

Second Quarter FY 2023 Quarterly Update

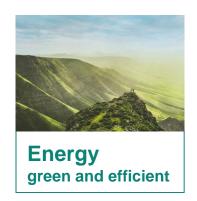
Infineon Technologies AG
Investor Relations



Infineon at a glance



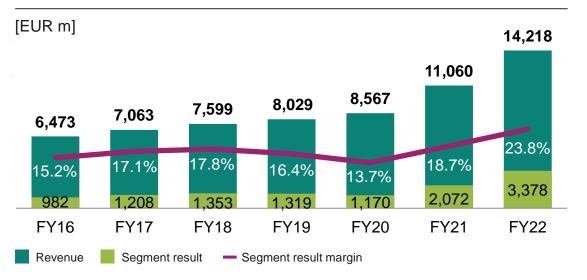
Addressing long-term high-growth trends





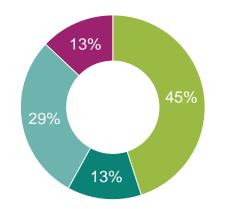


Financials

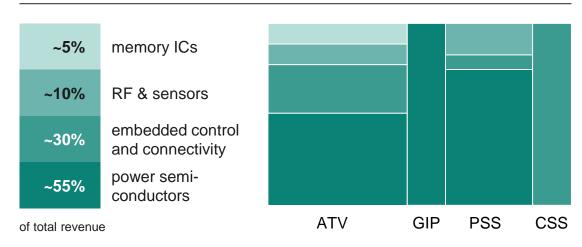


FY22 revenue by segment

- Automotive (ATV)
- Green Industrial Power (GIP)
 - Power & Sensor Systems (PSS)
- Connected Secure Systems (CSS)



FY22 revenue by product category

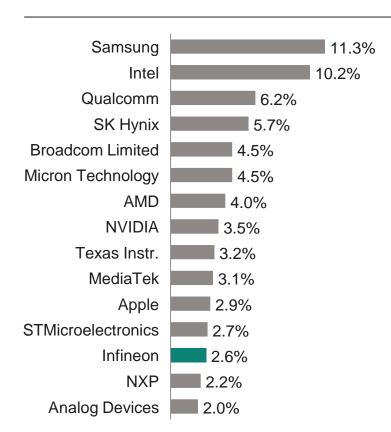


Infineon is a global player, clear #1 in power semiconductors, and ranked #5 in the overall microcontroller market



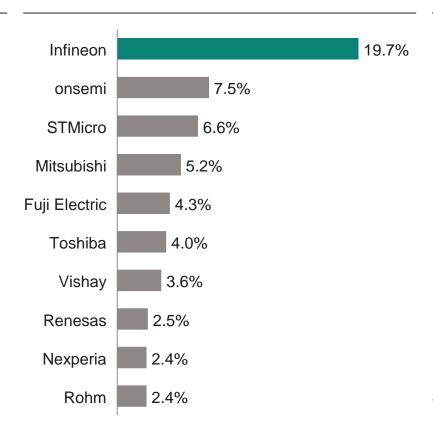
Semiconductor suppliers

2022 total market: USD 596bn1



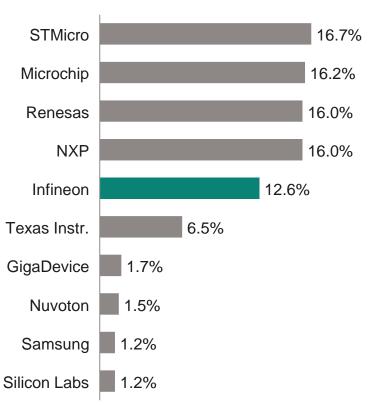
Power discretes and modules

2021 total market: USD 27.5bn2



MCU suppliers

2022 total market: USD 27.9bn1



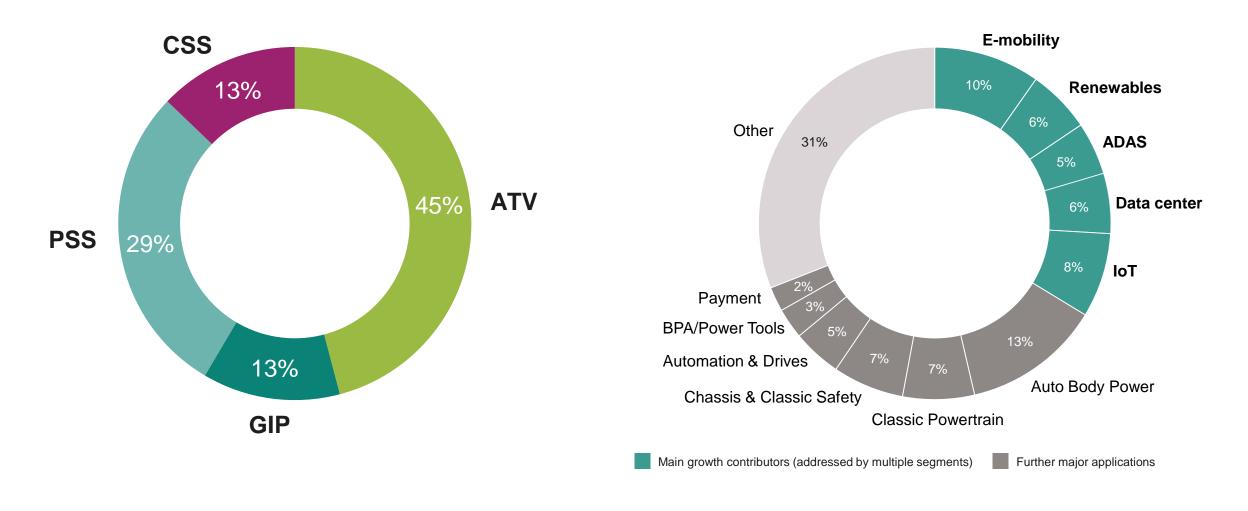
Based on or includes research from Omdia: Annual 2001-2022 Semiconductor Market Share Competitive Landscaping Tool – 4Q22. March 2023.

² Based on or includes research from Omdia: *Power Semiconductor Market Share Database – 2021 – Final V2.* October 2022. Results are not an endorsement of Infineon Technologies AG. Any reliance on these results is at the third party's own risk.

Well-balanced portfolio among segments and key applications, highest growth coming from Decarbonization and Digitalization

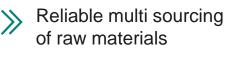


FY22 revenue of €14,218m by segment and key application



Undisputed power systems leadership mastering all three key materials





World-scale fabs



Application understanding

Packaging know-how and hybridization competence

Leadership in Power Systems across all materials and technologies

Silicon

Diode - MOSFET - IGBT - Driver - Controller



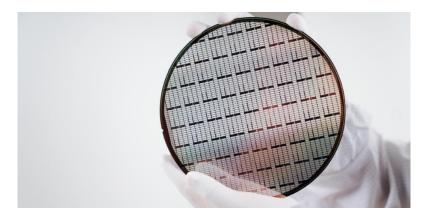
Silicon carbide

Diode - MOSFET



Gallium nitride

HEMT - Driver



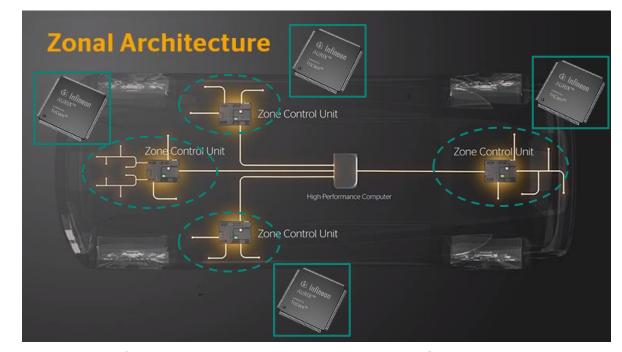
Infineon and Continental to cooperate in the development of server-based vehicle E/E (electrical/electronic) architectures



Continental using Infineon's AURIX™ TC4x MCU for its zonal platform



- Organized and efficient E/E architecture with central highperformance computers (HPC) and a few, powerful zone control units (ZCU) instead of up to a 100+ individual control units
- The AURIX™ TC4x was designed for usage in ZCUs and as support unit in HPCs
- Architecture allows essential software programs to be almost constantly on stand-by
- State-of-the-art cybersecurity functions, developed according to the ISO/SAE 21434-certified process
- RRAM (Resistive Random Access Memory) technology allows performance expansion, power consumption reduction, and cost improvement



- In the E/E architecture of the future, a ZCU bundles all electronic and electrical connections in a local section of the vehicle
- Bundling the software components centrally will thereby increase cybersecurity and updatability

Infineon awarded for BYD's new E/E architecture based on zonal platform



Design-win for three zones

New E/E architecture enabling efficient MCU setup and smart power distribution

MCU: TRAVEO™ 2G
 (2 MB to 8 MB on-chip memory)



Intelligent power devices (IPDs):
 PROFET™ +2 high-side switch



Superior solution by combining MCU and IPD for new zonal E/E architecture





P2S solution levering combined Infineon product advantages

Infineon and Delta to cooperate on EVs; joint innovation lab to be set up in Taiwan

- Infineon and Delta Electronics, Inc. are expanding their long-term cooperation from industrial to automotive applications
- Joint innovation activities to provide more efficient and higher-density solutions for the fast-growing market of EVs
- The agreement covers a wide range of components such as high-voltage and low-voltage discretes and modules as well as MCUs to be used in EV drivetrain applications such as traction inverters, DC-DC converters and on-board chargers
- In addition, both parties agreed to set up a joint innovation lab for automotive applications. The Delta-Infineon Automotive Innovation Center will be co-managed by both companies
- Over the past 25 years Delta and Infineon have successfully collaborated in the area of industrial products



Decarbonization and digitalization are accelerating structural growth of Infineon's target markets







Decarbonization



Digitalization

Infineon serving all target markets as leader in Power Systems and IoT

Supported by ...

From product thinking to system understanding



Software capability



Digital marketing and sales Eye-level strategic partnerships



Leader in power systems: Infineon enabling decarbonization by delivering maximum value to customers with holistic system approach



Electric vehicle

Inverter - BMS - OBC - DC/DC



Solar inverter DC/DC – DC/AC



Server power

AC/DC – DC/DC – PoL – Power stage





PoL (point of load): PMIC + Driver IC + MOSFETs | Power stage: Driver IC + MOSFETs

Infineon at the core of IoT – Driving digitalization by serving strongly growing multi-application markets



Consumer IoT



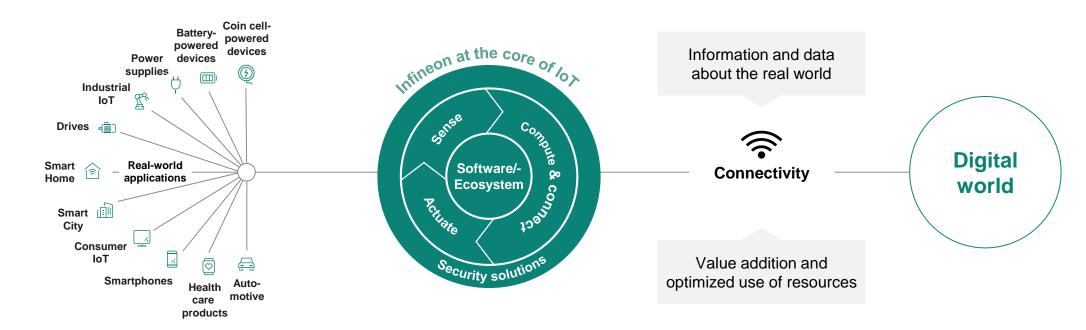
Industrial IoT



Automotive IoT



Products: MCU – Connectivity (Wi-Fi, BLE, NFC) – Sensors – Security – Power supply & switches



Upgraded Target Operating Model: Committing to more ambitious financial goals and being the sustainability leader



Target Operating Model

through cycle



Revenue growth

>10%

Previously

9%+



Segment Result Margin

25%

19%



Adj. Free Cash Flow Margin¹

10-15%

Invest-to-sales 13%

Sustainability leader

CO₂ neutrality 2030

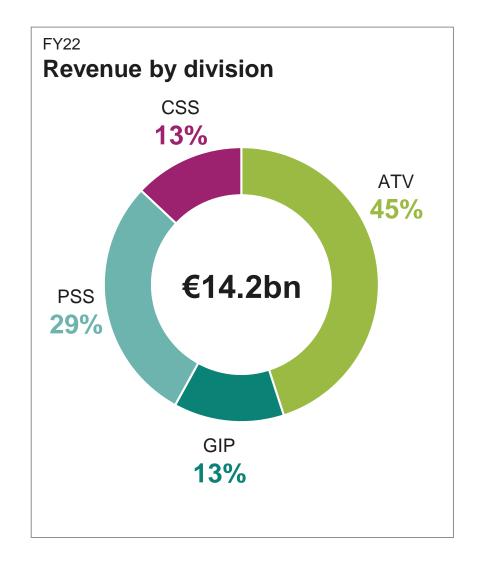




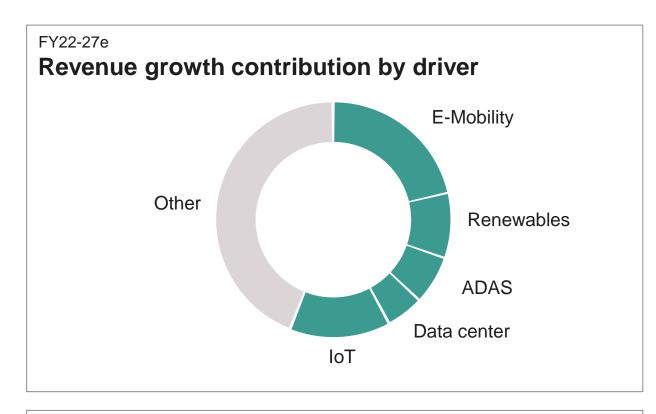
¹ Excluding major frontend buildings

Double-digit growth ahead – five key applications account for ~60% of growth; well-diversified divisional split





