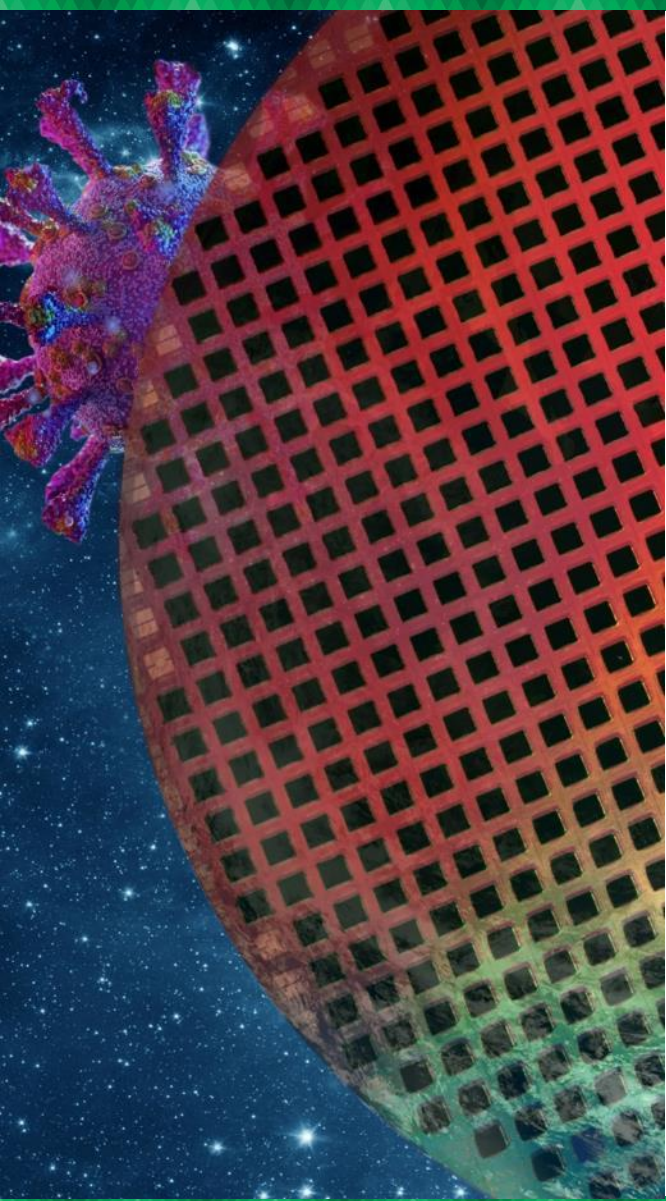




INVESTOR PRESENTATION

July 2022

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; our ability to mitigate the dislocations caused by the flood at one of our Malaysian 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, 2021 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
- VI. Appendix



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 substrate and wafer level packaging
- ~75% of systems used for advanced packaging applications
- Global operations in 6 countries; 2,238 employees. HQ in the Netherlands

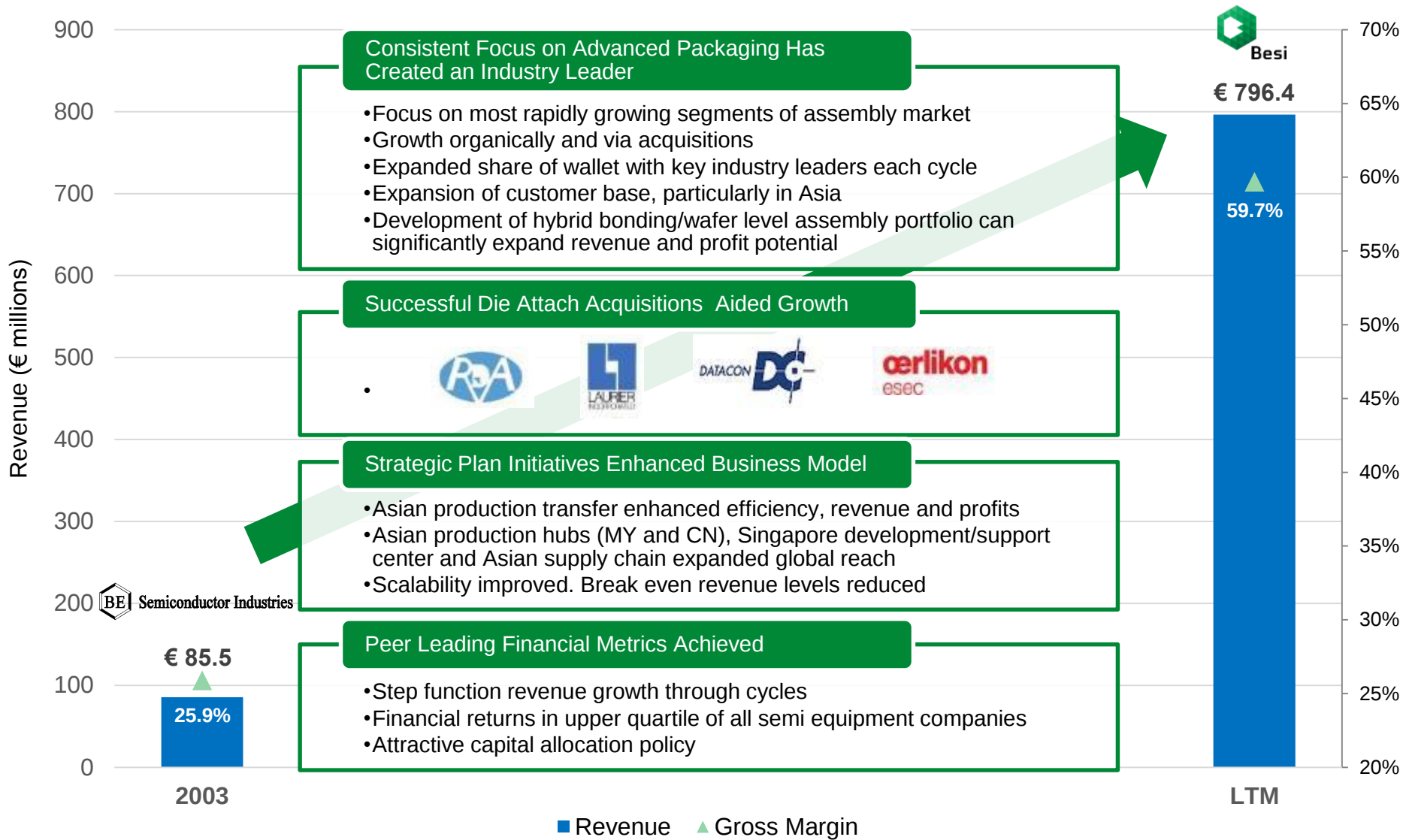
Financial Highlights

- LTM revenue and net income of € 796.4 million and € 294.5 million
- Cash/deposits at Q2-22: € 601.6 million
- Net cash/deposits at Q2-22: € 284.0 million
- € 1.2 billion of dividends and 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: Digital and cloud infrastructure build out, smart everything, 5G, AI, HPC, data centers, vehicle electrification
- Hybrid bonding adoption and expansion of wafer level assembly portfolio hold potential to significantly expand revenue and profit potential

* Includes share repurchases through June 30, 2022



Capital Allocation

Attractive capital allocation program

€ 1.2 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 vs. peers

Shareholder Return

**Superior Total Returns **: • 115% (3 year)
• 153% (5 year)**

Consistent TSR outperformance vs. peers

Upper quartile ranking for all semi-equipment companies

* Includes share repurchases through June 30, 2022

** As of June 30, 2022

Industry Leading Equipment Portfolio

Die Attach (82% of 2021 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 FC 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 2021 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

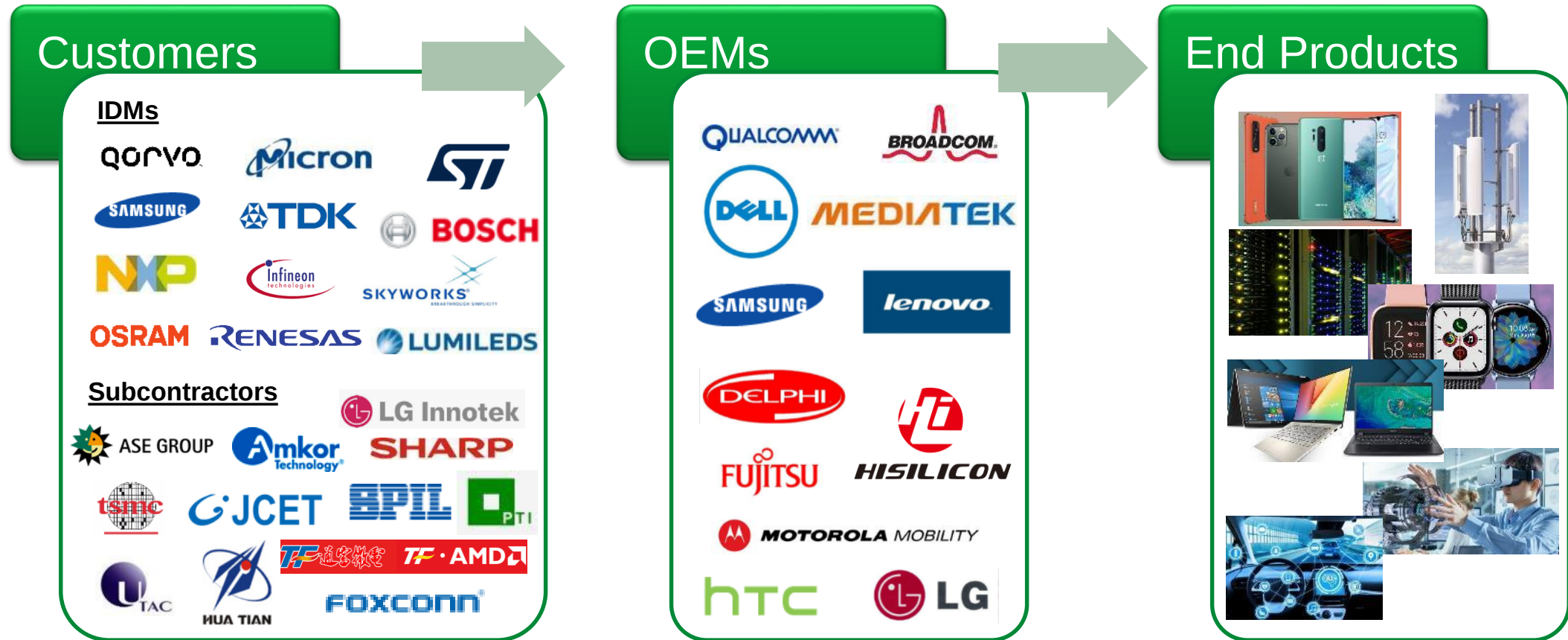


- FSL**
 - Substrate strip singulation
 - Sorting
 - Stepcut **New**

Plating



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



- Diversified, blue chip customer base, top 10 = ~53% of 2021 revenue
- Leading IDMs and subcontractors. 55%/45% order split in 2021
- 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 2021: \$101.2B*

Front end: \$88.9B
(88%)

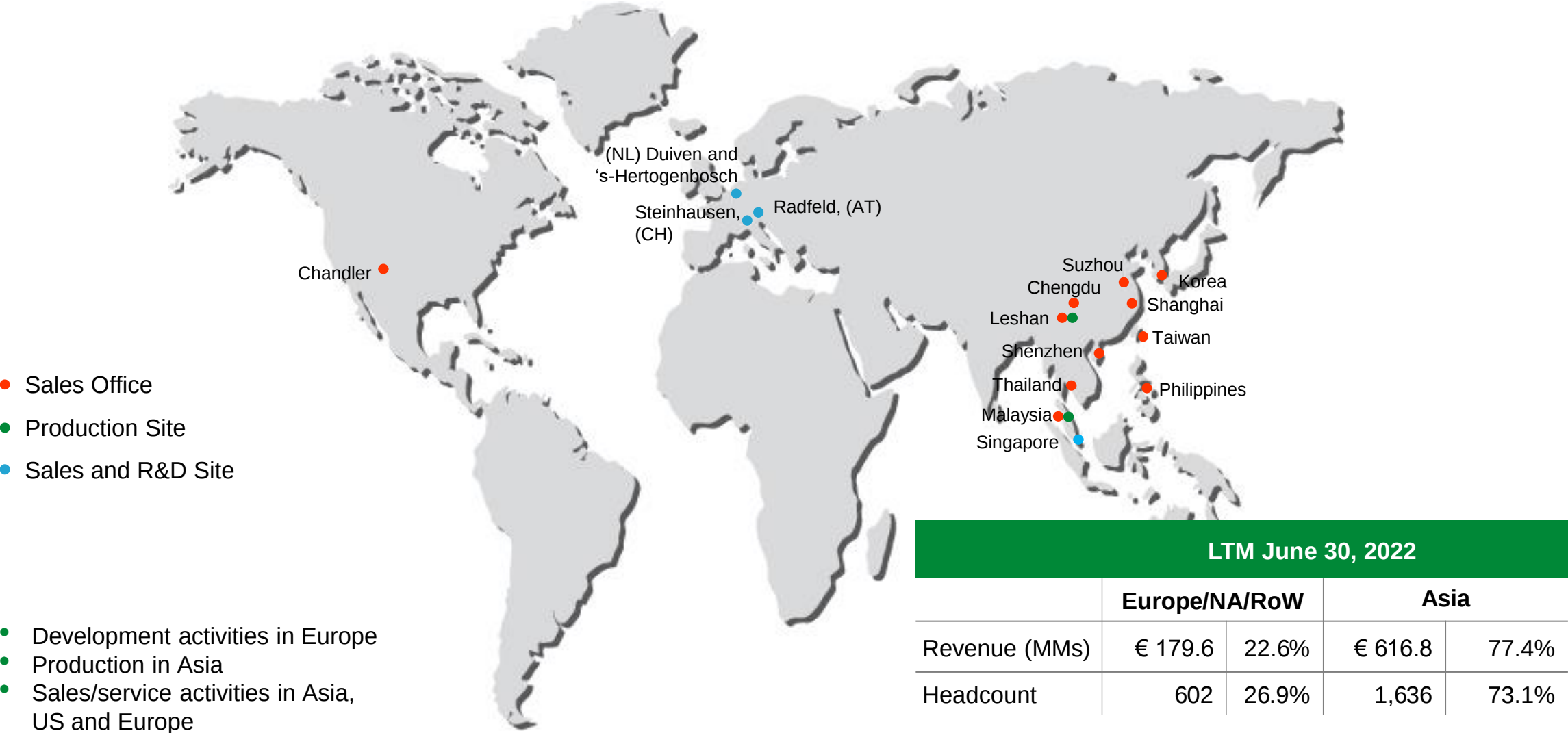
Assembly: \$6.5B
(6%)

Test: \$5.8B
(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, May 2022

Current Operational Profile



Summary Financials

Year Ended December 31, (€ millions, ex share data)	2019	2020	2021	H1-21	H1-22
Revenue	356.2	433.6	749.3	369.3	416.4
% seq. change	-32%	+22%	+73%	+71%	+13%
Orders	348.7	472.1	939.1	527.3	357.9
Gross margin	55.8%	59.6%	59.6%	60.5%	60.5%
EBITDA	111.7	169.0	335.1	163.5	185.2
Pretax income	78.1	137.5	303.8	147.7	164.7
Net income	81.3	132.3	282.4	131.1	143.2
Net margin	22.8%	30.5%	37.7%	35.5%	34.4%
EPS (diluted)	1.06	1.67	3.39	1.76	1.81
EPS (basic)	1.12	1.82	3.70	1.58	1.71
Dividend per share	1.01	1.70	3.33		
Net cash & Deposits	130.3	198.7	370.4	206.7	284.0

Long term, step function growth in cyclical business

- Increased revenue, profitability and market share per cycle
- Peer leading financial metrics

Strong upturn in 2021 despite supply chain disruptions

- Revenue and orders grew 72.8% and 98.9% vs. 2020
 - Across all end-user markets and geographies
 - Renewed mobile spending for 5G rollout
 - Order strength in computing and automotive H2-21
 - Accelerating hybrid bonding orders

H1-22 Revenue and Net Income +13% and 9% vs. H1-21

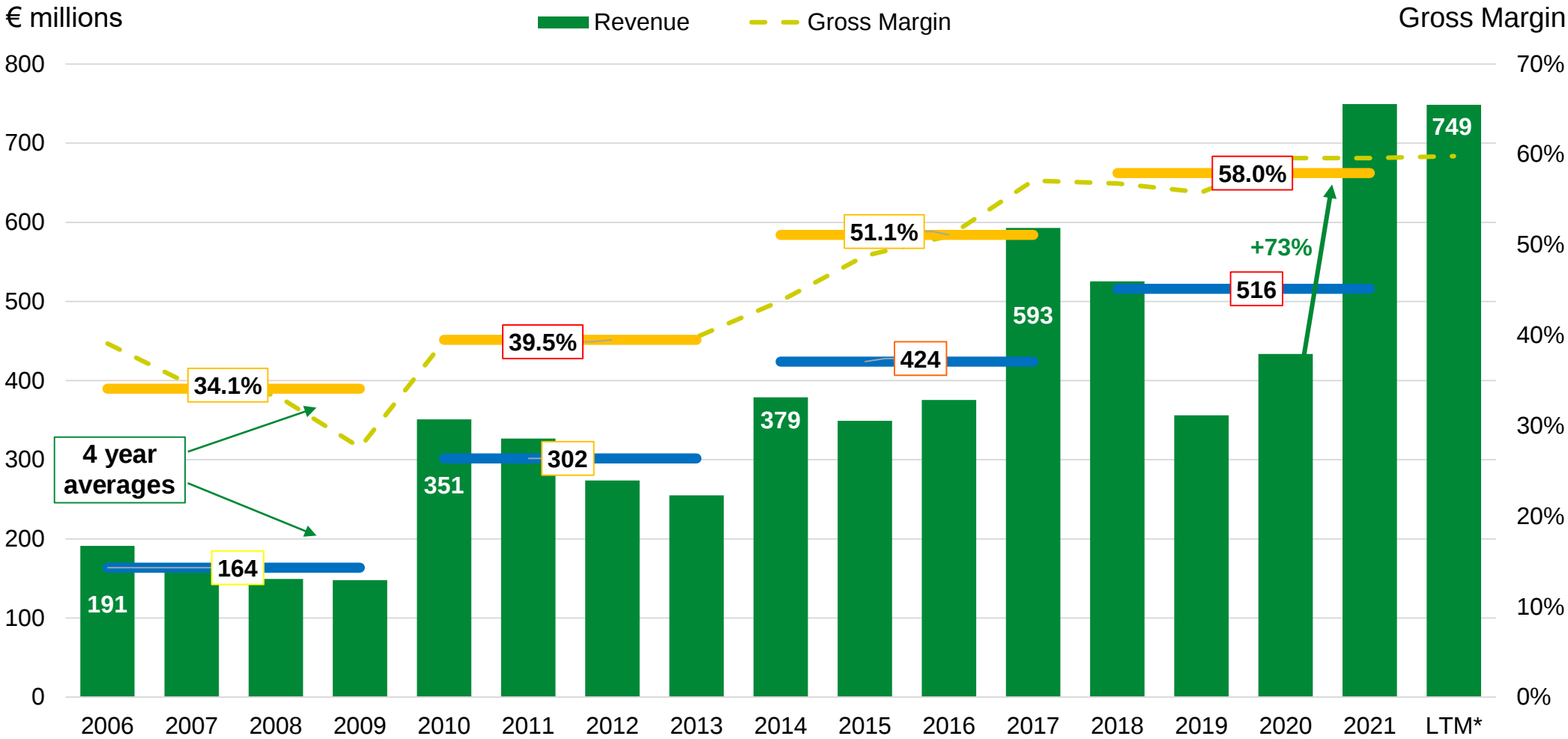
- Order weakness reflected lower demand for high-end smartphones and by Chinese subcontractors

Strong margins and profitability

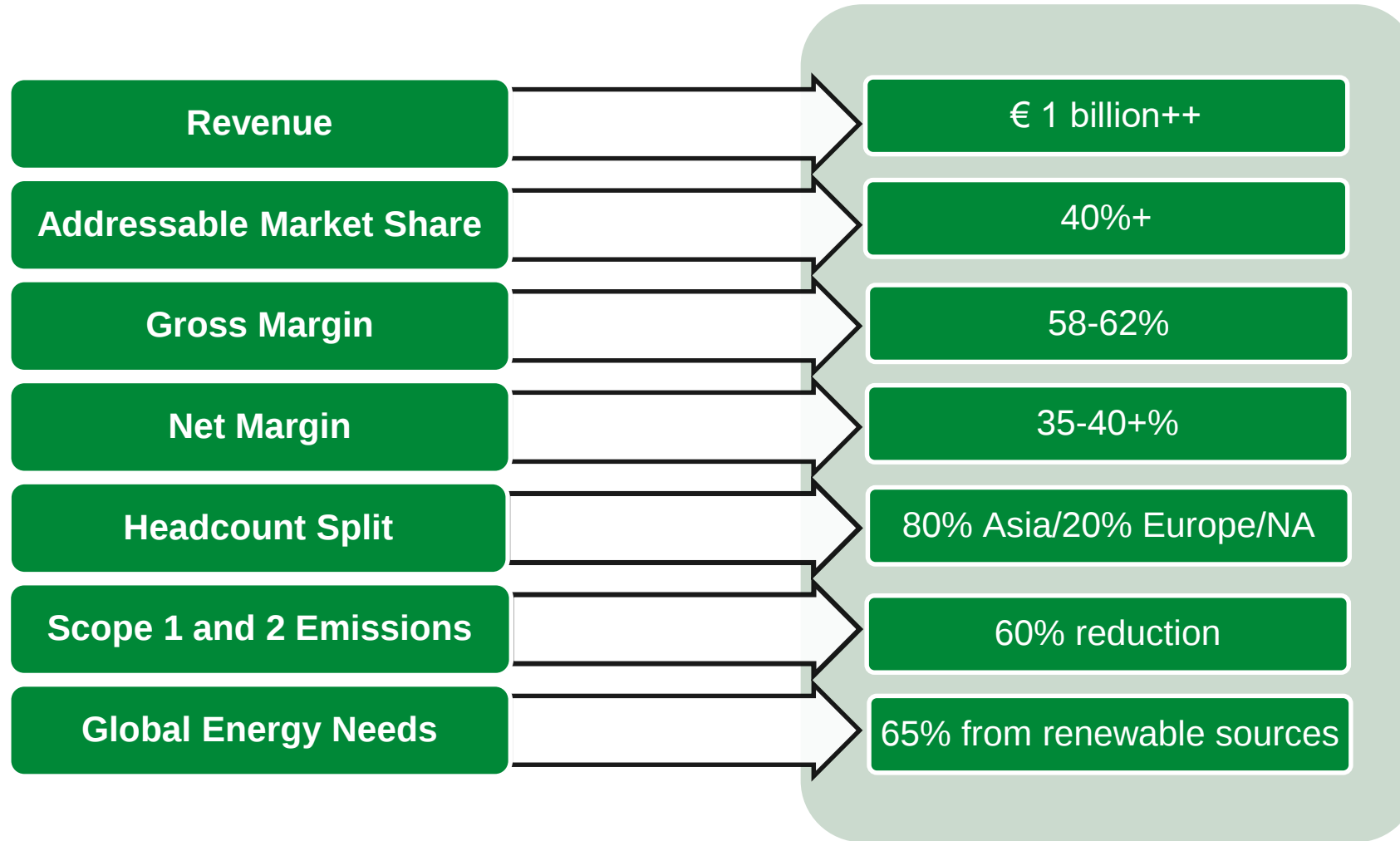
- Peer leading gross and net margins due to strong market position and flexible Asian production/workforce
- Cost control efforts lead to significant operating leverage

