

## First Quarter FY 2024 Quarterly Update

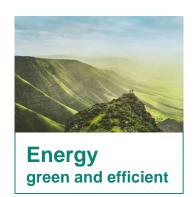
Infineon Technologies AG
Investor Relations



### Infineon at a glance



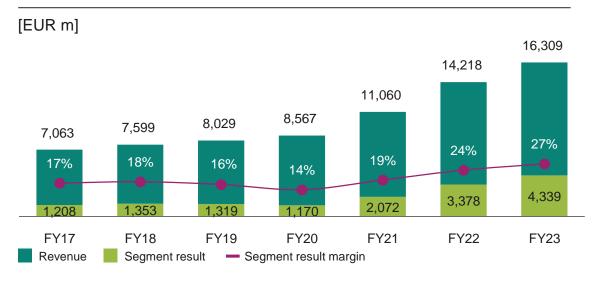
### Addressing long-term high-growth trends





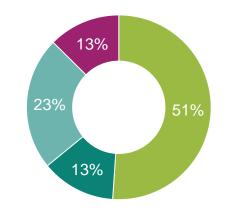


### **Financials**

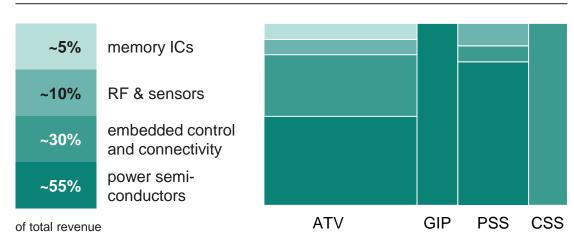


### FY23 revenue by segment

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



### FY23 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 597bn1

Samsung

Qualcomm

**Broadcom Limited** 

Micron Technology

**STMicroelectronics** 

Analog Devices

SK Hynix

Intel

**AMD** 

NVIDIA

Texas Instr.

MediaTek

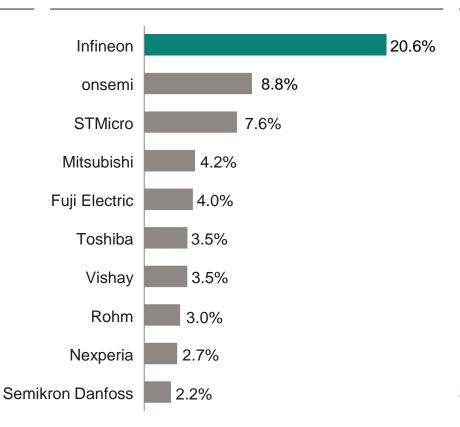
Apple

Infineon

NXP

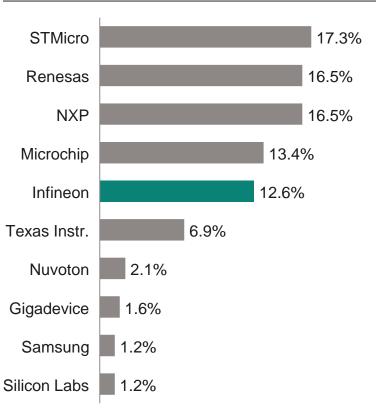
### Power discretes and modules

2022 total market: USD 28.1bn2



### **MCU** suppliers

2022 total market: USD 27.0bn1



<sup>&</sup>lt;sup>1</sup> Based on or includes research from Omdia: Annual 2001-2022 Semiconductor Market Share Competitive Landscaping Tool – 3Q23. November 2023.

