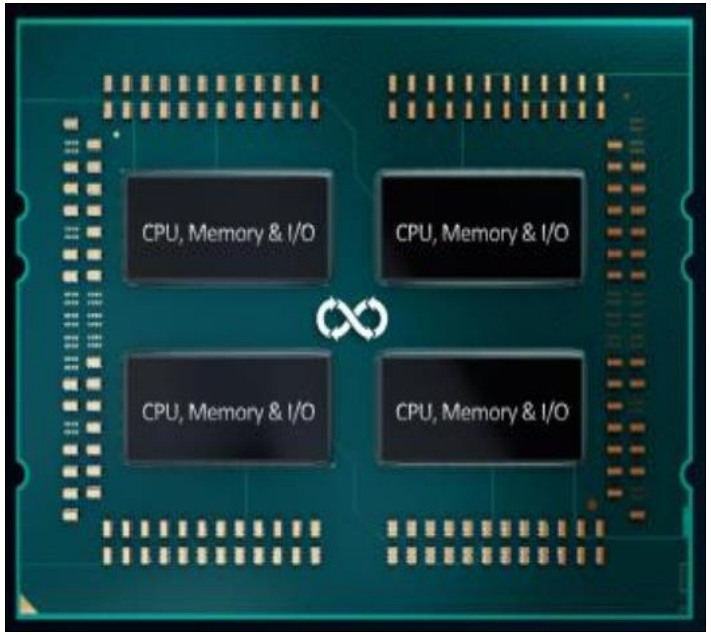
3D Chiplet Structures Use Variety of Advanced Assembly Processes



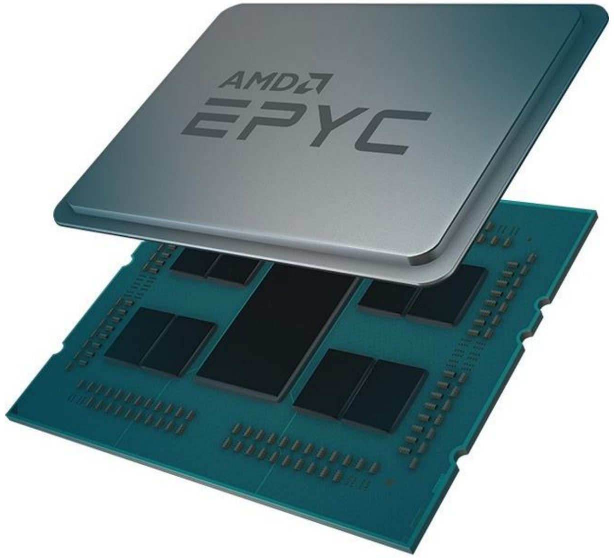
1	2	3	4	5	6
Chip to Wafer TCB 	Hybrid Bonding 	High Bandwidth Memory Stacking 	Embedded Bridge Die Attach 	Wafer Level Die Molding 	HD Interposer to Substrate 
TC Next C2W	8800 Chameo Ultra Plus	8800 TC Advanced 8800 Chameo Ultra+	8800 Chameo Ultra	FML	2200 evo

And Increase Process Steps/Capital Intensity

2017	2019	2022
1st Gen EPYC	2nd Gen EPYC	3rd Gen EPYC
4 flip-chip placement steps	**9 flip-chip placement steps**	**> 30 die placement steps** including hybrid and flip-chip



Source: AMD



Besi Process Solution:

8800 FC Quantum
ASP: $500k
UPH: ~9,000

→

8800 Ultra Accurate C2W Hybrid Bonder:
ASP: $1.5MM-$2.5MM
UPH: ~1,500

Why is Hybrid Bonding Important?

Extends Moore's Law <7nm node size
Enables faster, more complex devices with submicron placement accuracy

Direct Cu-Cu Interconnect
Eliminates need for solder balls and interposer

Increase contact density by factor of 1,000x

+

Heterogeneous integration of chiplet-based architectures

=

Increased Performance

- Increased data transfer
- Higher bandwidth
- Higher speed

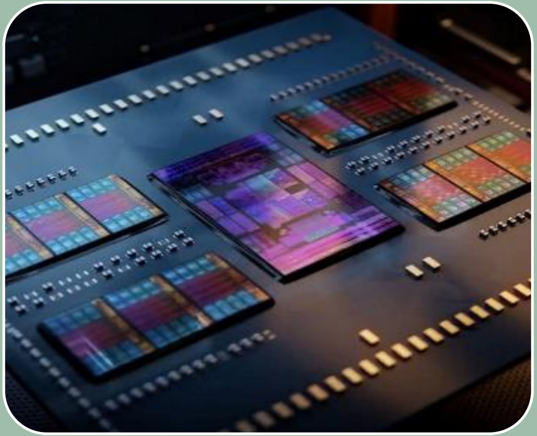
Design Flexibility

- New 3D chiplets
- Customized designs
- Highly configurable

Lower Cost of ownership

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

Applications Driving Hybrid Bonding Growth

HPC	Advanced Memory	Mobile	Sensors and Photonics
			
Unified Compute/Memory Core on Core	**Advanced Memory Stacking**	**Application Processors mmWave RF**	**Integrated Silicon Photonics**
AI Gaming Datacenters	HBM4 DRAM	Smartphones	Image Sensors AR/VR Display

Hybrid Bonding Update

Industry Adoption

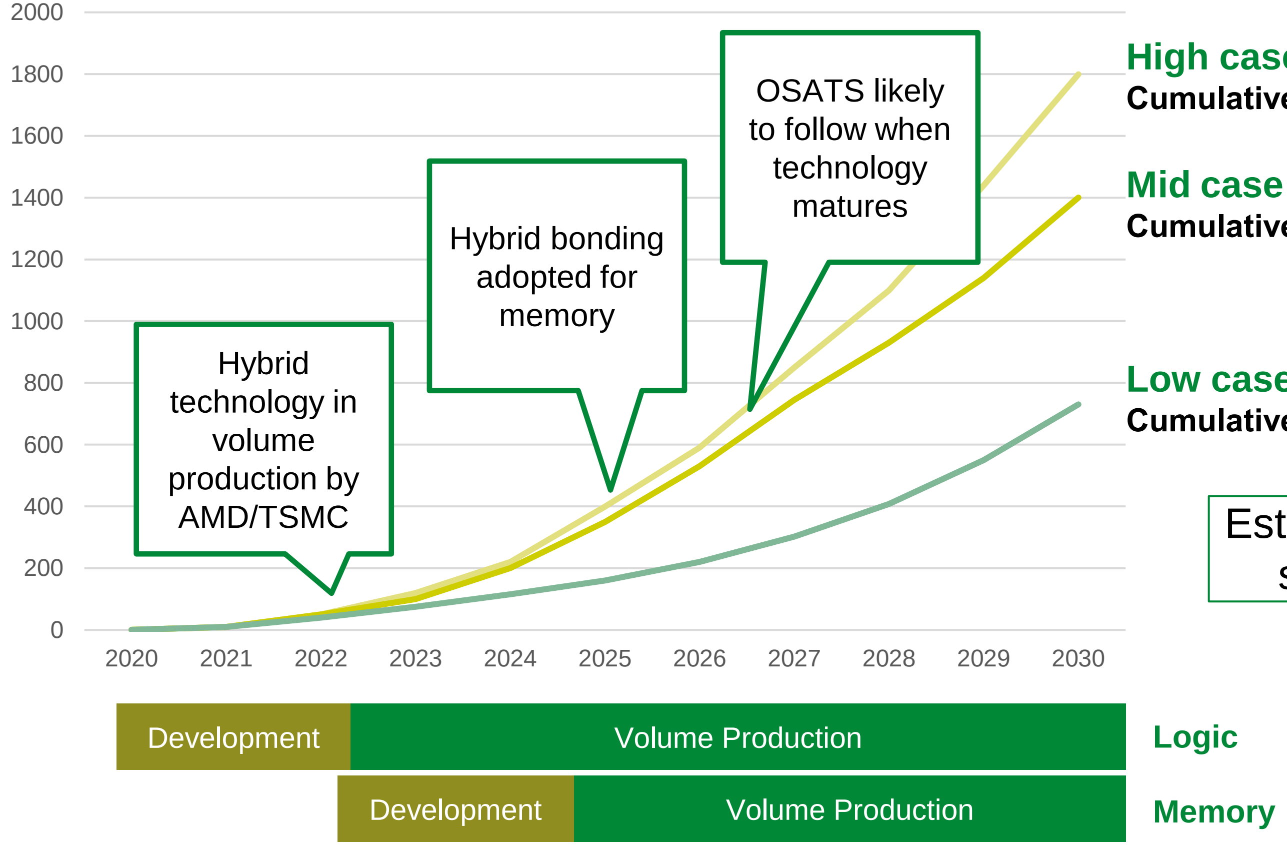
- Active development by leading semiconductor producers
- Full scale commercial production for high performance CPUs
- Memory applications in R&D phase
- Chiplet interface standards being developed

Besi Progress

- 35 units shipped since Q4-21
- 28 units shipped in 2022
- 14 new orders post Q3-22
  - 3 to date in Q1-23
- Production yields increased significantly
- Cycle times reduced
- First orders received for HB systems in integrated lines
- Capacity expansion in progress