Strong cash generation supports shareholder friendly capital allocation policy

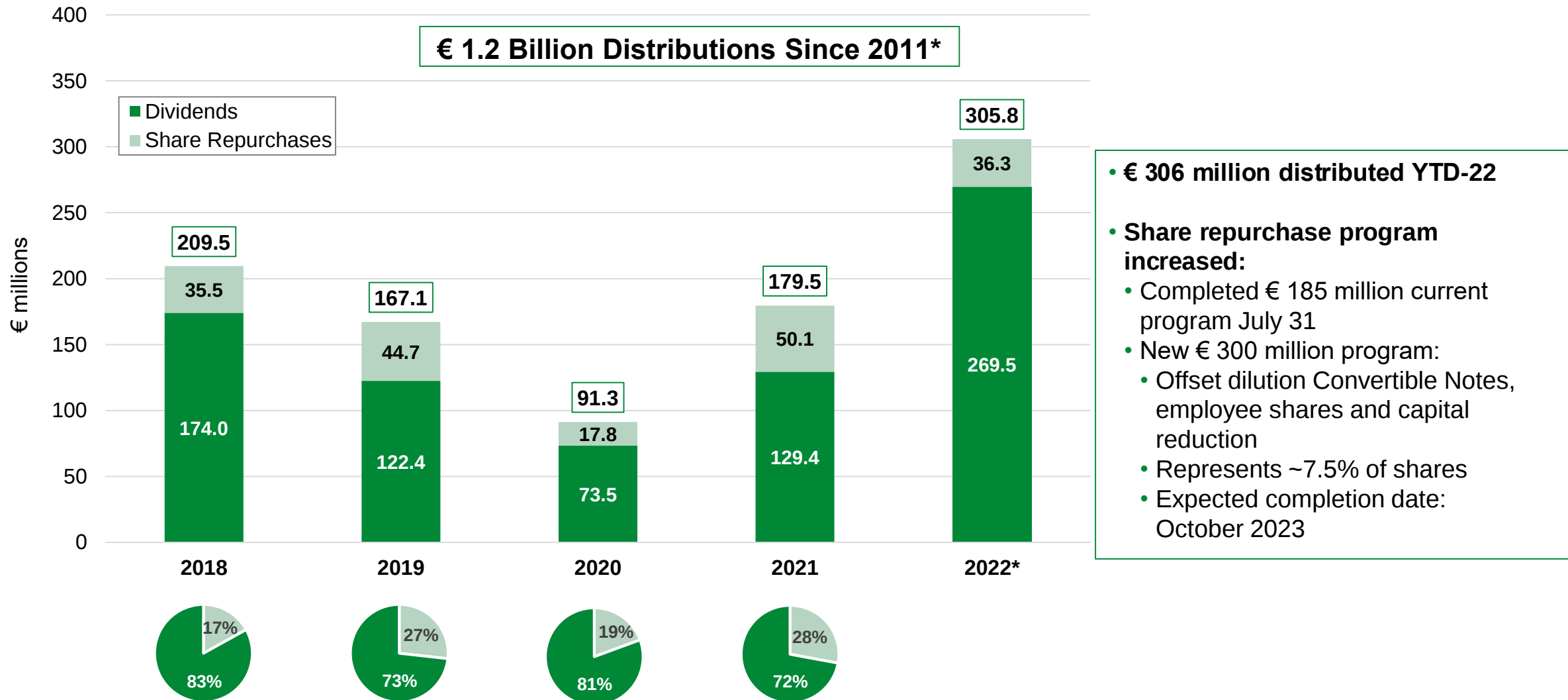
Through Cycle Revenue and Gross Margin Trends



* LTM including midpoint of guidance for Q3-22



Capital Allocation Trends



* Includes share repurchases to June 30, 2022



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

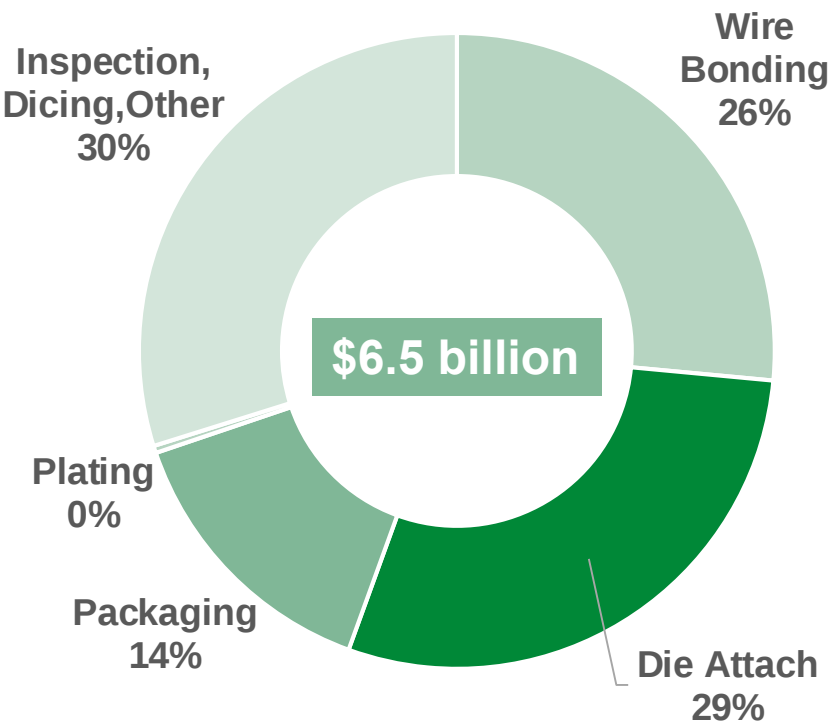
Performance in
24/7 production
environments

Competitive
cycle times and
scalability

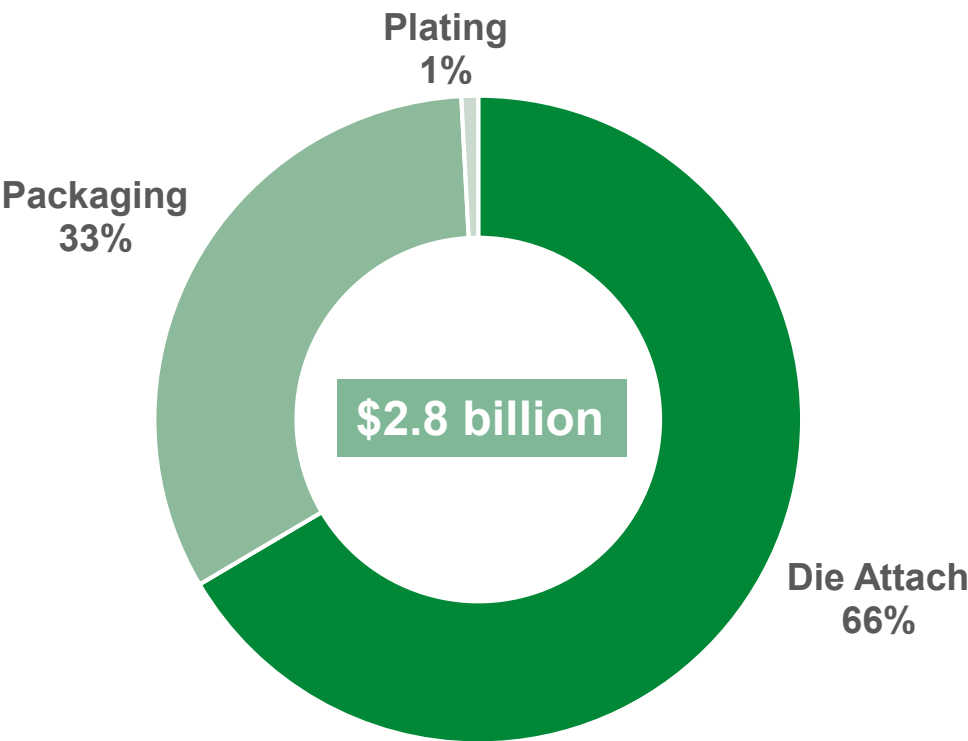
Assembly Equipment Market Composition



Assembly Equipment Market (2021)

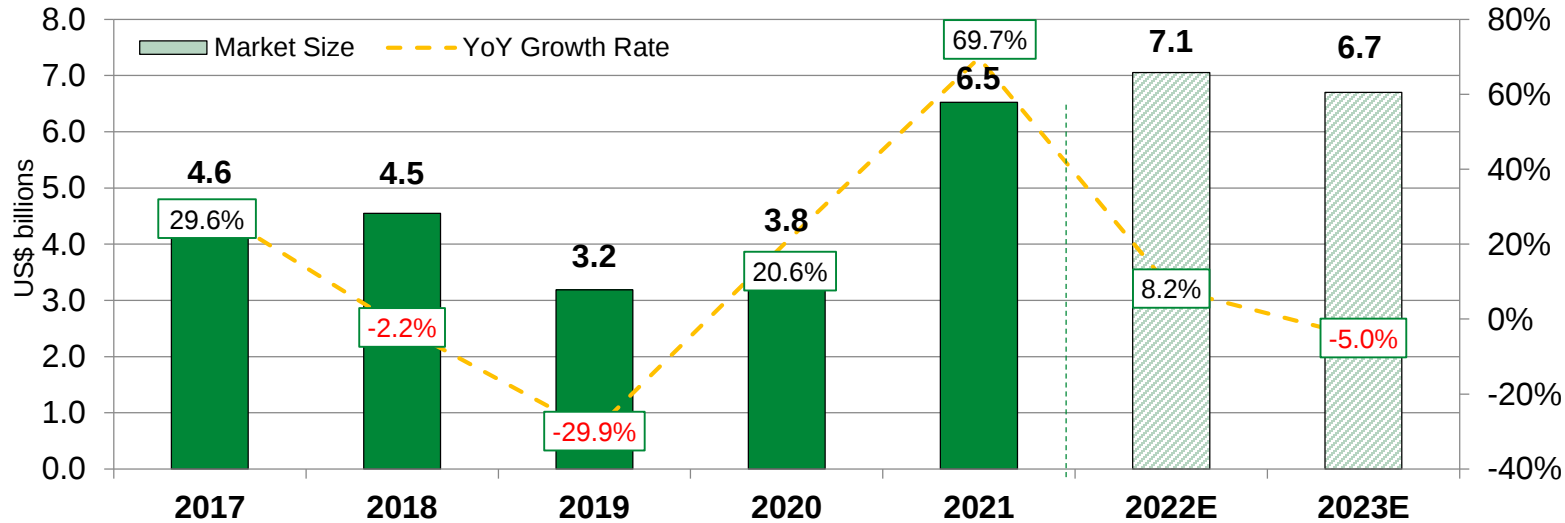


Besi Addressable Market (2021)



Source: TechInsights, May 2022

Assembly Equipment Forecast Revised



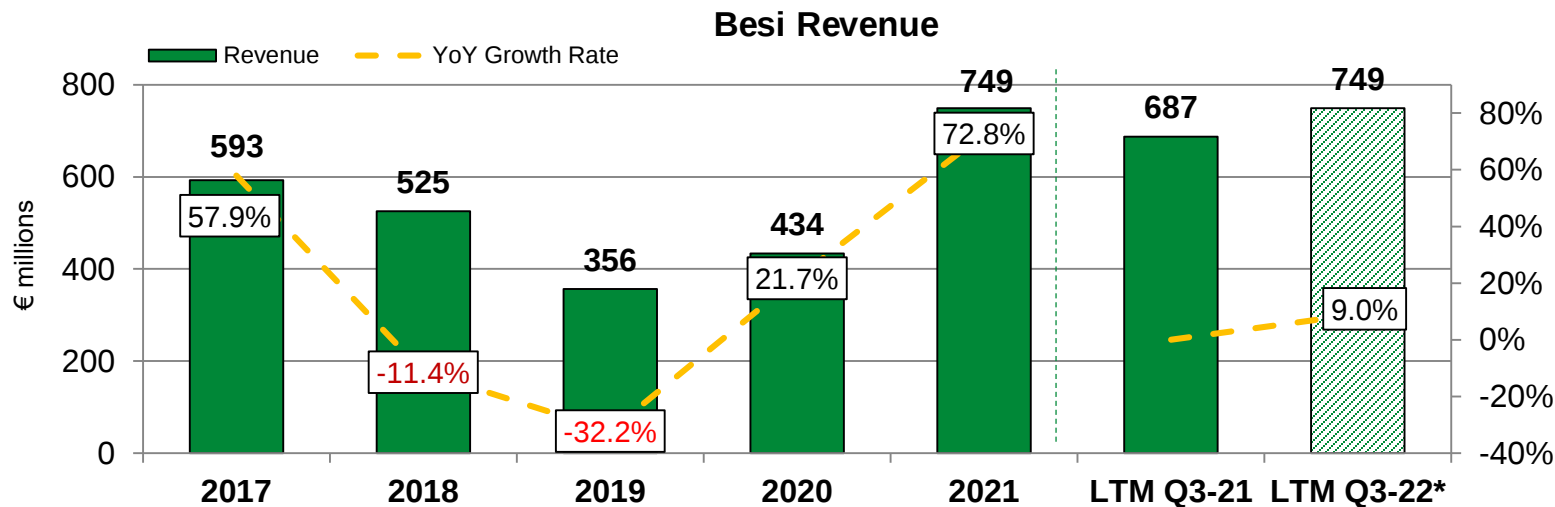
Source: TechInsights, July 2022. Assembly equipment revenue excludes hybrid bonding contribution and service revenue.

TechInsights forecasts \$ 7.1 billion market in 2022 (+8.2%)

- Growth rates for 2022 and 2023 reduced
 - 10.2% → 8.2% for 2022
 - -0.1% → -5.0% for 2023
- Ex hybrid bonding and spares/service revenue

Strong secular fundamentals intact:

- 5G, datacenter, AI and HPC primary drivers
- Investment in new process technologies: hybrid bonding/CSP

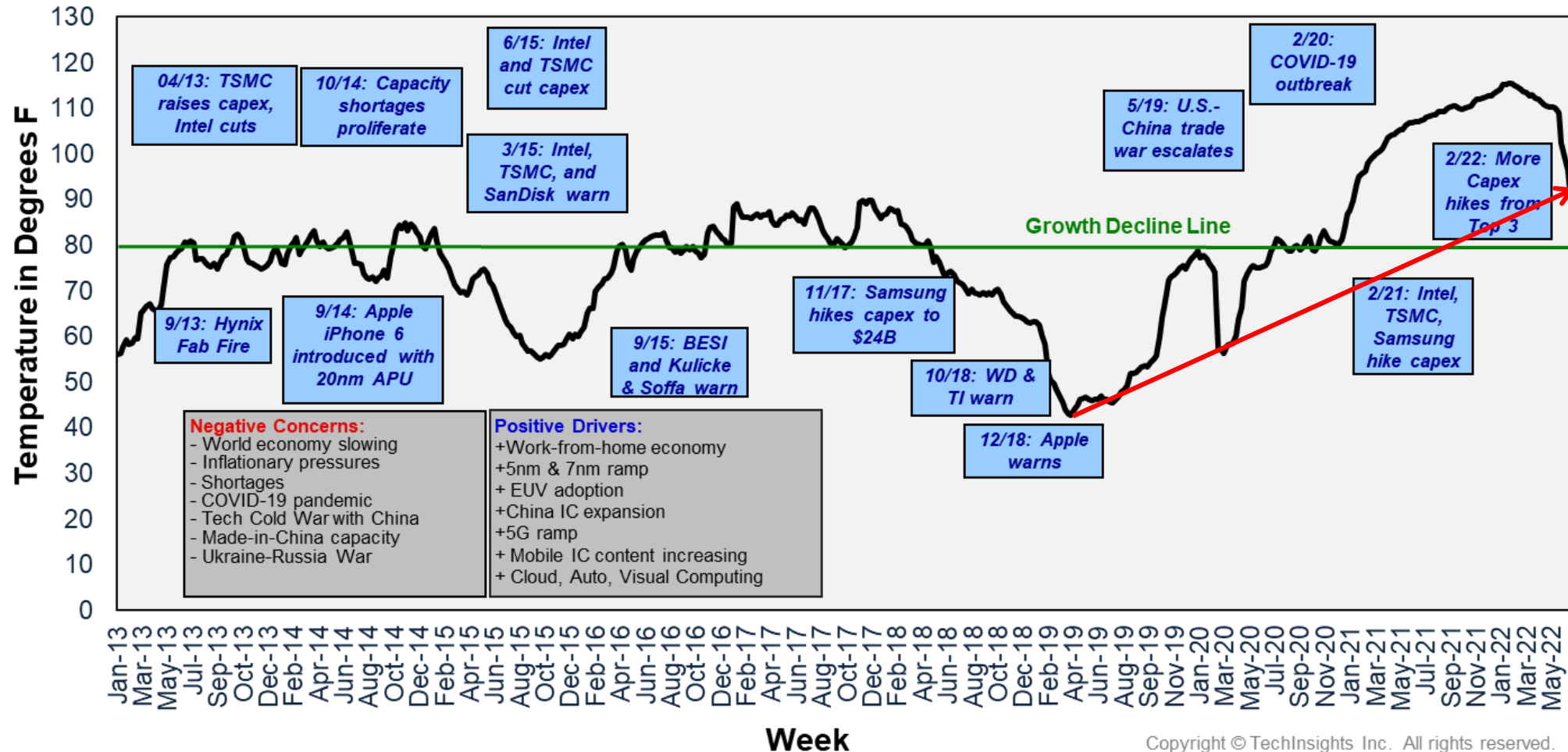


* At midpoint of guidance

Market Conditions Weakened in Q2-22

TECHINSIGHTS' GLOBAL CHIP MAKING CLIMATE TREND INDEX

(Average of Regional Order Activity Patterns in Chip Equipment)



Source: TechInsights, July 2022

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Besi Addressable Market Share Increasing Particularly in Key Die Attach Markets

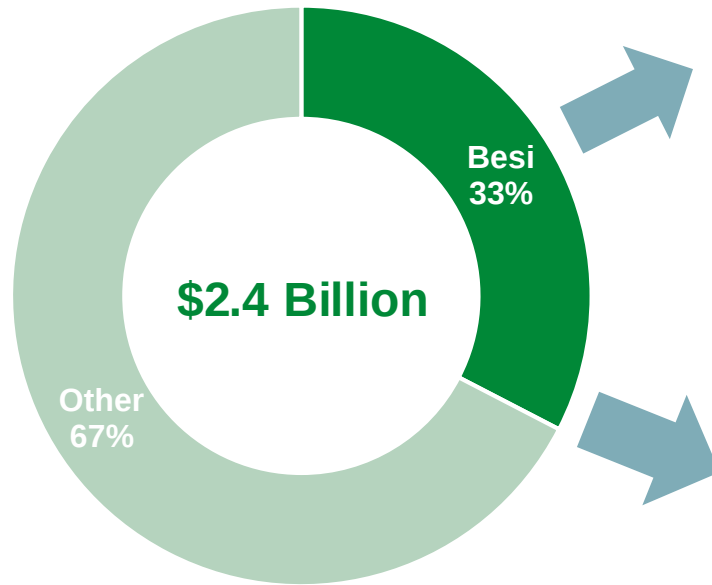


	2016	2017	2018	2019	2020	2021	Δ '21/'20	Δ '21/'16
Assembly Market (\$MM)	3,587	4,648	4,546	3,186	3,843	6,522	+69.7%	+81.8%
Besi Market Share	9.9%	12.7%	11.2%	10.1%	10.7%	11.9%	+1.2pts	+2.0pts
Addressable Market (\$MM)	1,507	1,948	1,859	1,251	1,403	2,374	+69.2%	+57.5%
Besi Market Share	23.7%	30.2%	27.3%	25.8%	29.2%	32.6%	+3.4pts	+8.9pts
Die Attach	30.4%	38.2%	33.2%	30.8%	36.8%	41.9%	+5.1pts	+11.5pts
Packaging & Plating	13.6%	14.7%	17.0%	16.8%	15.3%	15.2%	-0.1pts	+1.6pts
% 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

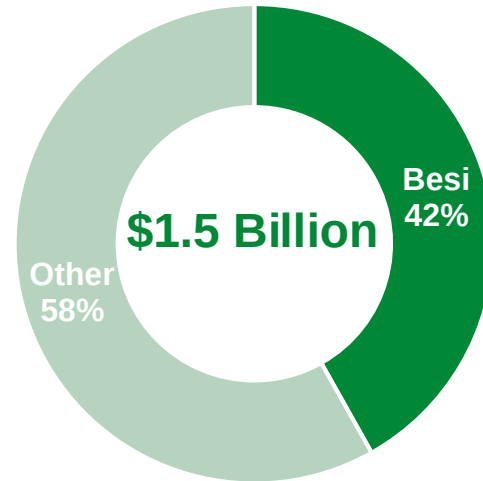
Source: TechInsights June 2022

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

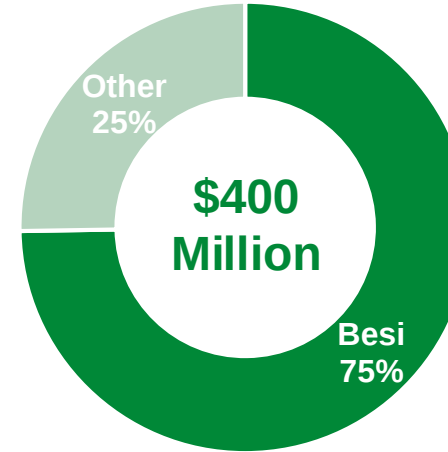
2021 Addressable Market*



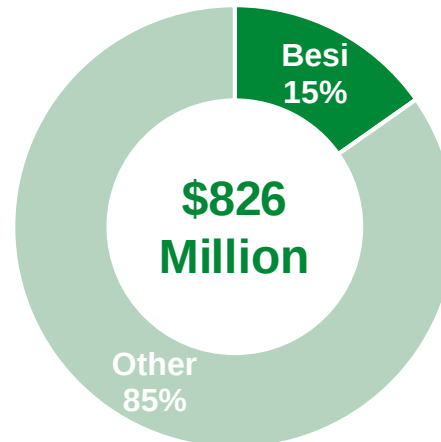
Die Attach
(82% of Revenue)



Advanced
Die Placement**



Packaging & Plating
(18% of Revenue)

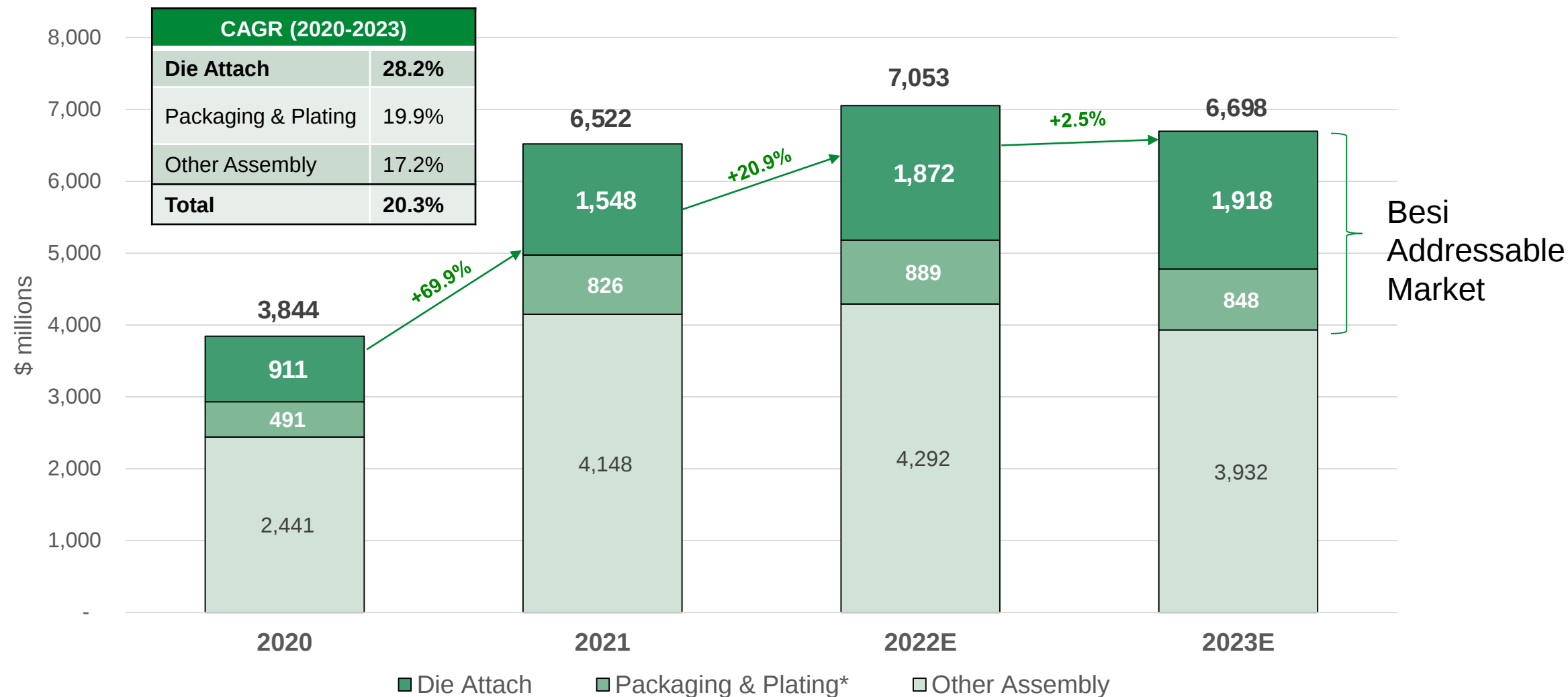


* Excludes wire bonding, dicing, and other.