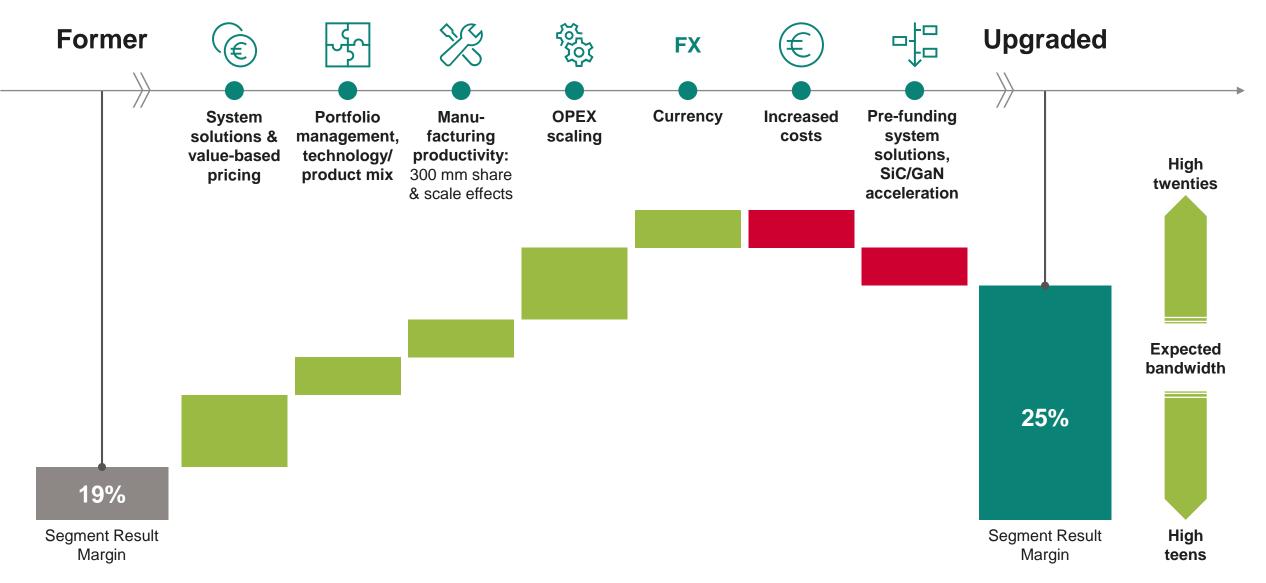






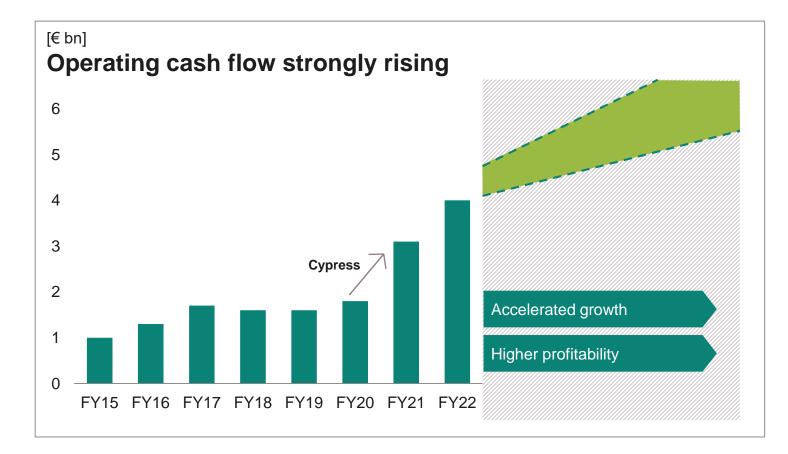
Upgraded Target Operating Model: Significant margin expansion through the cycle





Free Cash Flow generation increasing over the cycle, driven by profitable growth and better asset efficiency





- Accretive investments into high organic growth
- Operating cash flow expected to outgrow investments
- Differentiated in-house manufacturing complemented by ~40% outsourcing share over time
- FY23-27: ~€3.5bn cum. investments into major frontend buildings

>>

Adj. Free Cash Flow target: 10-15% of sales, excl. major frontend buildings



Putting it all together – Upgraded Target Operating Model leads to superior value creation



Target Operating Model

through cycle



Revenue growth

>10%



Segment Result Margin

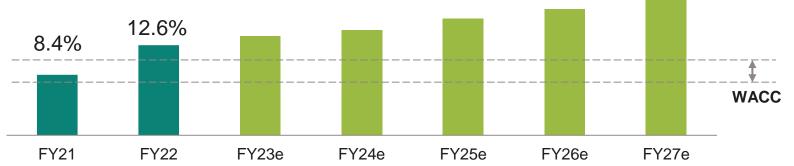
25%



Adj. Free Cash Flow Margin¹

10-15%

Reported RoCE to reach 2x cost-of-capital level



¹ Excluding major frontend buildings



Outlook for Q3 FY23 and FY23



	Outlook Q3 FY23 ¹	
Revenue	~€4.0bn	
Adj. Gross Margin		
Segment Result Margin	~26%	
FCF/adj. FCF		
Investments		
D&A		

Outlook FY23 ¹				
€16.2bn +/-€300m				
~47%				
~27%				
~€1.1bn/~€1.8bn				
~€3.0bn				
~€1.8bn²				

¹ Based on an assumed average exchange rate of \$1.10 for €1.00

² Including the amortization of around 450 million Euros from purchase price allocations

ESG: Targets and achievements



Our 2030 carbon neutrality goal is aligned with the Paris Climate Agreement's 1.5 °C target









- Using green electricity in Europe and North America
- Completing abatement system in Kulim





Net CO₂ emissions in million tons of CO₂ equivalents





Net ecological benefit: CO₂ emissions reduction of more than 97 million tons

1, 2, 3 For further explanation see "ESG footnotes" in the appendix

External recognitions confirm our engagement in contributing to a sustainable society



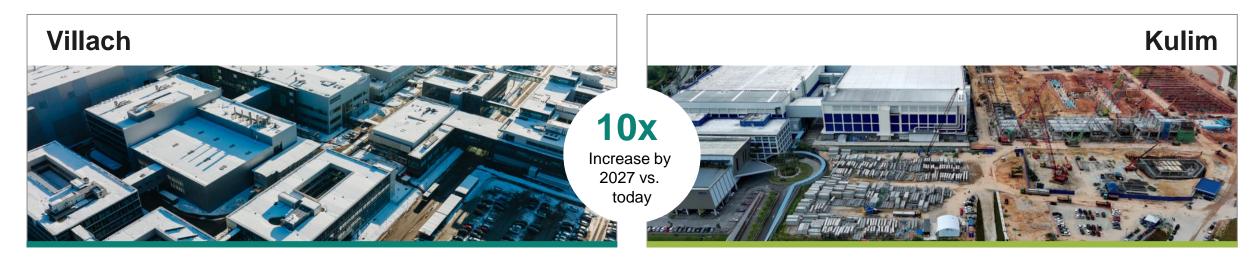
		Rating/Score	Scale	Date
MSCI 💮	MSCI ESG	AA	CCC to AAA	05/2022
DISCLOSURE INSIGHT ACTION	CDP	A- climate scoring B water scoring	F to A	12/2022
eco odis	Ecovadis	99th percentile "Platinum" award	0 to 100	02/2022
Dow Jones Sustainability Indices In collaboration with	Dow Jones Sustainability™ Index	83 Dow Jones Sustainability™ World and Europe Index listing	0 to 100	11/2022
ETHIBEL TO MAKENTO TO CHARGE TO CHAR	Ethibel Sustainability Index "Excellence Europe"	Index member	-	05/2020
ISS ESG ⊳	ISS ESG Corporate Rating	B- Prime Status	D- to A+	01/2021
FTSE4Good	FTSE4Good Index	Index member	_	03/2022
EURONEXT vigeoeiris	Euronext Vigeo Eurozone 120 Index Euronext Vigeo Europe 120 Index	Indices member	_	05/2021
SUSTAINALYTICS	Sustainalytics	Top ESG performer	_	01/2022

Infineon's wide bandgap strategy



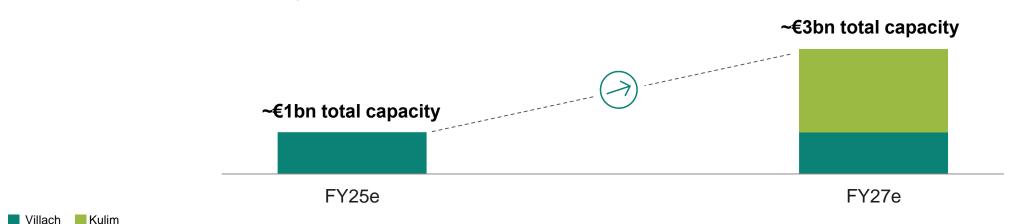
30% market share target in SiC by end of decade underpinned by significant capacity expansion





Infineon is well positioned for strong SiC market growth

Steep ramp enables market share gains



SiC momentum further accelerating: Significant new design-wins in auto, continuous leadership in industrial applications



Most recent automotive SiC design-wins























In addition, ~20 OEMs and ~10 Tier-1s already won

Most recent industrial SiC design-wins





Bloomenergy











More than **3,600 active customers** being served

With its comprehensive SiC strategy Infineon is mastering all key success factors





SiC raw material supply

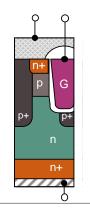
- More than 5 qualified SiC
 wafer and boule suppliers
 resilient supplier setup
- Cold Split technology increases productivity, especially in 200 mm





Superior trench technology

- 1 2 generations ahead of competition
- 30% more chips per wafer than planar





Packaging portfolio

- Best-in-class in-house packaging solutions
- New .XT technology for highest power density





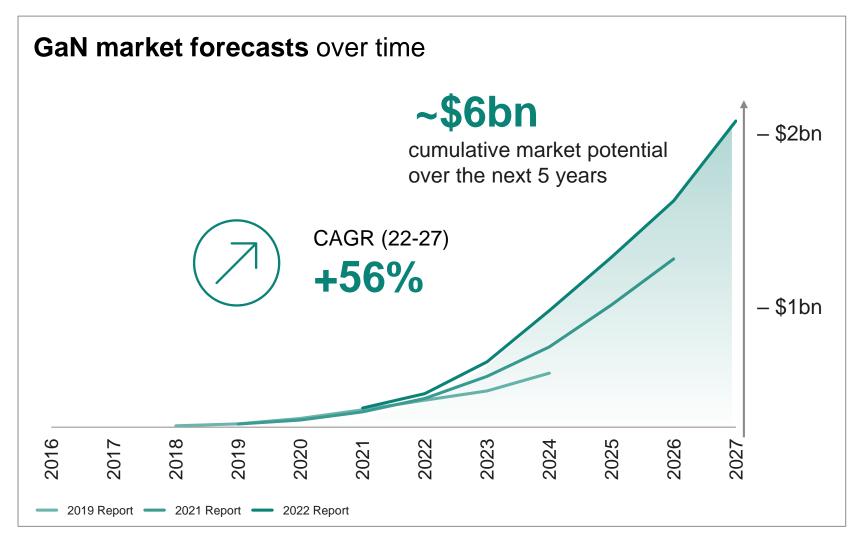
Deep system understanding

- Decades of experience in automotive and industrial power
- Broadest portfolio:
 Off-the-shelf plus
 customized solutions





GaN market accelerating, driven by key power applications



- Superior switching performance results in higher efficiency and lower system cost
- Applications with tipping point reached or in sight





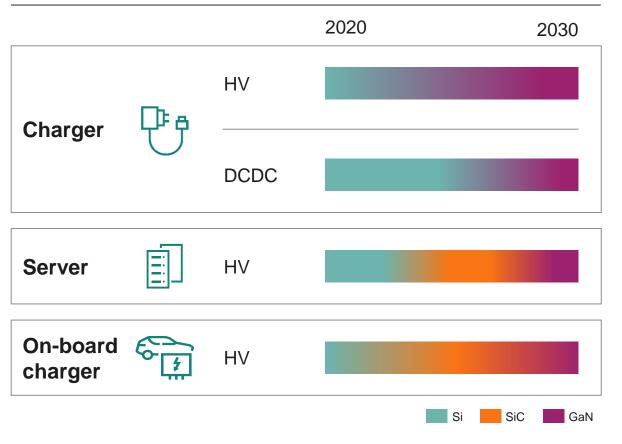


Yole: Power GaN Report 2022 & Compound Semiconductor Market Monitor-Module I Q4 2022.

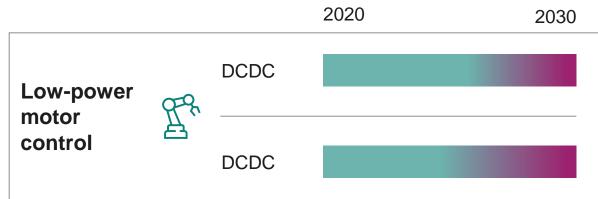
GaN expected to be the preferred technology in multiple core applications by 2030, different transition paths shaping up

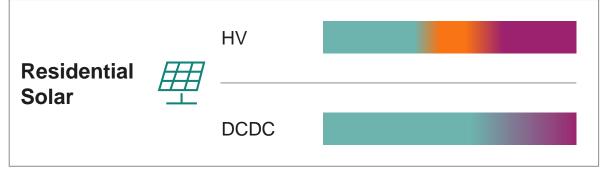






GaN transition coming up





More applications likely to transition to GaN over time

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Strong position to offer all relevant power semiconductor technologies creates clear customer benefits

GaN Systems: a leading GaN player across application understanding, product portfolio, customer access and IP



















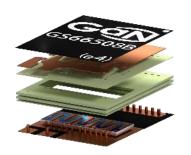
Founded: 2008 HQ: Ottawa, CAN Privately held Employees: >200 R&D: CAN, US, TW, JP Sales: 6 locations globally Business model: fabless developer of GaN power devices for power conversion Patents:
Iibrary focused on package
& device-package
interaction/metal stacks

Application focus: server/telecom, automotive, industrial, consumer

Current revenues: low/mid double-digit USD m

Broad lineup of devices and packages, featuring fully embedded power die packaging







Top-side cooling: Hard Switching Applications



Bottom-side cooling: Lower Power Designs



PDFN: Cost-Effective Solutions

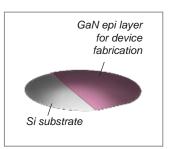


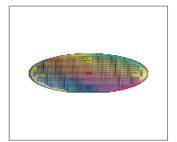
Die:Optimized For Wire Bonding

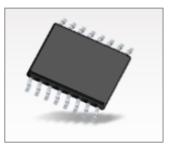
Joining forces and adding complementary strengths creates a winning formula for the GaN market



GaN fabrication starts with fully commoditized Silicon (Si) wafers













Substrates

Epitaxy









Product Portfolio



Application understanding



Customer access









- Strong IP portfolio
- Dual-site in-house manufacturing (Villach, Kulim 3 in construction) in transition to 200 mm
- Foundry partnerships

- Full system offering, fast track to GaN-specific topologies
- High-volume standard and GaNspecific, low-parasitic packages
- Monolithic integration roadmap

- Broad application coverage to significantly accelerate roadmap
- Excellent access to lead customers, incl. automotive

Combined platform features leading GaN IP and the industry's strongest R&D force, to speed up time-to-market

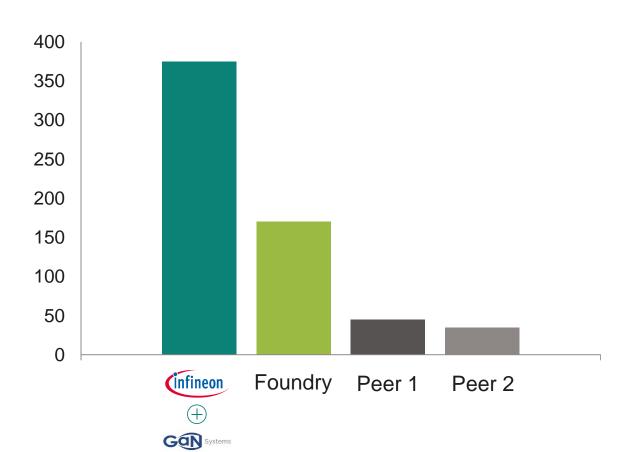


No. of patent families in GaN power













Combined team of ~450 GaN experts

Combined R&D budget high doubledigit USD m p.a.