Hybrid Bonding Market Potential

Total # of installed hybrid bonding systems



High case
Cumulative Total: € 3.0B

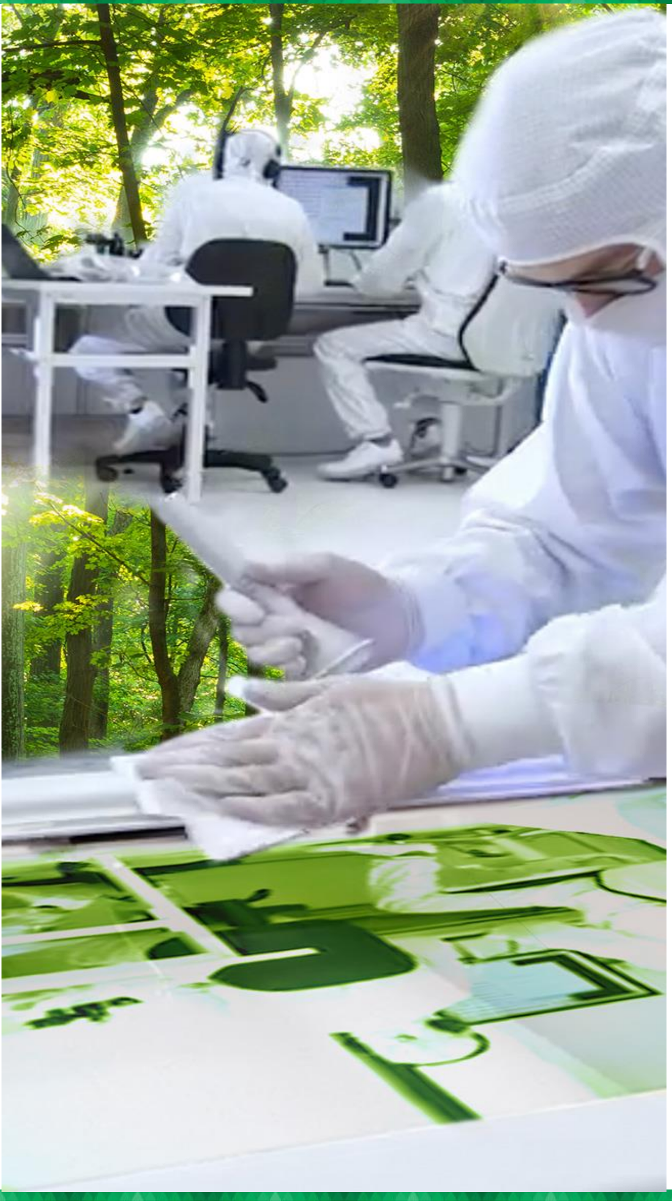
Mid case
Cumulative Total: € 2.4B

Low case
Cumulative Total: € 1.2B

Estimated 730 – 1,800 systems by 2030

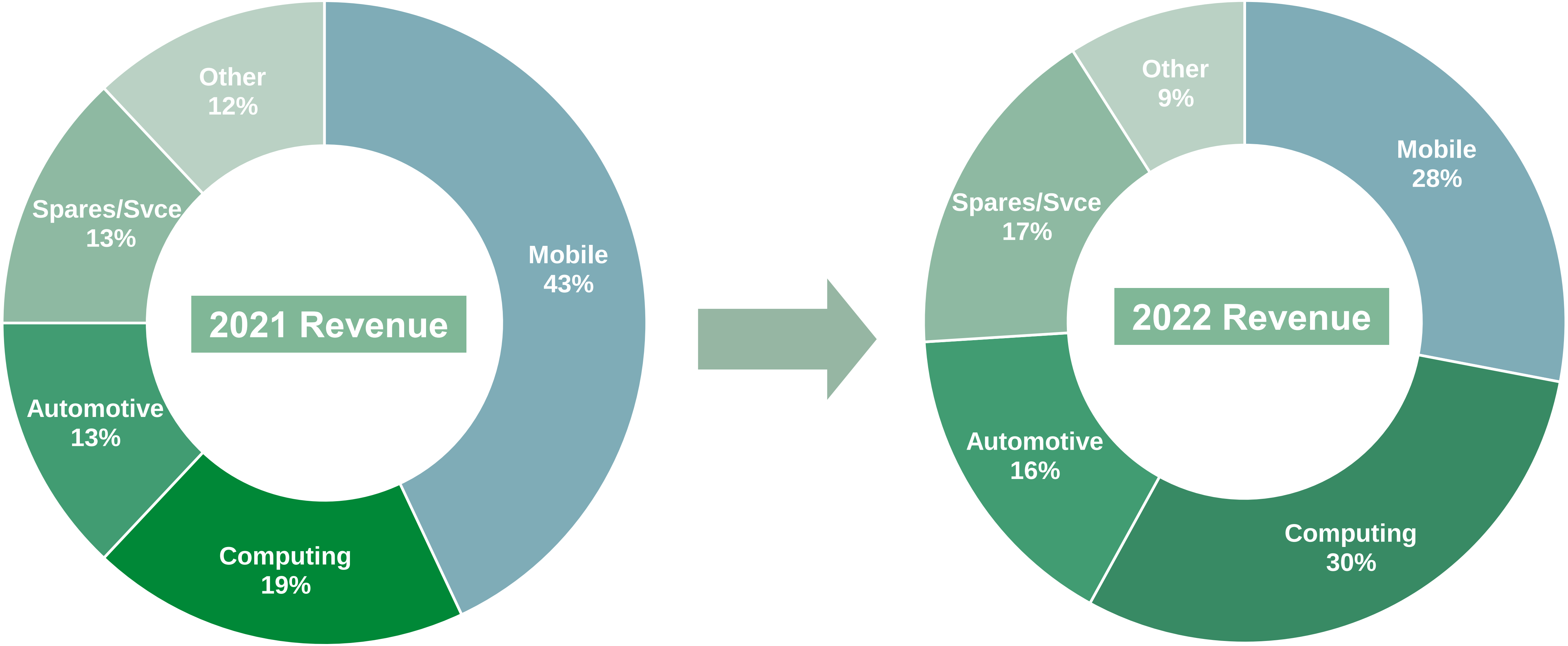
Source: Besi estimates, December 2022

- **Hybrid now on radar of all major semi producers**
- **Not question of if, but when and how large the market opportunity**
- **Upside market potential expanded**
  - Tracking to mid case currently
- **<u>Expected rollout sequence:</u>**
  1. Logic
  2. Memory
  3. Mobile
  4. Subcontractors



III. END-USER MARKET TRENDS

Besi End-User Market Composition



Source: Company estimates

Long Term Secular Growth Drivers

Mobile:

5G
Wearables
3D sensors
Advanced cameras
New Features

Technology:

New chiplet & 3D architectures,
High bandwidth memory

Well Positioned for Next Generation Opportunities

Computing:

AI goes mainstream
Big data
Edge computing
Silicon photonics

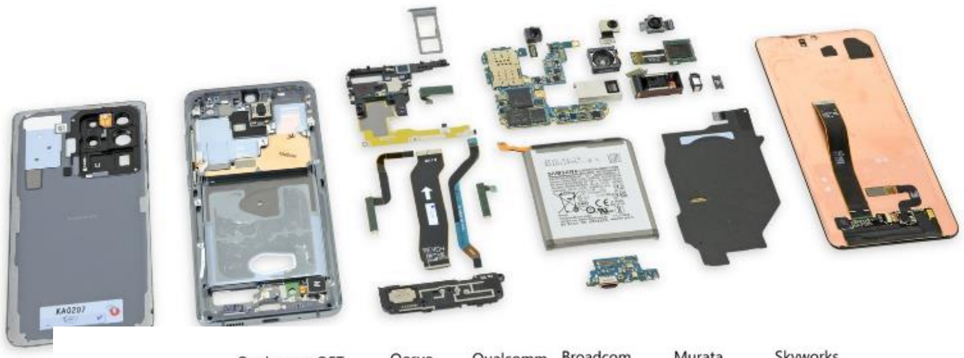
Automotive:

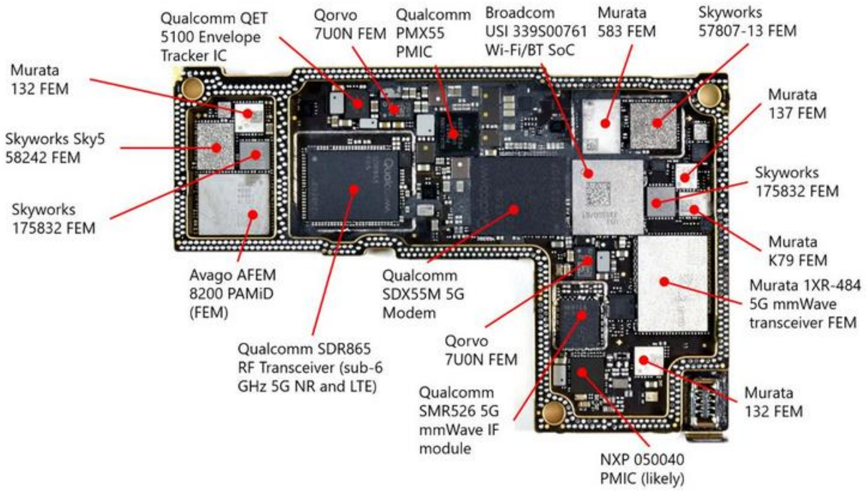
Autonomous driving
EV adoption
Advanced sensors SiC/GaN power devices