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

Source: TechInsights, June 2022. Equipment only.

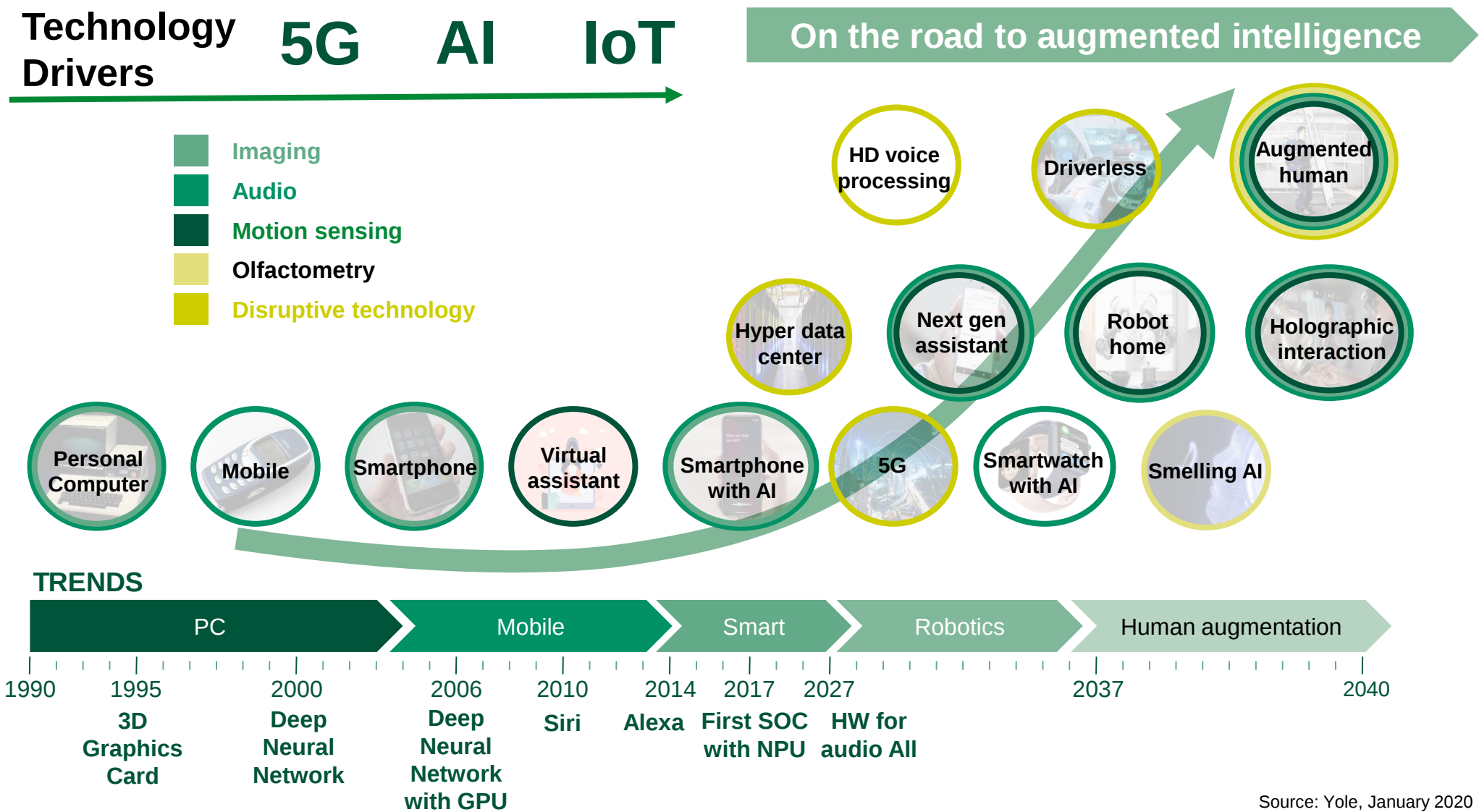
Growth Expected to Favor Besi's Product Portfolio, Particularly Die Attach



Source: TechInsights, July 2022. Addressable market revenue excludes hybrid bonding contribution.

* Packaging & Plating includes only Besi's addressable segments. Non-addressable reported in other assembly market.

Digital Society Drives Greater Computing and Data Needs

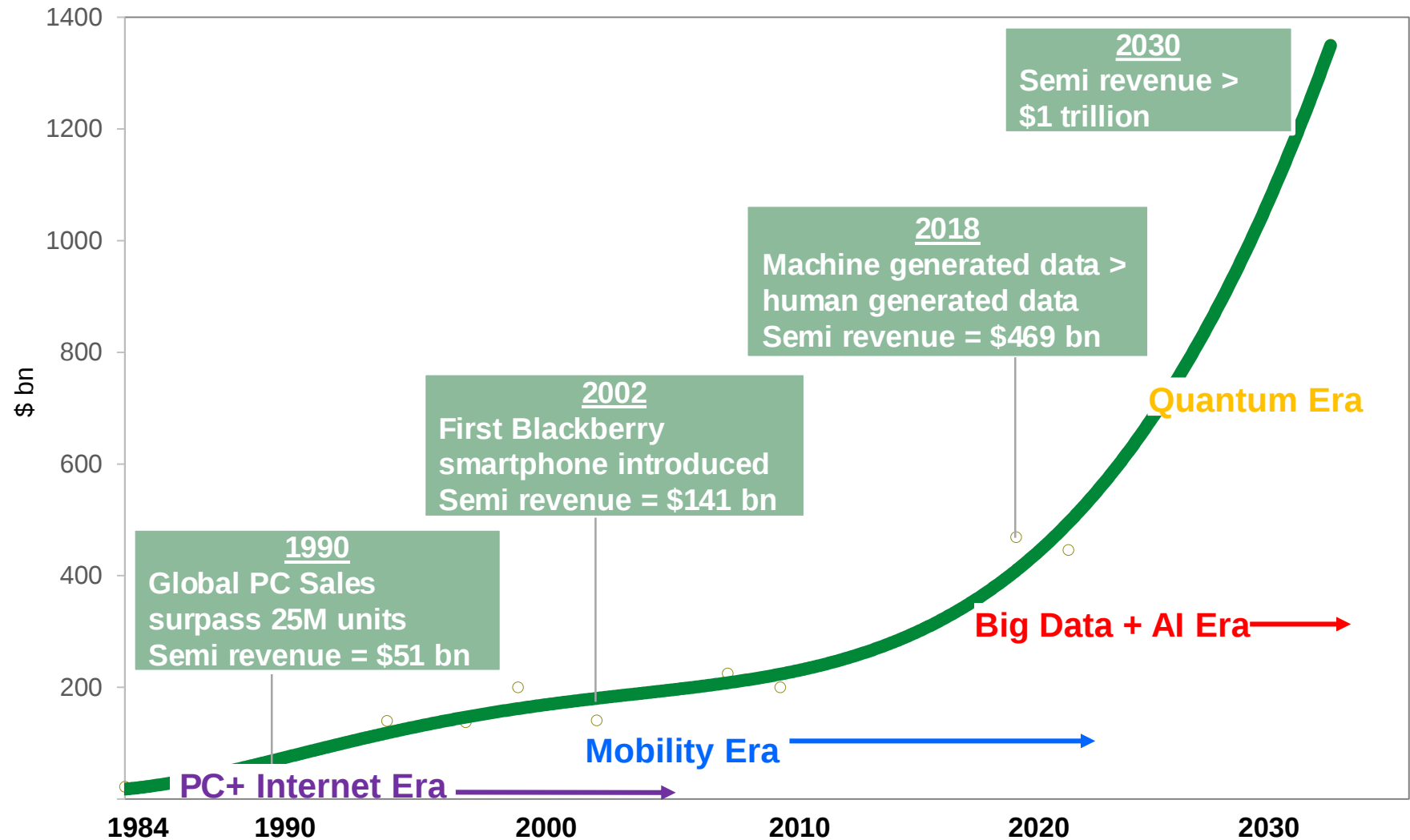


Source: Yole, January 2020

Semiconductor Growth Accelerating



\$500 B sales over past ~50 years → \$1.4T sales over next 10 years

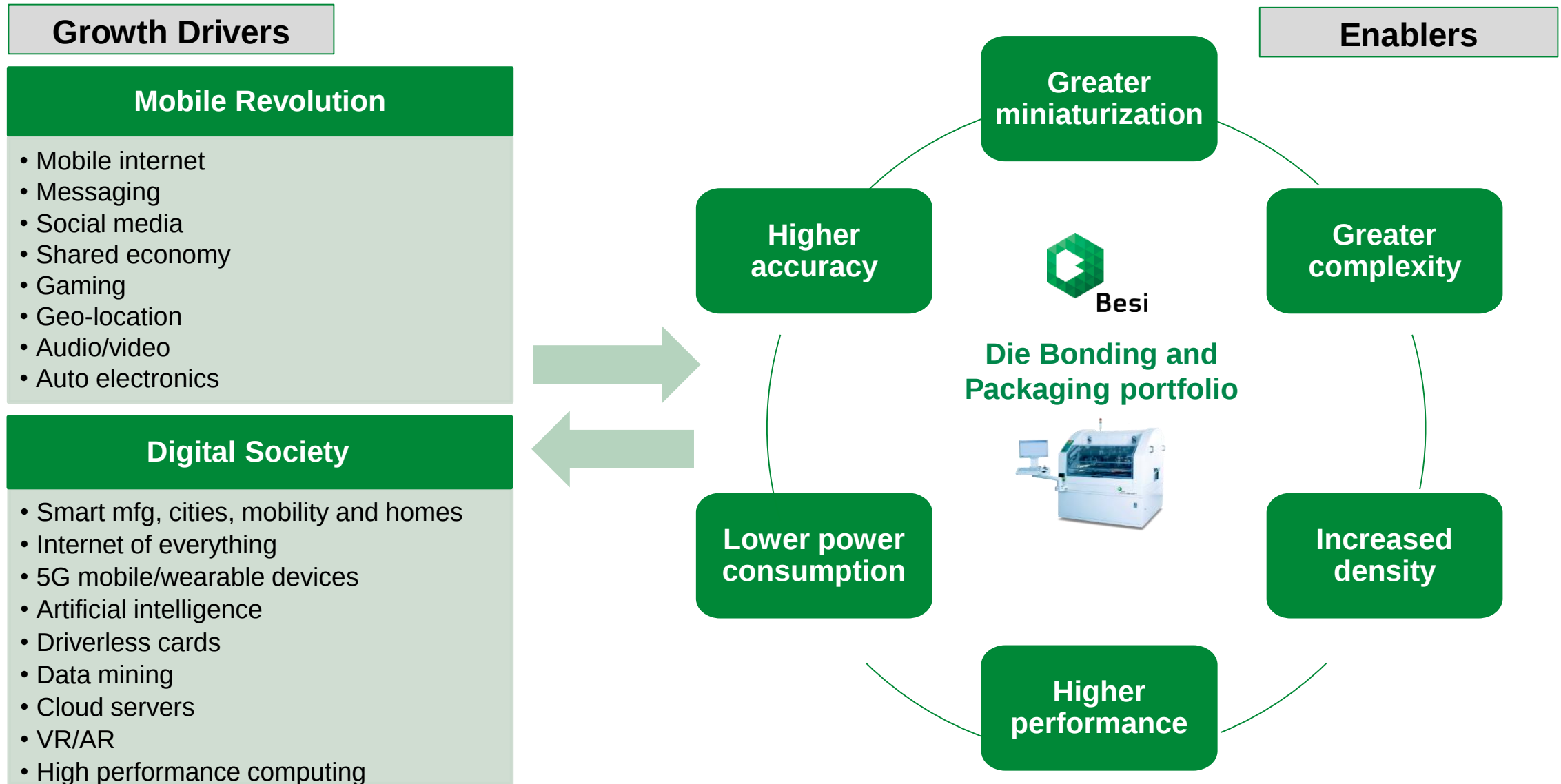


Projected Growth 2020-2030E

	2020	2030	CAGR
Non-Memory	\$235B	\$678B	11.2%
Memory	\$133B	\$467B	13.4%
Other ICs	\$79B	\$206B	10.1%
Total Semis	\$446B	\$1,351B	11.7%

Data source: Semi 2022

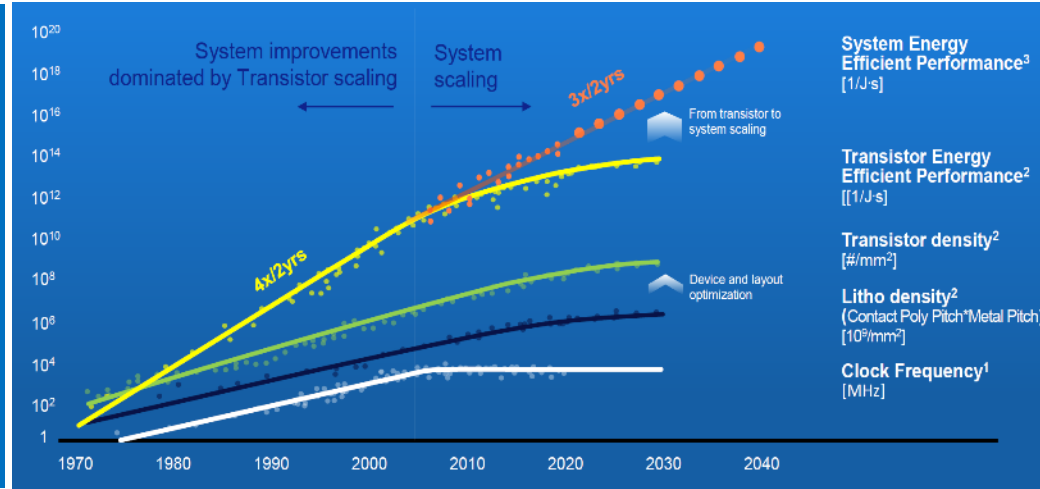
Advanced Packaging Critical to Next Generation Applications



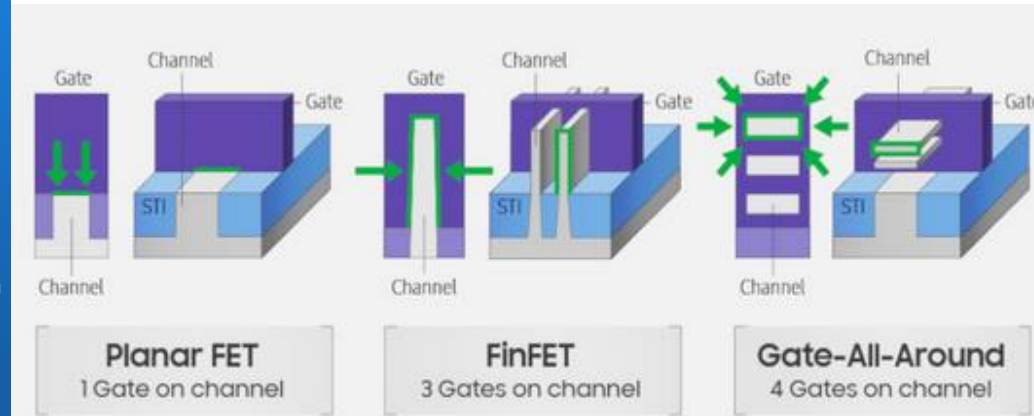
Requiring Increased Density, Higher Accuracy and Smaller Form Factors for Next Generation Devices

Front-End Wafer Fab

- Transistor scaling
- Lithography
- New 3D structures



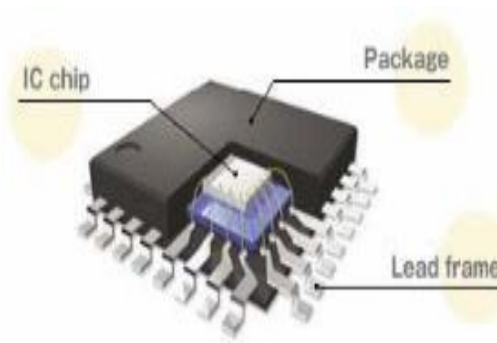
Source: ASML 2021



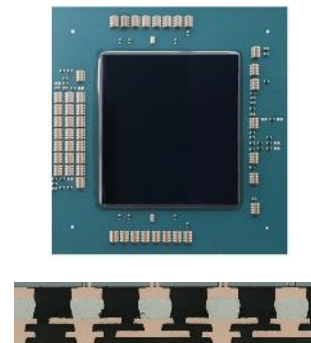
Source: Samsung

Back-End Assembly

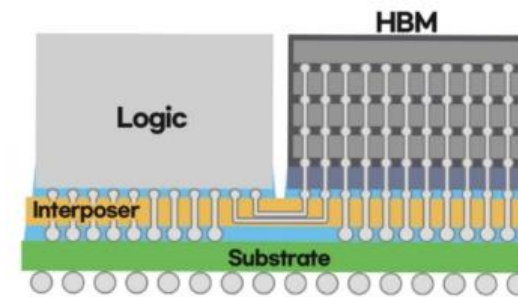
- More contacts
- Smaller pitches
- Thinner, denser and more complex packages
- Stacked 3D structures
- WLP/FOWLP packages



From simple wire bond

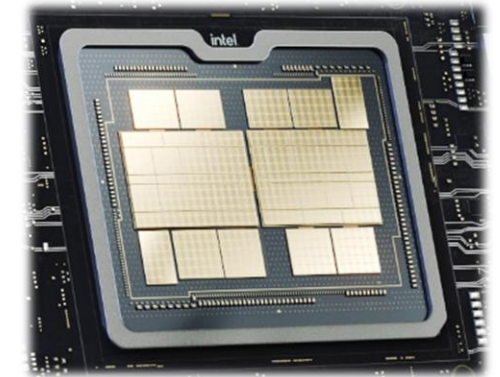


To flip chip and SiP



Source: Samsung

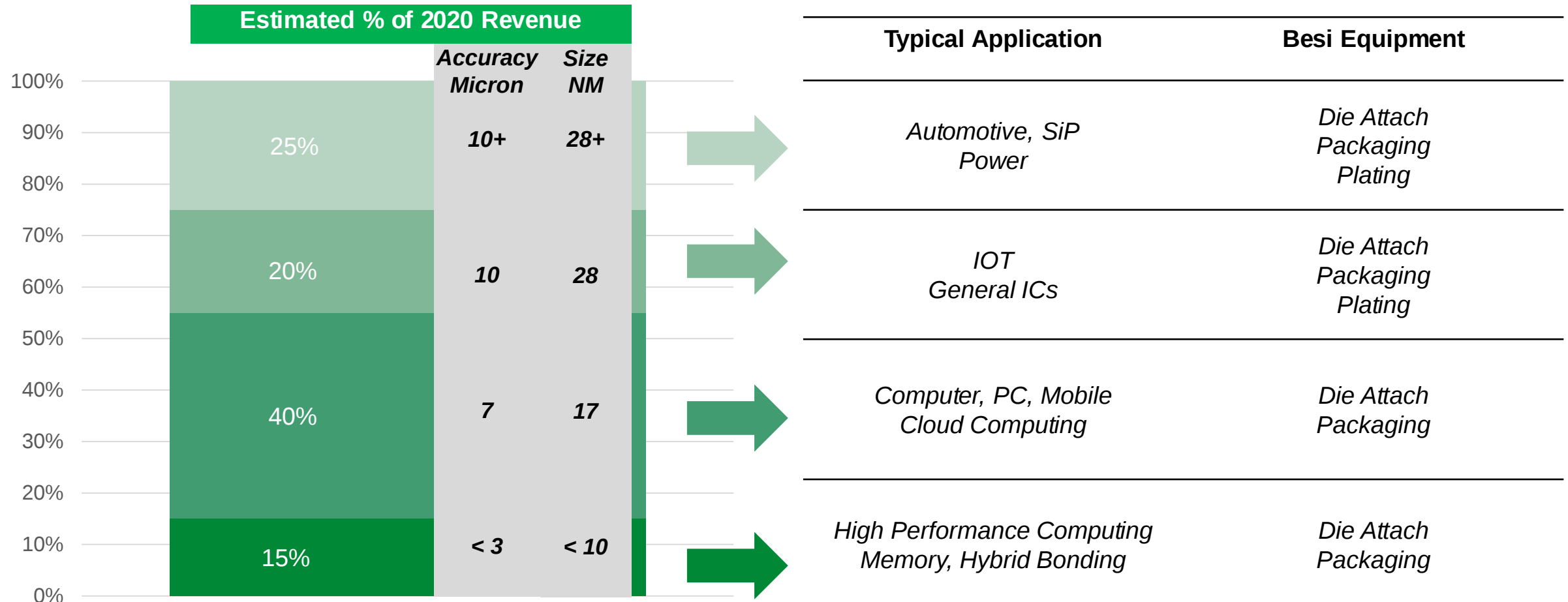
To complex 3D structures with TSVs, microbumps and thin dies



Source: Intel

To chiplet systems enabled by Hybrid Bonding

Besi Portfolio Well Positioned by Node Size and Accuracy



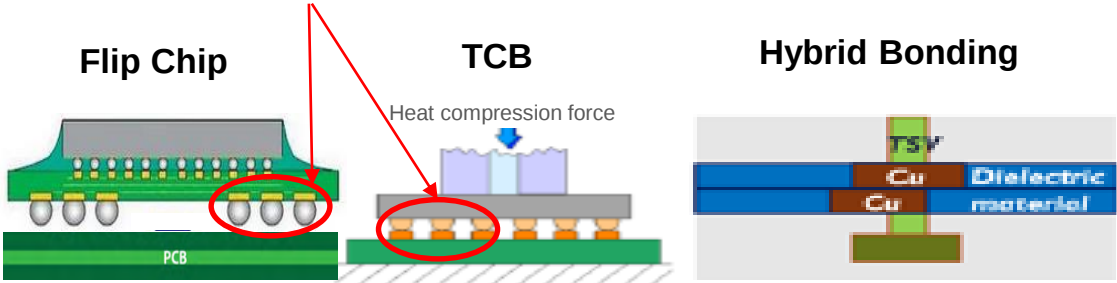
- **75% of Besi equipment revenue advanced packaging as per VLSI definition**
- 55% equipment revenue is < 7 micron accuracy and < 17 nanometer node size
- Most rapidly growing market segment

Why is Hybrid Bonding Important?