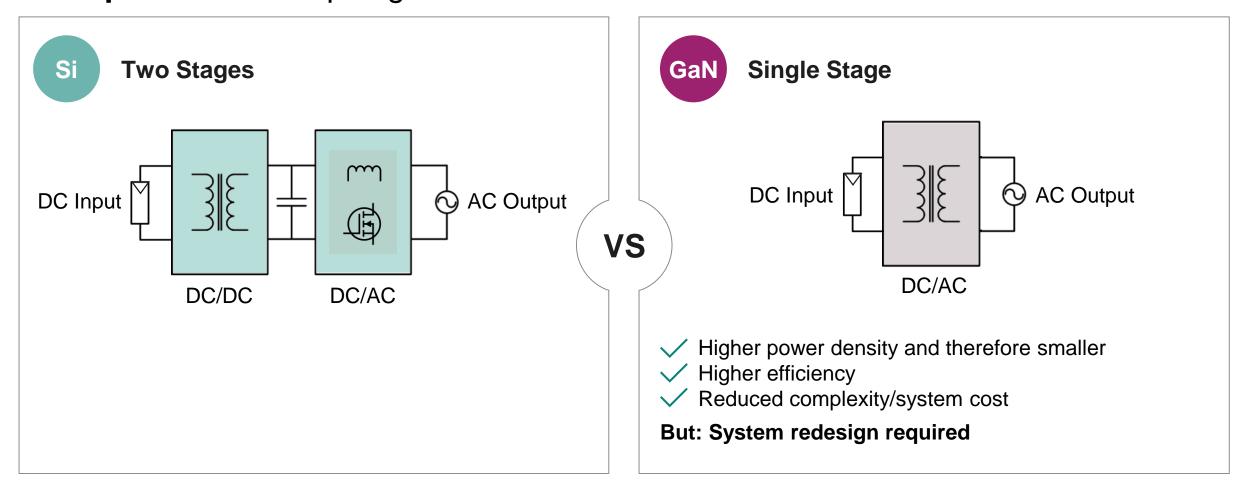
Leverage ability to scale learnings and **significantly accelerate roadmap** for shorter time-to-market

Source: Infineon analysis

Best-in-class application know-how is critical to creating completely new and improved systems



Example: Different topologies for a solar inverter



Strong engagement with market-shaping customers will support GaN market leadership







Automotive







>2,000 active GaN customers being served in Infineon focus applications

>2x design opportunity pipeline (GaN power) in focus applications of >€3bn

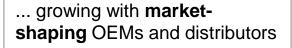
Becoming one of the **leading GaN** semiconductor companies





Charger/Adapter in consumer electronics

Industrial/Renewables

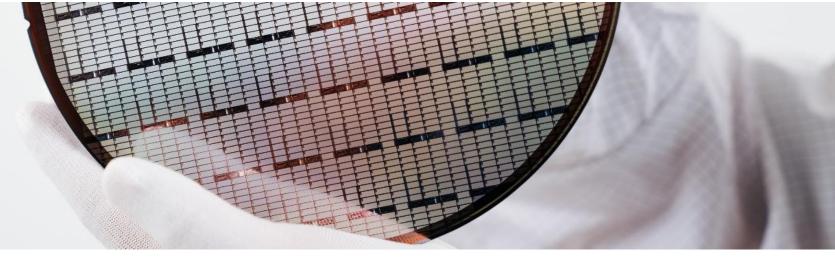


... creating high **financial value** through revenue and cost **synergies**

... and adding to Infineon's global leadership in Power Systems across Si, SiC, GaN

GaN Systems acquisition positions Infineon to be a leading **GaN player**





Leading IP & strongest R&D force



Leveraging foundry + IDM advantages



Leading patent portfolio

for GaN – >350 patent families

~450 strong
GaN team
high double-digit
USD m GaN R&D
p.a.

Best-in-class application under-standing incl. automotive

We own key IP and all frontend process steps We combine foundry partnerships and dualsite in-house production, ready for 200 mm

We target a leading market position

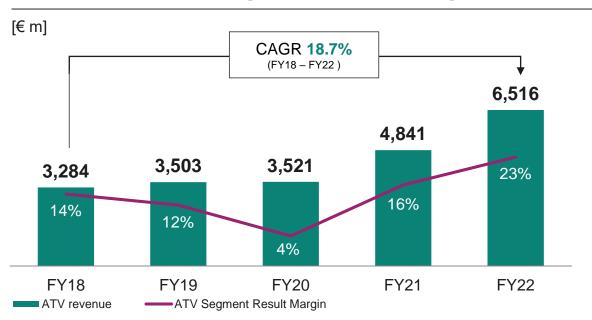
Automotive



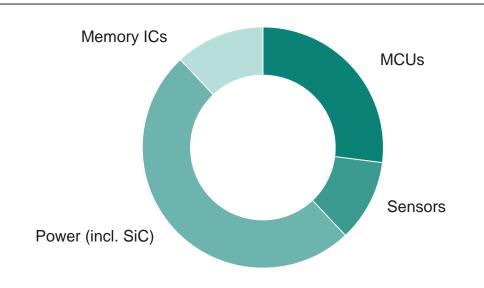
ATV at a glance



ATV revenue and Segment Result Margin



FY22 revenue split by product group



Key customers



Astemo















Automotive semiconductor market expected to continue its growth journey



Applications

Market Outlook for CY23



Automotive



- Ongoing risks of demand perturbations due to
 - Macroeconomic slowdown
 - Weaker consumer confidence
- However, demand overhang and OEM order backlog should stabilize car production
- Semiconductor shortage expected to ease further leading to more balanced demand/supply condition



e-mobility



- Positive Momentum for xEVs expected to continue: Consumer demand, more non-premium models, build-up of battery capacities, denser charging infrastructure, regulations and incentives
- More normalized pricing environment could increase BEV production and semi content growth
- New incentive programs in China
- Price reduction by OEMs



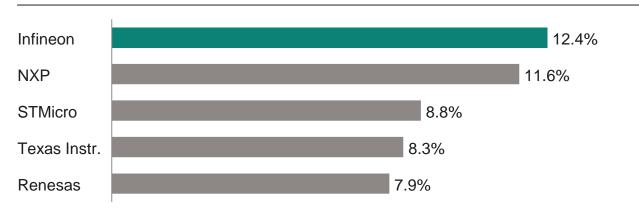


- Growth of L1, L2 and L2+ expected to continue
- L3 shipments will grow from a rather small base supported by additional L3 model launches
- First small-scale commercial robotaxi projects in operation; roll-out in more and more cities

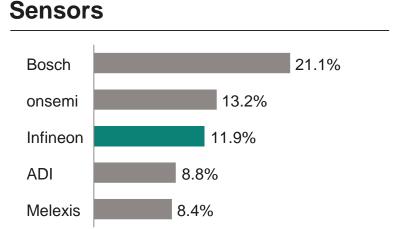
Infineon's top market position is built on system competence based on an industry-leading product portfolio

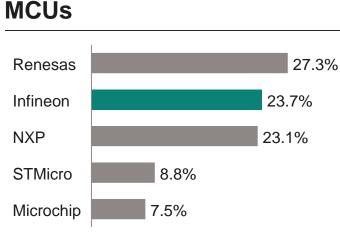


Automotive semiconductors (2022 total market: \$59.4bn; +27.4% y-y)

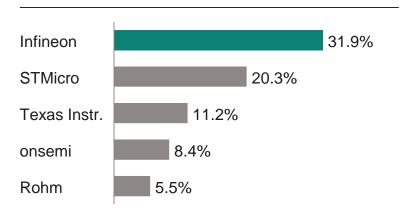


- Total market grew by 27.4% y-y, reaching all-time-high of \$59.4bn; market growth clearly supported by content-percar growth
- #1 in power semiconductors due to high exposure in xEV
- #2 in MCUs for the first time ever, driven by outstanding success in AURIX™ design-win momentum
- Undisputed #1 in automotive NOR Flash memory ICs





Power semiconductors



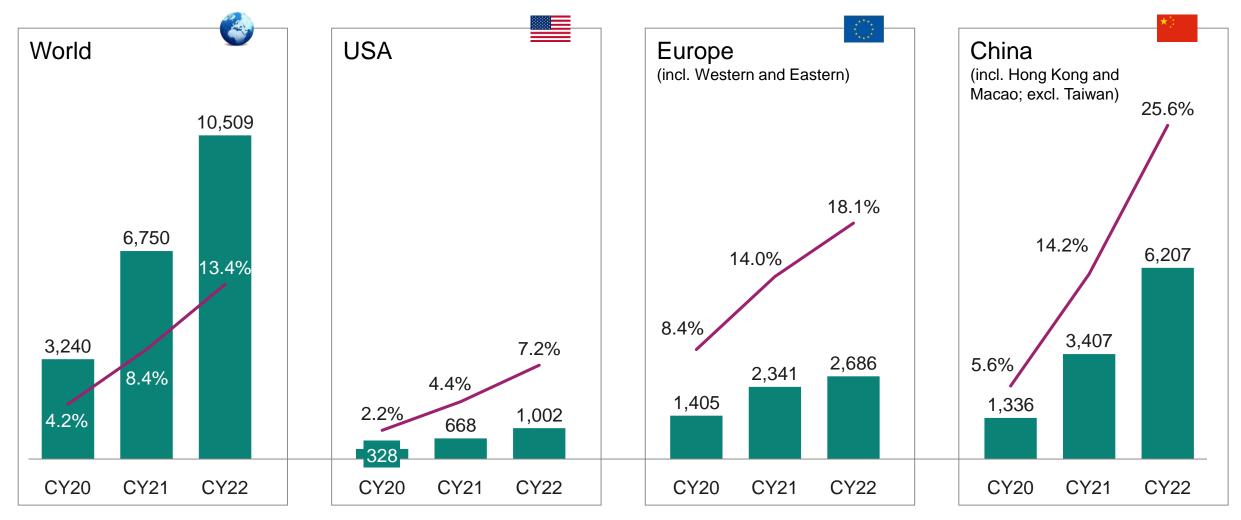
TechInsights (formerly Strategy Analytics): Automotive Semiconductor Vendor Market Shares. March 2023.

Electromobility



In CY22, xEV (PHEV + BEV) sales crossed the 10m mark driven by China with unit growth of 82% y-y; global monthly run rate now >1m





In units k Penetration

Based on or includes content supplied by S&P Global Mobility. January 2023; EV Volumes. January 2023.

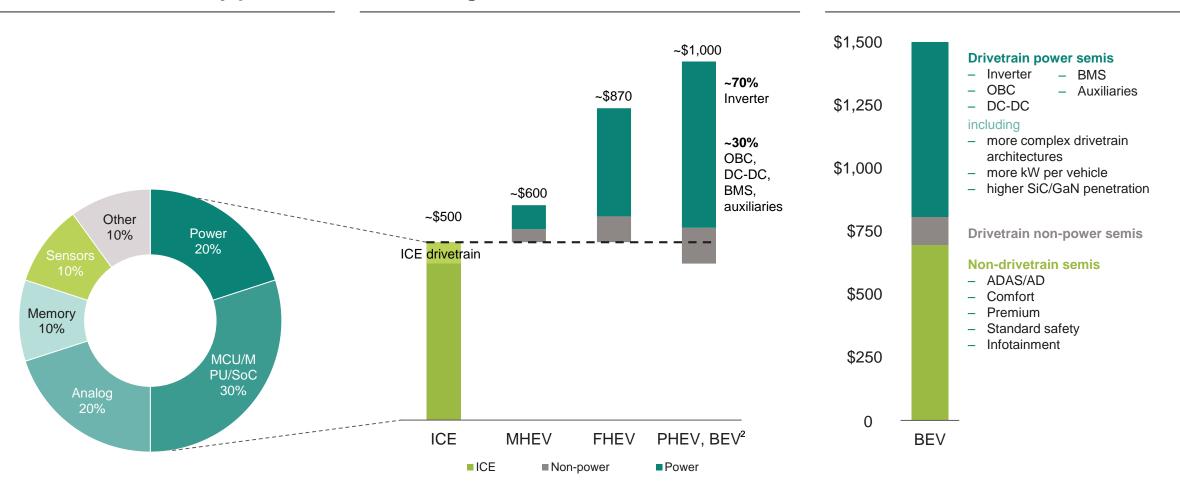
Infineon addresses 100% of power semiconductors for all drivetrains; BEV semi content expected to grow from ~\$1,000 to ~\$1,500 by 2028



2022 ICE semi content by product¹

2022 average vehicle semi content¹

2028 BEV semi content scenario



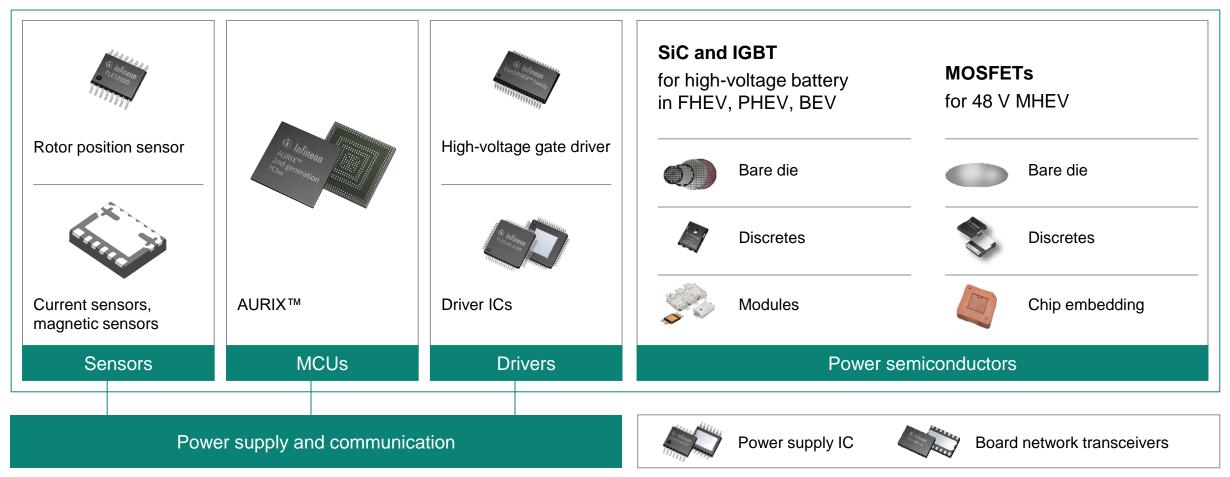
¹ Based on TechInsights: *Automotive Semiconductor Demand Forecast 2019 - 2029.* March 2023; Infineon. "power" includes voltage regulators, ADCs and ASICs.

² Due to missing ICE engine in BEV the weighted incremental semiconductor content for PHEV and BEV starts below the "~\$500" line.