11.2%

10.2%

6.2%

5.7%

4.5%

4.5%

4.0%

3.5%

3.2%

3.1%

2.9%

2.7%

2.6%

2.2%

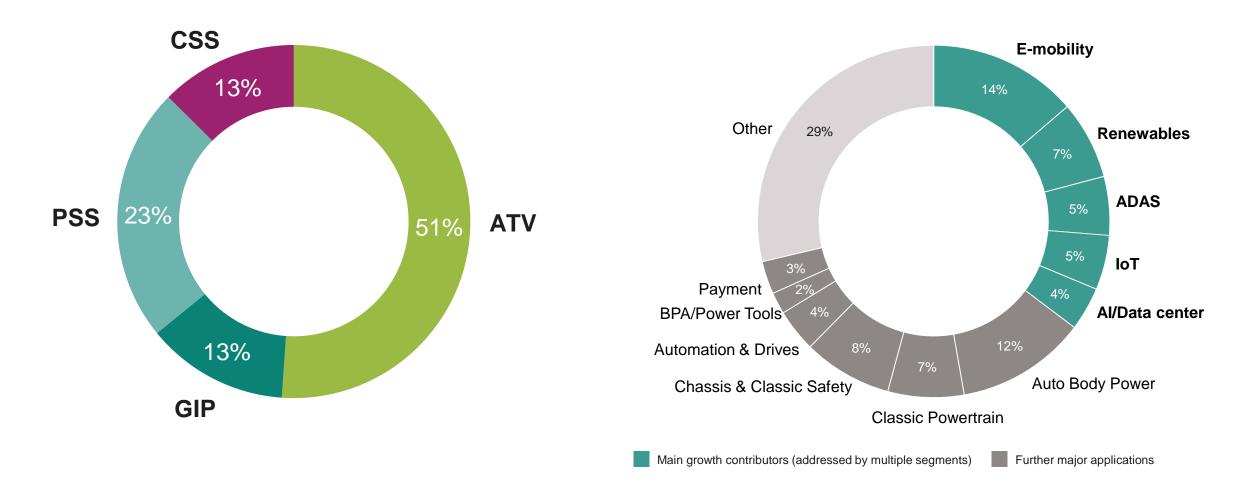
2.0%

<sup>&</sup>lt;sup>2</sup> Based on or includes research from Omdia: *Power Semiconductor Market Share Database – 2022*. September 2023. 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



### FY23 revenue of €16,309m by segment and key application



# Technology and quality leadership means added value for customers fostering long-term partnerships



### "Outstanding Partner Award 2023" from globally largest EV player BYD

#### Infineon has been honored for its

- strong and long-lasting support
- operational excellence with steady delivery and reliable quality
- trustful cooperation between Infineon and BYD, specifically as a result of Infineon's innovative Application Center
- The intensified partnership will address powertrain, ADAS/AD and E/E architecture





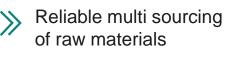
### First Memorandum of Understanding with a Japanese OEM

- Honda selects Infineon as semiconductor supplier to align technology roadmap addressing nextgeneration vehicle architectures:
  - electric drivetrain: traction inverter (IGBT, SiC, GaN)
  - ADAS/AD: radar
  - E/E architecture: power distribution, new architectural concepts, e.g. central/zone architecture (AURIX™ family)