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

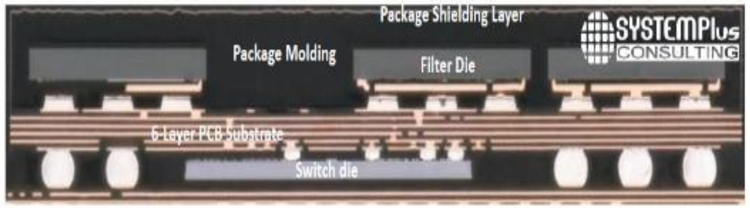
- RF Front End
  Antennas
  GPS
- RF
  Transceiver
  Modem
- Local
  Connectivity
  WiFi/NFC
- Microphone
  Cameras
  Sensors
- Display
  TouchScreen
- Power
  Battery
- Memory

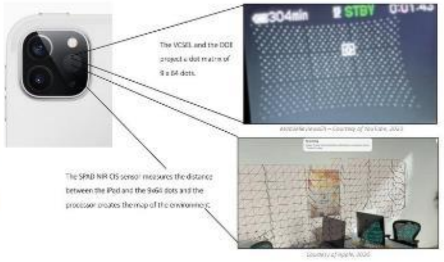
Application Processor





Lidar



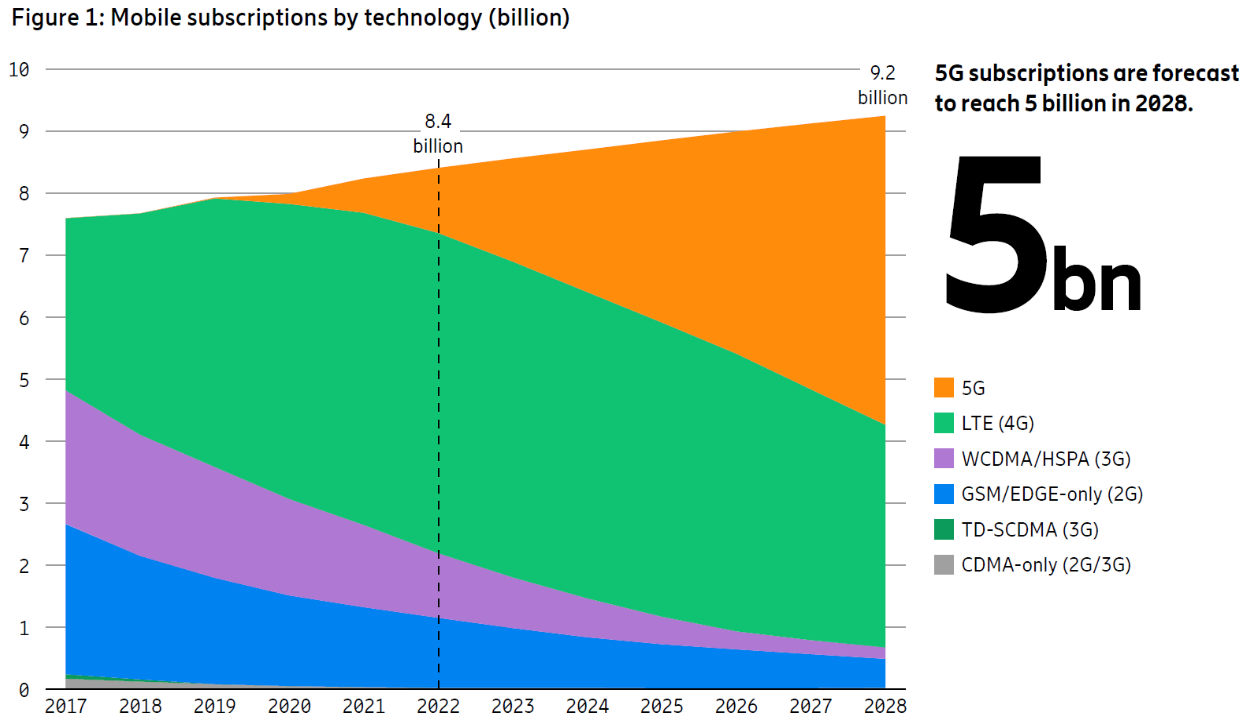


Besi Involved in Almost All Components

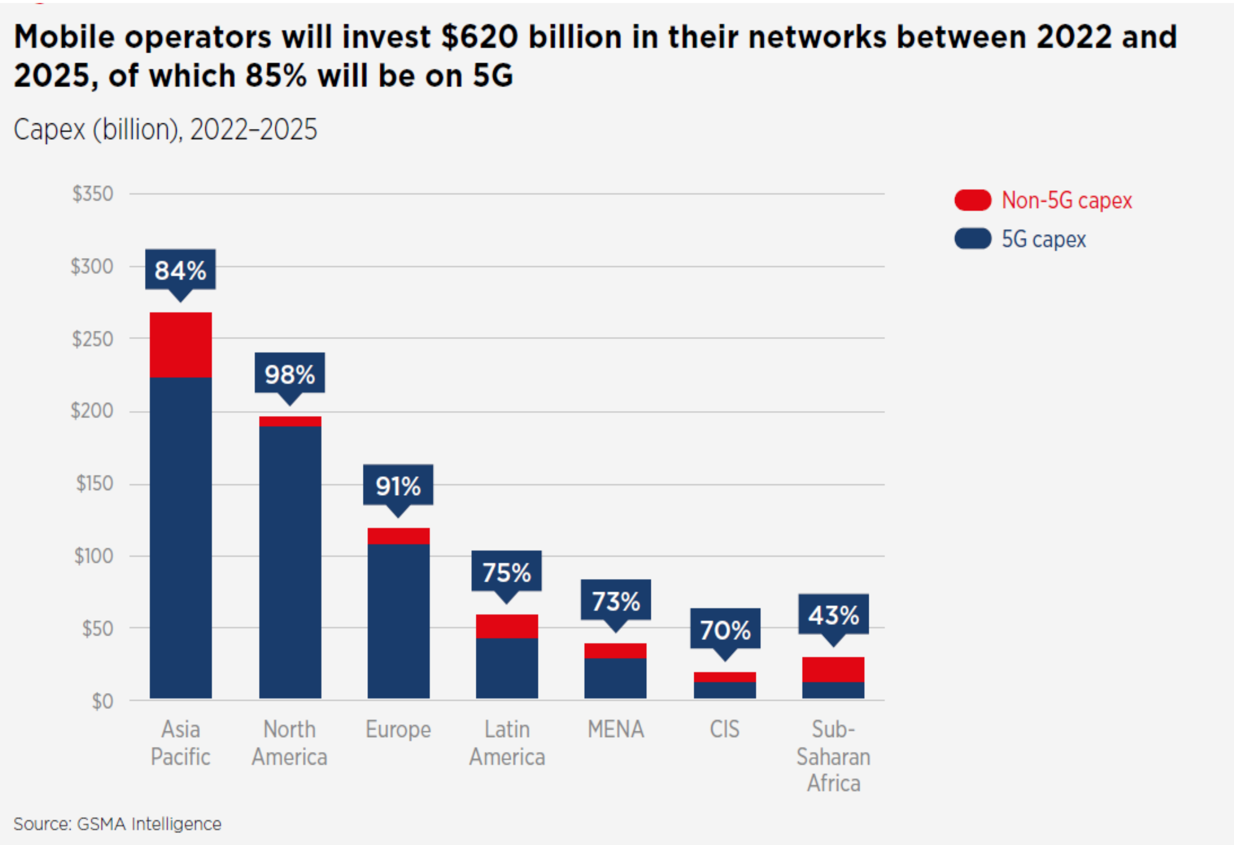
Main Components	Besi system Utilized
Processor	8800CHM, MMS-LM
DRAM Memory	2100sD, FSL
NAND Flash	2100sD, AMS-W/LM/FCQ8800
PM IC	2100sD, AMS-W/LM
Motion coprocessor	2100sD, AMS-W/LM
Gyroscope	2100xP, 2100sD, AMS-W/LM, FCL
3-ax accelerometer	2200evo
barometric sensor	2200evo
Charging IC	2100xP, 2100sD, 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

Mobile Growth Also Aided by 5G Network Expansion



[1] GSA (November 2022).
[2] A 5G subscription is counted as such when associated with a device that supports New Radio (NR), as specified in 3GPP Release 15, and is connected to a 5G-enabled network.
[3] Mainly CDMA2000 EVDO, TD-SCDMA and Mobile WiMAX.