Infineon offers the most comprehensive system solutions addressing all xEV segments: pure EVs and all types of hybrids



Infineon offers a full portfolio for the control loop of an electric car



In 5 years, every second car will be fully or partially electrified; SiC to take lead over silicon in the 2027-2030 period



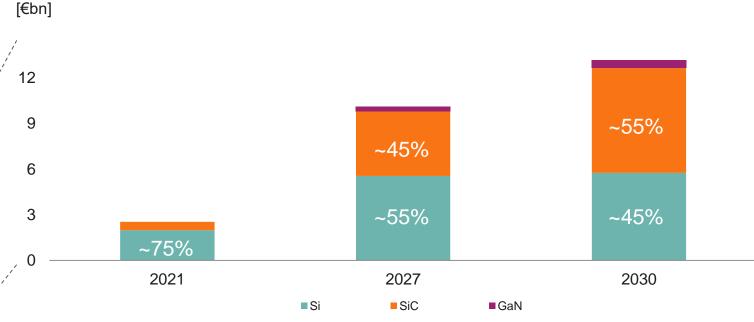
Car production by fuel type

[m units] [€ 100 80 60

>50% of cars

2030

xEV drivetrain power semiconductor TAM by technology



- By mid-2022, global BEV + PHEV penetration reached 12.4%, led by China (26.5%) and followed by Europe (15.8%) and the US (6.8%)
- Inverter, OBC, and DC-DC are the three main power semiconductor applications in drivetrains for BEVs and PHEVs; 48 V MOSFETs and DC-DC are the key applications in MHEVs
- By 2030, SiC will own the lion share; GaN to gain traction in OBC/DC-DC

Based on or includes content supplied by S&P Global Mobility. September 2022; Infineon

2027

■PHEV ■FHEV ■FCEV ■MHEV ■ICE

20

2021

Around 20 design-wins in SiC across all auto applications: traction inverter, OBC, DC-DC



World's leading IGBT supplier











Nissan



Hyundai (front axle)













Genesis (Horit axie)

US OEM

Latest CoolSiC™ design-wins including traction inverter, OBC, DC-DC



Li Auto

Japanese OEM

6 Distribution partners



























Rapid execution of our BMS strategy showing great success

Infineon's comprehensive BMS portfolio

PMIC Wireless communications ICs Transceiver Battery monitoring ICs MCU F-RAM Power switch Pressure sensor Gas sensor Current sensor Auxiliaries for thermal management (e.g., fan, pump etc.) MOSFET Motor control IC Security IC

Selected balancing IC customers



High-volume OEM



Premium car OEM



NETA Auto



Chinese bus OEM



Japanese OEM



BMS BoM of ~ €100 per vehicle

Automated Driving



The new 28nm CMOS radar from Infineon enables autonomous truck driving for L4 truck platforms

Design-win details

- 4D imaging radar for autonomous driving truck platform
- Infineon's highest-resolution radar sensor ICs enable the next level of autonomous driving
- Triple-digit million € design-win over lifetime

Key product information

- CMOS 28 nm CTRX radar sensor family
- 76 GHz 81 GHz MMIC
- Best-in-class RF performance
- Zero-defect quality enables dependable systems
- Scalability and cascadability enable radar solutions for all SAE levels



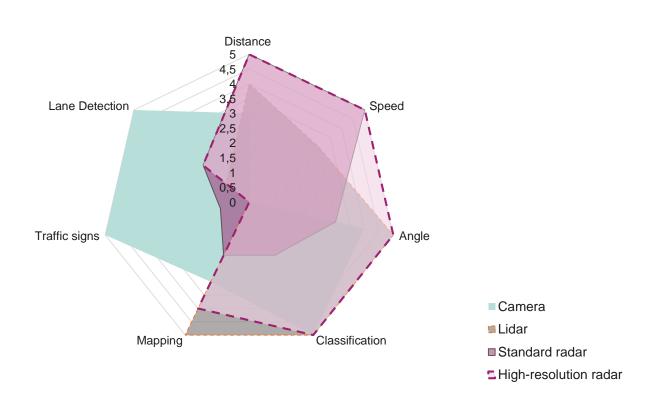
Growth of L1/L2/L2+ is the main driver of ADAS semiconductor content until 2027



Car production by degree of automation (SAE level)

100% LO 80% L0 60% L1 L1/L2/L2+ to reach ~65% in 2027, 40% up from ~50% in 2021 L1 L2 20% L3/L4/L5 to reach ~5% in 2027, ~0% in 2021 L2 up from 0% 2021 2027

Radar is essential to meet decisive requirements of ADAS/AD



- Standard radar is the technology to detect distance and speed
- High-resolution radar significantly improves angle and classification

Market research companies; Infineon

The number of radar systems is expected to grow by 24% annually, driven by new applications and increasing penetration



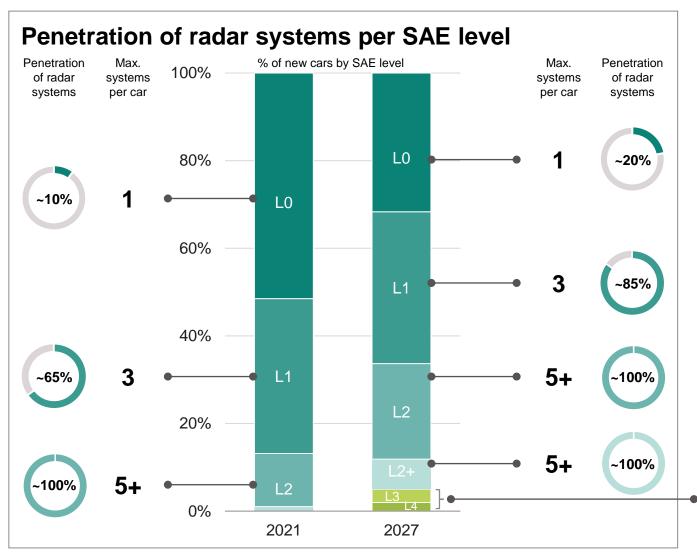
Today

Total: 55m systems

- AEB
- 3m systems

- AEB
- Low-speed ACC
- Blind spot detection
- 21m systems
- AEB
- High-speed ACC
- Blind spot detection
- 26m systems

Market research companies; Infineon



Future

Total: **200m systems**; **CAGR**₍₂₁₋₂₇₎ = **24**%

- AEB
- 8m systems; CAGR(21-27) = 18%
- AEB
- ACC
- Blind spot detection
- 70m systems; CAGR(21-27) = 22%
- AEB
- High-speed ACC
- Vulnerable road users detection
- 70m systems; CAGR(21-27) = 18%
- In addition to L2: lane change assist
- 30m systems; CAGR(21-27) = 38%
- 24m systems; CAGR(21-27) = 133%



User experience meets electrical/electronic (E/E) architecture

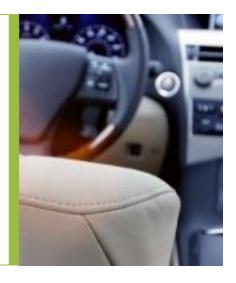


Software-defined car

- E/E architecture
- MCUs
- Sensors
- Actuators



- MEMS sensor technology
 - MEMS microphones







Matrix light

Car of the future

Comfort

- Motor control ICs
 - MOSFETs





Software-defined cars will become a reality through architectural transformation; Infineon's MCUs to win big here



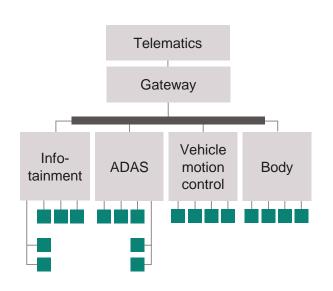


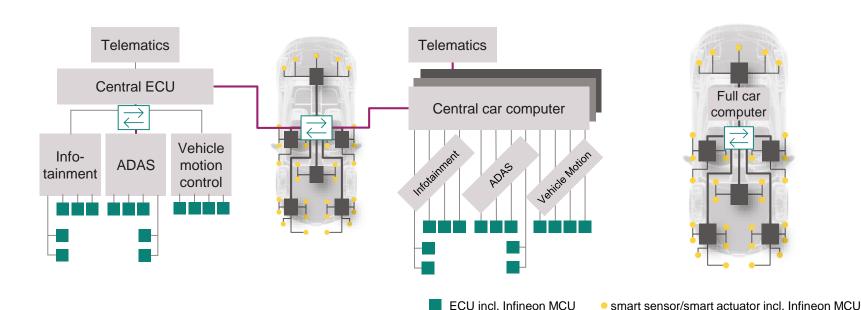
Domain architecture

Mixed domain/zone architecture

Full car computer

Full car





New E/E architectures offer benefits of

- Hierarchical software
- Fail-operational power distribution
- Optimized power management
- Reduced wiring harnesses

... leading to

- More smart actuators
- More smart sensors
- Higher redundancy
- Dependable electronics

... further fueling Infineon's MCU growth $\sim 2.5x$ Infineon's MCU revenue growth ~ €1.6bn ~ €4bn FY22 FY27e

Game changing innovations from Infineon are defining the digital cockpit of tomorrow





Augmented head-up display based on MEMS mirrors





Internal and external MEMS microphones









Example #2: Emergency vehicle detection

Industry-leading, premium lighting technology offers enhanced user experience on the road

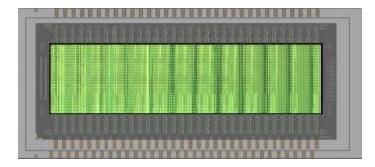




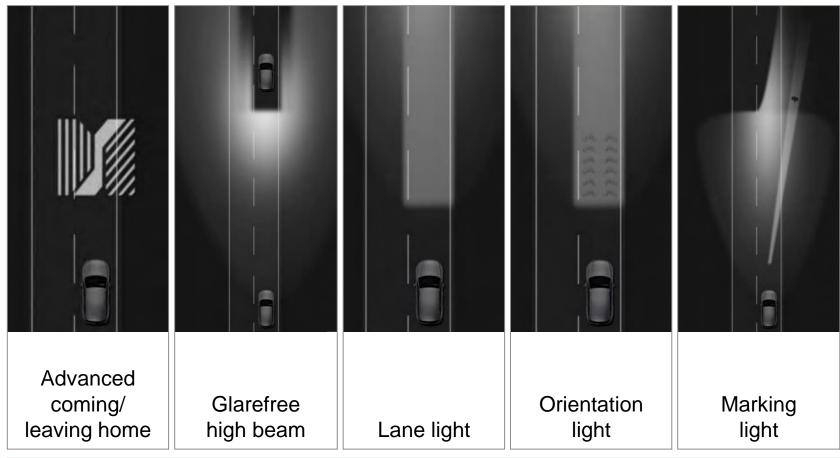
Key facts

- Infineon driver IC controls each of the 16K µLEDs individually with outstanding luminous intensity
- Lead customer: EU premium
 OEM ("Best light ever!")
- Start of production: early 2023

Nichia high-definition micro-pixel light source (HD µPLS)



Courtesy: Nichia





Advantages: Enhanced driving experience, higher safety, more energy efficient

Courtesy: Audi AG

Infineon's suite of motor control ICs lead the way to address fastgrowing comfort features





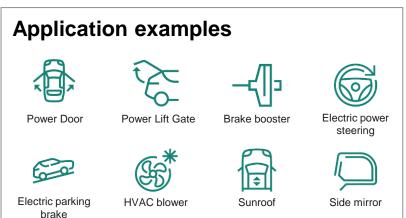
- Comfort features making further inroads into cars; e.g., seats in a mid-range car feature about seven motors today
- Up to ~€80 semiconductor
 BoM per vehicle for comfort
 features
- Infineon's leading suite of motor control ICs fits ideally for all comfort applications

Infineon's suite of motor control Ics

MCU

- PMIC
- Bridge IC
- Driver IC
- MOSFET
- SBC

Software



On average ~7 motors per seat





Heated Ventilated Seat



Power Folding Seat



masssage





Green Industrial Power



Effective 1 April 2023, Industrial Power Control (IPC) has become Green Industrial Power (GIP)







Emphasizes our contribution to decarbonization, electrification and energy efficiency



Sets a mark for the **paradigm shift** towards rapid growth and highly dynamic applications



Fosters **pride** and engages **external stakeholders**



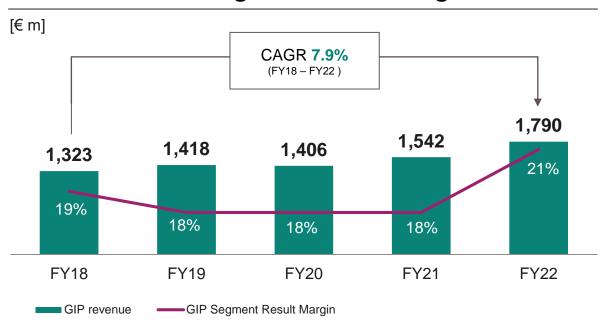


We are committed to serve all industrial applications and customers as trusted partner

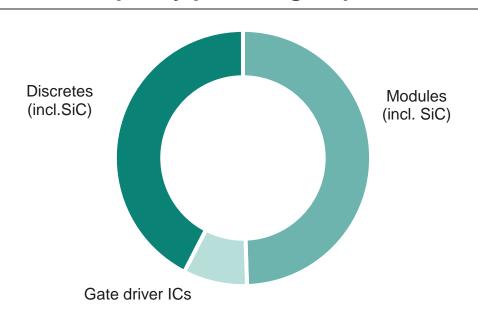
GIP at a glance



GIP revenue and Segment Result Margin



FY22 revenue split by product group



Key customers

































Despite weak macro sentiment, GIP market outlook remains positive. Strong demand in decarbonization related applications



Applications

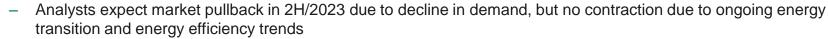
% of FY22 segment revenue



~35% **Automation and Drives**



Market Outlook for CY23



Customers see still strong demand overall, for China demand seems to slow down (increased stock levels)



~26% Renewable Energy Generation



- Growth rates remain strong for global PV installations (43% YoY); demand for green hydrogen boost outlook
- Wind project delays in China pushed demand from 2022 to 2023 (51% YoY growth of global wind installations), project push outs in Europe into 2024/2025 impair growth in 2023



~10% Power Infrastructure



- Growth in EV charging infrastructure is expected to remain strong supported by government push programs
- Further growth of ESS (34% YoY) and T&D required to capture renewable energy generated



~17% Home Appliance



- Overall market is weak, semiconductor demand more stable in areas linked to progressing inverterization
- Residential AirCon demand slowed down, China government measures expected to induce stabilization in 2H/2023; heat pump demand remains strong



~5% **Transportation**



- Strong growth opportunities for CAV and OBC (electrification)
- Traction: growth for locomotives & metro to stay flat, demand for high-speed trains still weak, but slightly ramps



Others



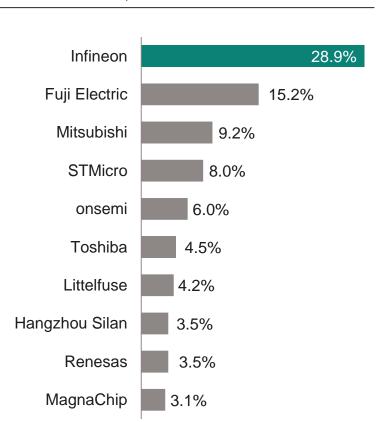
Long-term positive outlook driven by general trend of electrification in emerging applications (e.g. e-aviation, e-marine)





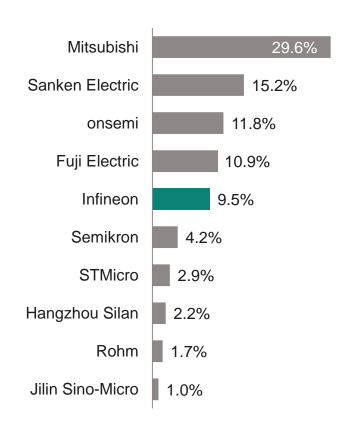
Discrete IGBTs

2021 total market: \$2.2bn



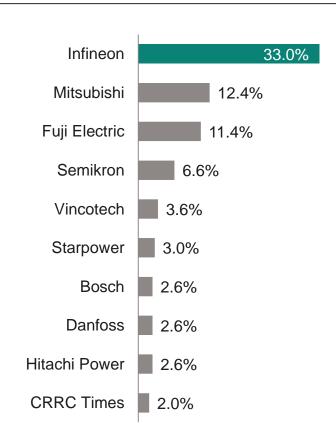
IPMs¹

2021 total market: \$2.0bn



IGBT modules²

2021 total market: \$4.2bn



¹ Including MOSFET-based IPMs and IGBT-based IPMs

² Including standard (non-integrated) IGBT modules and power integrated modules (PIMs)/converter inverter brake (CIB) modules. Based on or includes research from Omdia: *Power Semiconductor Market Share Database 2021 – Final V2*. October 2022. Results are not an endorsement of Infineon Technologies AG. Any reliance on these results is at the third party's own risk.