## Undisputed power systems leadership mastering all three key materials





World-scale fabs



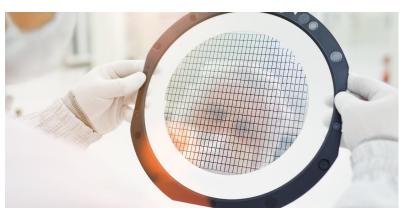
Application understanding

Packaging know-how and hybridization competence

### Leadership in Power Systems across all materials and technologies

### Silicon

Diode - MOSFET - IGBT - Driver - Controller



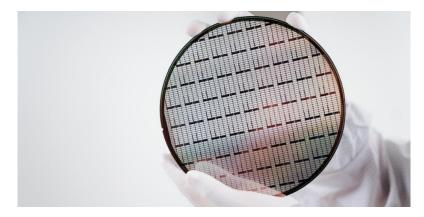
### Silicon carbide

Diode - MOSFET



### **Gallium nitride**

HEMT – Driver



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



### **Consumer IoT**



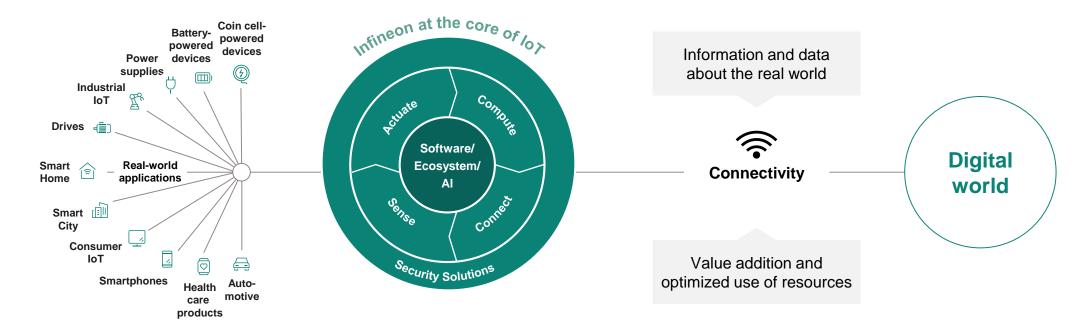
### **Industrial IoT**



**Automotive IoT** 



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



## 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



# Our Target Operating Model: committing to ambitious financial goals and being the sustainability leader



### **Target Operating Model**

through cycle



Revenue growth

>10%



Segment Result Margin

25%



Adj. Free Cash Flow Margin<sup>1</sup>

10-15%

### Sustainability leader

CO<sub>2</sub> neutrality 2030

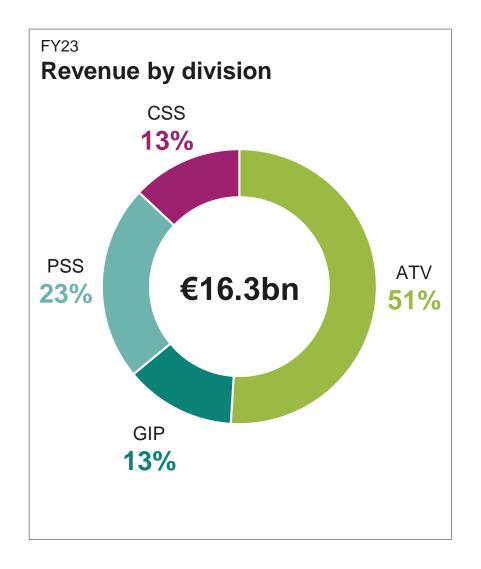




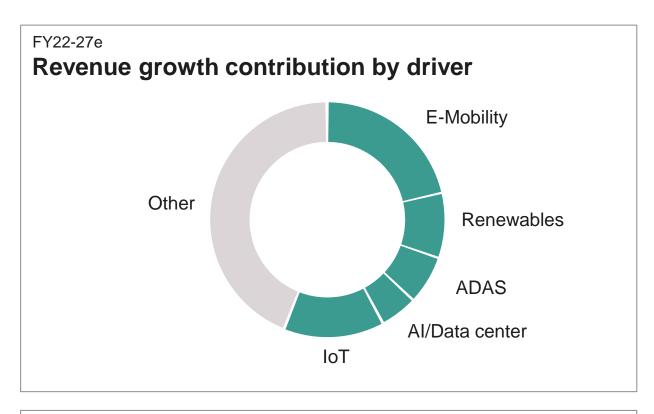
<sup>&</sup>lt;sup>1</sup> Excluding major frontend buildings

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





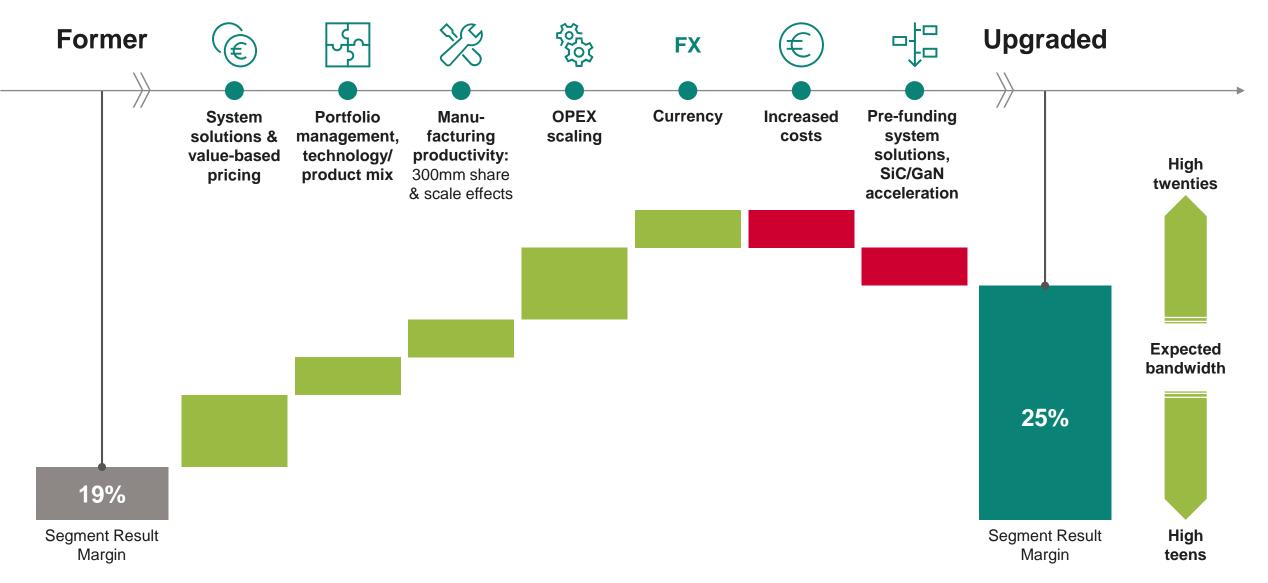






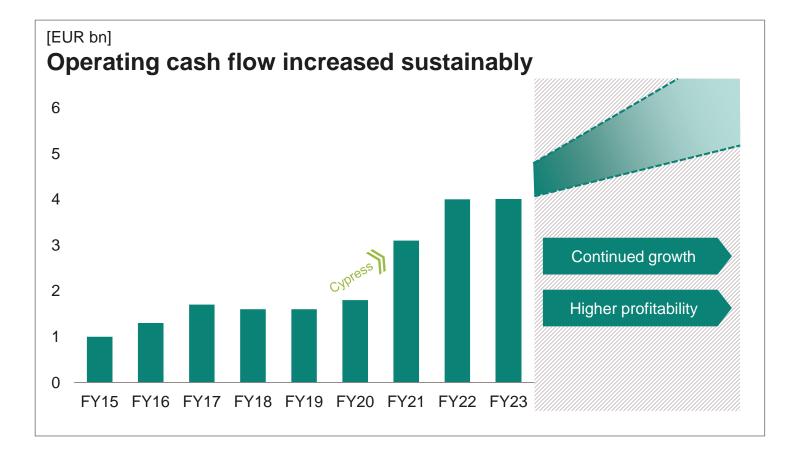
# Our Target Operating Model: significant margin expansion through the cycle