Source: Ericsson Mobility Report Nov 2022

Computing Demand Expanding Rapidly

Advanced Computing Expanding To Many Commercial Applications

AI/Vision/Recognition

Medical

Super Computers

Mobile Phones

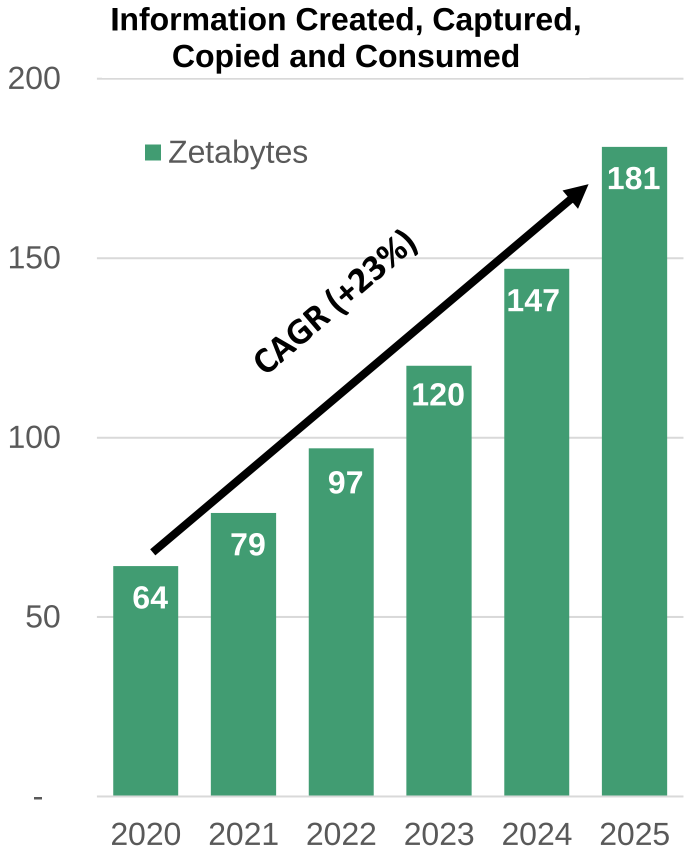
Industry 4.0

Autonomous Driving

Datacenters

Laptops/Gaming/ Engineering

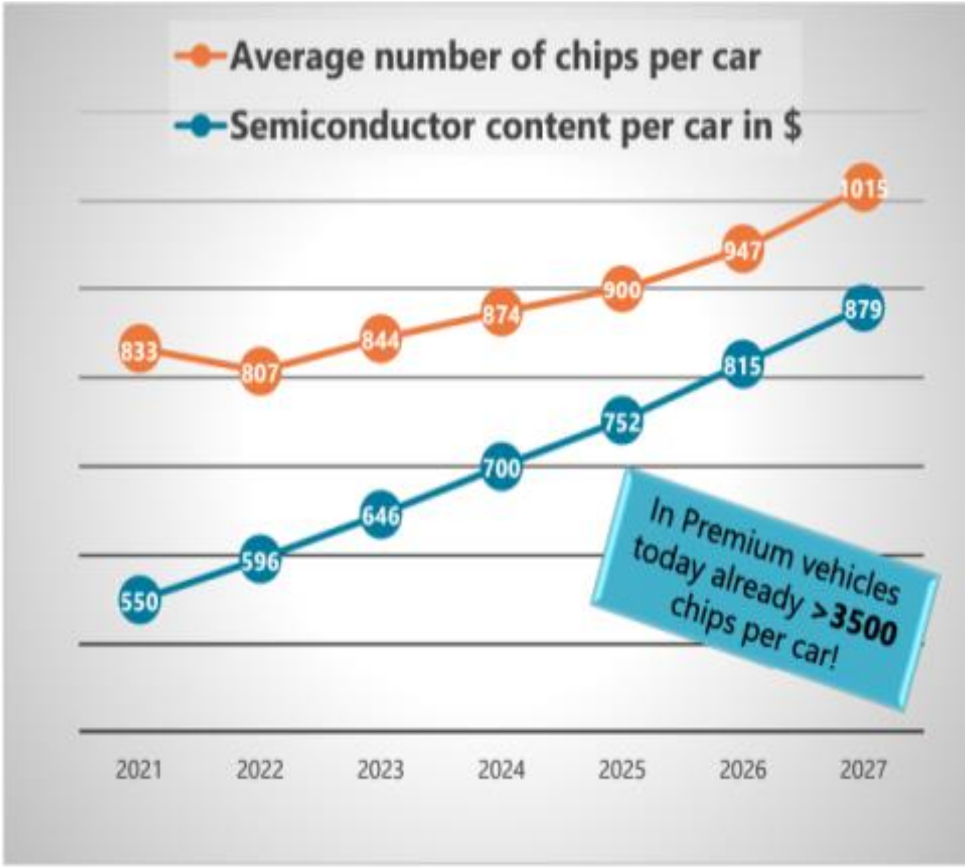
Data Volumes Growing Exponentially



Source: Statista December 2022

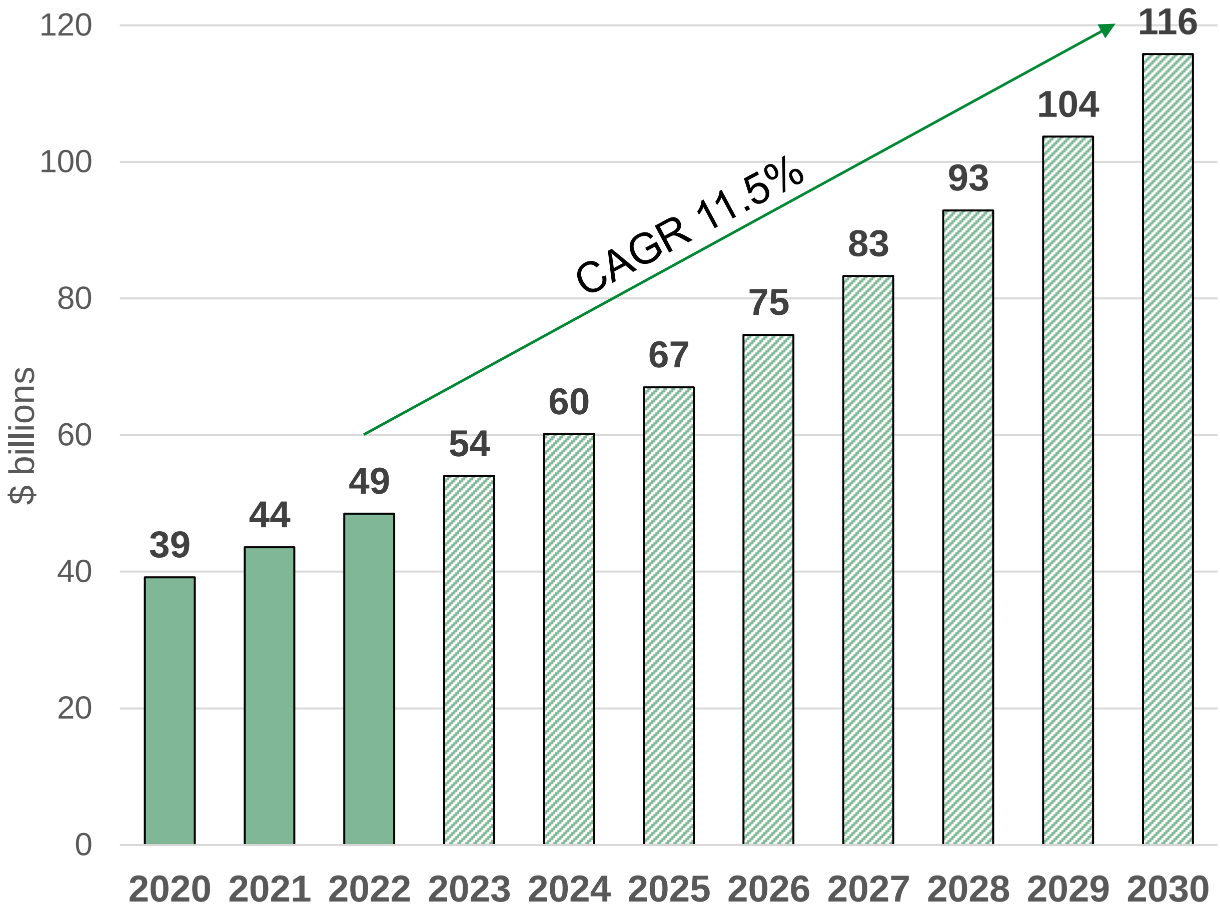
Automotive Semiconductor Market Continues to Expand

Cost Content Increasing



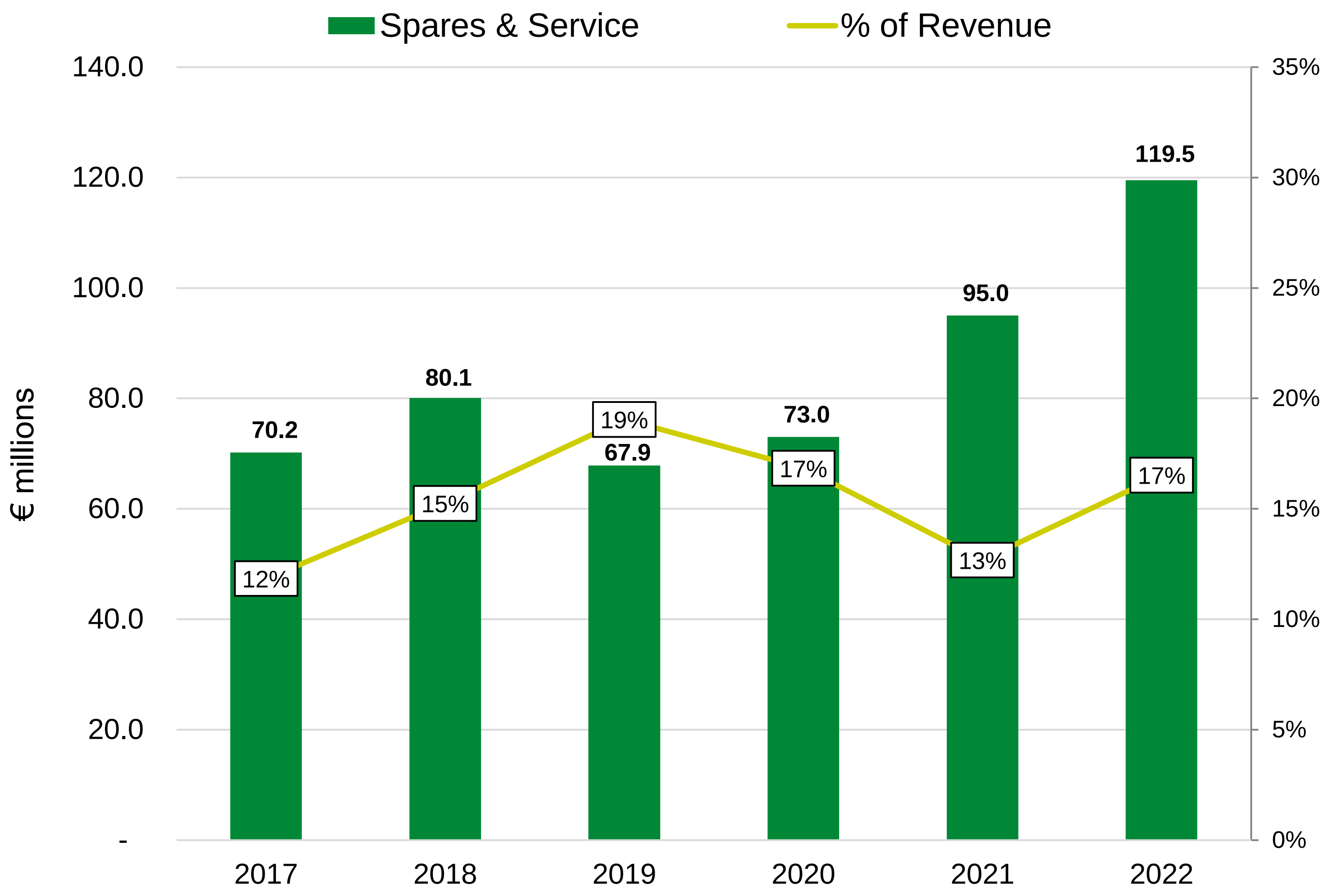
Source: Power Electronics News, January 2023