Infineon is the key enabler for Power Systems that are needed at every step of the entire power transformation chain



Renewable energy generation

#1 semi enabler

powering ~50% of currently installed wind/solar capacity

Energy infrastructure

#1 semi enabler

for ~2/3 of grid infrastructure incl. EV charging

Energy conversion and usage

#1 semi enabler

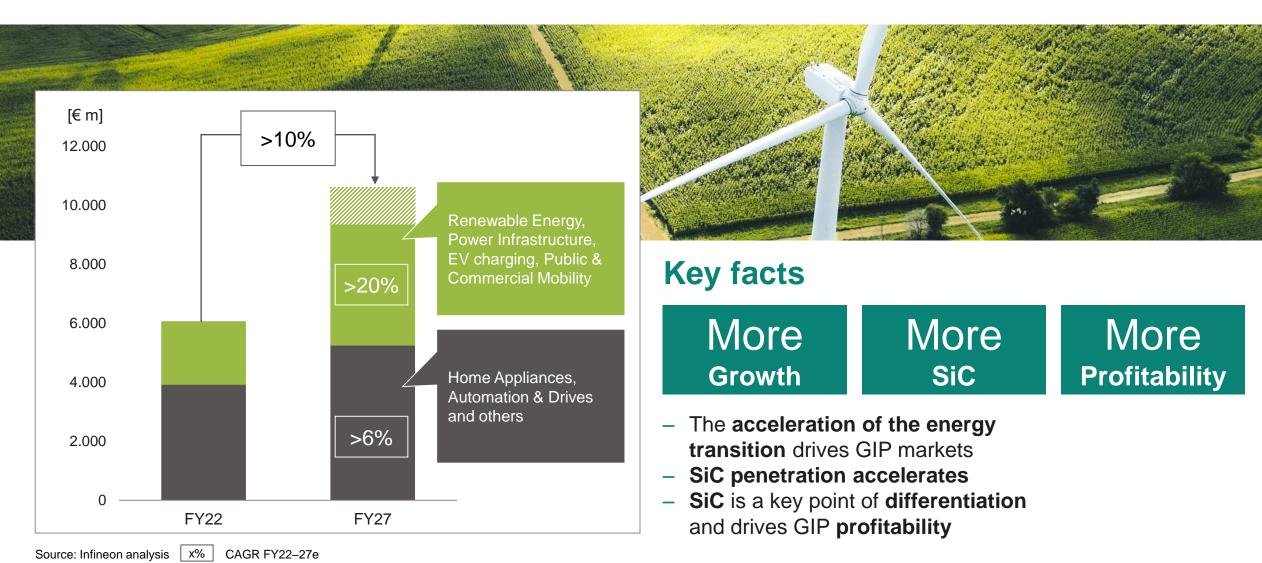
broadest portfolio covering all verticals leader in power density and efficiency #1 in vehicle electrification



Based on or includes research from Omdia: Power Discrete and Module Market Tracker - 2021. September 2022. Infineon market model.

GIP markets accelerate growth – Enabling green energy and driving decarbonization





Huge potential along entire green energy chain until 2030 according to IEA Net Zero scenario





Generation

Photovoltaic	+4,200 GW
Wind power	+2,400 GW

Infrastructure

\$600bn annual investments	Grid network	发
+660 GW	Grid storage	為
+32m chargers	EV Charging	<u></u>
+720 GW (pipeline: 240 GW)	Electrolysis	H ₃ O

Consumption

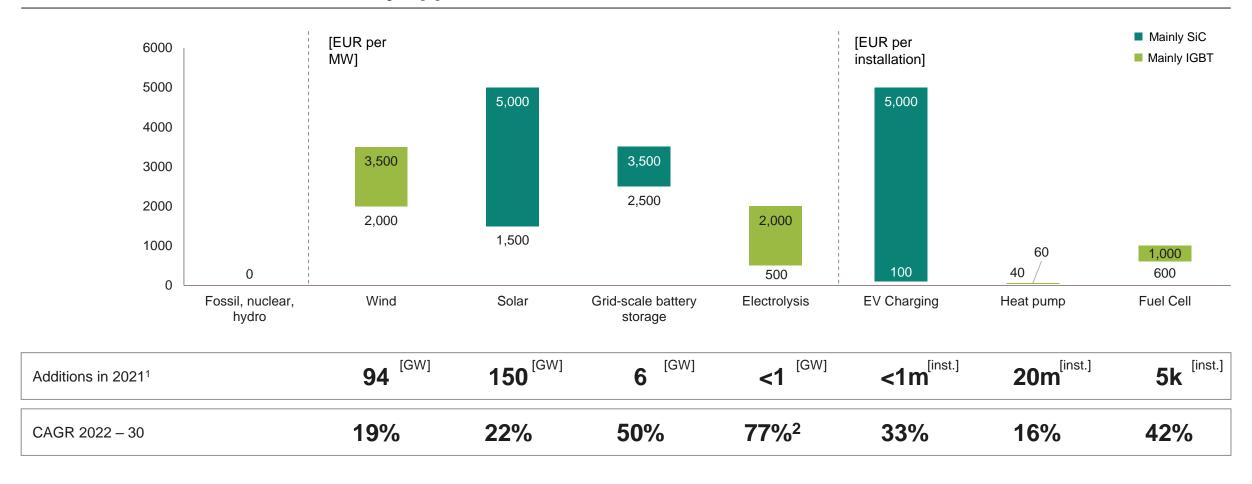
≡ ₩	Heat pump	+420m units
H2	H ₂ Fuel Cell ¹	+200k FC EV +200k FC Trucks
Ü	eAviation eMarine	

Note: Based on Net Zero Scenario (IEA) | Source: IEA, ¹Internal Analysis



Green energy generation provides large business opportunities

Power semiconductor content by application



¹ IEA: Net Zero by 2050 – A Roadmap for the Global Energy Sector. May 2021; Sector Tracking reports September 2022; internal Analysis | ² Based on 240 GW pipeline, >100% based on NZE requirements

Infineon is manifesting its leading position in the industrial SiC market with above market 5y CAGR and strong outlook





>300 Industrial SiC products available



More than **3,600 active customers**being served



Design opportunity pipeline of ~€5bn¹



Industrial revenue CAGR >40% – cum. Design-Wins almost €2bn on track for revenue of >€500m in 2025

























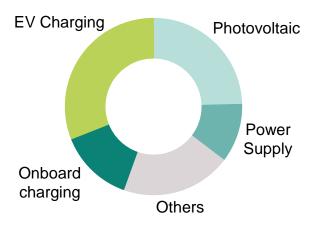


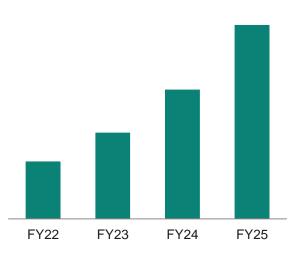












¹ Excluding Auto Drivetrain

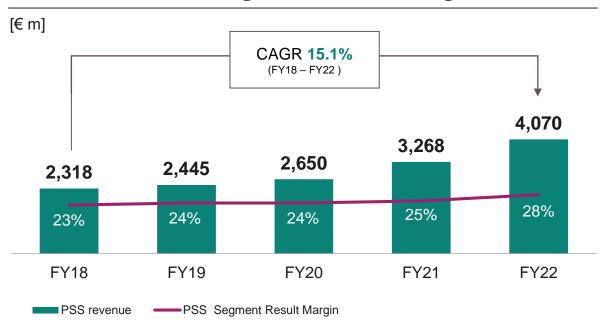
Power & Sensor Systems



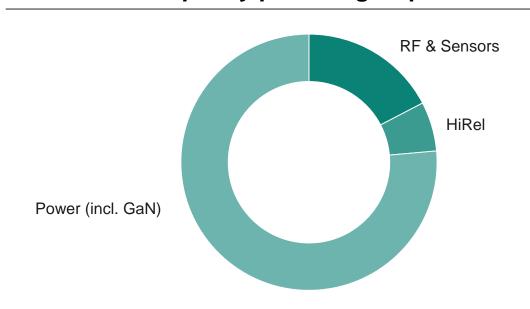
PSS at a glance



PSS revenue and Segment Result Margin



FY22 revenue split by product group



Key customers

























Weakness in all verticals except industrial persists in 2023

Applications

% of FY22 segment revenue¹



~18% Computing



Market Outlook for CY23

- Server market is still soft and bottoming out, while channel inventories are on an elevated level
 However, increasing power content in servers could be a tailwind
- PC market and edge computing market shipments are bottoming out



~9%
Communications



- 5G roll-out in India continues, but overall telecom market shows signs of slowdown



~12% Smartphones



 Continued weak smartphone market remains, however, H2 expected to see reversal of negative trend based on improved macro environment



~25% Consumer



Global decline in consumer confidence continues to create headwinds for consumer spending



~32%



- Demand in renewable energy, EVs and EV charging expected to further accelerate
- Stimuli packages for renewables and respective infrastructure to support growth in CY23

¹ Does not sum up to 100% due to other applications not shown here

PSS's growth is built on many applications from different sectors in power and non-power



Computing



- Data center
- Enterprise server
- PC, notebook
- Peripherals
- Chargers and adapters

Communications



- Base stations
- Backhaul cellular infrastructure
- 5G massive MIMO
- Telecommunication servers

Smartphones



- Smartphones
- Mobile devices
- Wearables
- USB Type-C,USB Type-C PD

Consumer



- eBikes, eScooter
- Multicopter
- Gaming
- TV sets
- Smart home

Industrial



- Power supplies
- EV on-board charger
- Charging infrastructure
- PV inverter
- Power tools
- Lighting
- Industry 4.0
- Aerospace

PSS – Power

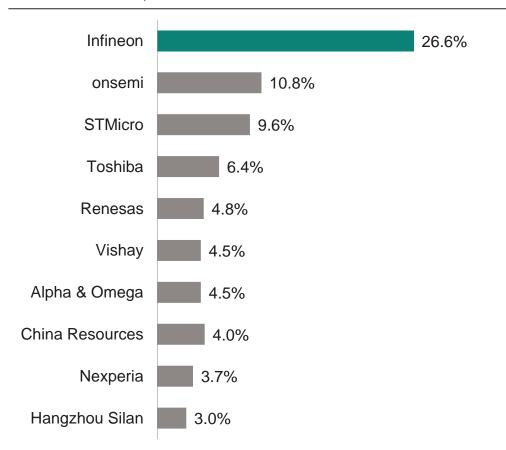


Infineon is the clear leader in MOSFETs with further market share gains, additional growth potential in power ICs



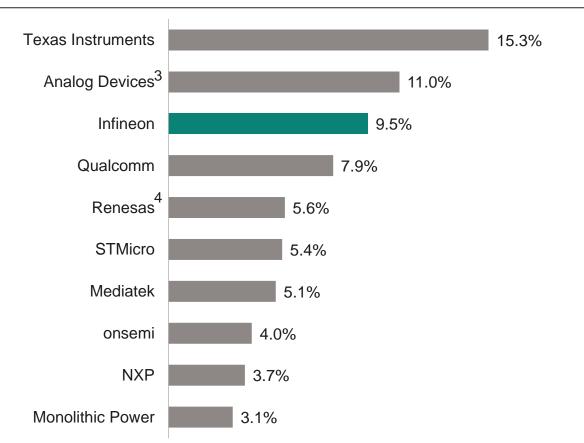
Discrete Power MOSFETs¹

2021 total market: \$11.1bn



Power ICs²

2021 total market: \$30.9bn



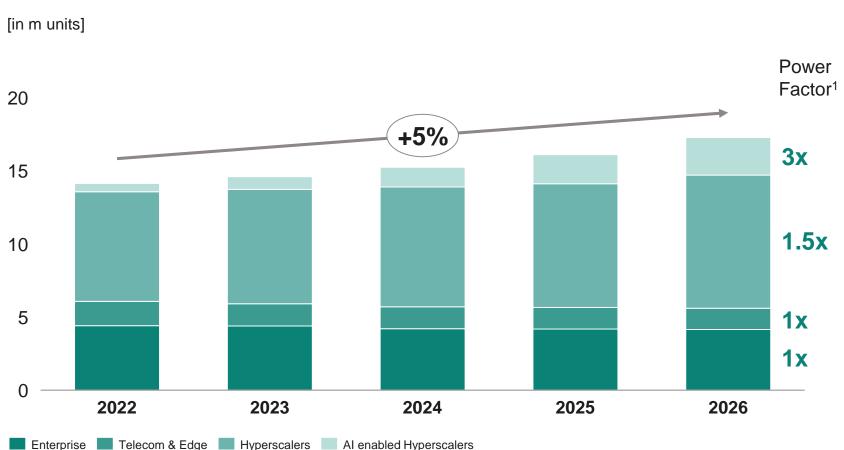
¹ Discrete Power MOSFET market includes automotive MOSFETs, Si Power MOSFETs, Si Protected MOSFETs and GaN Power Transistors | ² Power IC market includes automotive power ICs.

³ Analog Devices acquired Maxim in August 2021 | ⁴ Renesas acquired Dialog Semiconductor in August 2021. | Based on or includes research from Omdia: *Power Semiconductor Market Share Database* 2021 – *Final V3.* December 2022. | Results are not an endorsement of Infineon Technologies AG. Any reliance on these results is at the third party's own risk.

Server market including AI hyperscalers offers attractive growth potential



Server market units as well as BoM expected to grow



Exponential increase in

Al Training & Networking
power level requires cutting-edge
innovation in Device & Packaging
technologies to solve power
efficiency and density challenges

→ The bill of material is outpacing unit growth by a factor of ~1.3x

¹ Normalized overall power requirement per server board for x-comparison
Based on or includes research from Omdia: *Data Center Server Tracker – 3Q22 Database*. September 2022
Results are not an endorsement of Infineon Technologies AG. Any reliance on these results is at the third party's own risk.

Infineon components enable best power usage effectiveness for data centers



Supermicro collaborates with Infineon on green computing

Supermicro MicroBlade servers contain ...

28 digital multiphase controllers

112 power stages

&

28
point-of-load controllers

- Infineon's power stages provide the best power efficiency in the industry
- Infineon's power IC's high temperature tolerance and excellent reliability enables operations at high ambient temperature → less energy-intense external cooling needed

Example

In one use case¹, the end customer of Supermicro's MicroBlade server saved **56%** in data center space utilization, **45%** in capex and \$13m/year in electricity. This led to customer's data center power usage effectiveness (PUE) of **1.061**

An ideal PUE value is 1.0, which means that all the power required for a data center is in the actual computing devices, not in overhead costs such as cooling or power conversion. According to recent research², IT and data center managers reported an average annual PUE ratio of 1.57 at their largest data centers.