## 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 mid-/long-term
- Differentiated in-house manufacturing complemented by ~40% outsourcing share over time
- FY24-28: ~€4.5bn cum. investments into major frontend buildings

**>>** 

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



### Outlook for Q2 FY24 and FY24



Outlook Q2 FY24 <sup>1</sup>
~€3.6bn
~18%

Outlook FY24 <sup>1</sup>
€16.0bn +/-500m
low to mid-forties
low to mid-twenties
~€200m/~€1.8bn
~€2.9bn
~€1.9bn²

<sup>&</sup>lt;sup>1</sup> Based on an assumed average exchange rate of \$1.10 for €1.00

<sup>&</sup>lt;sup>2</sup> Including the amortization of around 400 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







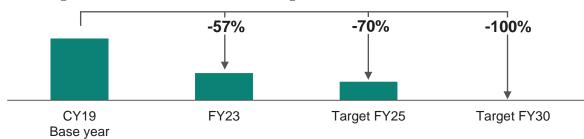
## On the road to carbon neutrality<sup>3</sup> we achieved significant milestones by

- Using green electricity in Europe and North America and our main sites Kulim and Melaka in Malaysia
- Installation start of PFC abatement system in Austin



### Infineon's CO<sub>2</sub> target<sup>3</sup> by 2025 and 2030

Net CO<sub>2</sub> emissions in million tons of CO<sub>2</sub> equivalents





Net ecological benefit: CO<sub>2</sub> emissions reduction of more than 113 million tons

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

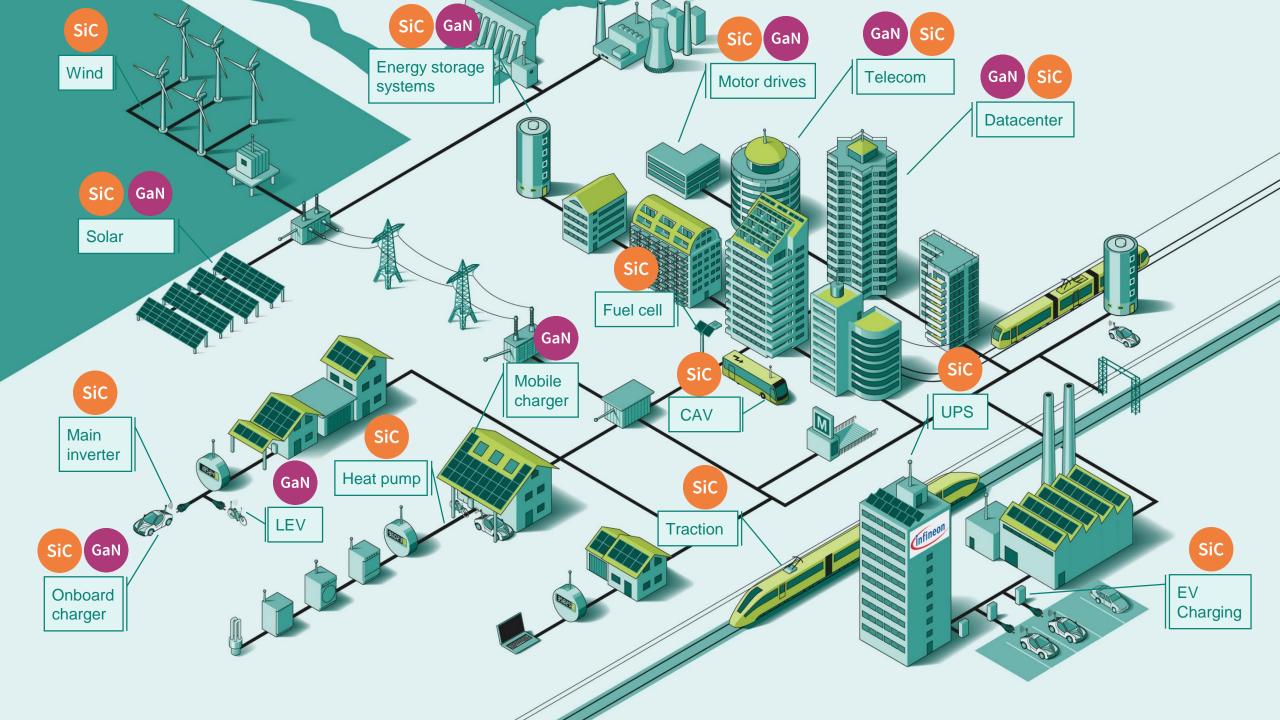
# External recognitions confirm our engagement in contributing to a sustainable society