Direct Cu-Cu Interconnect

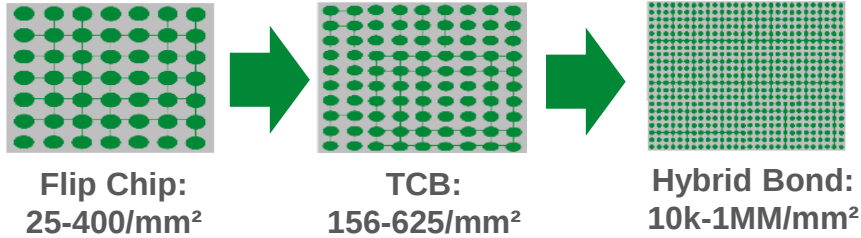
Eliminates need for interposer & solder balls

Results in smaller, thinner form factor to design more complex devices



Ultra-High Bandwidth & Speed

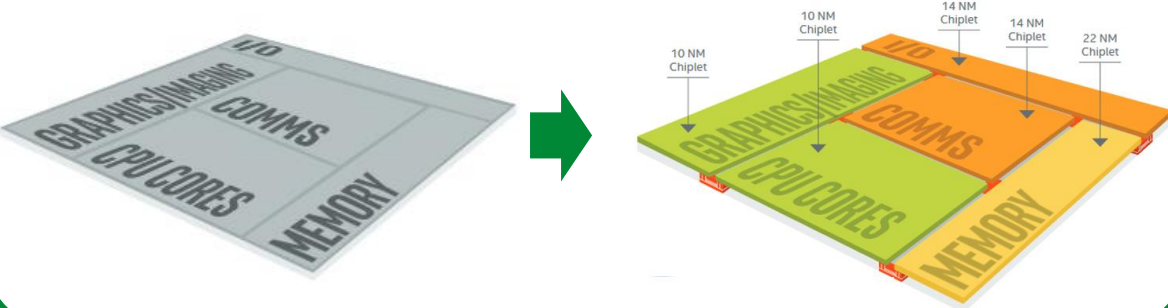
Contact density increased by factor of 1000x by eliminating solder balls, reducing distance between contacts & increasing speed & data transfer



Current design achieves 122 nano placement accuracy at 2,000 uph

Design Flexibility

Hybrid bonding facilitates development of new 3D chiplet architectures and increased features/functionality in smaller form factor



Lower Cost of Ownership

Lower Cost of Ownership

- Performance and functionality increased
- Fewer chips required
- Materials cost lower
- Cost per contact lower
- Lower heat dissipation
- Energy consumption lower

Energy Efficiency

Process	Flip Chip	TCB	Hybrid Bonding
Energy/Bit	0.5pJ/bit	0.1pJ/bit	<.05pJ/bit

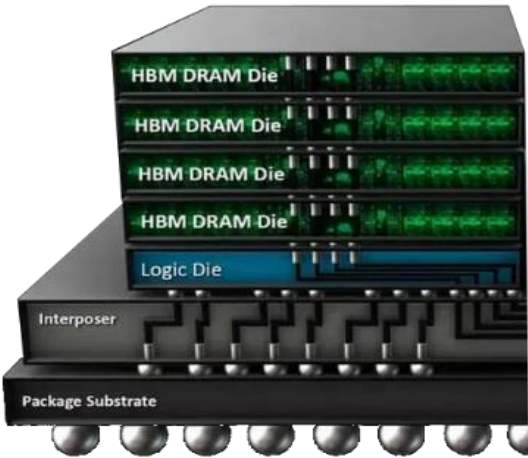
Smaller devices draw less electrical power

Applications Driving Hybrid Bonding Growth

Logic



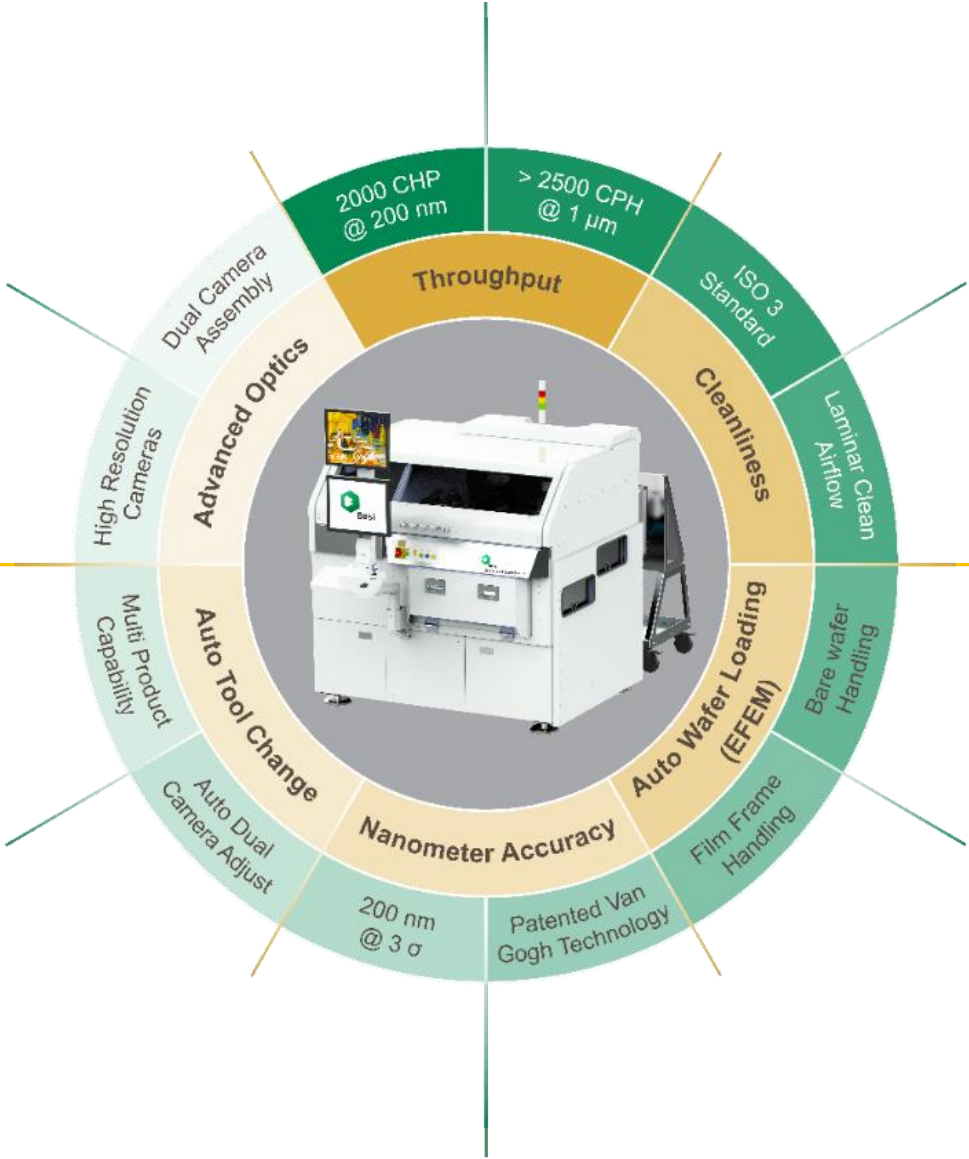
Memory



Sensors & Display



Mobile



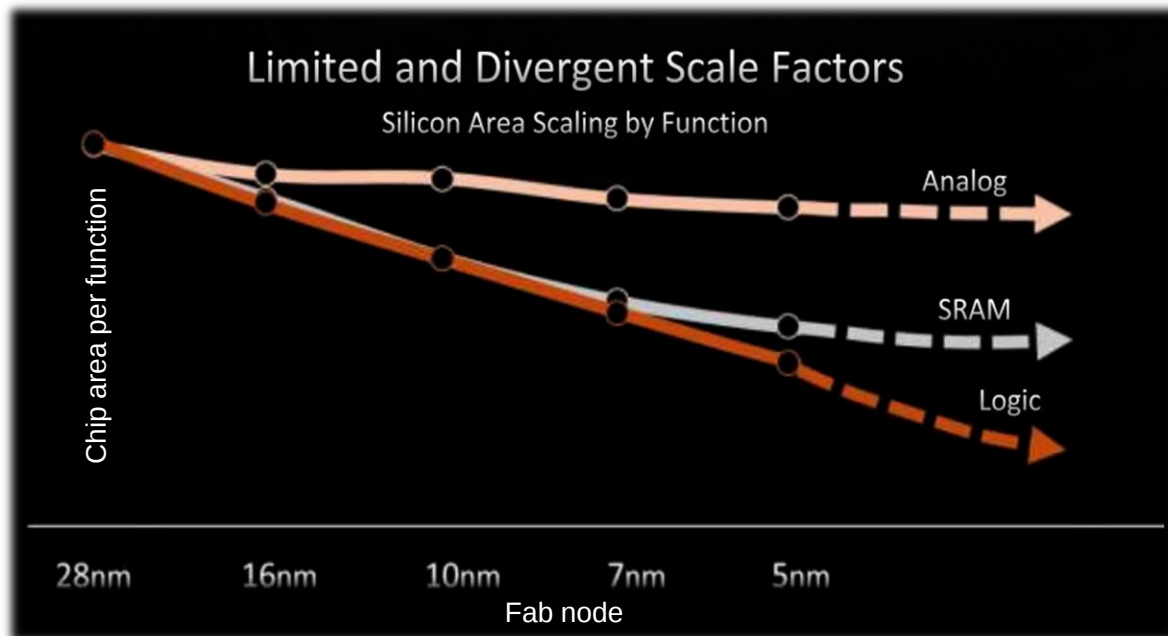
Slowing of Moore's Law Drives Adoption of Chiplet Architectures and New Assembly Solutions

Problem

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

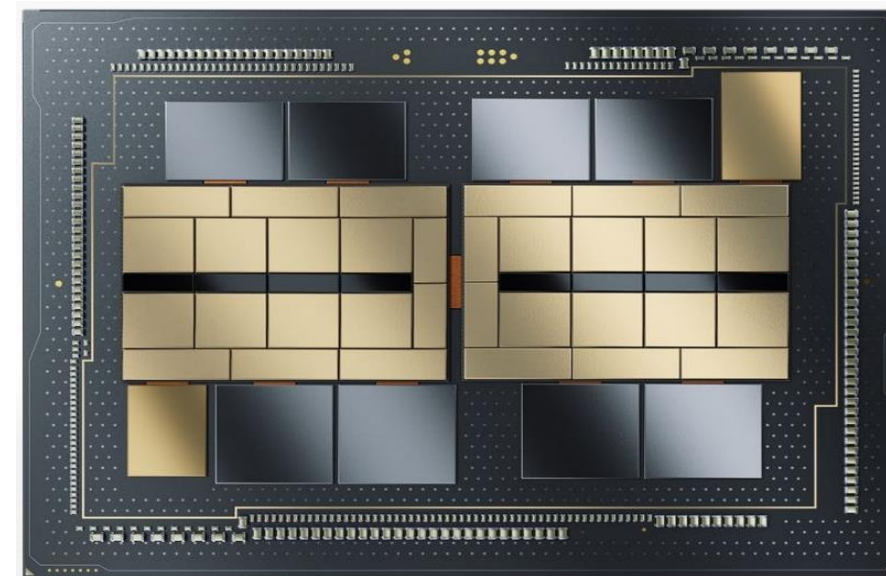
Solution

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



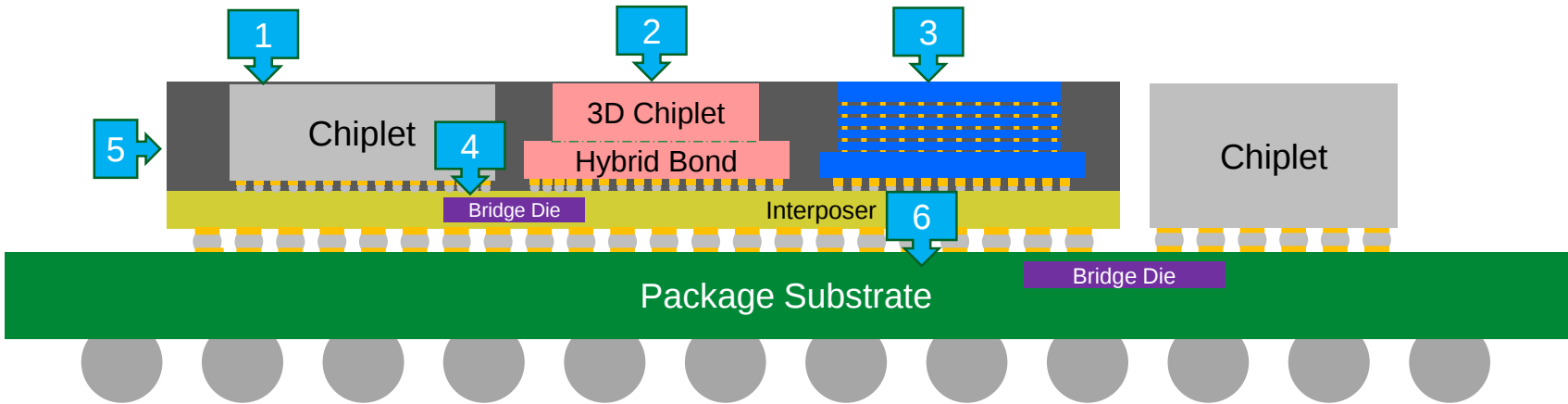
Source: AMD

Intel's Ponte Vecchio: 47 Chiplets in One Package



Source: Intel

New 3D Chiplet Structures Use Variety of Advanced Assembly Processes



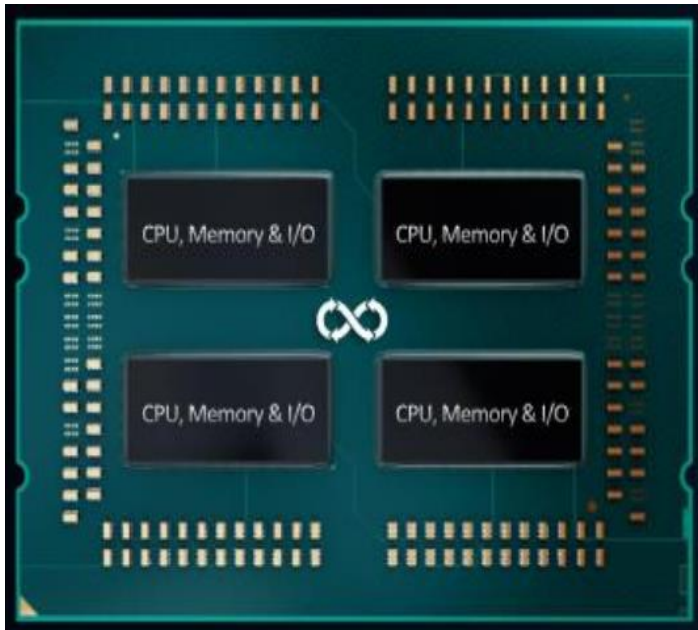
1 Chip to Wafer TCB	2 Hybrid Bonding	3 High Bandwidth Memory Stacking	4 Embedded Bridge Die Attach	5 Wafer Level Die Molding	6 HD Interposer to Substrate
TC Next C2W	8800 Chameo Ultra Plus	8800 TC Advanced 8800 Chameo Ultra+	8800 Chameo Ultra	FML	2200 evo

New Chiplet Architectures Increase Process Steps/Capital Intensity

2017

1st Gen EPYC

4 flip-chip placement steps

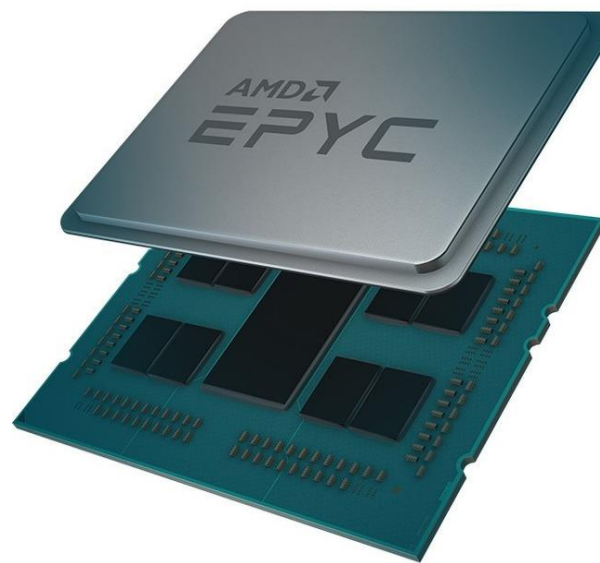


Source: AMD

2019

2nd Gen EPYC

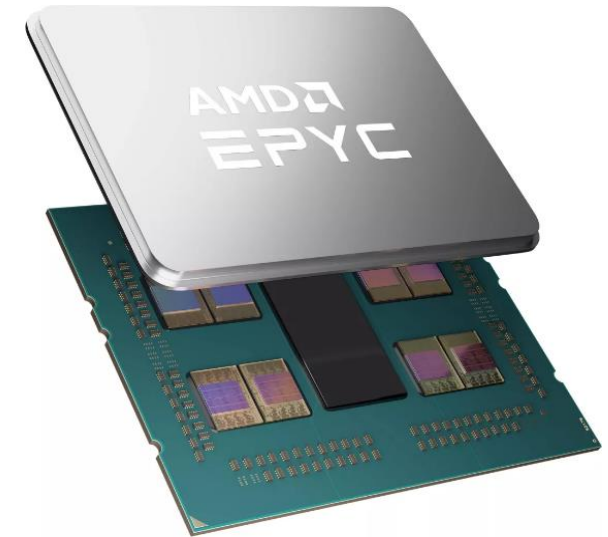
9 flip-chip placement steps



2022

3rd Gen EPYC

> 30 die placement steps
including hybrid and flip-chip



Besi Process Solution:

8800 FC Quantum

ASP: \$500k

UPH: ~9,000

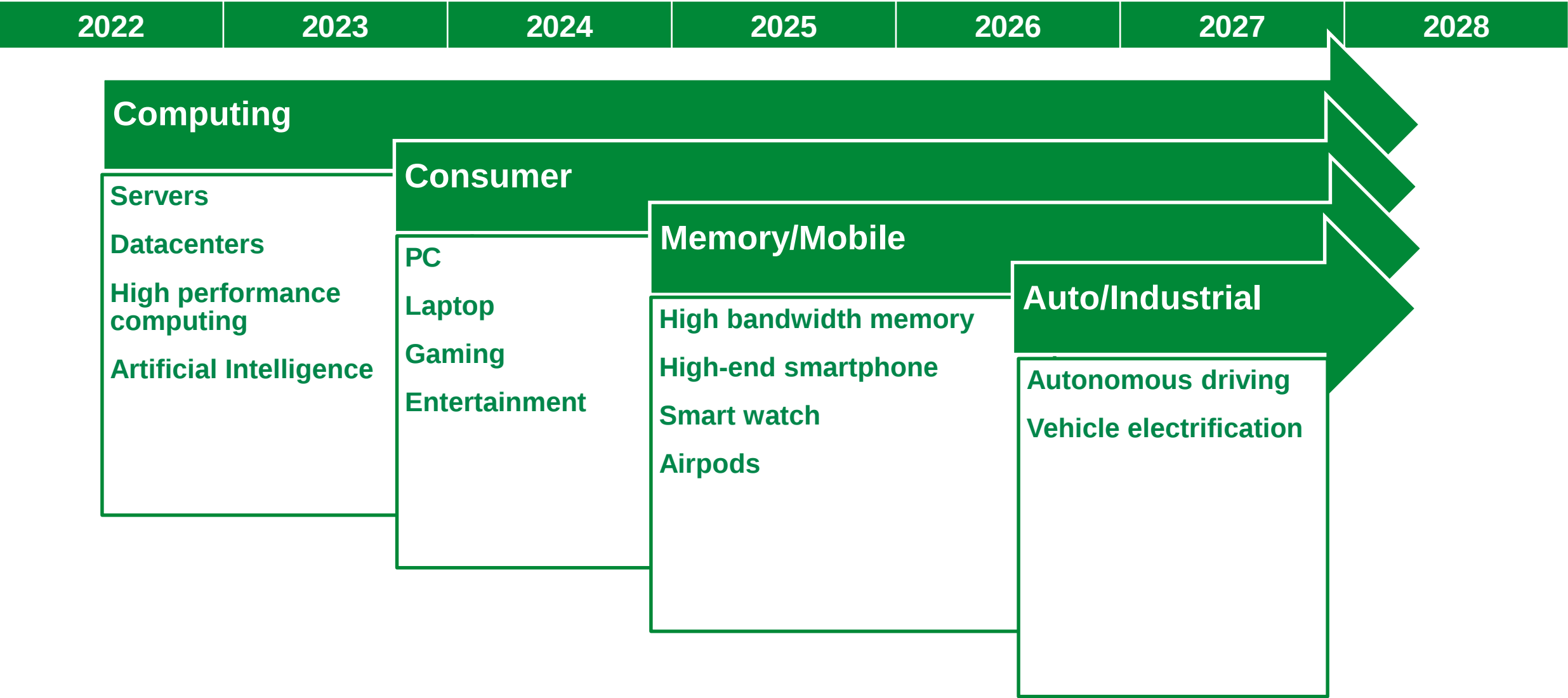


8800 Ultra Accurate C2W Hybrid Bonder:

ASP: \$1.5MM-\$2.5MM

UPH: ~1,500

Estimated Timetable Per Application

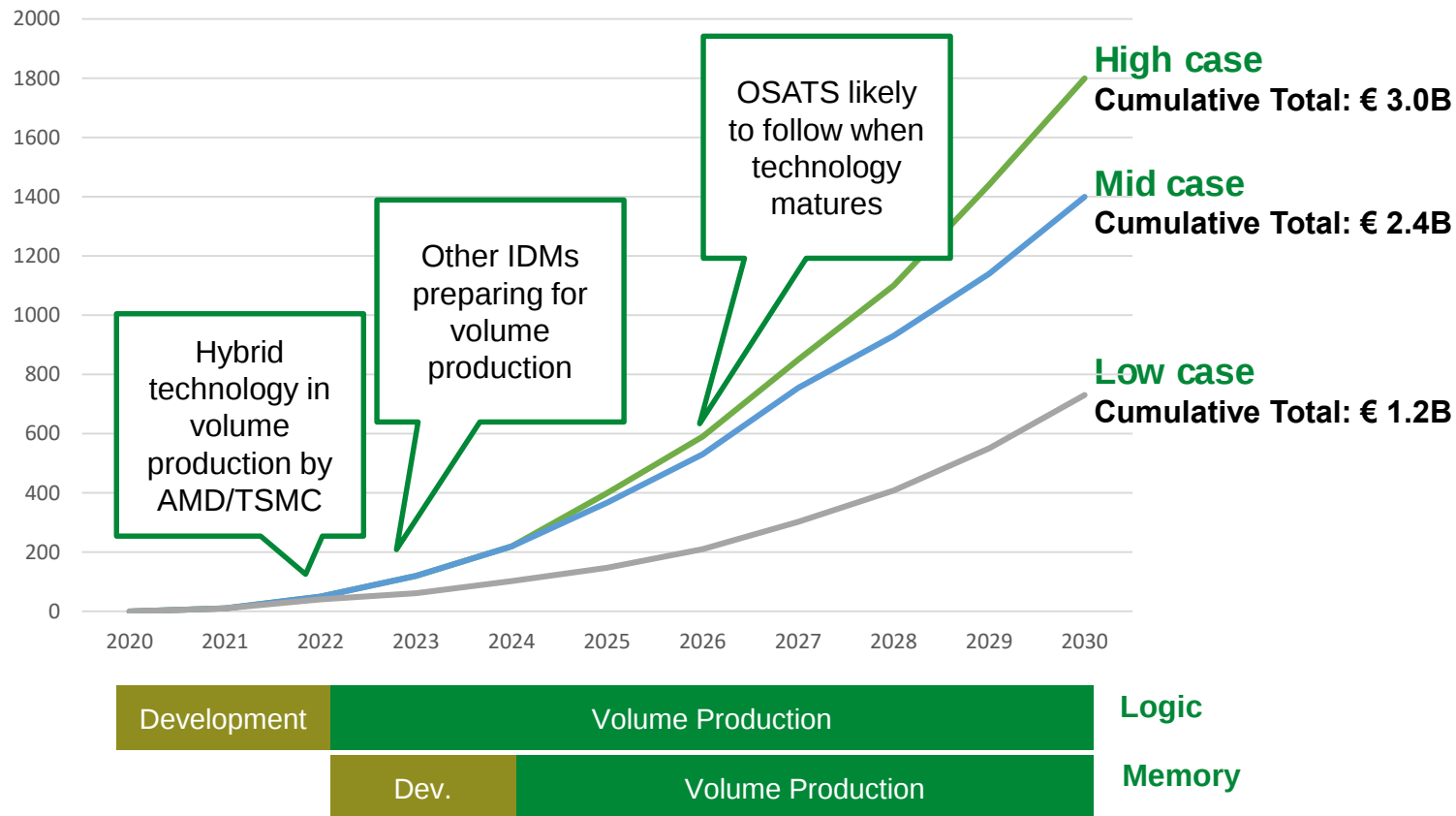


Hybrid Bonding Adoption Gaining Traction

Hybrid Bonding Equipment Market

Estimated 700 – 1,800 systems by 2030

Total # of installed back-end machines for hybrid bonding

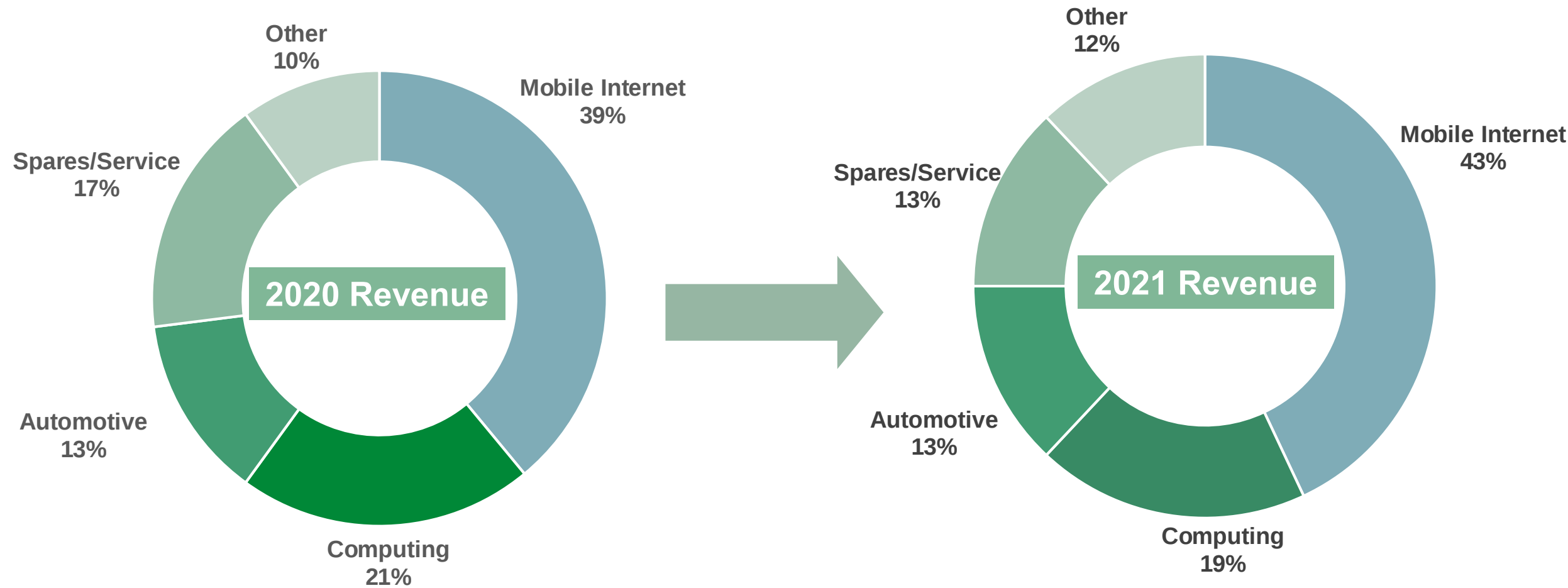


- Hybrid now on radar of all major semi producers
- Not question of if, but when and how large the market opportunity
- Upside market potential expanded
 - Tracking to mid case currently
- Expected rollout sequence:
 1. Logic
 2. Memory
 3. Mobile
 4. Subcontractors

Source: Besi estimates

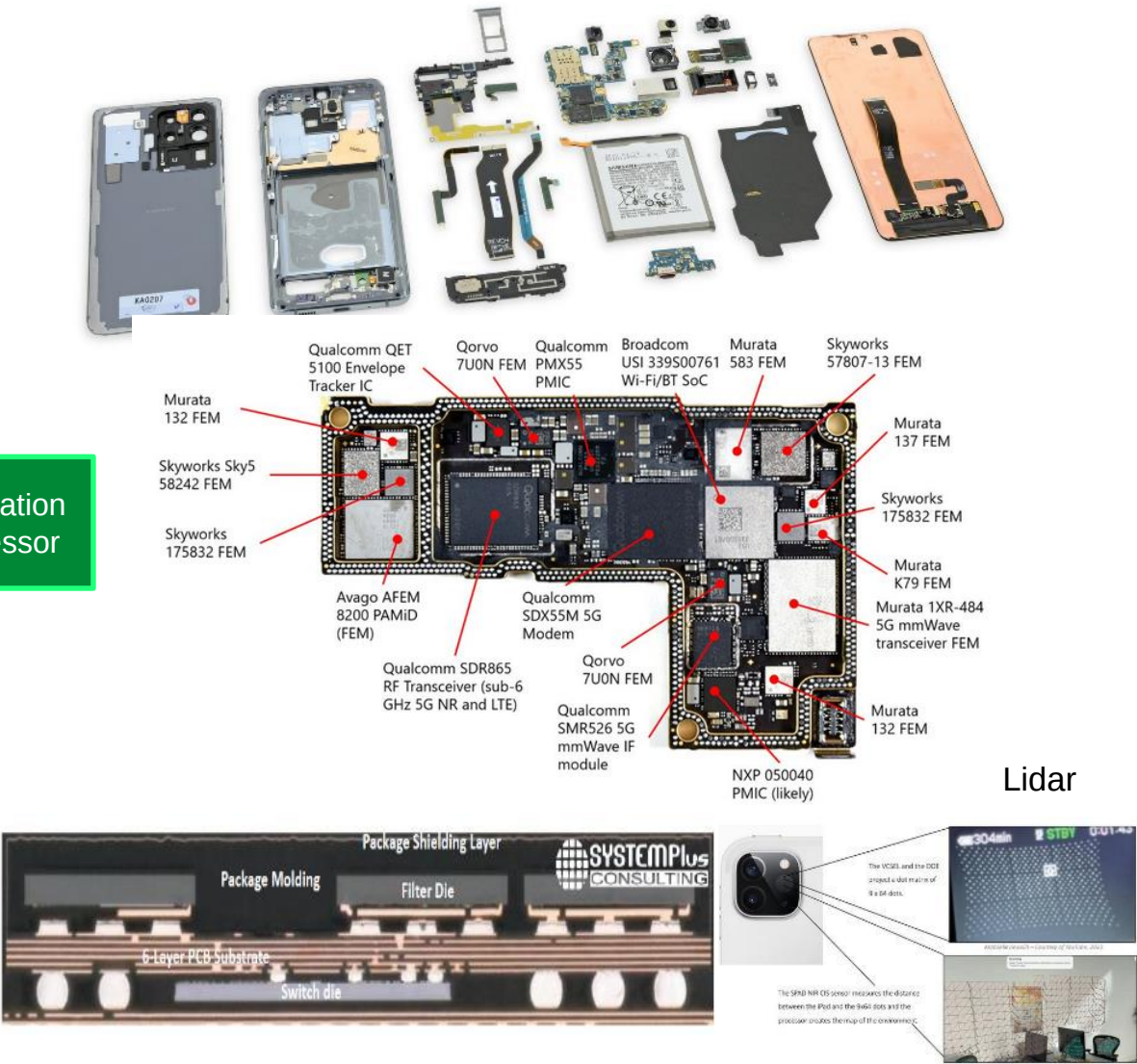
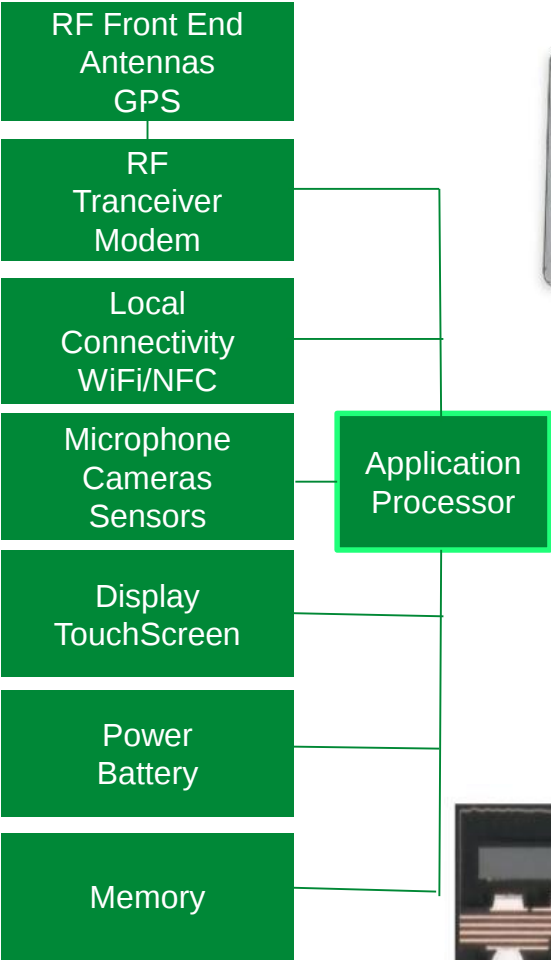


III. END USER MARKET TRENDS



Source: Company estimates

Mobile: Besi's Largest End-User Market



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: Increasing 5G Adoption is Primary Growth Driver Will Generate New Smartphone Applications and Features

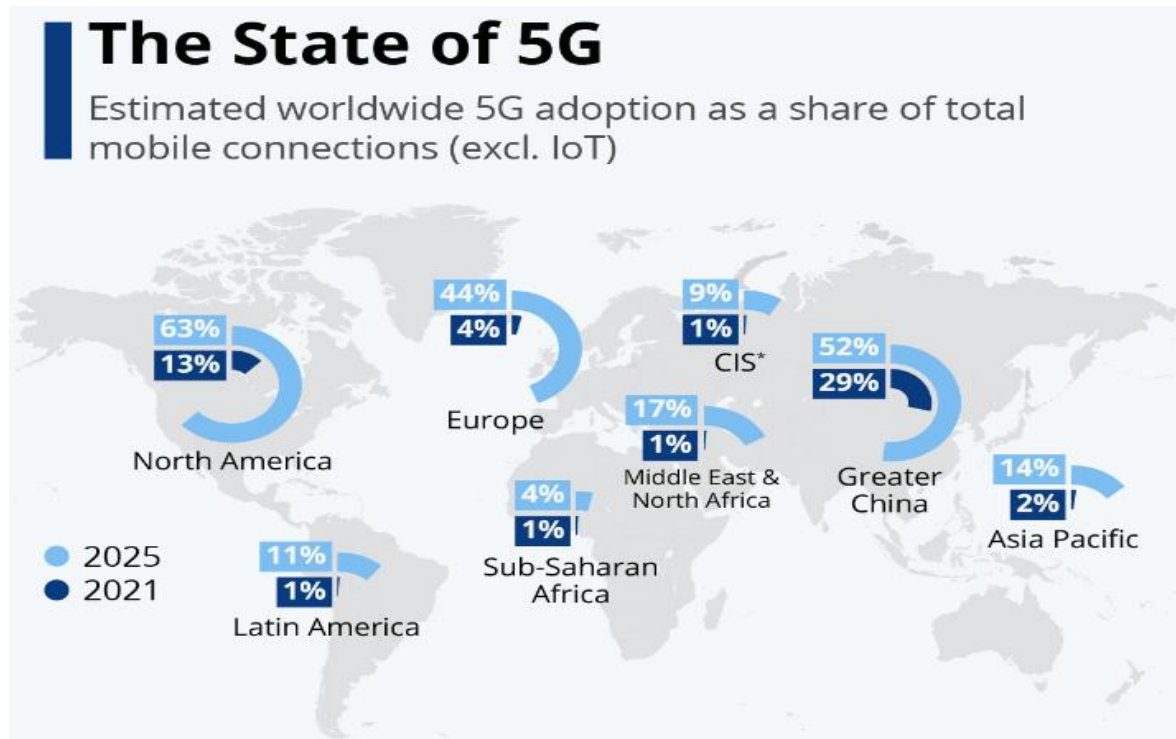
Growth in new features and functionality requires new/advanced assembly systems to achieve higher performance and more compact form factors

5G rollout is progressing, still mid-cycle adoption rates

- mmWave 5G deployment and 6G research in progress

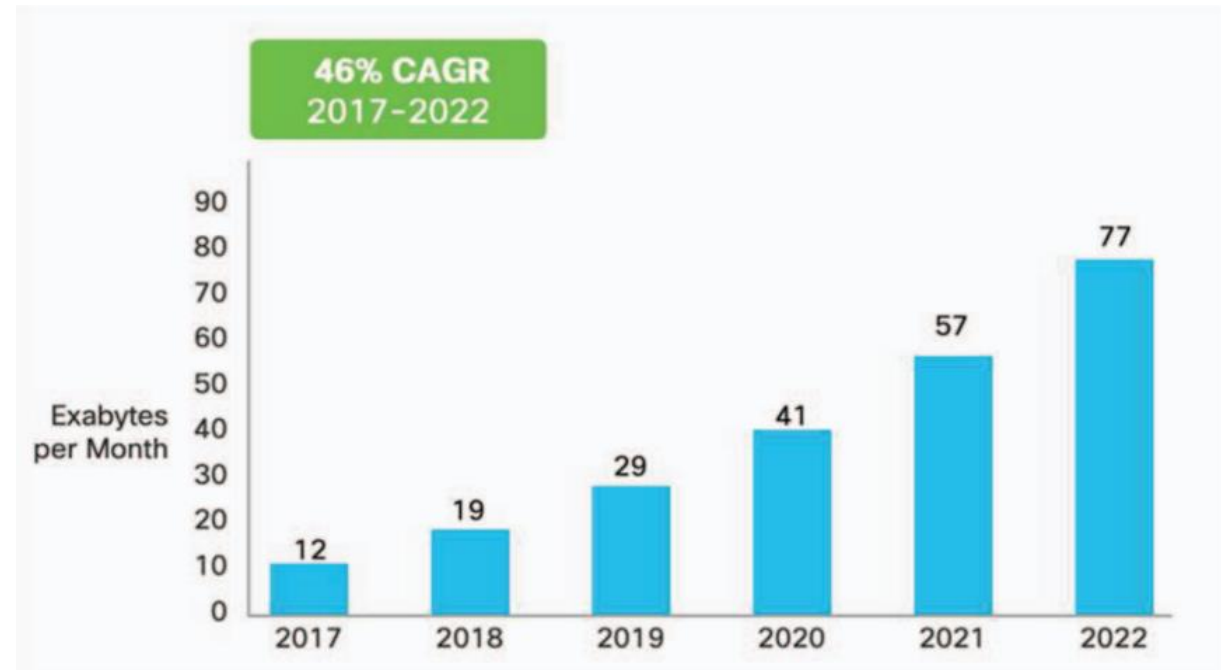
Mobile data traffic is growing rapidly

- Growth in new features and functionality requires new advanced assembly systems



Source: IDC

Global mobile traffic growth 2017-2022



Source: Cisco, 2022 ECTC

Computing Demand Expanding Rapidly

Advanced computing expanding to many commercial applications
Primary driver: hyperscale cloud infrastructure buildout

Data volumes growing exponentially

HPC driving rapid innovation in chiplet assembly technologies



AI/Vision/Recognition



Medical



Super Computers



Mobile Phones



Industry 4.0



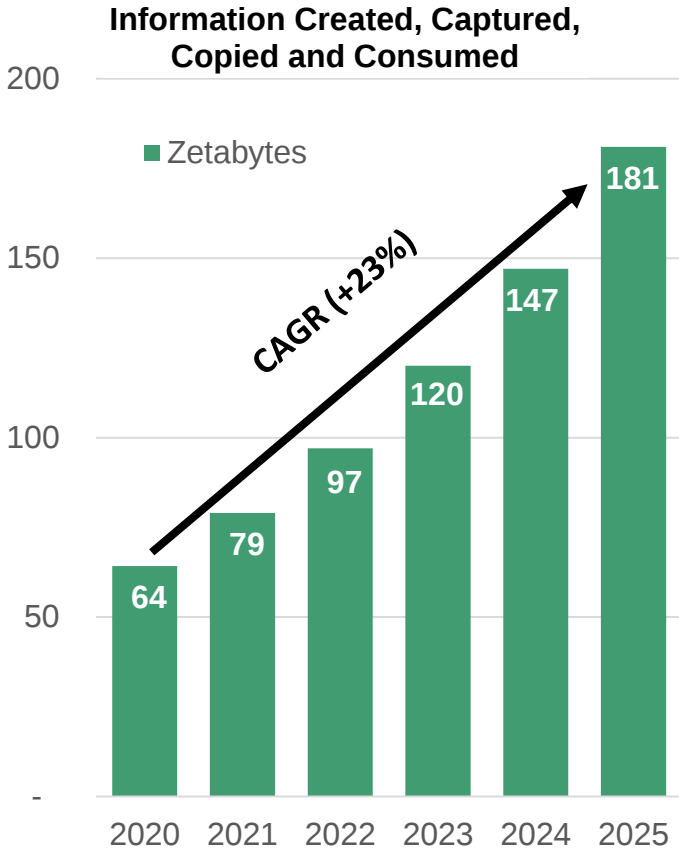
Autonomous Driving



Datacenters



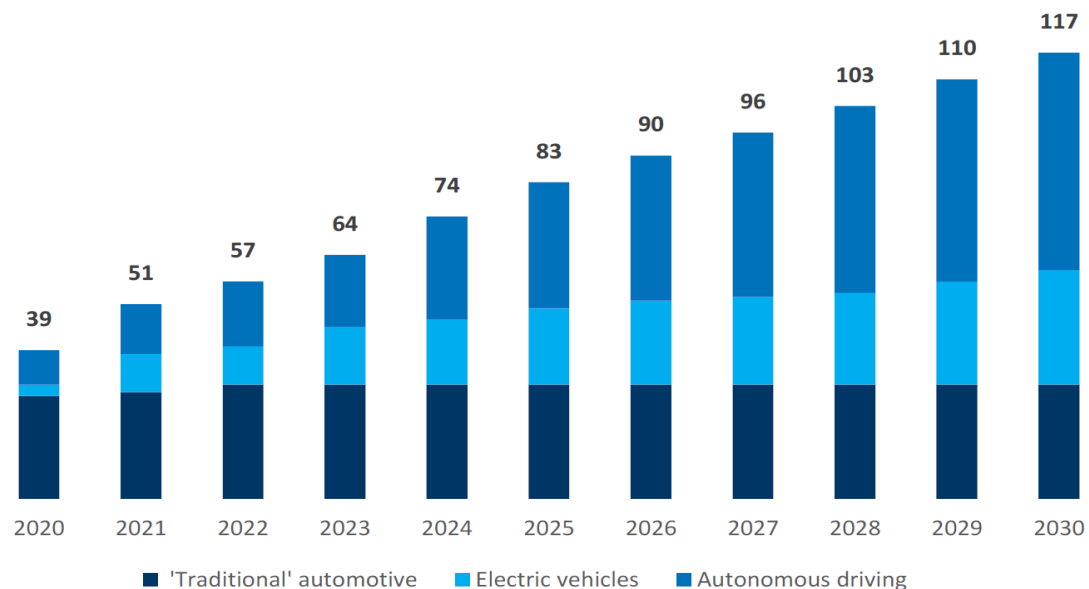
Laptops/Gaming/Engineering



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

Majority of cars produced by 2030 will have an EV drive train

IDC Automotive Semi Market Forecast (\$ bn)