¹ Source: <u>https://www.supermicro.com/CaseStudies/CaseStudy_Fortune100.pdf</u>

² Statista Research Department: Data center average annual power usage effectiveness (PUE) worldwide 2007-2021. July 21, 2022.



PSS is a key enabler for residential solar systems

Full portfolio breadth for solar

- Innovative MOSFET transistors
 for MV & HV applications in all technologies:
 OptiMOS™, CoolMOS™, CoolSiC™, CoolGaN™
- Isolated gate driver and GaN driver ICs for high system level efficiencies, excellent power density and consistent system robustness
- CoolSET™ integrated power stages for auxilliary power supply
- Digital isolaters enables safe signal transfer







Enabling residential solar energy systems



PV microinverters

DC optimizer + string inverter

Energy storage systems

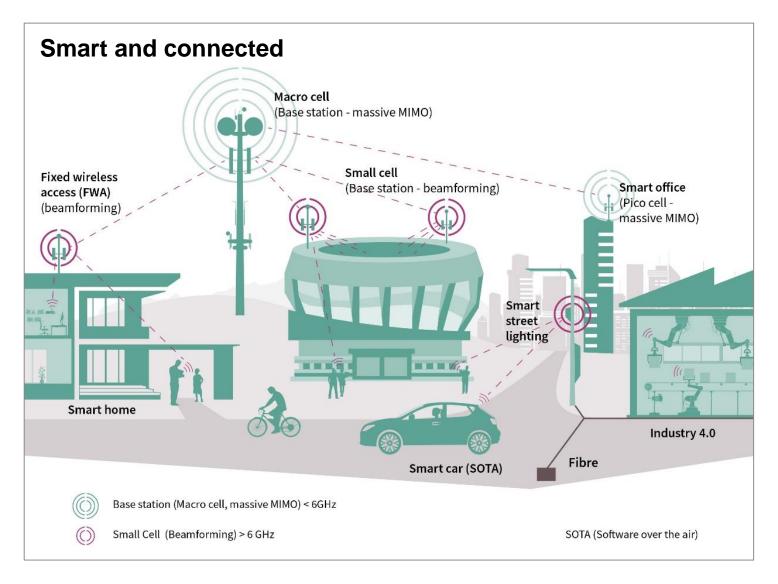
» Partnering with leading customers of the industry

Securing customer and market growth by entering into long-term strategic agreements

Growing above industry CAGR with the leading customers of the industry

Transition to 5G drives demand in power semis for antennas and power supplies





Driver #1

Massive growth of data and computing power

Driver #2

Higher number of base stations due to dense network

Driver #3

~ 4x higher power semi content per radio board: From ~\$25 for MIMO antenna to ~ \$100 for massive MIMO antenna array

Driver #4

Fog computing data center as a completely new market

PSS – RF and Sensing



Main applications addressed by PSS sensors portfolio



MEMS microphone



Best audio performance

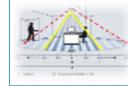


Low power consumption

3D radar (24/60 GHz)



Ultra-low power consumption



Presence detection/ Vital Sensing

3D ToF image sensor



Best price/performance



Face ID (biometrics), VR/AR

Environmental



High precision and Small form factor



Measure CO₂

Main applications

- Smartphone
- True wireless stereo headsets
- Smart speaker
- Laptop & tablet

- Automotive
- Smart home
- TV
- Security camera
- Smart building

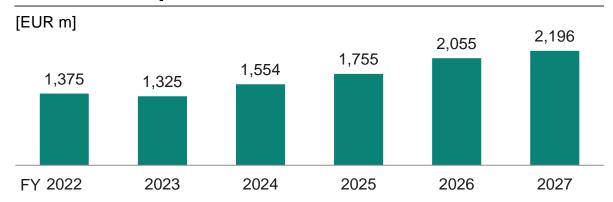
- Smartphone: World-facing and user-facing
- Robotics
- Automotive in-cabin sensing
- Payment terminals

- Heating, ventilation, air conditioning (HVAC)
- Air purifier
- Smart thermostat
- CO₂/virus risk reduction

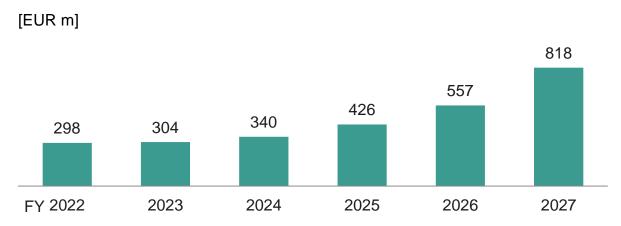


Sensor markets targeted by PSS offer attractive growth potential

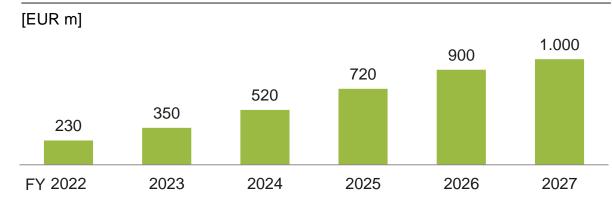
MEMS microphone market



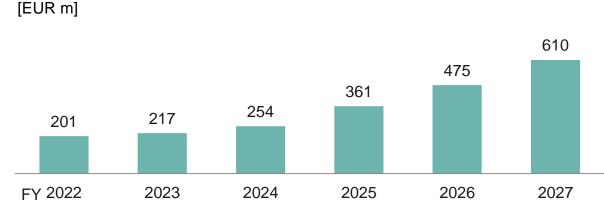
3D ToF image sensor market



Radar IC market (24 GHz and 60 GHz only)



Environmental sensor market¹

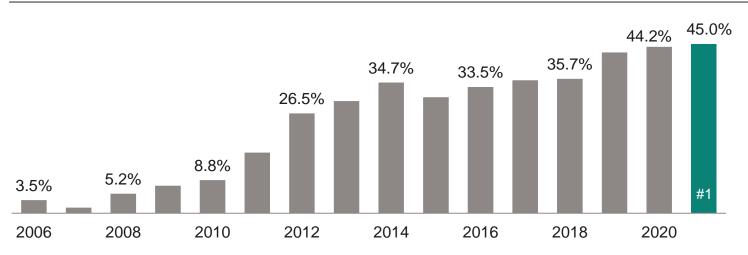


¹ Infineon is addressing smart building, smart home, smart appliances, consumer IoT devices and automotive. Source: Infineon estimates

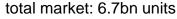
Infineon as market leader has significantly increased the distance to #2

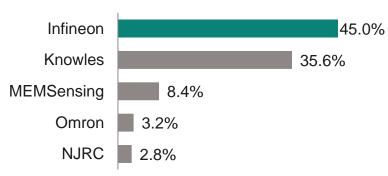


Infineon's market share development in MEMS microphones (by units)



2021 MEMS die market share





Based on or includes research from Omdia: *MEMS Microphones Report Dice Market Shares 2022*. October 2022. Results are not an endorsement of Infineon Technologies AG. Any reliance on these results is at the third party's own risk.

New XENSIV™ MEMS microphone with very low power consumption

- New PDM (pulse density modulation) microphone is based on Infineon's latest Sealed Dual Membrane MEMS technology
- Offers unmatched SNR of 69 dB(A) that enables crystal-clear audio experience
- Needs half of current consumption compared with available models on the market with similar performance
- This leads to a long battery life and is therefore perfect suited for hearable applications like true wireless earbuds, over-ear headsets, and hearing enhancement devices



Expanding our portfolio towards H2 (hydrogen) sensors to address battery protection and the entire fuel cell ecosystem



H₂ sensor key use cases



H₂ gas leakage sensor for fuel cell applications

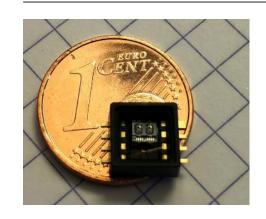


H₂ gas leakage sensor for infrastructure applications



H₂ outgassing sensor for battery thermal runaway detection

H₂ sensor details



Based on Infineon's MEMS technology

H₂ sensor key target applications



















Currently in evaluation with around 20 customers

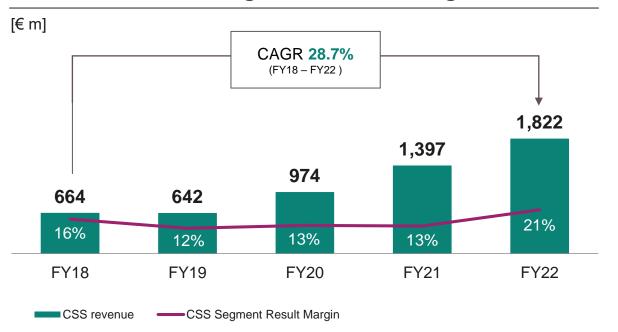
Connected Secure Systems



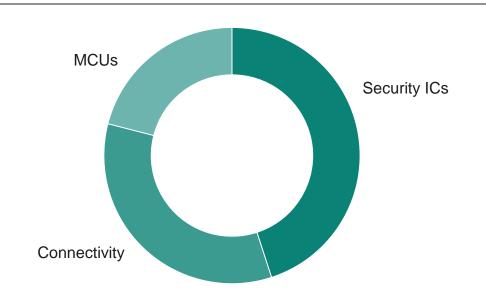
CSS at a glance



CSS revenue and Segment Result Margin



FY22 revenue split by product group



Key customers

































Market outlook is affected by macroeconomic conditions; risks continue especially for consumer segments

Market Outlook for CY23



Applications

% of FY22 segment revenue



Industrial IoT



Growth in industrial IoT is expected to stretch into CY23 based existing order backlog despite geopolitical and economic uncertainties



Home **Appliances**



Overall demand slowing down and returning to prepandemic levels. Although penetration of smart appliances increases, deterioration of customer sentiment might limit growth



Industrial and

Consumer IoT

Smart Home



Launch of Matter 1.0 standard and focus on energy management systems counteracted by risks driven by overall consumer sentiment



Health & Lifestyle



Market risks driven by overall consumer sentiment might outweigh potential growth in areas like smart watches



Media, Game & Compute



Main consumer markets are trending downwards due to overall macroeconomic environment and reduced consumer sentiment, while enterprise product categories remain rather flat



Automotive



Market outlook for 2023 has improved driven by the easing of China's zero-Covid policy, while risks of demand destruction due to worsening macroeconomic conditions persist





Payment



The market is assumed to grow as supply constraints continue to ease



Identification



Positive trend expected driven by recovery in passports issuance as well as project roll-out for other eDocuments





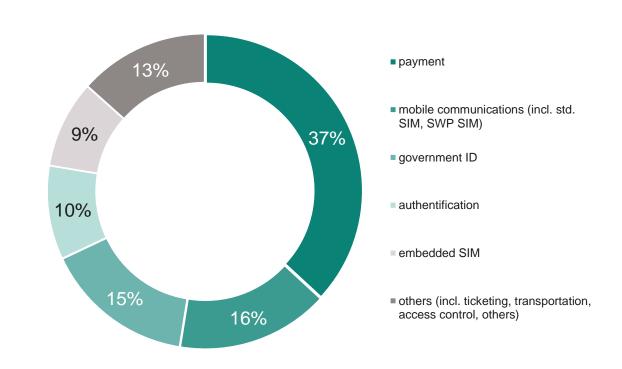
Security ICs (excl. NFC controllers; excl. NFC eSE)

2021 total market: \$3.2bn

Infineon 25.8% NXP 17.4% STMicro 17.3% Samsung 11.9% **CEC Huada** 8.5%

Security ICs (excl. NFC controllers; excl. NFC eSE)

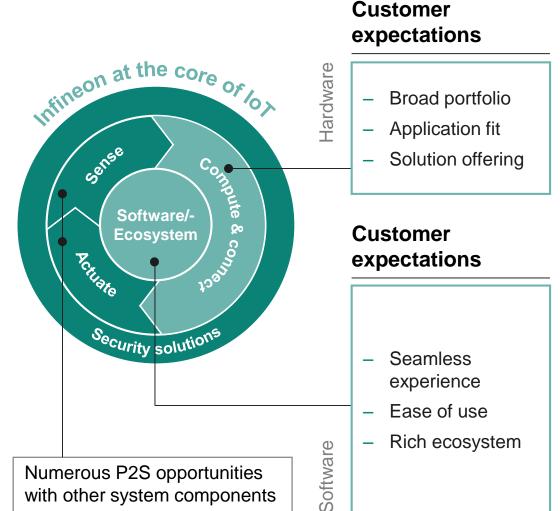
2021 by application



ABI Research: Smart Card and Embedded Security IC Technologies. October 2022.

MCU and software are key for the success in IoT as they define the functionality and time-to-market of the device





Infineon's MCU offering

- Broad solution-oriented MCU family offering
- Platform strategy for MCU development:
 - shared core IP
 - use-case-specific components

Infineon's software and services offering

- Software development environment and ecosystem with ModusToolbox™
- Cloud-connected software for IoT devices using Wi-Fi, PSoC™, OPTIGA™
- Motor drive software stack for iMOTION™ controller
- Driver software, firmware and complete functional products for easy hardware integration (e.g., OPTIGA™ family)
- Fast innovation: AI/ML enablement
- Software-as-a-service (SAAS) for IGBT module lifetime simulation

Infineon is enabling the 'IoT at a fingertip' with robust and reliable touch solutions and reconfirming Cypress revenue synergies



Infineon as the leader¹ in Touch-HMI inherited through Cypress acquisition

>6 Billion

conventional buttons replaced

>100 Patents

filed for touch solutions

5th generation of CAPSENSE™ controller in advanced analog/mixed-signal technology available

Infineon CAPSENSE™ technology in volume production in a wide range of applications



Capacitive sense buttons



Metal proximity

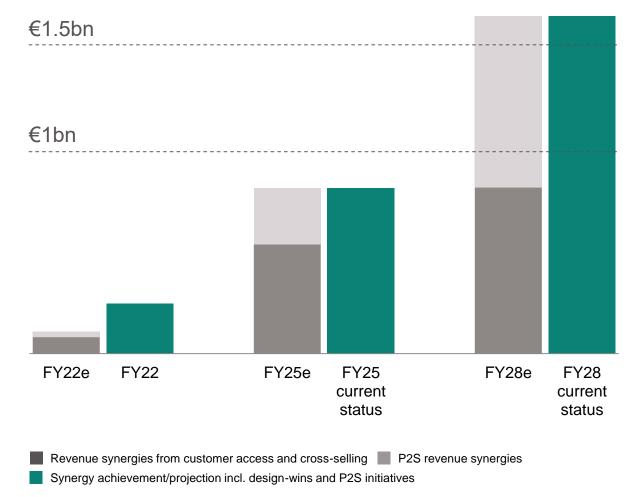


Capacitive sense slider



Touchless gesture control

We are fully on track to reach or even overachieve the announced Cypress revenue synergy targets



¹ Infineon estimate

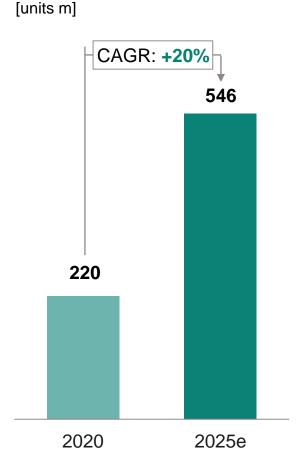
With a broad set of key enabling technologies, Infineon is well positioned to capture growth opportunities

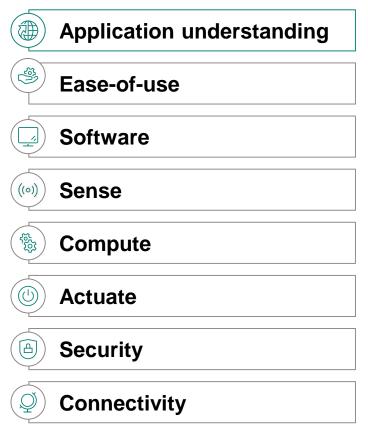


Market: Home Automation Devices¹

Leading competencies to provide full system solutions

Customer ex. for wireless smart cameras and smart door locks























 $WYZ \equiv$

¹ ABI Research: Wireless Connectivity Technology Segmentation and Addressable Markets. July 2021; excluding Chromebooks, desktop PCs, feature phones, media tablets, netbooks, smartphones, white box tablets.