	<b>\</b>	Rating/Score	Scale	Date
MSCI  MSCI ESG		AA	CCC to AAA	05/2023
CDP CDP		A- climate scoring B water scoring	F to A	12/2022
Ecovadis  SUSTAIVABLE SUPERY MANAGEMENT  ECOVADIS		99th percentile "Platinum" award	0 to 100	03/2023
Dow Jones Sustainability Indices In collaboration with Collaboration w		77 Dow Jones Sustainability™ World Index listing	0 to 100	12/2023
ISS ESG  Ses Corporate Rating		Prime Status	D- to A+	03/2023
FTSE4Good Index		Index member	_	06/2023
Sustainalytics		ESG industry top performer		01/2024

Infineon's wide bandgap strategy

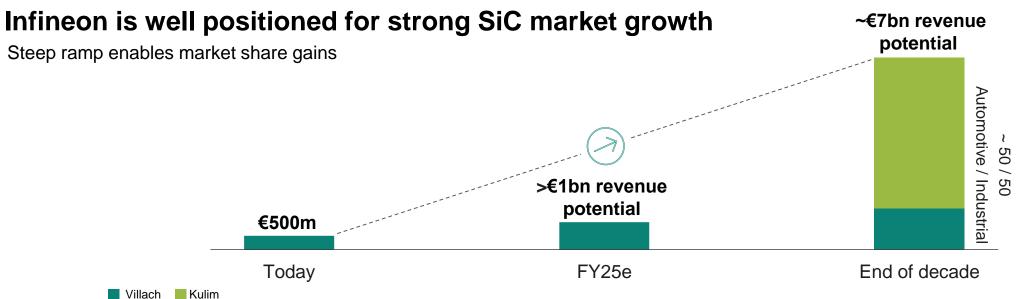




## 30% market share target in SiC by end of decade underpinned by significant capacity expansion







## Building the world's largest and most competitive 200-millimeter SiC power fab



### Rationale

- Undisputed leadership position in power systems across all materials based on technology and scale
- Expanding the third module at the existing site in Kulim offers significant advantages economies of scale, competitive local cost position, implementation speed and reliability from existing employees and infrastructure
- Modular setup allows for flexibility in ramp-up phase

Xulim 3 phase 2 investment	up to €5bn
Related design-wins	~ €5bn
>> Customer pre-payments	~ €1bn
>> Start of production	Summer 2027

Total SiC revenue potential¹ end of decade: ~ €7bn



<sup>&</sup>lt;sup>1</sup> Total revenue potential comprises Villach, Kulim 3 phase 1 and phase 2 incl. 200-millimeter conversion

### With a world-scale fab complementing existing strengths, Infineon will be the industry's most competitive provider of SiC technology

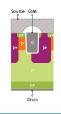




### SiC raw material supply + Cold Split technology



- More than 6 qualified SiC wafer and boule suppliers
- Increased productivity through Cold Split



### **Superior trench technology**



ŧ⊚

- 30% more chips per wafer than planar
- Unmatched reliability with zero field returns



### Packaging portfolio

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



### Deep system understanding



- Decades of experience
- Broadest portfolio: off-the-shelf plus customized solutions





World-scale 200-millimeter fab with industry-leading cost position

## **Expansion of Kulim 3 backed by strong long-term customer commitments**



### **Automotive**



### Industrial (incl. PV and ESS)





Design-wins: ~ €5bn

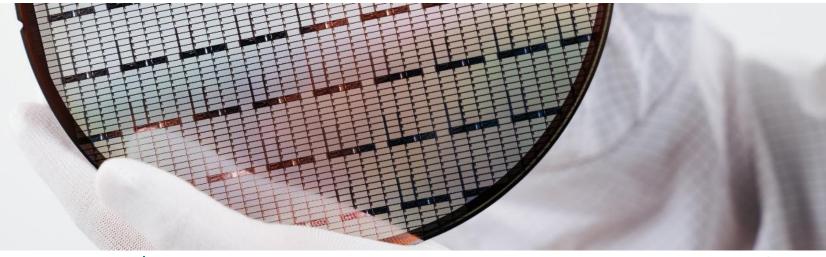


### Related customer pre-payments: ~ €1bn

- Phase 2 of Kulim module 3 expansion is backed by numerous customer commitments
- Significant design-wins in automotive and renewable applications
- About €1bn of customer pre-payments contribute to our free cash flow in FY24 and FY25

## Continuing our leadership in Power Systems with the most comprehensive GaN portfolio





### **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

Infineon's design opportunity pipeline for Gan power in focus applications amounts to more than €3bn



### Reducing CO<sub>2</sub> and saving resources with Infineon's GaN solutions

### Mobile charger

Saving resources with highly efficient GaN chargers

Current adapter

GaN

Same power, smaller size

### 2x less size & weight

- \$10 BOM

(2 GaN power transistors + 10 Si MOSFETs and

1 controller IC)

Customers: Anker plus 50 other projects in Asia and North America

### **Switched mode power supply**

Reaching highest efficiency and power density with GaN power supplies



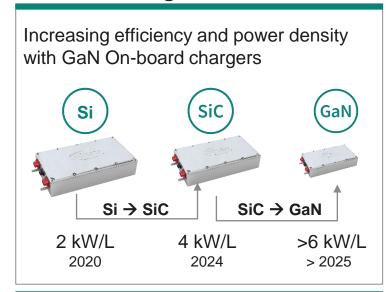
### 2x less size & weight

- \$75 BOM

(4 GaN power transistors + 4 SiC diodes, 40 Si MOSFETs, 8 gate driver ICs and 1 CoolSET™)