Auto Semi Market Size Increasing



Source: Precedence Research, February 2022

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

Summary Strategy

Strategy Update

Business

- Responded effectively to industry downturn
- Expanded R&D investment for next generation applications
- Significant progress on wafer level assembly portfolio
- Key ESG targets exceeded
- Capital allocation to shareholders increased

Development

- Gross R&D spending increased 23% in 2022 to reach € 63.8 million
- Increased development staff in Austria, Singapore, Taiwan and the US
- Enhancements to advanced packaging portfolio for next-gen applications
- Introduced embedded bridge die attach and TCB chip to wafer systems
- Hybrid bonding commercial production started
- Established new Malaysia and Singapore cleanroom facilities to increase capacity

Operations

- 125,000 square foot facility in Malaysia added to facilitate future growth
- Increased capacity to 12-15 hybrid bonders per month
- Retrofitted Malaysian facilities to better protect against potential flooding risk
- Began work on tooling and support facility in Vietnam

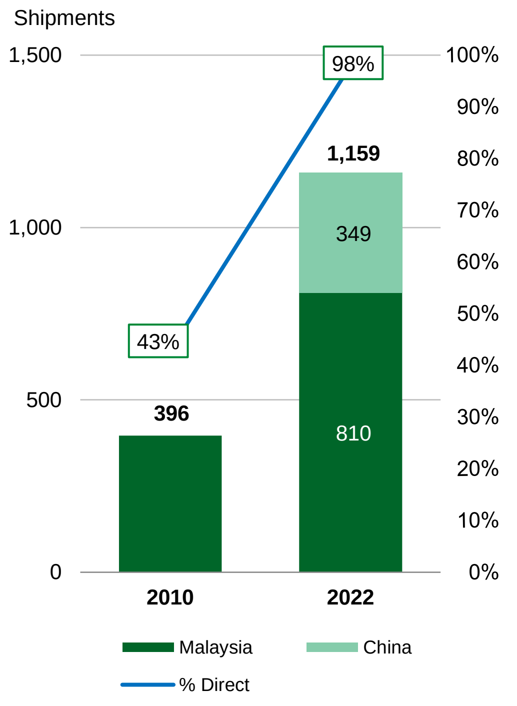
Asian Production Transfer Has Improved Profitability and Cash Flow

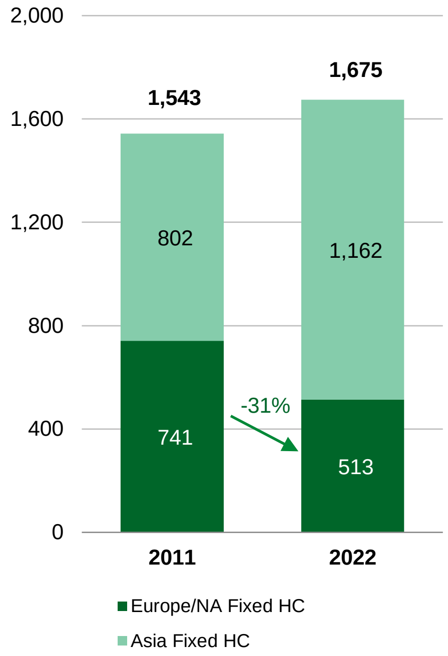
Asian Production Has Significantly Expanded

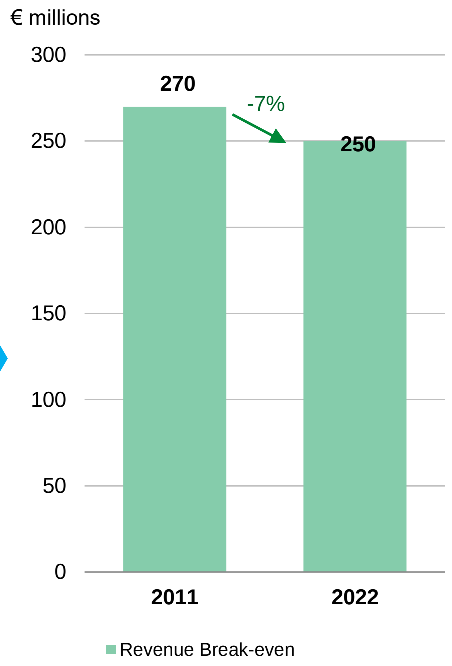
Leading to Lower Fixed European and NA Headcount