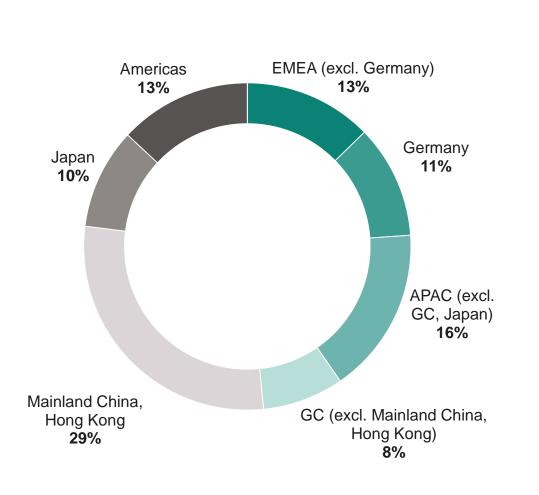
Selected financial figures



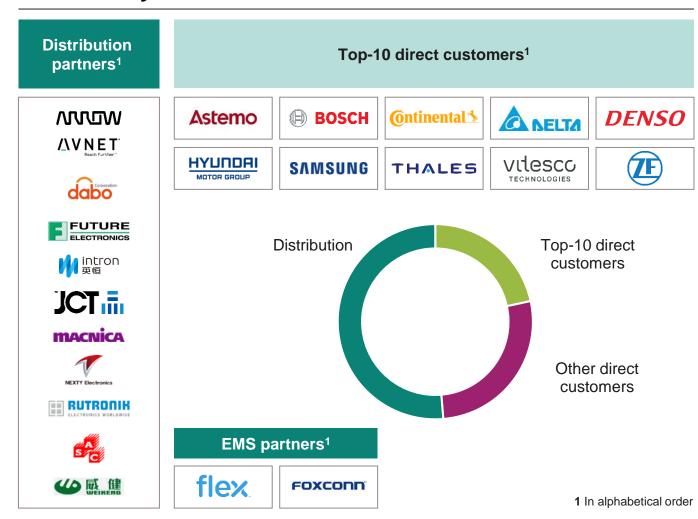
Strong presence in all regions; well-balanced customer portfolio; no customer represents more than 10% of total sales



FY22 revenue by region



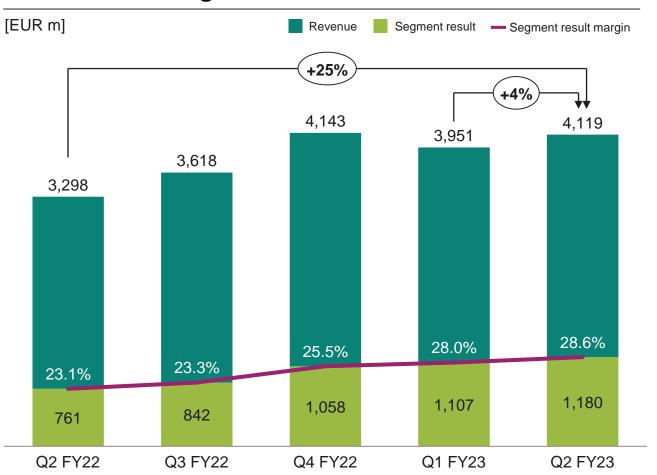
Revenue by sales channel







Revenues and segment result



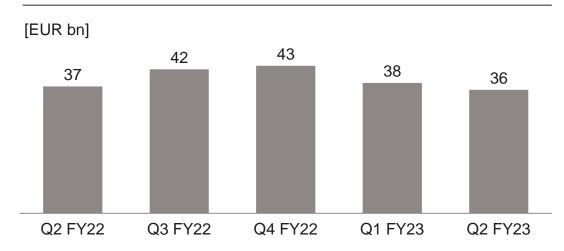
USD exchange rate

Average exchange rate

ø USD/EUR

<u>Q2</u>	<u>Q1</u>	<u>Q2</u>
FY22	FY23	FY23
1.12	1.02	1.08

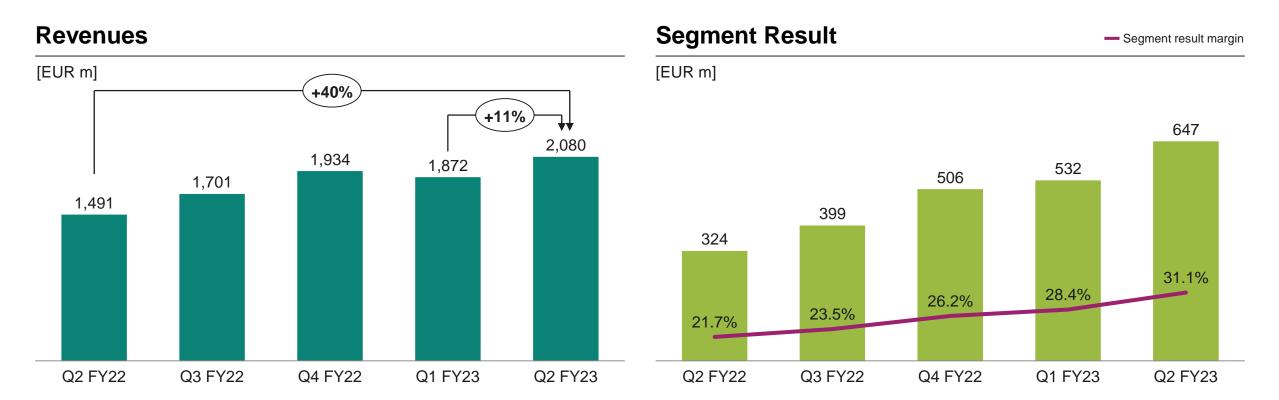
Order backlog¹



¹ See notes for definition

Automotive (ATV)



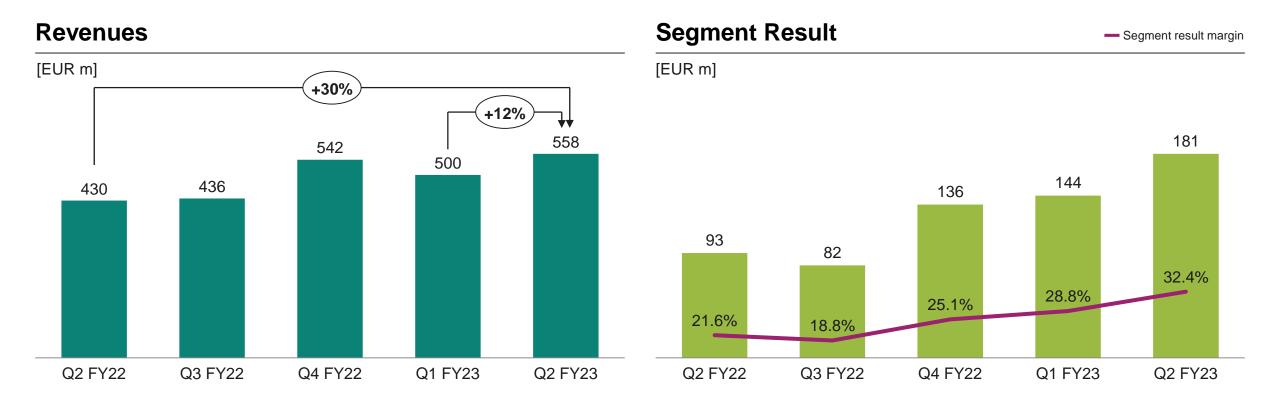


- Record revenues and segment result ATV crossed the €2bn quarterly turnover mark for the first time ever
- All product groups, especially microcontrollers, specialty memories, and power components contribute to this success
- ATV continues to be the global market leader in automotive power, and moves up to a second place position in automotive microcontrollers¹
- The exposure to the structural megatrends e-mobility, ADAS and new E/E architectures supports our business' resilience

¹TechInsights (formerly Strategy Analytics): Automotive Semiconductor Vendor Market Shares 2022. April 2023



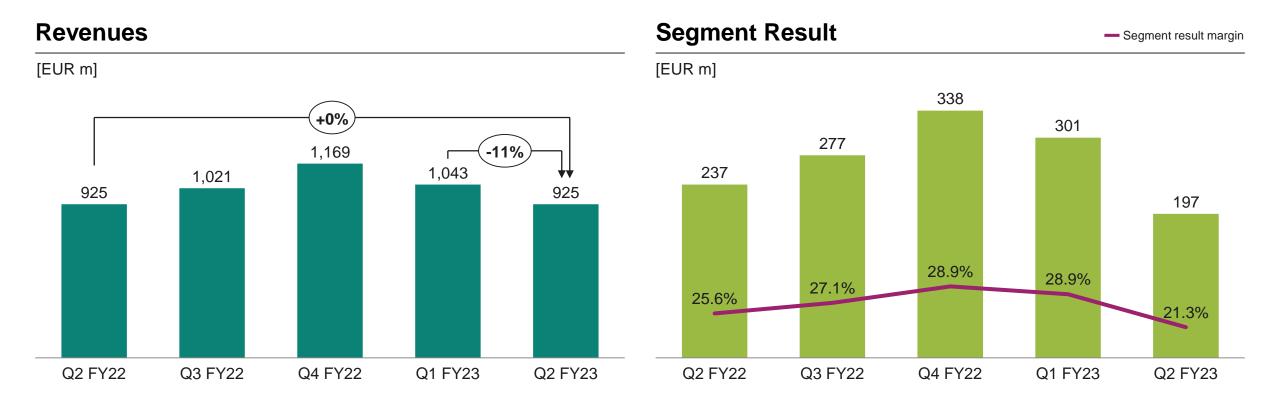




- The division has been renamed "Green Industrial Power" (GIP), originally IPC, to reflect above-average growth in the fields of renewable energy and energy infrastructure
- In Q2 FY23, revenue and segment result reached an all-time high all product groups contributed to this achievement
- Decarbonization-related demand overcompensates macro-driven weakness in home appliances; general-purpose drives going back to long-term growth rates



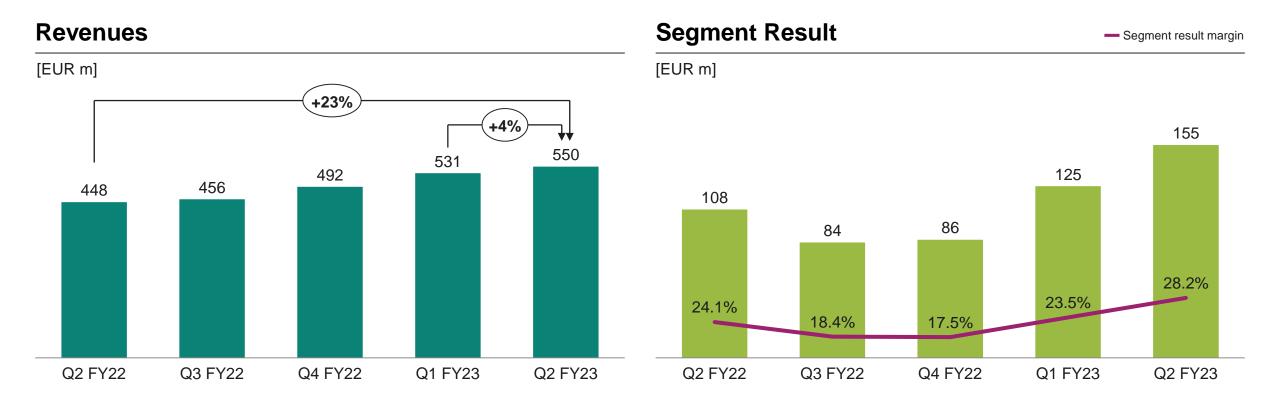




- Revenue step down was driven by the well-known softness in consumer, computing and communications applications
- Higher idle costs weigh on margin development
- Underlying long-term trends remain strong, especially demand for gallium nitride-based solutions





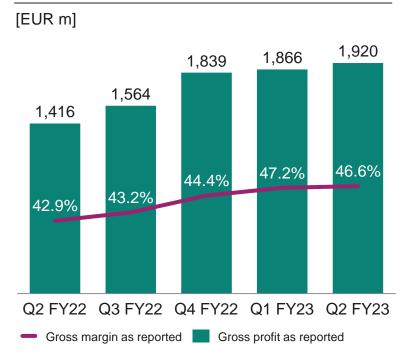


- Record revenue and segment result
- Revenue growth primarily driven by payment applications, embedded security and general-purpose microcontrollers
- Strong segment result was supported by pricing and higher volumes overcompensating negative currency developments
- Demand for smartcard ICs remains high long-term growth opportunities for consumer as well as industrial IoT applications undiminished

Gross margin and Opex



Gross profit



Therein non-segment result charges [EUR m]

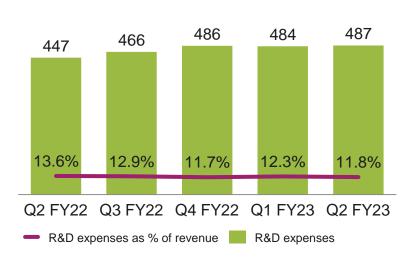
82 78 81 76 81

Adjusted gross margin

45.4% 45.4% 46.3% 49.2% 48.6%

R&D

[EUR m]

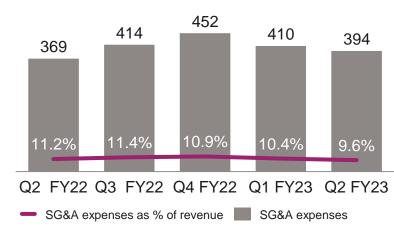


Therein non-segment result charges [EUR m]

6 7 12 10 8

SG&A

[EUR m]