 Customers: 40 projects with leading electronic manufacturers in Asia, Europe and North America

### **On-board charger**



### 3x less size & weight

- More than \$100 BOM

(18 GaN power transistors + 16 digital isolators,

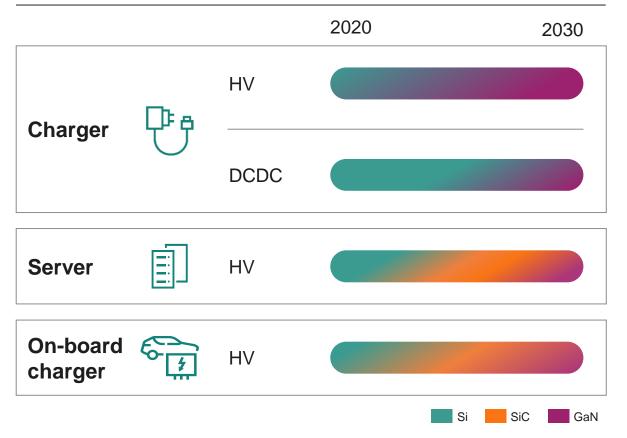
5 current sensors and 1 controller IC)

 Customers: 25 projects with leading electric car manufacturers in Asia, Europe and North America

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

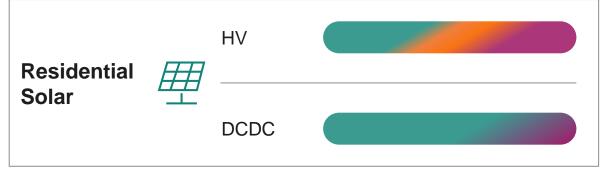


### GaN tipping point reached/in sight



### **GaN** transition coming up





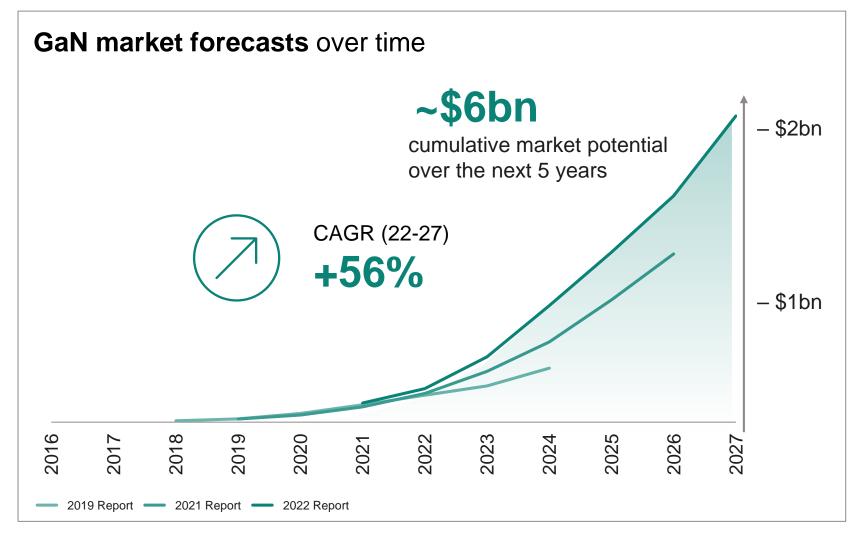
More applications likely to transition to GaN over time