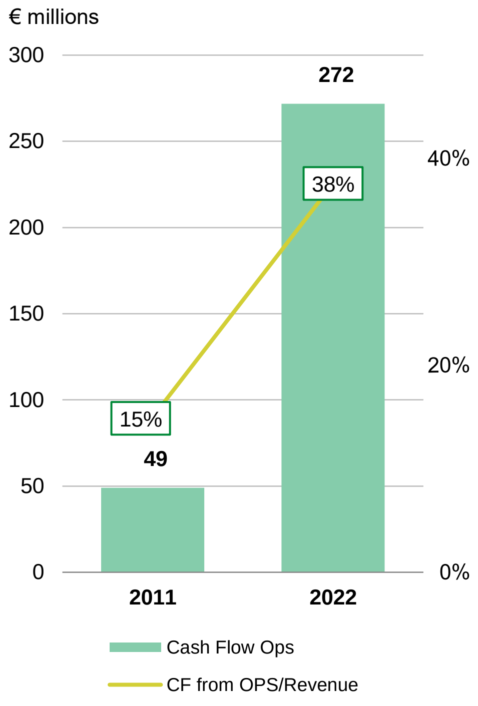
And Reduced Break Even Revenue Levels

And Improved Cash Generation



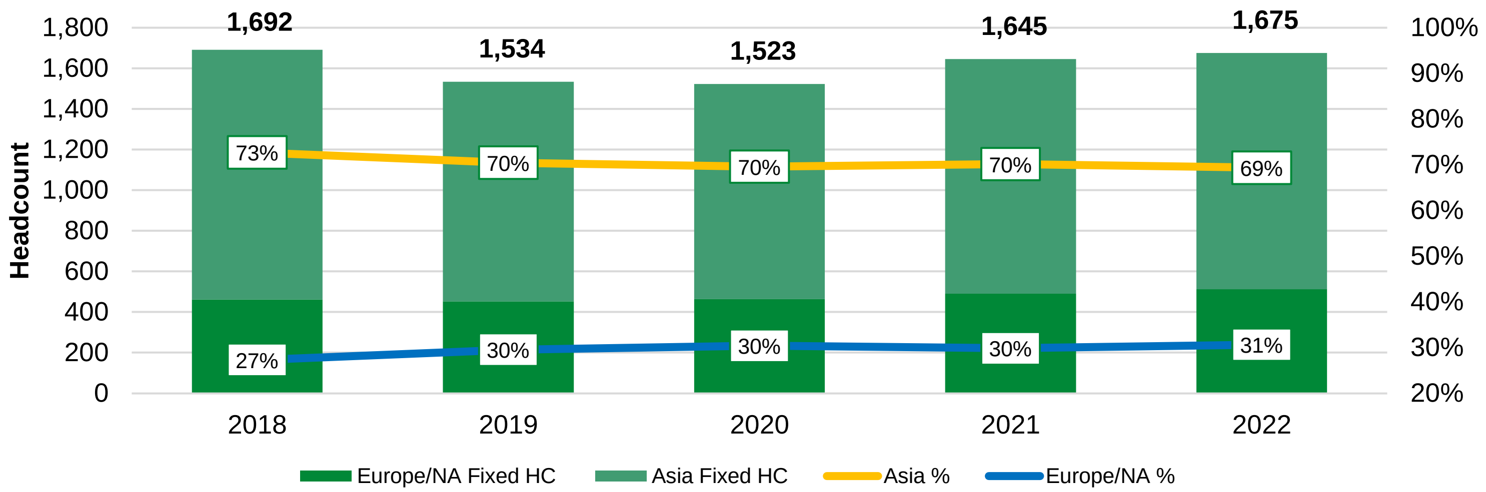




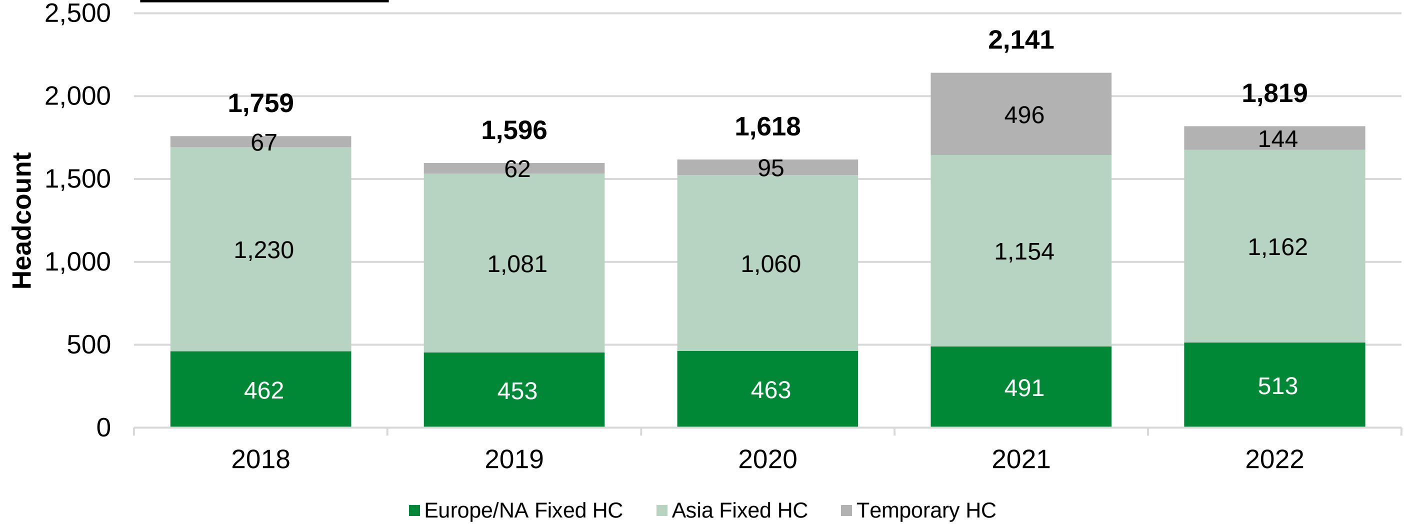


Flexible Asian Workforce Has Enhanced Scalability

Fixed Headcount



Total Headcount



- **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

Enhanced ESG Targets

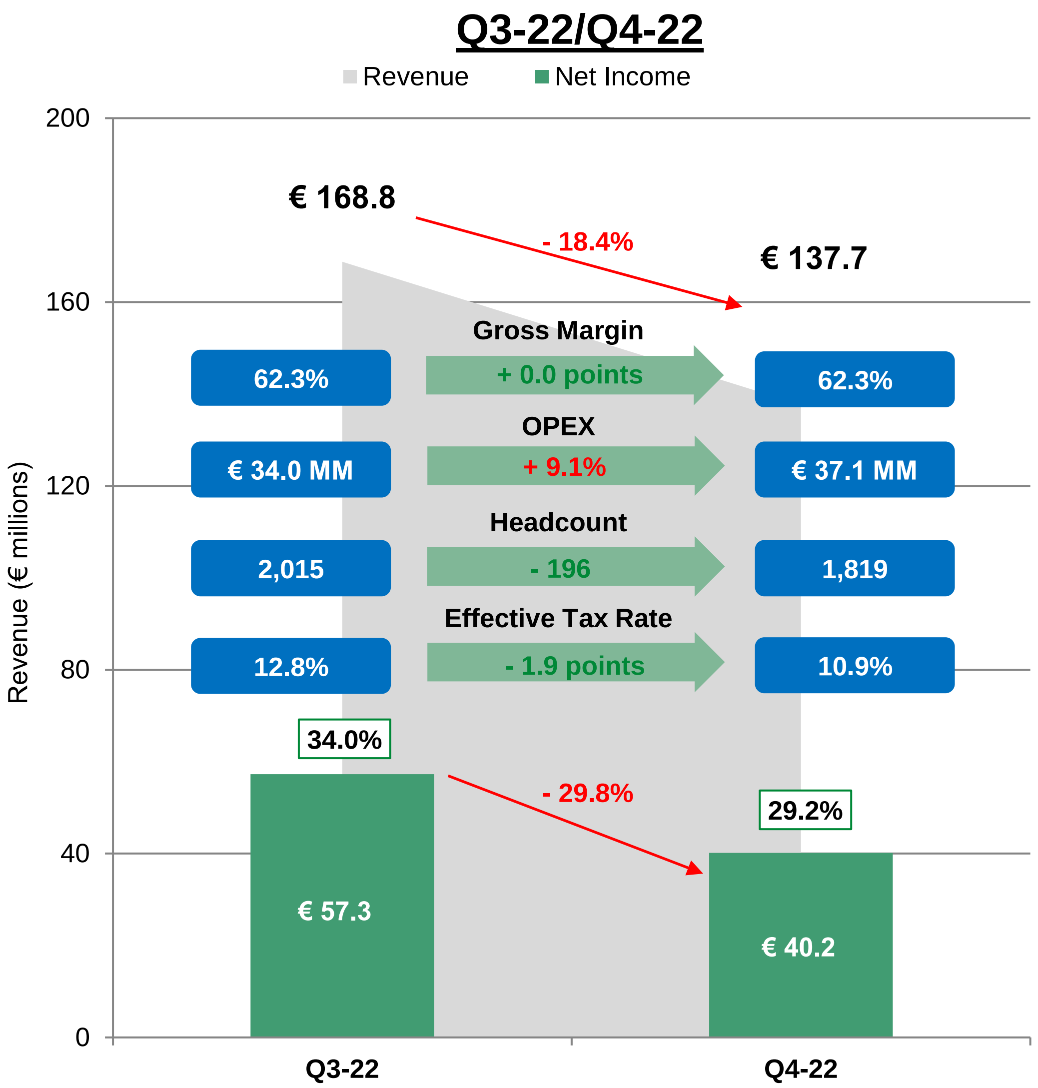
2024	2030
75% renewable sources for global energy needs	90% renewable sources for global energy needs
62% reduction in Scope 1 and 2 carbon emissions*	58% reduction in Scope 1 and 2 carbon emissions*
12% reduction in Scope 3 carbon emissions*	58% reduction in Scope 3 carbon emissions*
Above-benchmark employee engagement	Decouple carbon footprint from revenue growth
Compliance with CSRD	80% vendor compliance with Conflict Free Sourcing Initiative