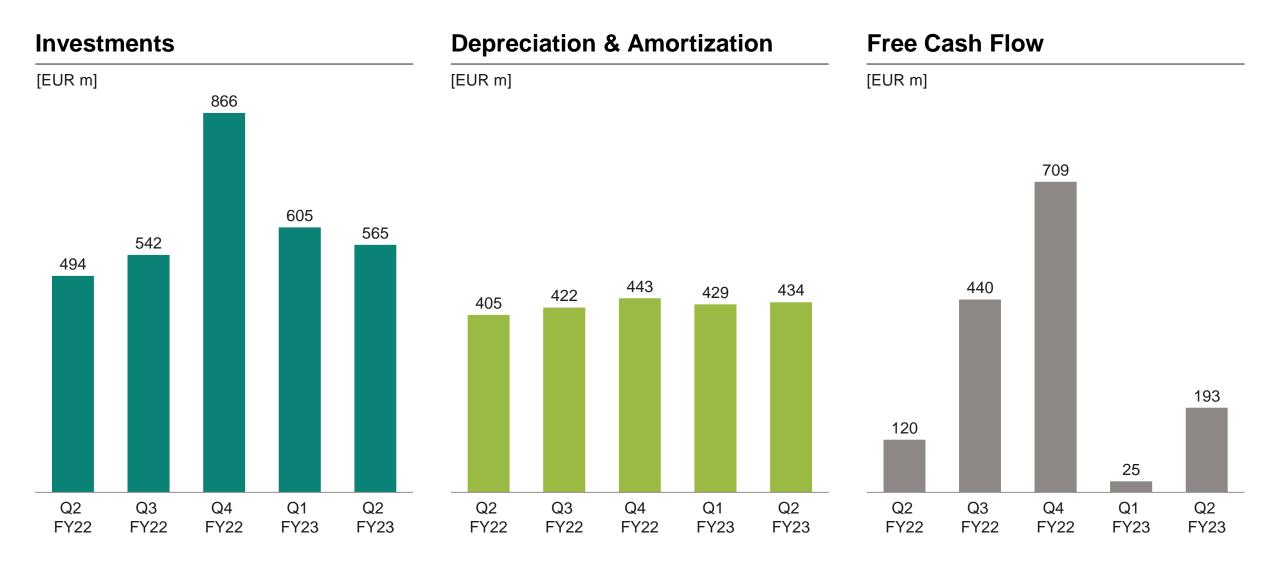


Therein non-segment result charges [EUR m]

50 62 56 53 54



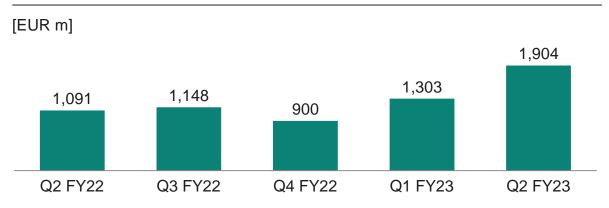
Investments, Depreciation & Amortization and Free Cash Flow



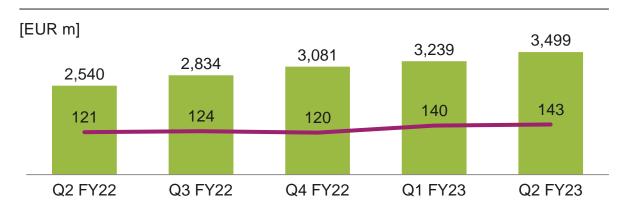


Working Capital, in particular trade working capital components

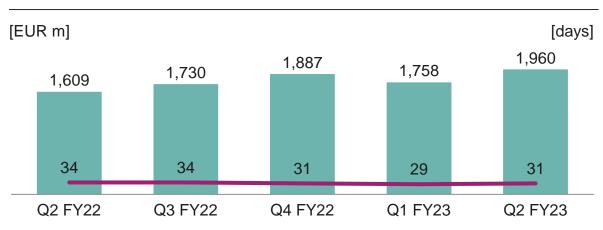




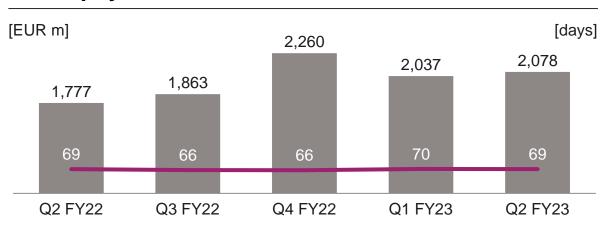
Inventories



Trade receivables



Trade payables

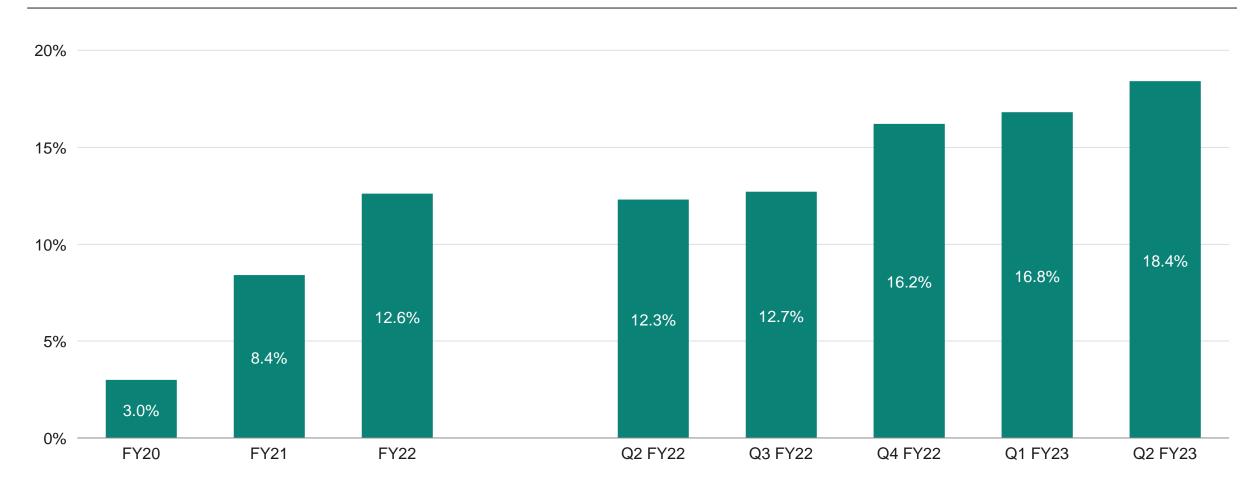


¹ For definition please see page "Notes"





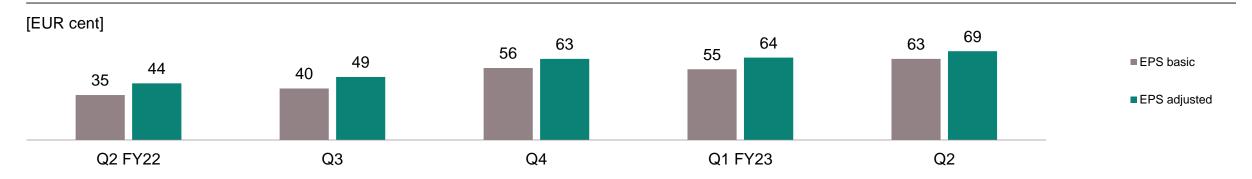
Historical development



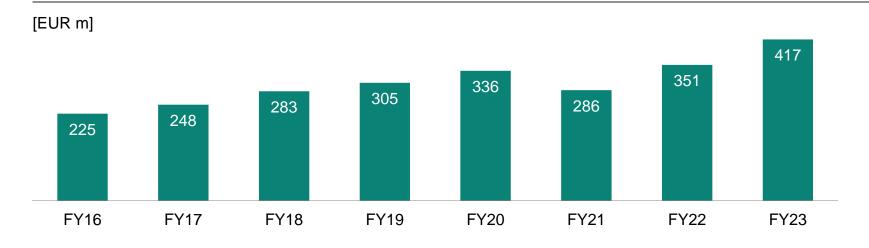


Earnings-per-share and total cash return

Development of earnings-per-share (EPS) from continuing operations



Total cash return to shareholders via dividends



- Dividend for FY22: €0.32 per share
- Dividend payout
 of €417m for FY22

Liquidity development



Historical liquidity development

[EUR m]



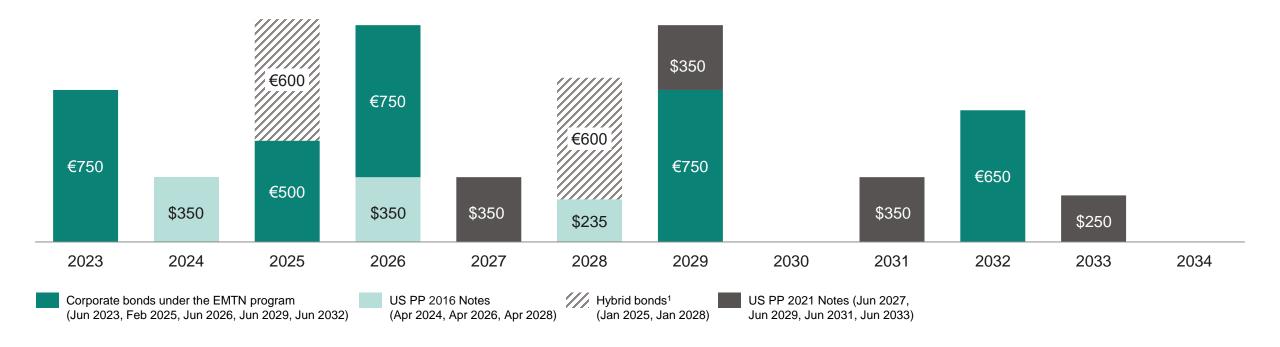


Maturity profile



Maturity profile from 2023 to 2034

[EUR m; US\$ m; nominal values]



Graph excludes additional debt totaling €2m maturing in 2023.

¹ On 1 Oct 2019, Infineon issued a perpetual hybrid bond with two tranches: €600m with first call date in 2025 and €600m with first call date in 2028; both are accounted as equity under IFRS.

Conservative financial policy and strict commitment to investment-grade rating are the basis for through-cycle flexibility



	Financial Policy Targets	Status Quo (LTM 31 March 2023)		
Gross Cash ¹	€1bn + at least 10% of revenues → €2.5bn	€1bn + 15% of revenues → €3.4bn		
Gross Debt ²	≤ 2.0x EBITDA	1.0x EBITDA		
Comfortable liquidity position	 Flexibility for financing operating activities and Cushion for net pension liabilities and conting 	• •		
Balanced debt position	 ebt			
Rating	Investment grade	BBB positive outlook (by S&P Global)		

¹ Gross cash position is defined as cash and cash equivalents plus financial investments | ² Gross debt is defined as short-term debt and current maturities of long-term debt plus long-term debt. EBITDA is calculated as the total of earnings from continued operations before interest and taxes plus scheduled depreciation and amortization



Disclaimer



Disclaimer

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Glossary

AC	alternating current
ACC	adaptive cruise control
AD	automated driving
ADAS	advanced driver assistance system
ADC	analog-to-digital converter
AEB	autonomous emergency braking
Al	artificial intelligence
AR/VR	augmented/virtual reality
ASIC	application-specific integrated circuit
BEV	battery electric vehicle
BLE	bluetooth low energy
BMS	battery management system
BoM	bill of Materials
BPA	bisphenol A
CAV	commercial, construction and agricultural vehicles
CMOS	complementary metal-oxide-semiconductor
DC	direct current
E/E	electrical/electronic architecture
ECU	electronical control unit
eSE	embedded secure element
eSIM	embedded subscriber identity module
ESS	energy storage systems
EV	electric vehicle
FCEV	full cell electric vehicle
FHEV/MHEV	full/mild hybrid electric vehicle
FoM	figure of merit
F-RAM	ferroelectric memory
GaN	gallium nitride
HMI	human machine interaction
HV	high voltage
HVAC	heating, ventilation, air conditioning
IC	integrated circuit
ICE	internal combustion engine

IGBT	insulated gate bipolar transistor
loT	internet of things
IPM	intelligent power module
LED	light-emitting diode
MCU	microcontroller unit
MEMS	micro electro-machanical systems
MHA	major home appliances
MIMO	multiple input, multiple output
ML	machine learning
MNO	mobile network operator
MOSFET	metal-oxide silicon field-effect transistor
MV	medium voltage
OBC	on-board charger
OEM	original equipment manufacturer
P2S	Infineon's strategic product-to-system approach
PD	power delivery
PHEV	plug-in hybrid electric vehicle
PMIC	power management integrated circuits
PoL	point of load
PSoC	programmable system-on-chip
PUE	power usage effectiveness
PV	photovoltaic
RAC	risk-adjusted capital
RAM	random-access memory
RF	radio frequency
SBC	system basis chip
Si	silicon
SiC	silicon carbide
SiGe	silicon-germanium
SNR	signal-to-noise ratio
SWP	single wire protocol
ToF	time-of-flight
WBG	wide band gap, specifically referring to SiC and GaN based devices





Investments =

Capital Employed =

RoCE =

Working Capital =

DIO (days inventory outstanding; quarter-to-date) =

DPO (days payables outstanding; quarter-to-date) =

DSO (days sales outstanding; quarter-to-date) =

'Purchase of property, plant and equipment' + 'Purchase of intangible assets and other assets' incl. capitalization of R&D expenses

'Total assets' - 'Cash and cash equivalents' - 'Financial investments' - 'Assets classified as held for sale

- ('Total Current liabilities' - 'Short-term debt and current maturities of long-term debt' - 'Liabilities classified as held for sale')

Operating profit from continuing operations after tax/Capital Employed

= ('Operating profit' - 'Financial result excluding interest result' - 'Share of profit (loss) of associates and joint ventures accounted for using the equity

method'-'Income tax')/Capital Employed

('Total current assets' - 'Cash and cash equivalents' - 'Financial investment' - 'Assets classified as held for sale')

- ('Total current liabilities' - 'Short term debt and current maturities of long-term debt' - 'Liabilities classified as held for sale')

('Net Inventories'/'Cost of goods sold') x 90

('Trade payables'/['Cost of goods sold' + 'Purchase of property, plant and equipment']) x 90

('Trade receivables' - 'reimbursement obligations')1/revenue' x 90

Order backlog =

The total amount of orders received regardless of their current status

ESG footnotes:

- 1) This figure takes into account manufacturing, transportation, own vehicles, travel, raw materials and consumables, chemicals, water/waste water, direct emissions, energy consumption, waste, etc. as well as direct and indirect energy-related emissions by manufacturing service providers. It is based on data collected internally and publicly available conversion factors and relates to the 2021 fiscal year.
- 2) This figure is based on internally established criteria, which are described in the explanatory notes. The figure relates to the 2020 calendar year and takes into account the following application areas: automotive, LED, induction cookers, servers, renewable energy (wind, photovoltaic) and cell phone chargers as well as drives. CO₂ savings are calculated based on the potential savings generated by technologies in which semiconductors are used. The CO₂ savings are allocated based on Infineon's market share, semiconductor share, and the lifetime of the technologies concerned, based on internal and external experts' estimations. Despite the fact that carbon footprint calculations are subject to imprecision due to the complex issues involved, the results are nevertheless clear.
- 3) Carbon neutrality is defined in terms of Scope 1 and Scope 2 emissions.

Without debtors with credit balances





Financial calendar

Date	Event	Location
10 May 2023	Berenberg Madrid Seminar	Madrid
11 May 2023	GIP business update call along with PCIM trade show	Nuremberg and virtual
12 May 2023	Stifel German Corporate Conference	Frankfurt
15-16 May 2023	J.P. Morgan European Technology, Media and Telecoms Conference	London
17 May 2023	UBS Best of Europe Conference	virtual
23 May 2023	Equita European Conference	Milan
31 May 2023	Goldman Sachs Global Semis Conference	New York
6 June 2023	Berenberg Innovation Conference	Zurich
6-7 June 2023	24th CEO Conference of BNP Paribas Exane	Paris
12 June 2023	Future of the auto industry Conference, Newstreet Research	virtual
20 June 2023	dbAccess German Corporate Conference	Frankfurt
21 June 2023	BofA EU TMT Conference	London
3 August 2023 ¹	Q3 FY23 results	
15 November 2023 ¹	Q4 FY23 and FY 2023 results	

¹ Preliminary

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