**>>** 

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



### 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.

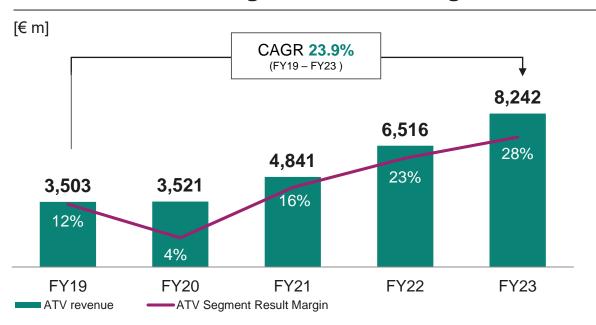
## **Automotive**



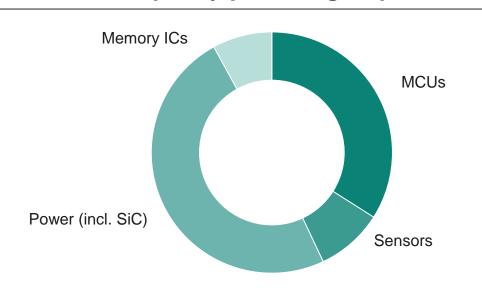
### ATV at a glance



### **ATV revenue and Segment Result Margin**



### FY23 revenue split by product group



### **Key customers**

























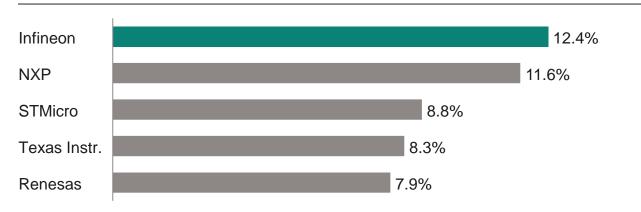




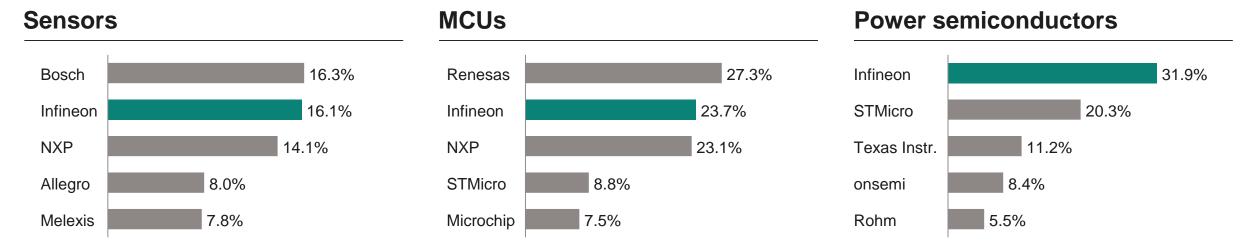
## Infineon's top market position is built on system competence based on an industry-leading product portfolio



### 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



TechInsights (formerly Strategy Analytics): Automotive Semiconductor Vendor Market Shares. March 2023. Sensors: S&P Global: Automotive Semiconductor Market Shares 2022. May 2023.

# Automotive semiconductor market expected to continue its growth journey even at flat light vehicle production growth



### **Applications**

### Market outlook for CY24



**Automotive** 



- Macroeconomic weaknesses in some key markets may stall car production growth in 2024
- Vehicle affordability concerns persist, despite recent OEM price cuts
- No major semiconductor shortage is expected



e-mobility



- Continued momentum for xEV expected, however with a slower pace outside China
- Availability of xEV models in different price and feature segments may alleviate some concerns about affordability





- Growth of ADAS/AD continues also driven by higher xEV share which usually offer higher levels
  of car autonomy and more advanced E/E architecture platforms
- First small-scale robotaxi projects launched

## Several strong content growth drivers for Infineon, even at flat LV production



### Several structural trends fueling our growth

### **xEV**

- Strong volume growth of BEVs and PHEVs
- Increasing share of SiC in traction inverters
- Larger batteries lead to higher BoM in BMS

### ADAS/AD

- Need for functional safety, redundancy
- More sensors, more computing performance

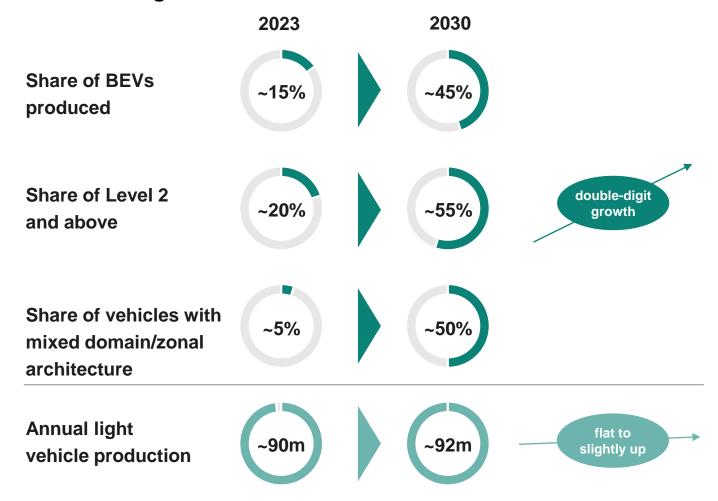
### E/E architecture

- SW-defined cars with higher need for connectivity
- Centralized signal processing by zone computers
- Smart switches for decentralized power distribution

### **Comfort and premium features**

- More loads (motors, heating, cooling etc.)
- Elaborate interior and exterior lighting

### Overview of growth vectors until 2030



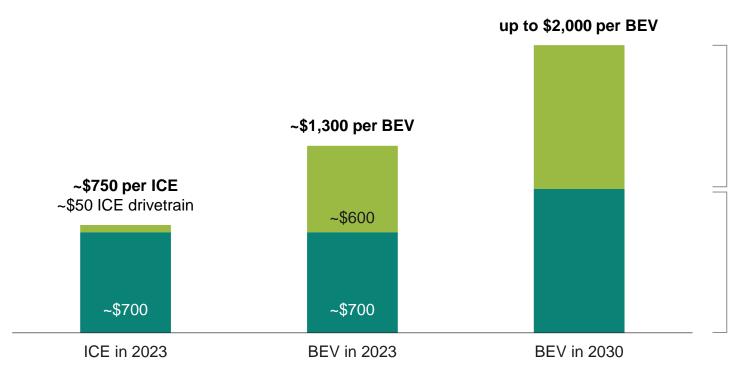
Infineon estimates

# Infineon is the world leader in automotive semis, serving all key applications and benefiting strongly from content growth