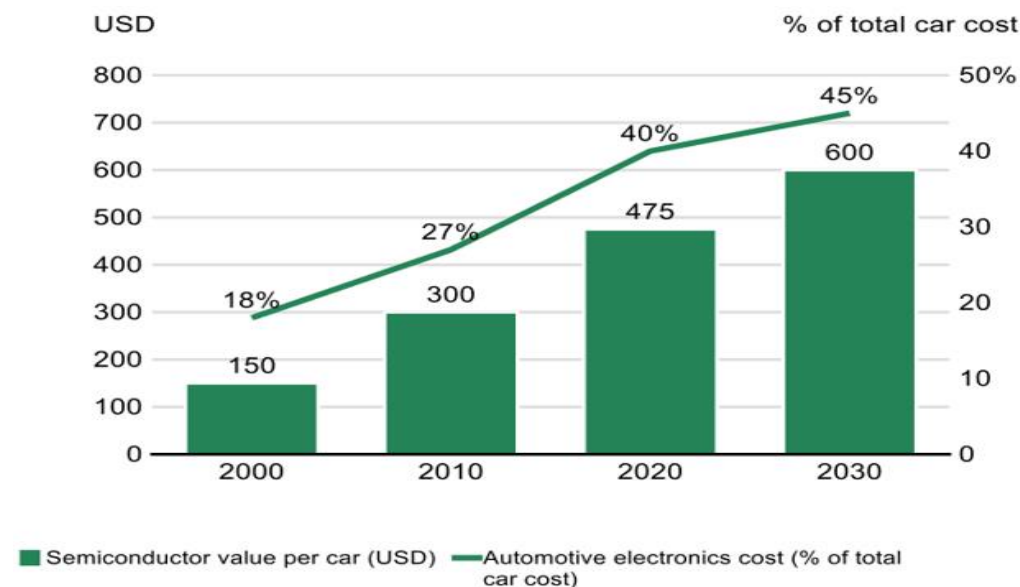
Source: Gartner, ASML Position Paper – European Chips Act

12% CAGR in automotive semi sales 2020 – 2030

- Semis for electrification to grow by 26% CAGR
- ADAS Semiconductors to grow by 20% CAGR

Almost all will have some level of autonomous driving

Semiconductor content per car is increasing



Source: IHS Markit and Deloitte Insights, July 2020

Upward trend anticipated to continue

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

Besi Well Positioned to Capture Next Generation Opportunities



Multiple long term drivers for secular growth

- Computing: Big data, AI, edge computing, photonics
- Mobile: Continued roll-out of 5G, wearables, and deployment of mmWave 5G
- Automotive: EV and autonomous driving

Slowing of Moore's Law drives innovation in chiplet architectures

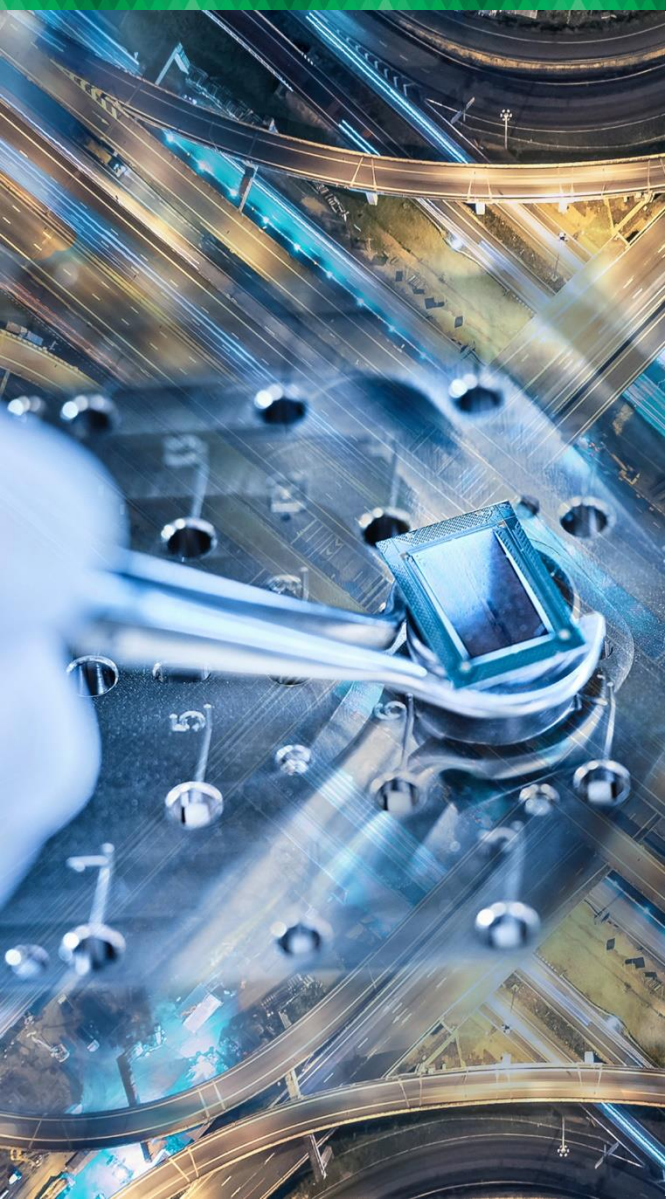
- Chiplets = more die placement steps = higher capital intensity
- Besi is well positioned with leadership in hybrid bonding and sub-micron die attach

New mobile technologies on the horizon

- New wearable devices like AR glasses with challenging form factors & advanced cameras
- Potential adoption of hybrid bonding in mobile processors
- 3D IC integration, advanced camera systems and 3D sensing

Transition to EVs with autonomous driving

- New SiC and GaN power devices requiring new die attach processes
- Increase in sensing and on-board computing content for safety and automation
- Requires advanced process control



IV. STRATEGY



Revenue Growth Initiatives

Engine 1

Next gen high end smart phones features & functionality

Advanced logic and memory capex for HPC/data center

Expanded Photonics applications

EV & Autonomous Driving

New assembly solutions for SiC & GaN power devices

Engine 2

Increase engagement top logic and memory players

New 5G, AI, HPC and smart phone applications

New wafer level product introductions

Production/Supply Chain

- Supply chain management top priority
- Ramp HB production. Reduce lead times
- New 125,000 sq ft. Malaysian facility to consolidate existing and expand wafer level capacity

Development

- Gross R&D investment +24% H1-22 vs. H1-21
- Next generation HB roadmap:
 - + throughput to 3,000 uph
 - + accuracy to 100 nano
- Roll out new wafer level assembly systems:
 - Embedded Bridge Die Attach
 - TCB C2W

Organization

- Implement strategic review initiatives 2021-25
- Increased R&D headcount 7% vs. year end 2021
- Reduced temporary production staff 16% vs. Q1-22

Asian Production Transfer Has Improved Profitability and Cash Flow

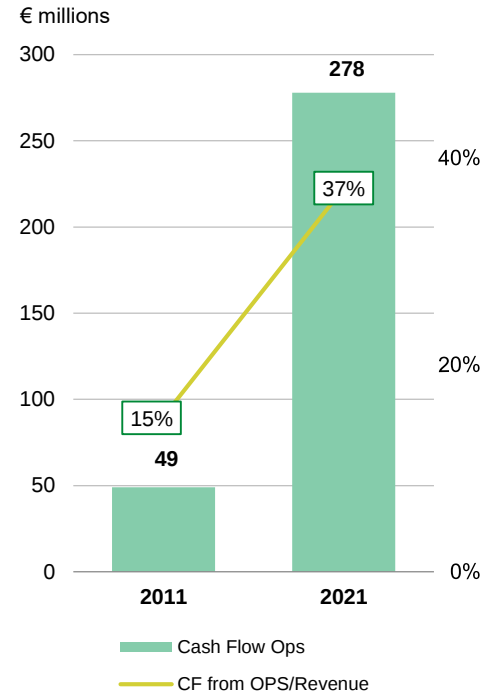
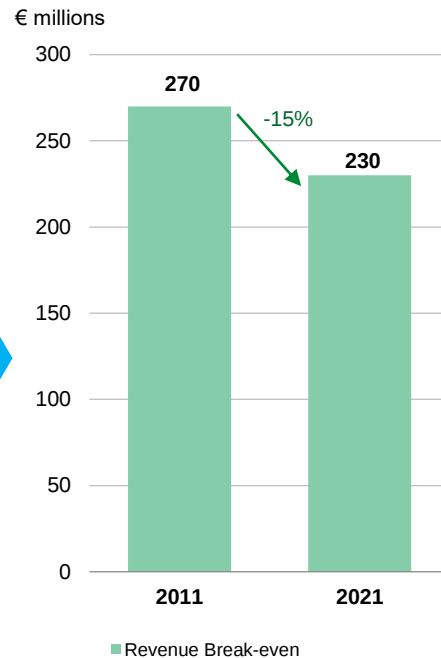
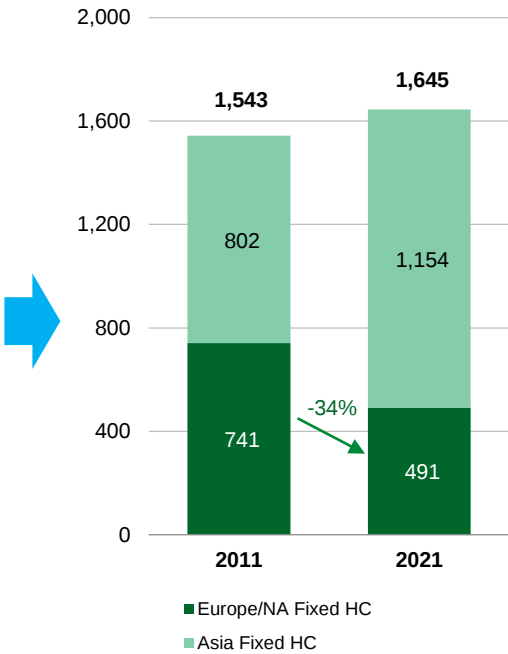
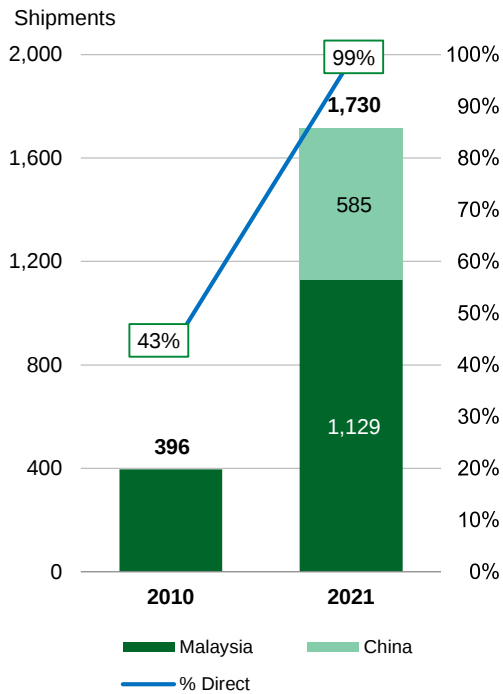


Asian Production Has Significantly Expanded

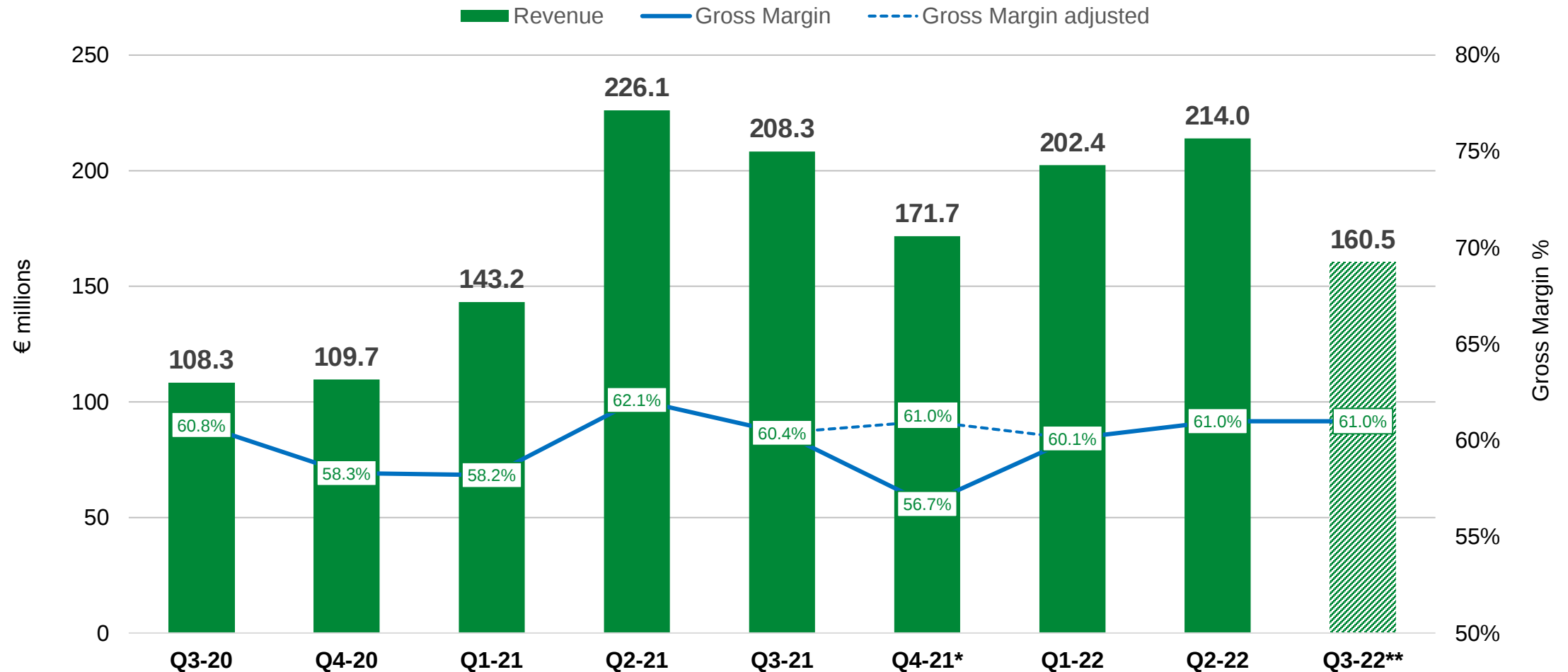
Leading to Lower Fixed European and NA Headcount

And Reduced Break Even Revenue Levels

And Improved Cash Generation



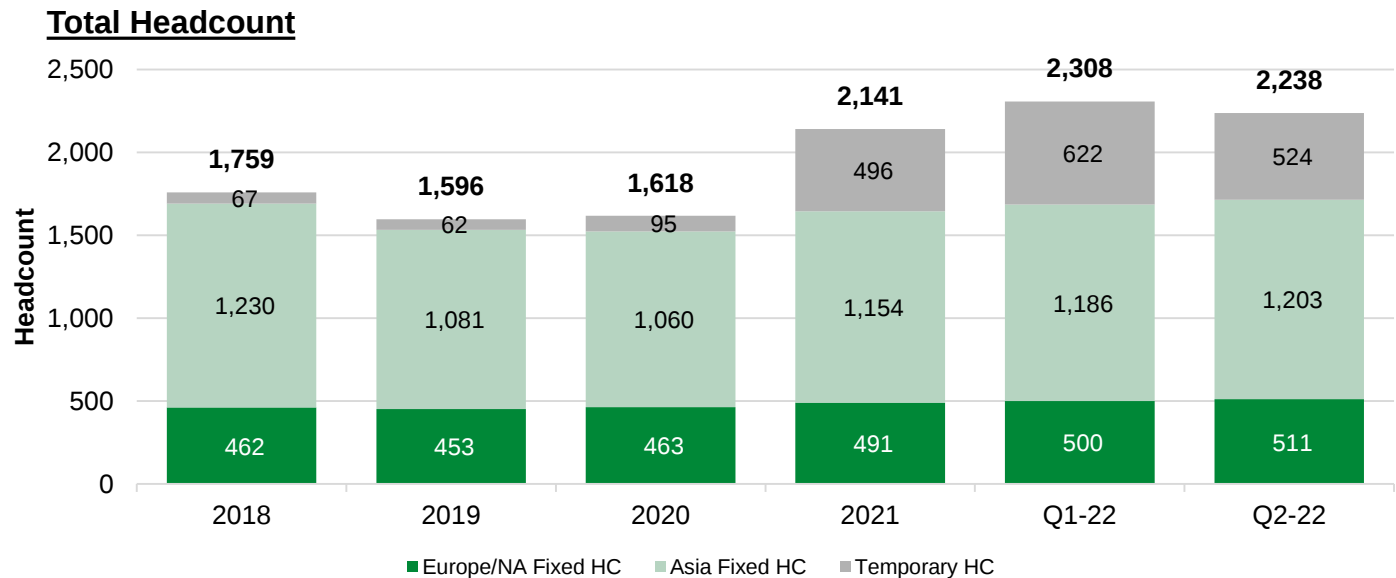
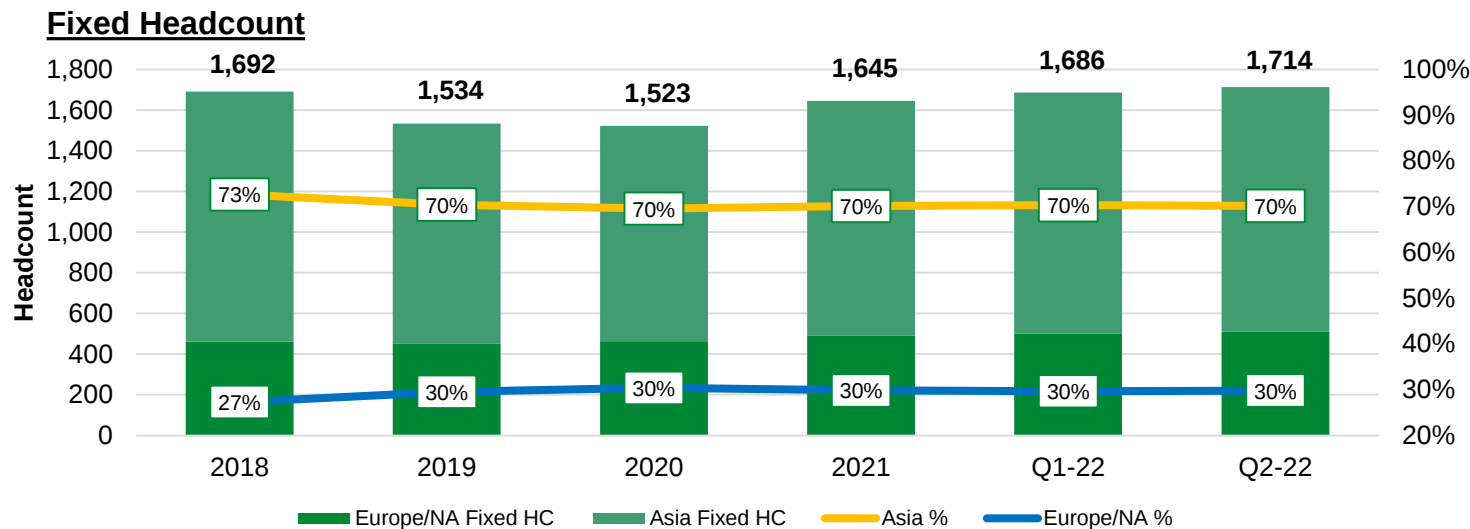
Flexible Production Model Has Generated Consistent Gross Margins in Market Cycles



* Includes € 7.4 million (4.3 gross margin point) inventory charge in Q4-21 related to a flood of one of Besi's Malaysian production facilities.

** Assumes midpoint of guidance for Q3-22

Flexible Asian Workforce Has Significantly Enhanced Scalability



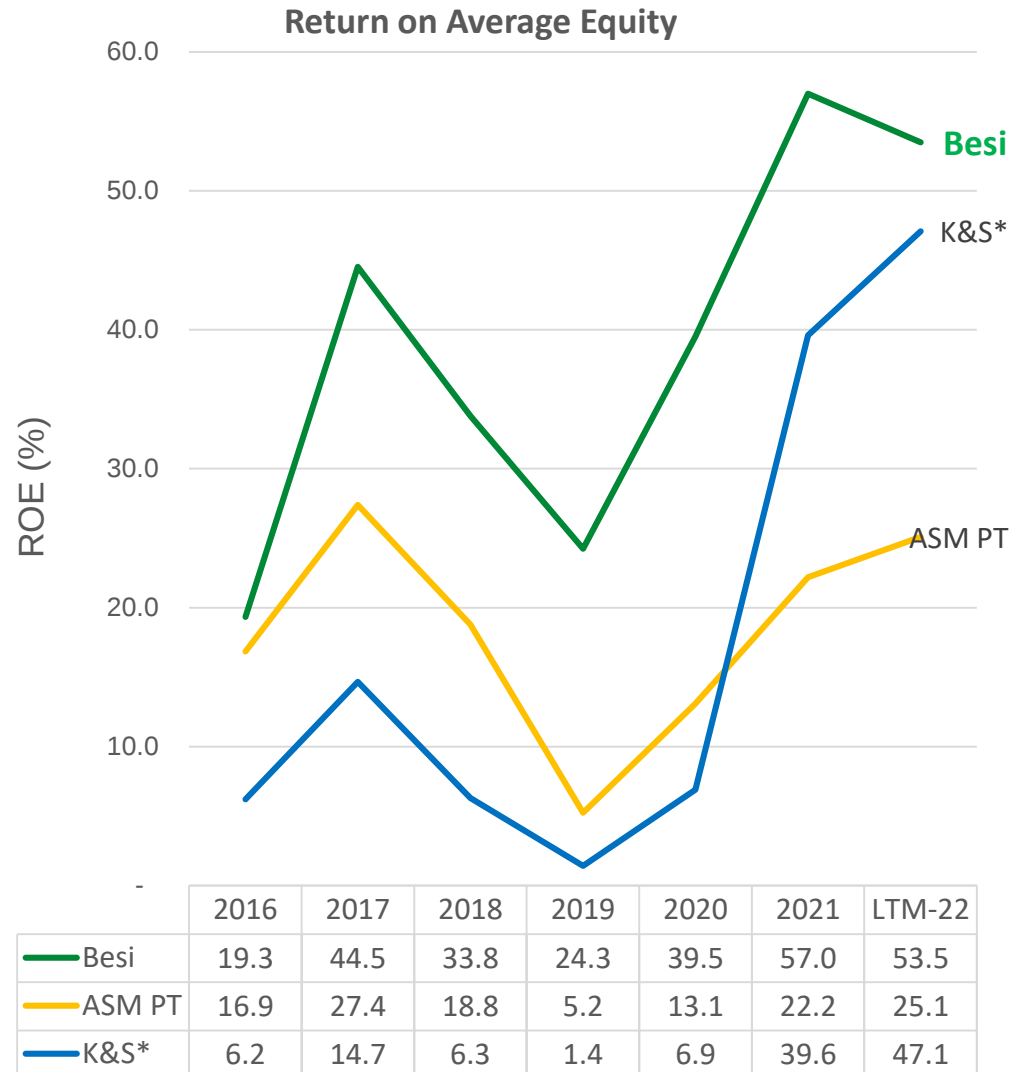
- Increasing fixed headcount to support R&D and service/support for wafer level assembly expansion
- Reducing temporary Asian production HC in alignment with changing market conditions

Structural, Through Cycle Outperformance Achieved vs. Direct Peers



Gross Margin			
	2016	YTD-22	Δ 2016/ YTD-22
Besi	51.0%	60.5%	9.5pts
ASM PT (Back end)	43.4%	44.7%	1.3pts
K&S*	44.8%	52.5%	7.7pts

Operating Margin			
	2016	YTD-22	Δ 2016/ YTD-22
Besi	20.0%	41.8%	21.8pts
ASM PT (Back end)	20.6%	20.6%	0pts
K&S*	8.6%	33.7%	25.1pts



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 on fiscal year basis. K&S last twelve months and year-to-date to March 31, 2022.