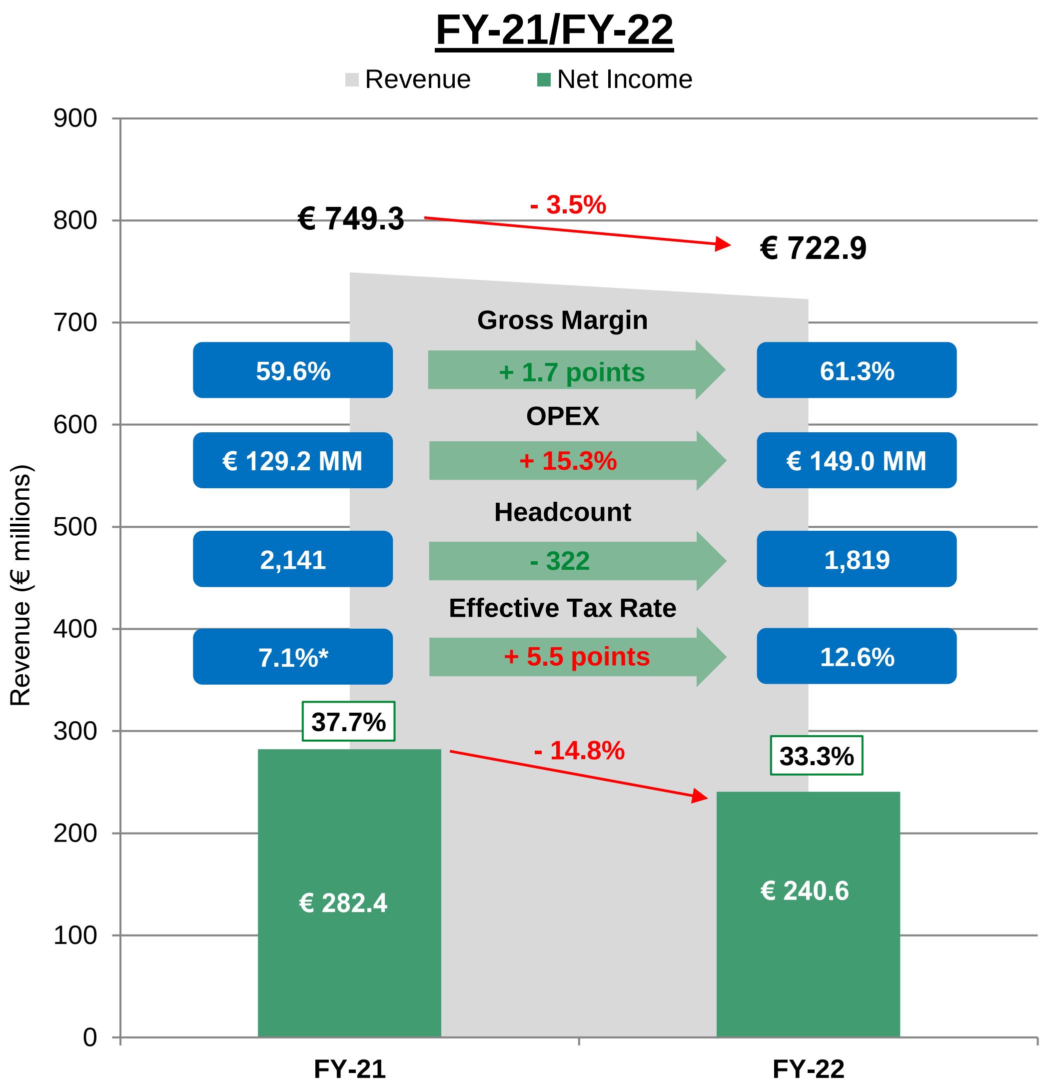
Carbon Neutral By 2050

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

V. FINANCIAL UPDATE AND SUMMARY

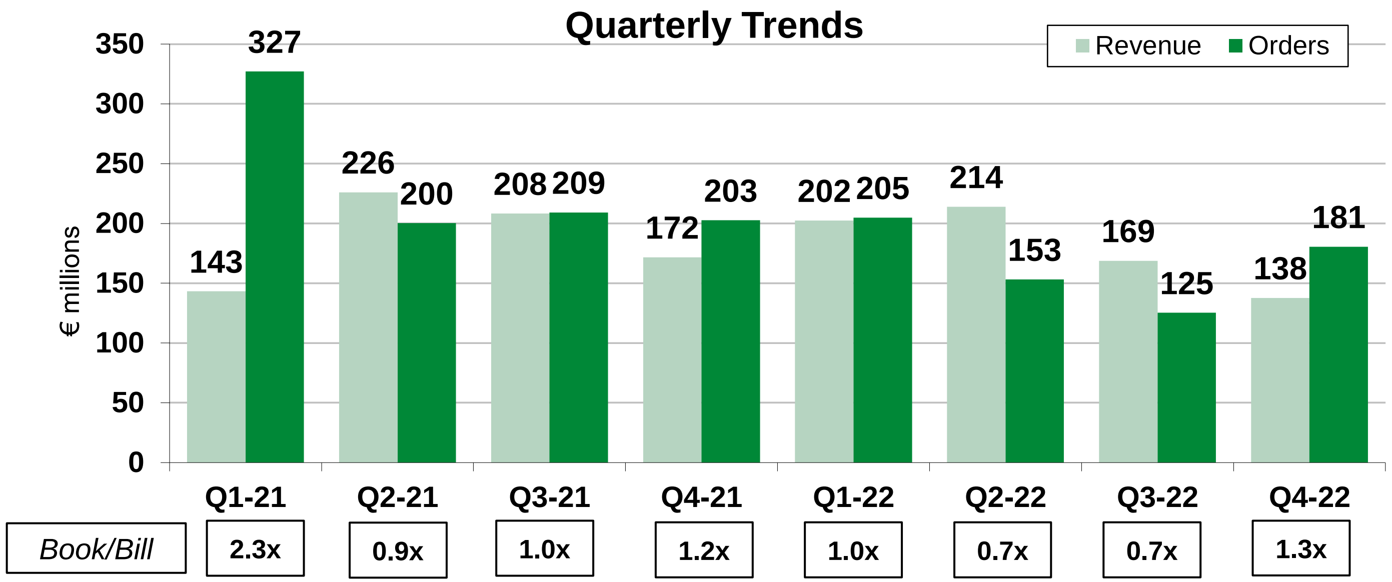
FY-22 Revenue Down 3.5%. Gross & Net Margins of 61.3% and 33.3% Achieved in Challenging Environment

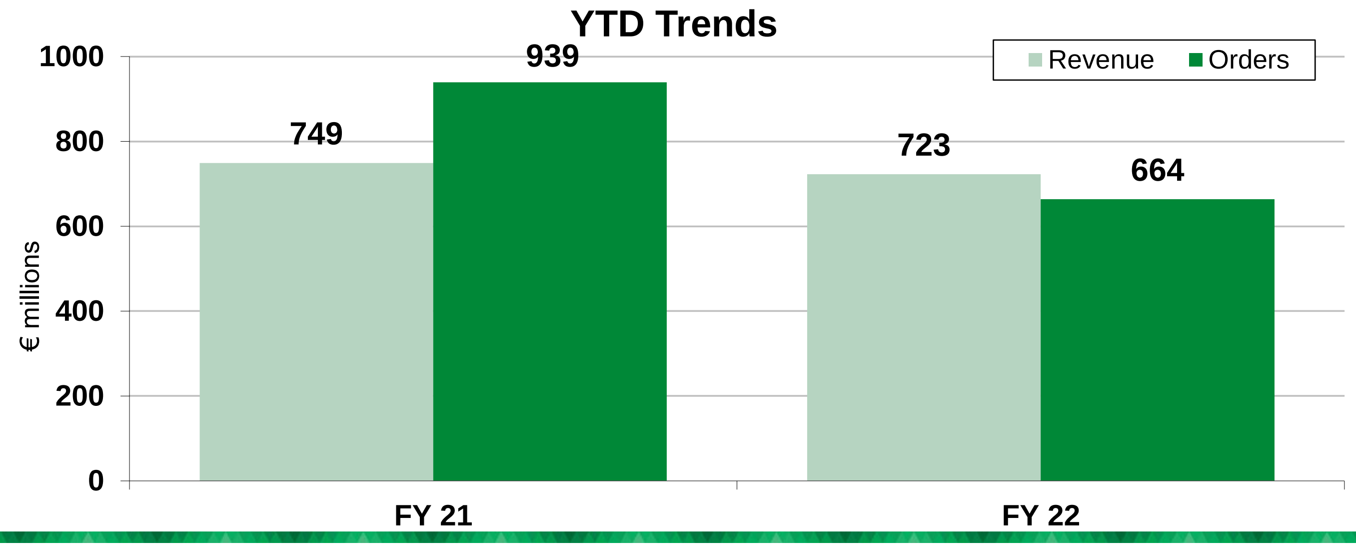




* Effective tax rate for 2021 reflects € 15.0 million of deferred tax benefits. Ex such benefits, the effective tax rate would have been 12.0% and net income would have been € 267.4 million

Revenue/Order Trends





<u>Q4-22 vs. Q3-22</u>

- **Revenue: -€ 31.1 million (-18.4%)**
  - -Lower computing and mainstream electronics
  - -Ongoing weakness in mobile
  - +Partial offset automotive
- **Orders: € 180.5 million (+44.1%)**
  - +Increased high-end smartphones for Q2-23
  - +New hybrid bonding systems

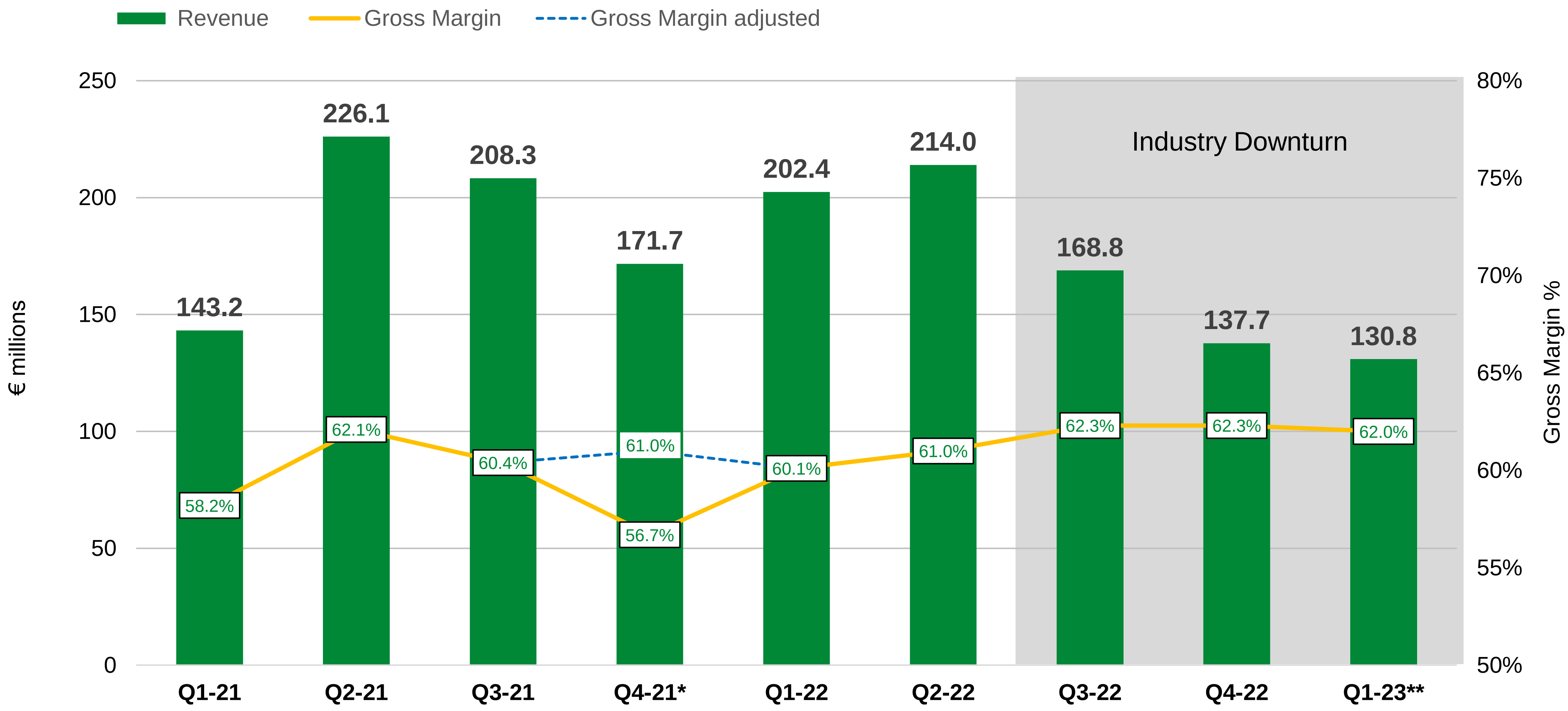
<u>Q4-22 vs. Q4-21</u>

- **Revenue: -€ 34.0 million (-19.8%)**
- **Orders: -€ 22.1 million (-10.9%)**

<u>FY-22 vs. FY-21</u>

- **Revenue: -€ 26.4 million (-3.5%)**
  - -Weaker demand smartphones and Chinese markets following strong capacity growth past two years
  - +Partial offset: automotive and computing/hybrid bonding
  - **Orders: -€ 275.4 million (-29.3%)**