Significant ESG Progress Achieved

Process Pillar	2021 Progress
Environmental Impact	Reduced Scope 1 & 2 and 3 emissions intensity by 27% and 4%, respectively
	Relative reductions in fuel, energy, hazardous waste and water consumption
	Launched sustainable design initiatives for die bonding platforms
People Wellbeing	Additional COVID-19 health and safety measures implemented
	Increased female and local management % and training hours
	High level of employee engagement and motivation identified in COVID-19 Survey
Responsible Business	Increased % of Purchasing Volume signed CFSI and SAQ
	94% of Purchasing Volume compliant with RoHS directive, up from 92% in 2020

Key Targets 2022

100% renewable sources for European energy needs

15% reduction in Scope 1 and 2 carbon emissions*

Above-benchmark employee engagement

Increase training hours per employee

Compliance with SASB benchmark (2021)

TCFD compliance

Key Targets 2030

65% renewable sources for global energy needs

60% reduction in Scope 1 and 2 carbon emissions*

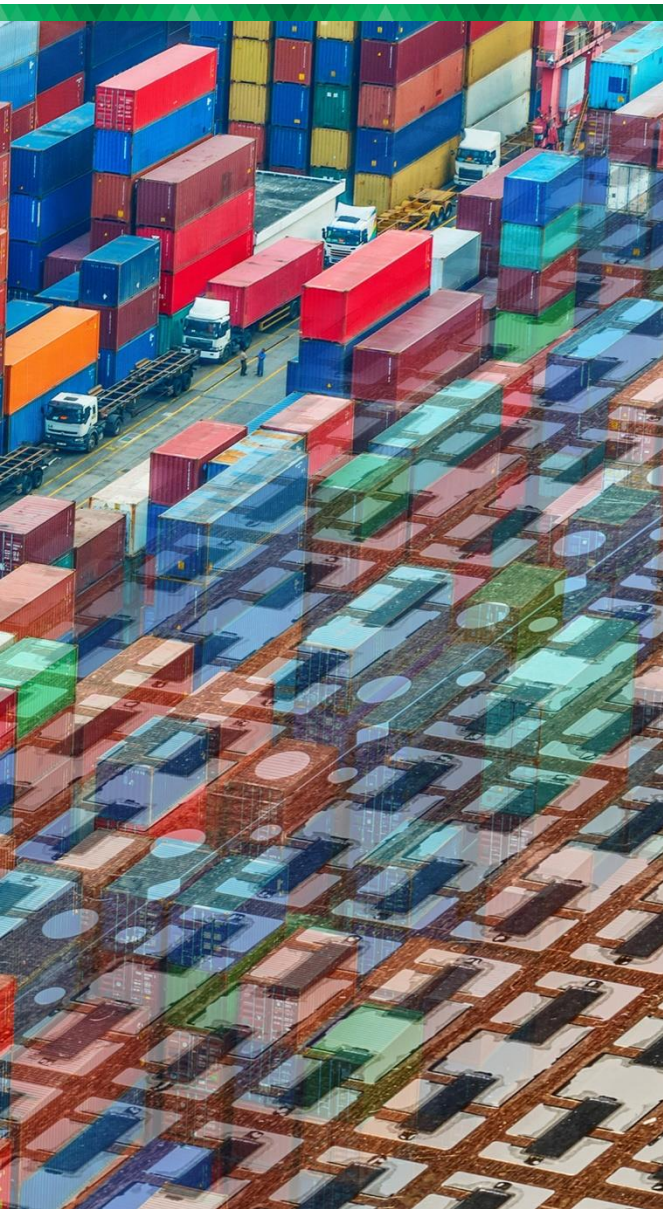
Reduce energy consumption

Decouple carbon footprint from revenue growth

80% vendor compliance with CFSI

Carbon Neutral By 2050

* As per Greenhouse Gas Protocol. Targets relative to 2019 baseline data

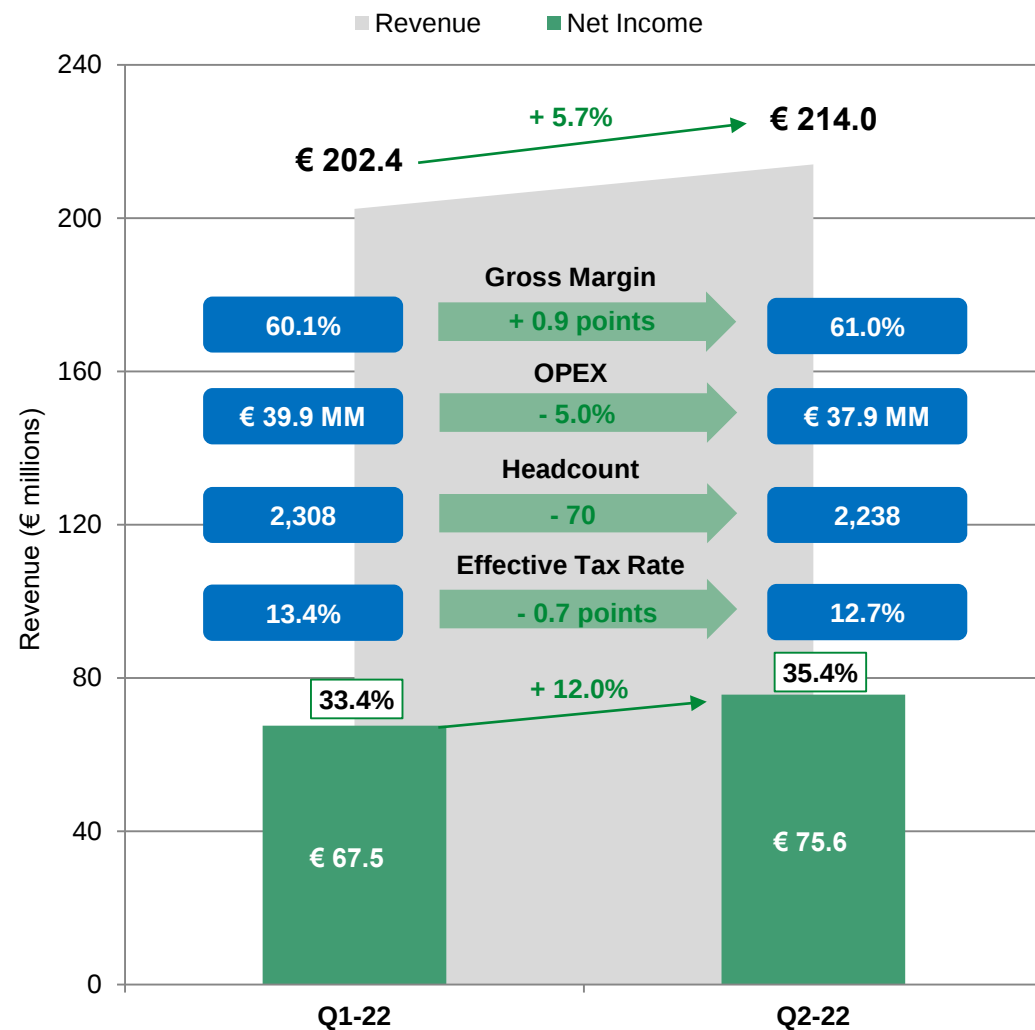


V. FINANCIAL UPDATE AND SUMMARY

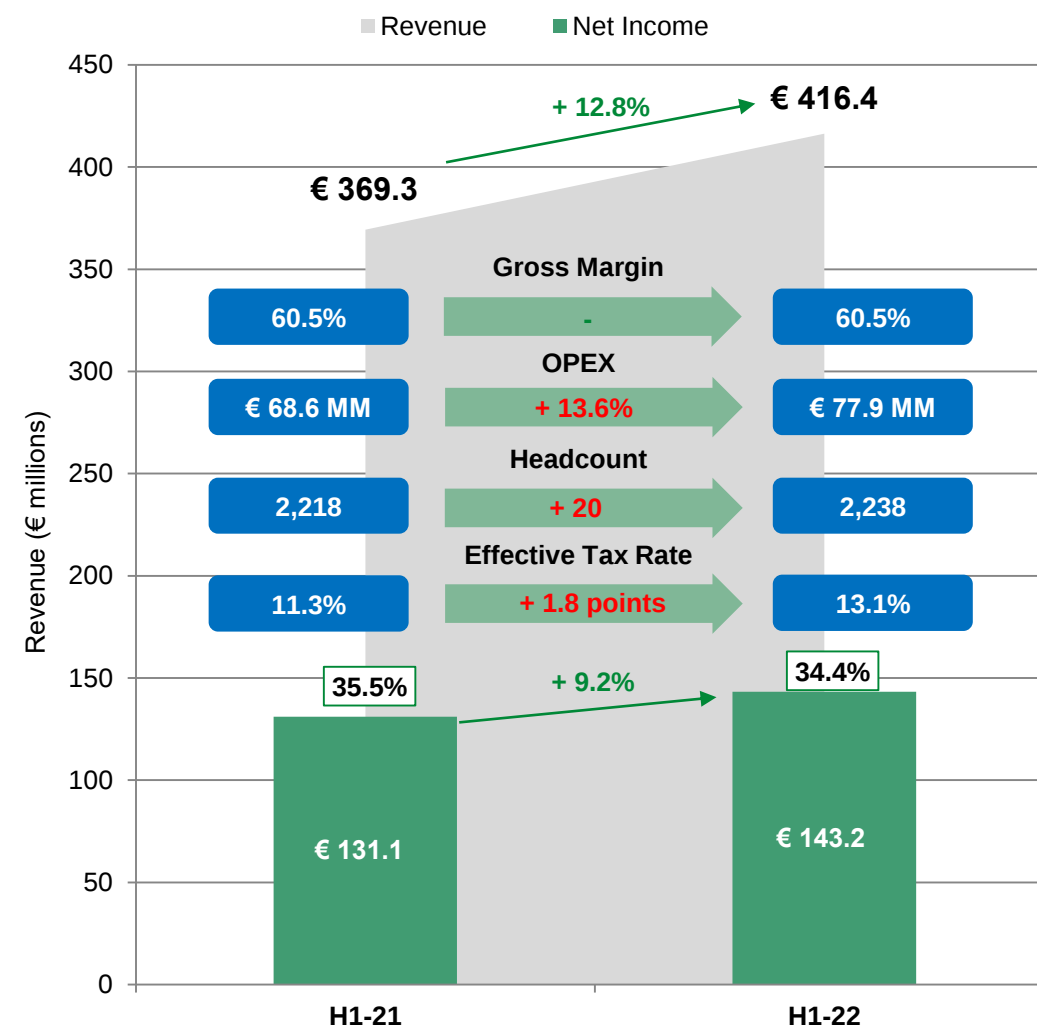
H1-22 Up Solidly vs. H1-21

Strategic Execution Keeps Profit Efficiency High

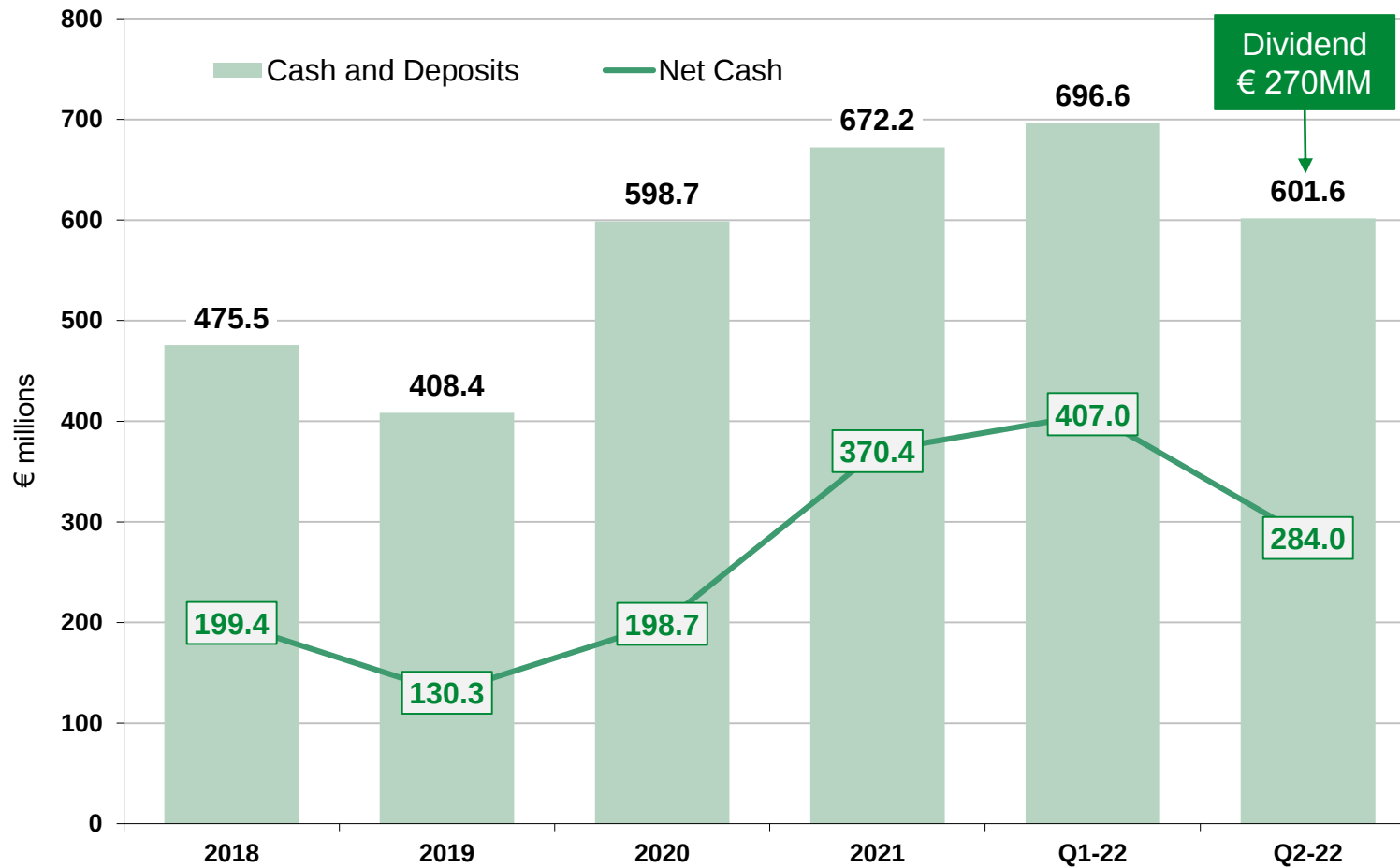
Q1-22/Q2-22



H1-21/H1-22



Liquidity Position Enhanced



Q2-22 vs. Q1-22

- Cash and deposits € 601.6 million decreased by € 95.0 million (-13.6%) due to:
 - - € 269.5 million dividends paid
 - - € 22.2 million share repurchases
 - - € 5.2 million capitalized R&D
- Partial offset:
 - + € 172.2 million of 1.875% Convertible Notes
 - + € 27.6 million cash flow from operations

Q2-22 vs. Q2-21

- Cash and deposits up € 90.2 million (+17.6%)
- Net cash up € 77.3 million (+37.4%)

Convertible Notes

- € 359.9 million outstanding at June 30, 2022
 - Average conversion price € 67.28
 - Blended coupon rate 1.29%

€ in millions

Q2-22

Q3-22

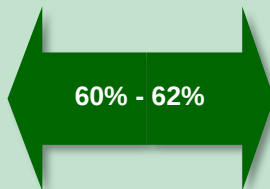
Revenue

€ 214.0



Gross Margin

61.0%



Operating Expenses

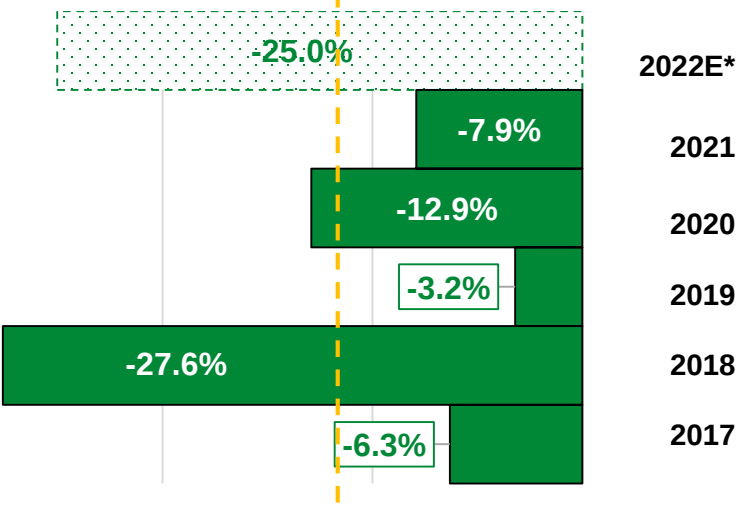
€ 37.9



Seasonal Revenue Trends

Q3E/Q2Δ

Average decline 2017-2021 (-11.6%)



- Q3-22E decrease above average Q2-Q3 decline past 5 years

* Assumes midpoint of guidance for Q3-22

**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**

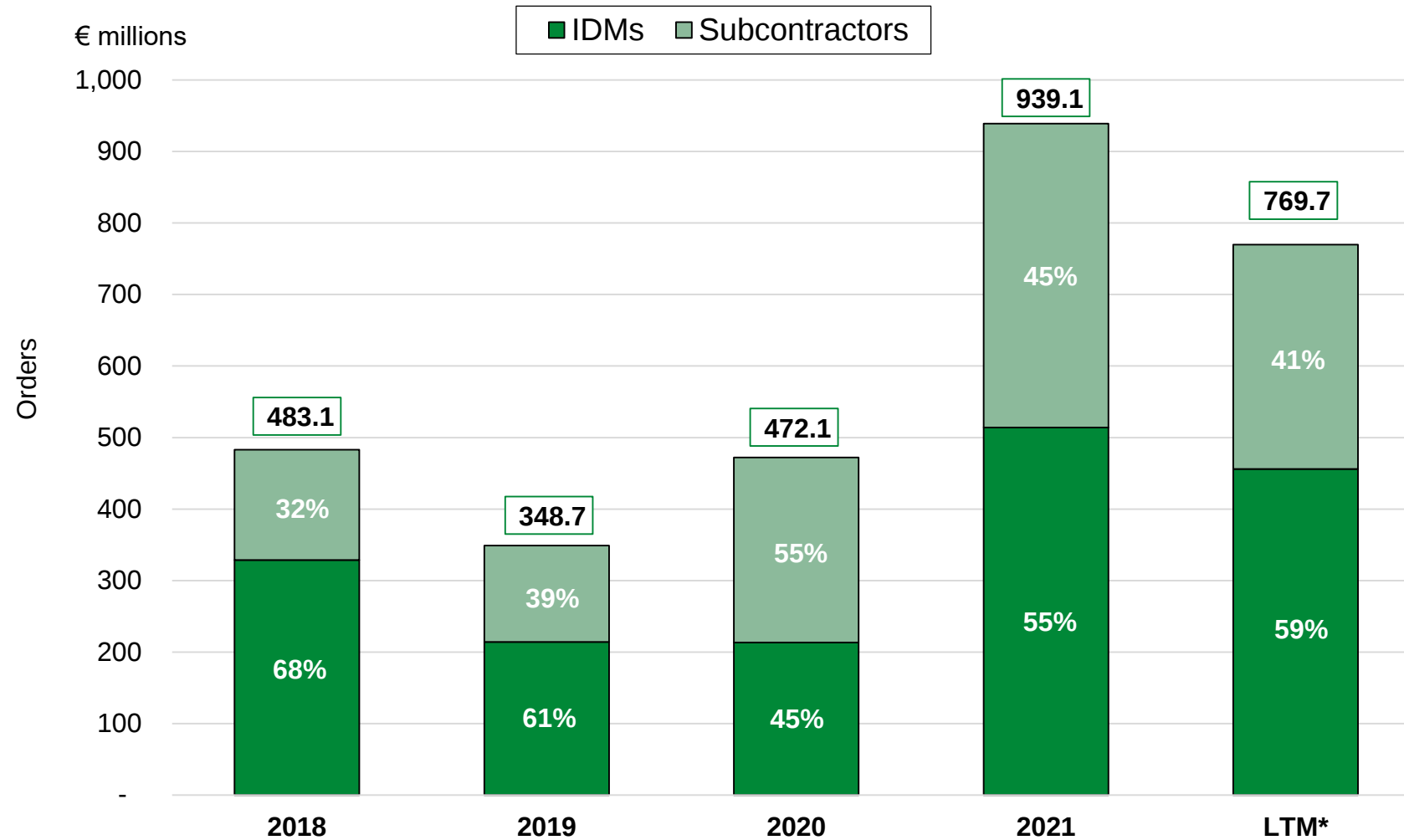
**Commitment to
sustainable growth
and fighting climate
change**

**Attractive capital
allocation policy**



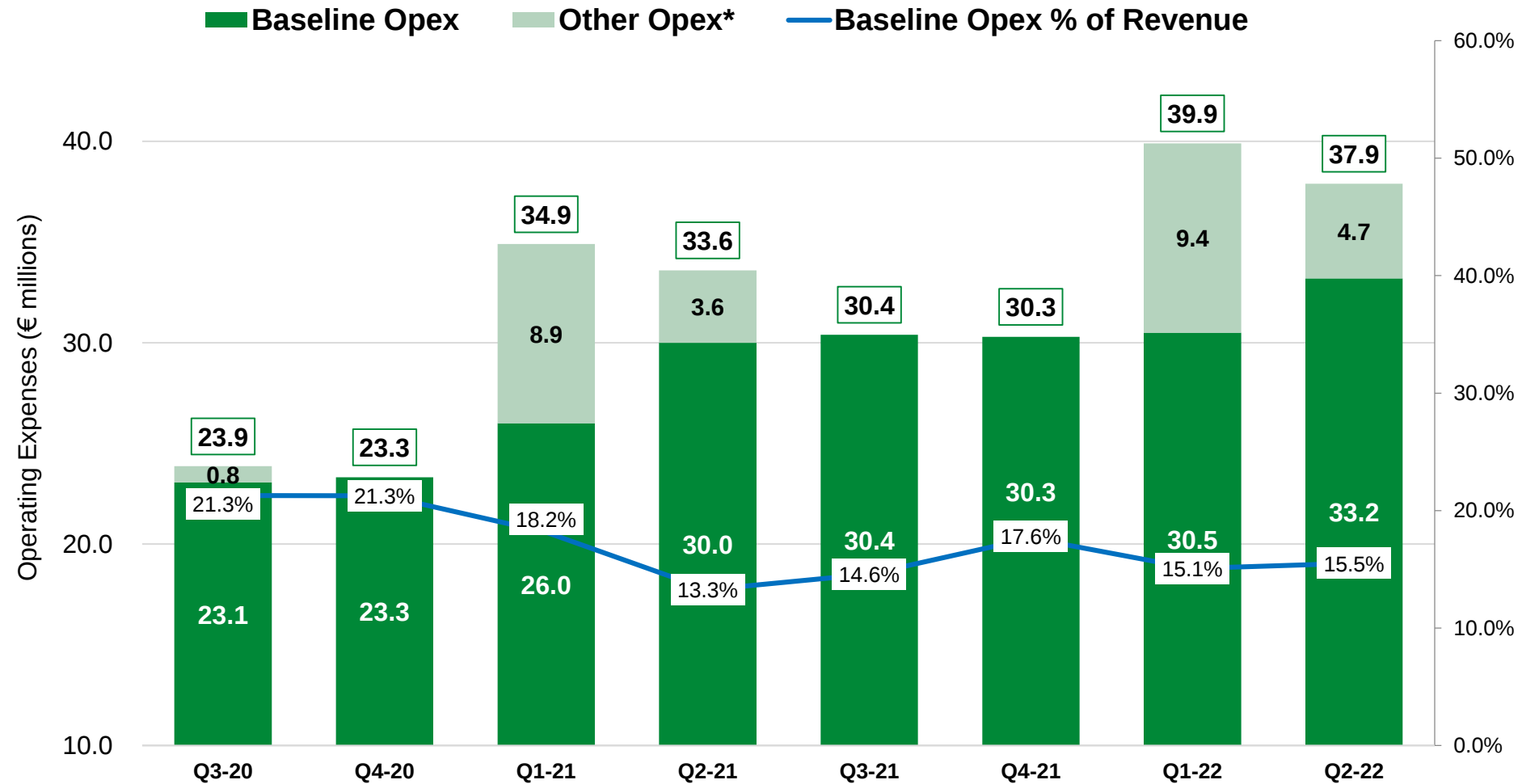
VI. APPENDIX

IDM/Subcontractor Order Trends



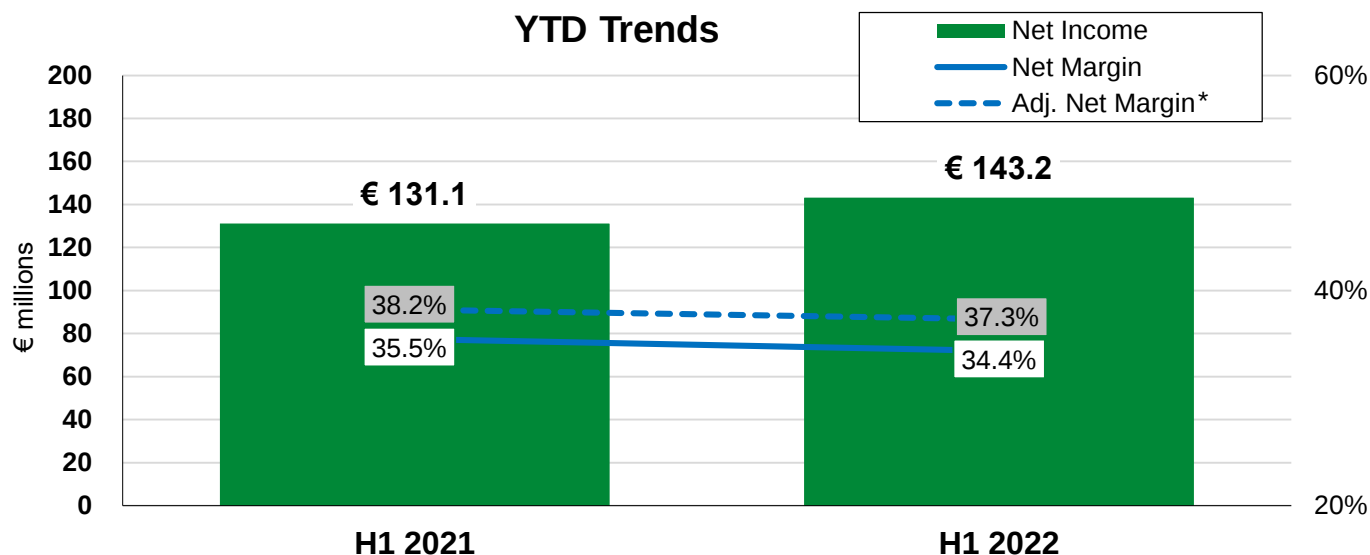
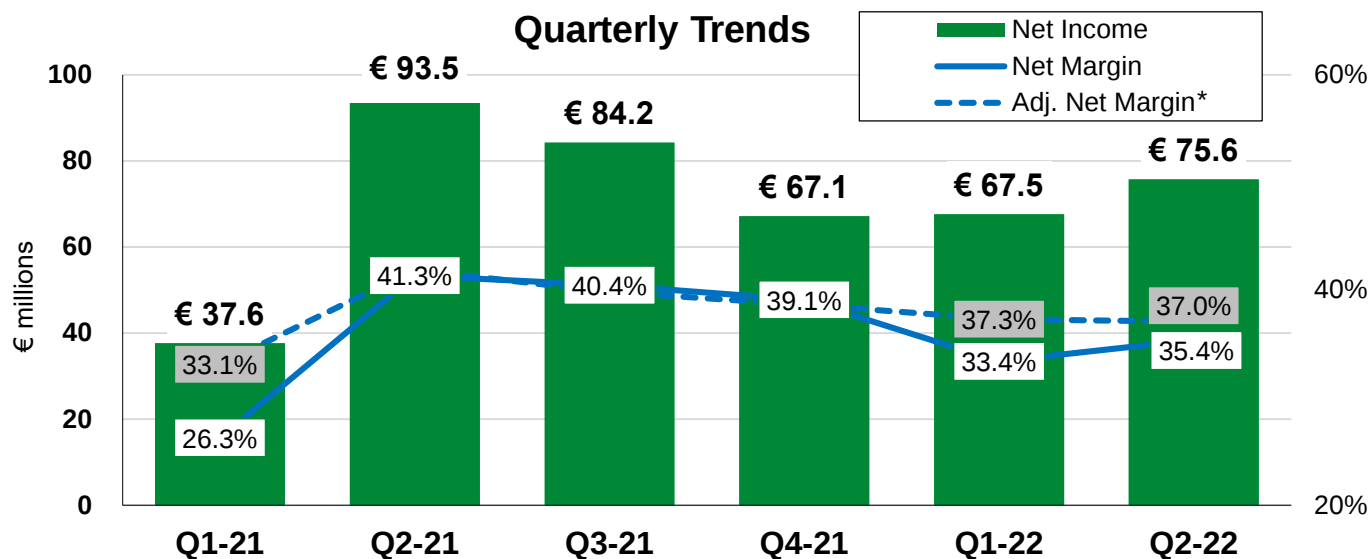
* Last twelve month ended June 30, 2022

Baseline Operating Expense Trends



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

Net Income Trends



Q2-22 vs. Q1-22

- **€ 75.6 million (+€ 8.1 million)**
 - +5.7% revenue,
 - +0.9 point gross margin
 - 5.0% opex reduction, primarily incentive comp
- Net margin of 35.4%

Q2-22 vs. Q2-21

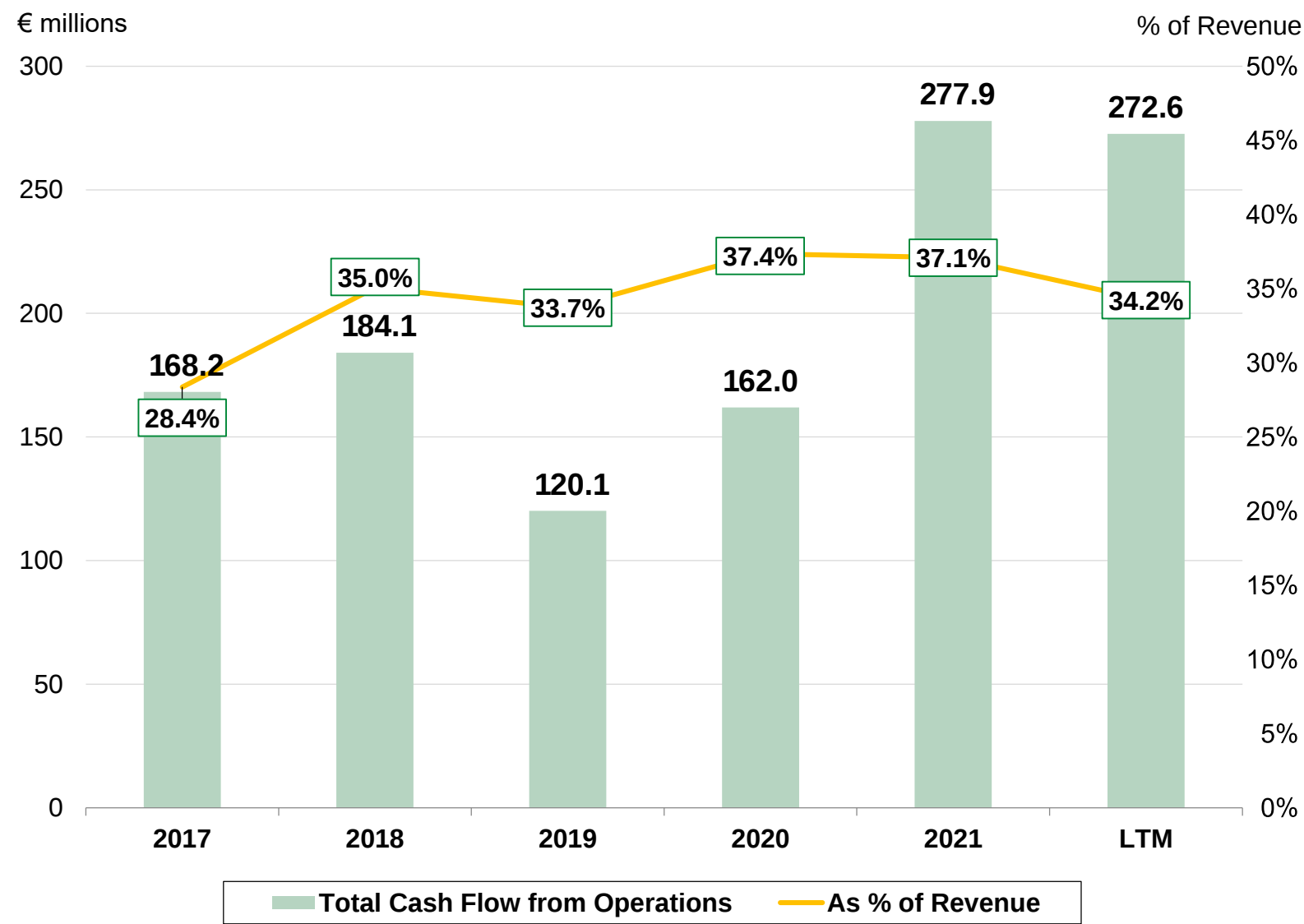
- **-€ 17.9 million**
 - Lower revenue and gross margin
 - Increased R&D spending
 - Higher effective tax rate

H1-22 vs. H1-21

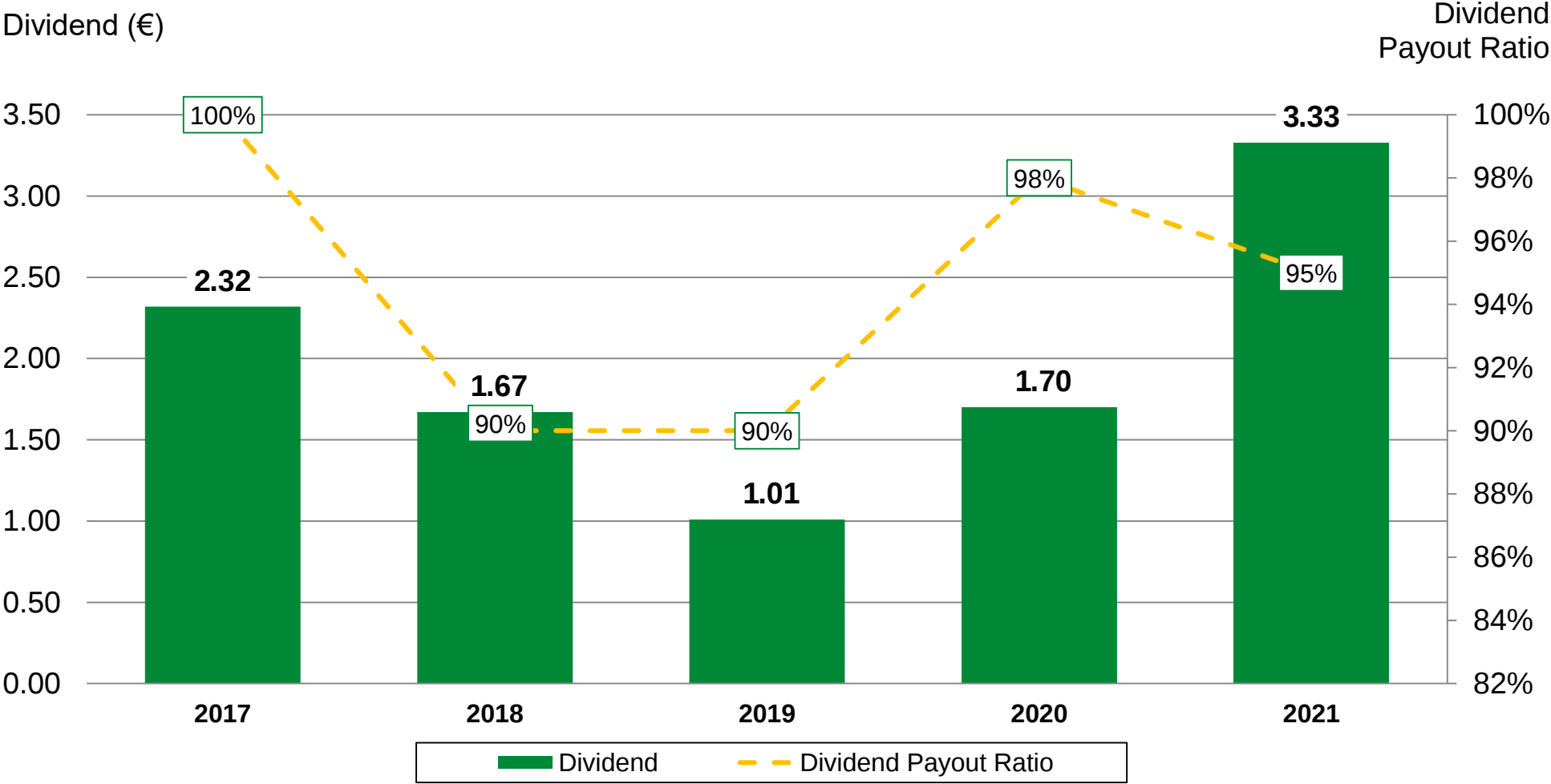
- **€ 143.2 million (+€12.1 million)**
 - +12.8% revenue increase
 - Successful control of overhead growth
 - Increased R&D spending for wafer lever assembly

* Adjusted Net Margin excludes one-time flood related inventory impairment charge in Q4-21, tax benefits realized and share-based compensation expense in each of the respective periods.

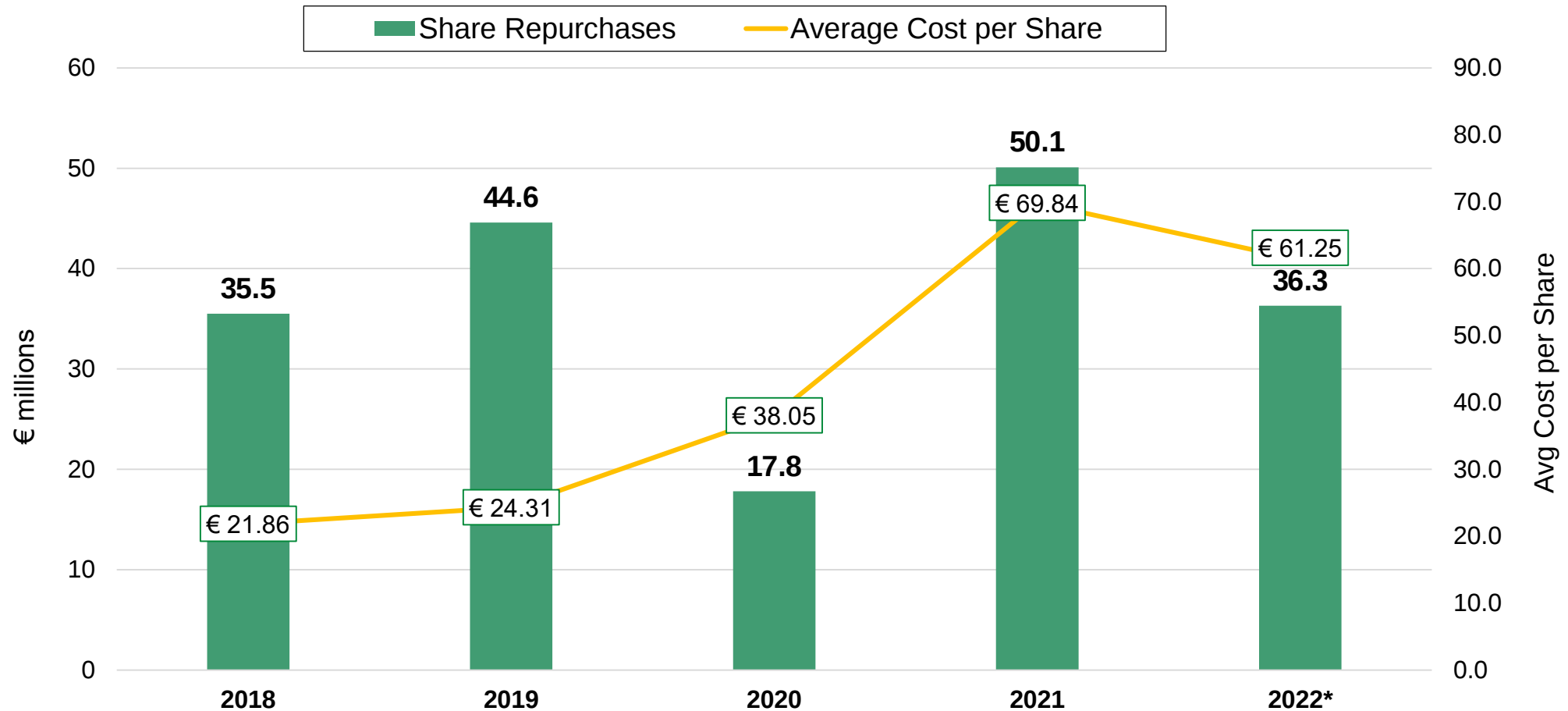
Cash Flow Efficiency Trends



Cumulative dividends of € 975.1 million since 2011, or € 12.78 per share



Share Repurchase Activity



- Approximately 550,000 treasury shares at June 30, 2022.
- Represents 0.7% of shares outstanding.

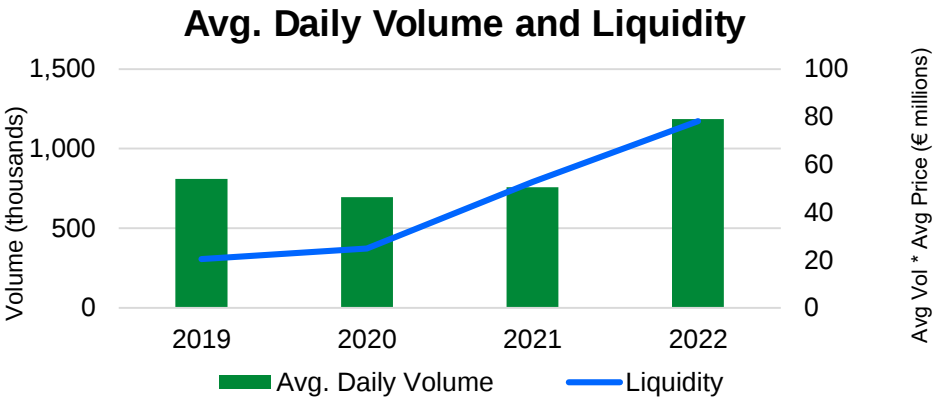
* Share repurchases included up to June 30, 2022.

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

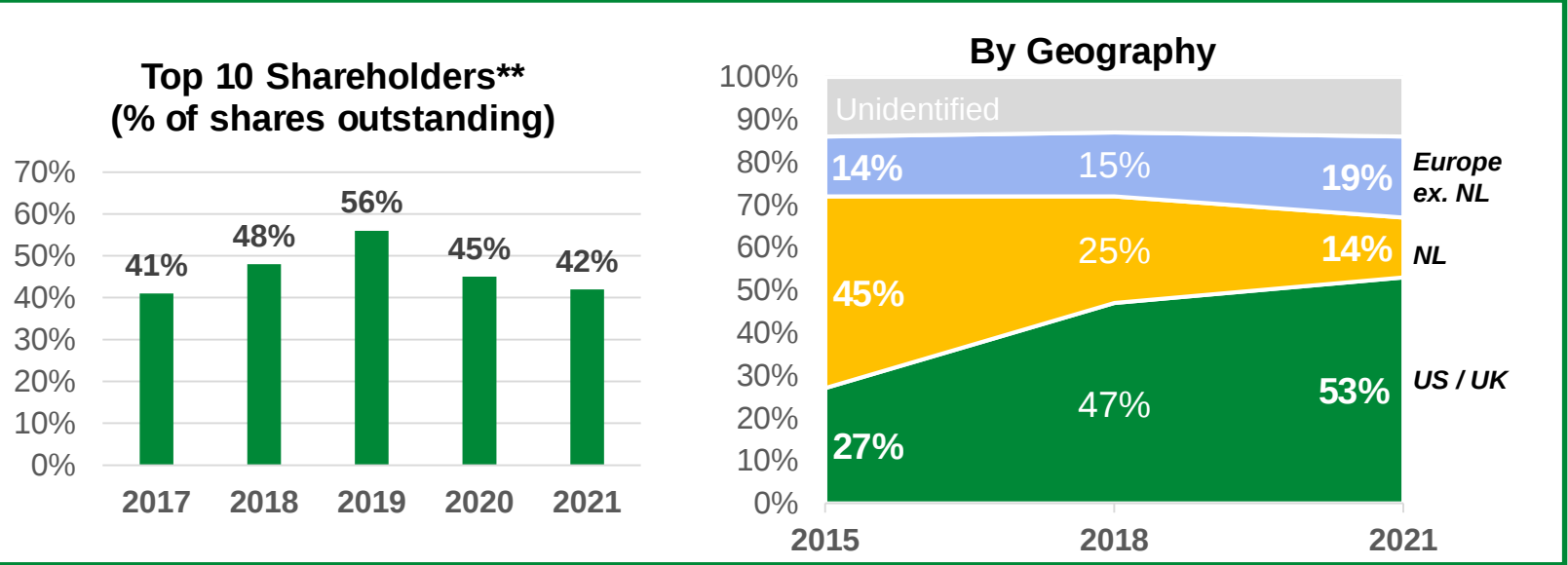


Market Profile

Symbol/ Index	• BESI • Euronext AEX
Market Cap*	• € 3.7 billion (\$ 3.8 billion)
Dividend Policy	• Pay out 40-100% of net income per annum



Share Ownership



* As of June 30, 2022 ** Besi estimates