Through Cycle Gross Margin Resilience

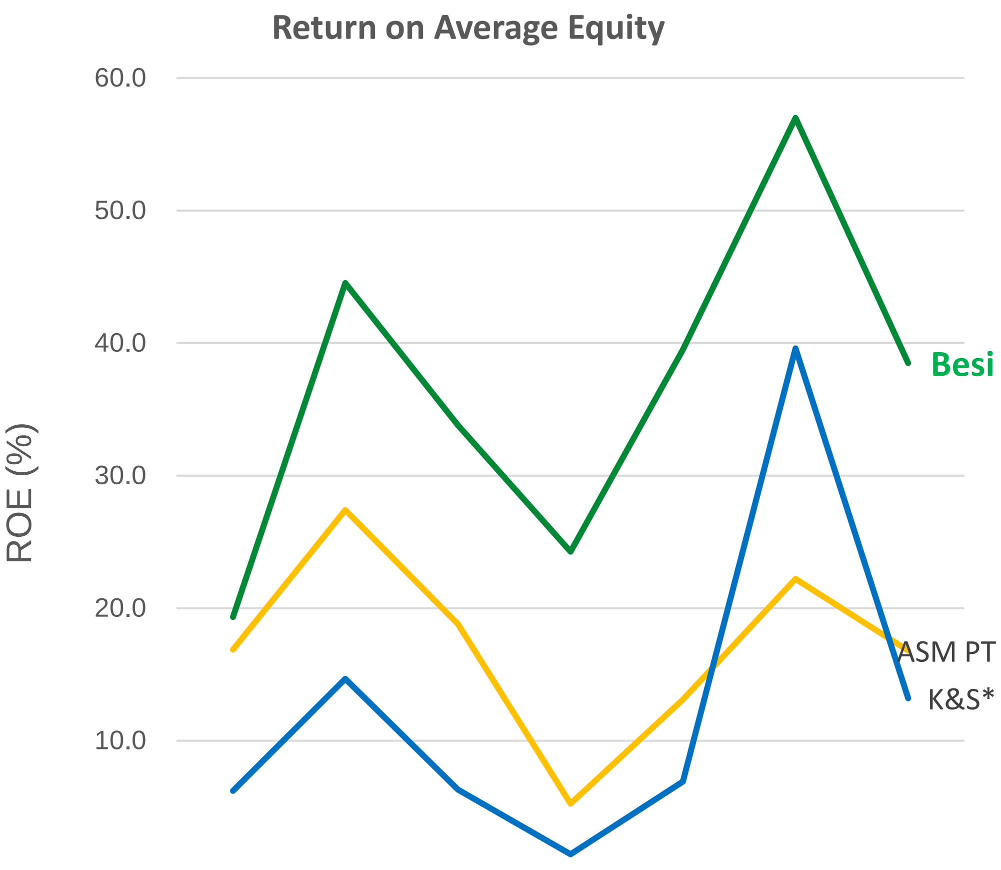


* Adjusted to exclude € 7.4 million (4.3 gross margin point) inventory charge.
** At midpoint of guidance.

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



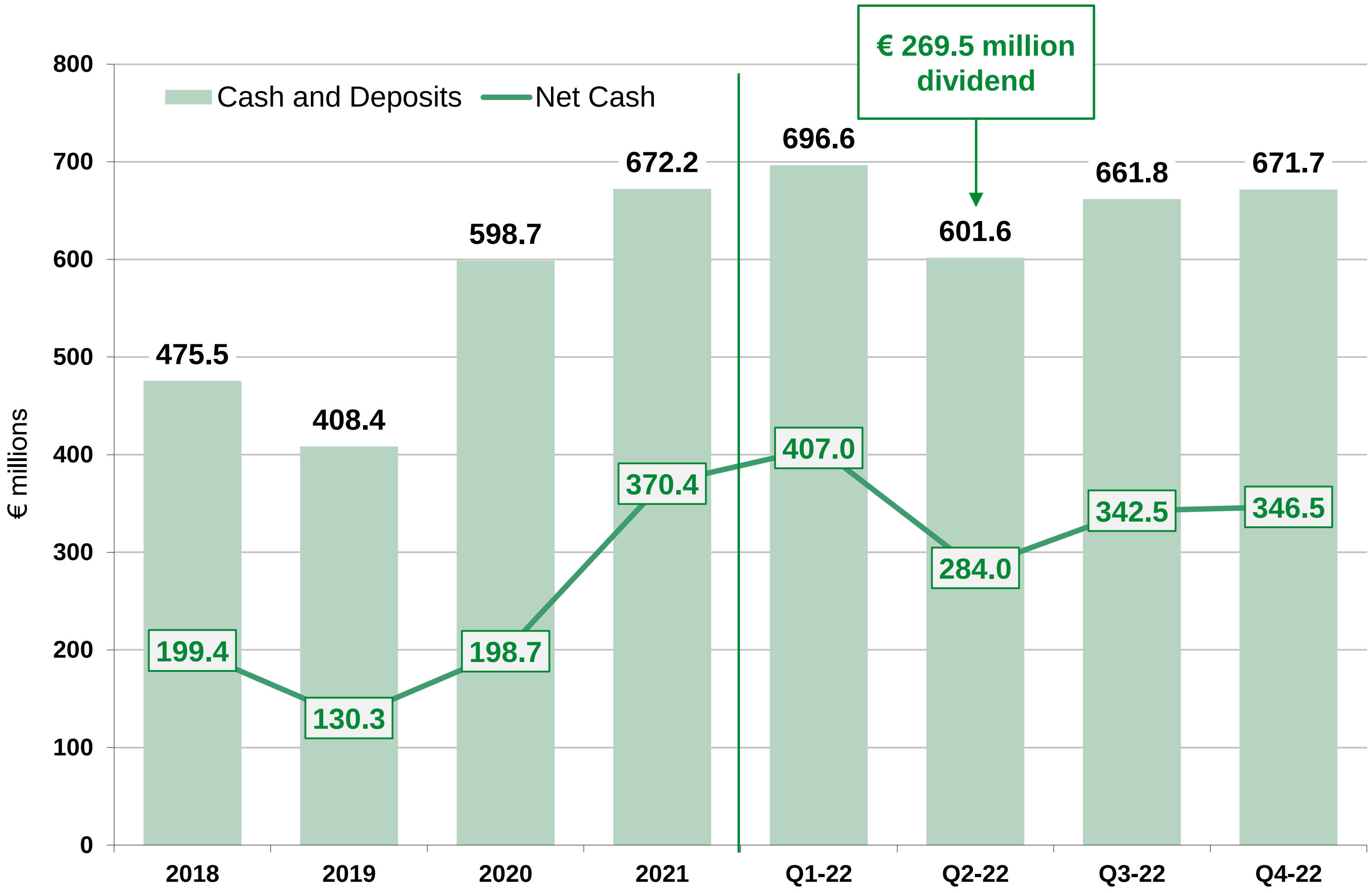
	2016	2017	2018	2019	2020	2021	2022
Besi	19.3	44.5	33.8	24.3	39.5	57.0	38.5
ASM PT	16.9	27.4	18.8	5.2	13.1	22.2	16.8
K&S*	6.2	14.7	6.3	1.4	6.9	39.6	13.2

* K&S ROAE on fiscal year basis.

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

Strong Cash Flow Generation Continues



Q4-22 vs. Q3-22

- Cash and deposits of € 671.7 million up € 9.9 million primarily due to:
  - + € 86.6 million cash flow from operations
  - - € 65.0 million share repurchases
  - - € 5.5 million capitalized R&D
  - - € 2.1 million capex
- Net cash up € 4.0 million to € 346.5 million

Q4-22 vs. Q4-21

- Cash and deposits relatively flat despite 132% increase in capital allocation
- Net cash down € 23.9 million (-6.5%)

Convertible Notes

- € 359.9 million at December 31, 2022
  - Average conversion price € 67.28
  - Blended rate 1.29%

Guidance Q1-23

	Q4-22	Q1-23
Revenue	€ 137.7	0% - -10%
Gross Margin	62.3%	61%-63%
Baseline Operating Expenses	€ 34.3	0% - -5%
Total Operating Expenses	€ 37.1	+15 - 20%

€ in millions

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