### Semiconductor bill-of-material in a car in 2023 and 2030

[USD]



- Semis for drivetrain function (e.g. Inverters, on-board chargers, BMS, etc.)
- Semis for non-drivetrain functions

### Key applications for drivetrain semis:

- Inverter
- On-board charger (OBC)
- DC-DC converter
- Battery management system (BMS)
- Auxiliaries

### Key applications for non-drivetrain semis:

- Autonomous and automated driving (ADAS/AD)
- Safety and advanced security
- Comfort and premium
- Connectivity
- Infotainment

Based on TechInsights: Global xEV System Semiconductor and Sensor Demand Forecast 2019-2028. October 2023; Infineon

# Infineon benefits from Chinese OEMs, at the same time portfolio breadth, quality and innovation ensure stickiness



### Infineon is present in a multitude of different applications



- >40 different applications, covering all segments: ADAS, traction inverter, BMS, standard safety, and comfort etc.
- Hundreds of different products, incl.>20 MCUs incl. software
- System solution (P2S) levering combined Infineon product advantages, e.g., motor control MCU + driver + MOSFETs;
   MCU for signal pre-processing + radar
- Infineon value: >€800/car

### Infineon auto sales track record in China

FY	ATV y-y sales growth
FY22	+35%
FY23	+20%

High innovation pace and at the same time platform stickiness of up to 10 years



High quality suppliers are key for Chinese export ambitions



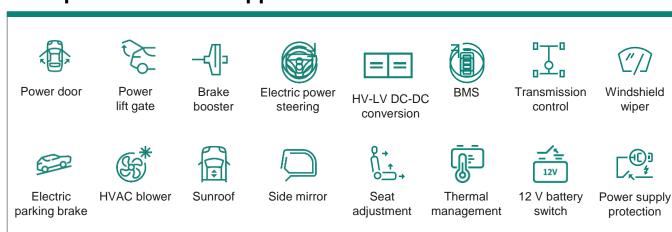
Content growth even excluding power semis



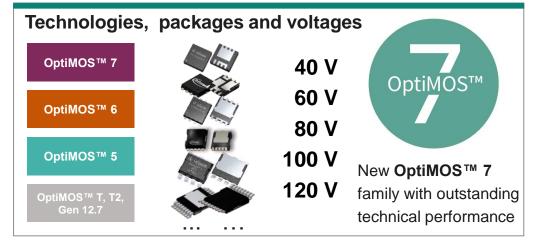
## Number of power MOSFETs per car continues to increase, and drives accelerated growth for the leading portfolio



### **Examples of MOSFET applications**



### Latest portfolio with constant innovation



### Infineon's revenue growth



### Infineon offers broadest portfolio (>600 products) and eco-system to address specific and high-margin applications:

all segments: body, chassis, safety, ADAS/AD, powertrain

embedded control, gate driver, MOSFETs, software, P2S

100 to 180 MOSFETs are used per vehicle in ~90 different applications in

- entire eco-system with digital twins
- simulation environment (esp. for motor control)

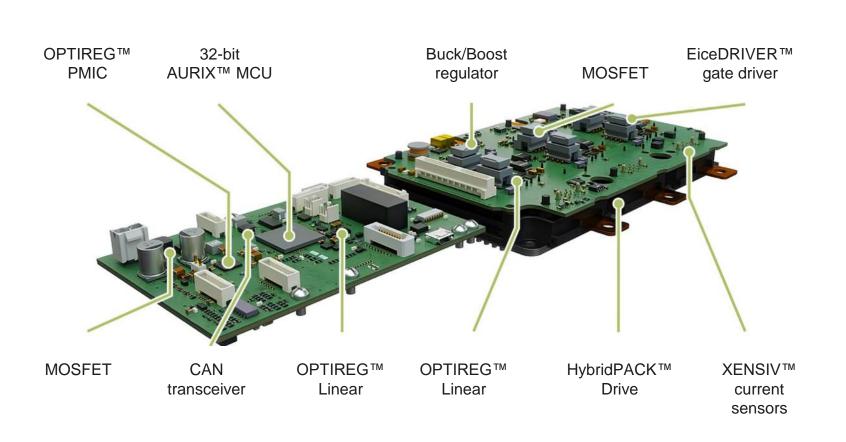
## **Electromobility**



# Infineon's broad product portfolio and system understanding enable higher BoM and allows for compact designs and fast T2M



### Infineon inverter reference design, covering up to 95% of value



### P2S (product-to-system approach)

- Reference design for up to 300 kW, further customization possible
- System solution for easy implementation
- Fast time-to-market (T2M)

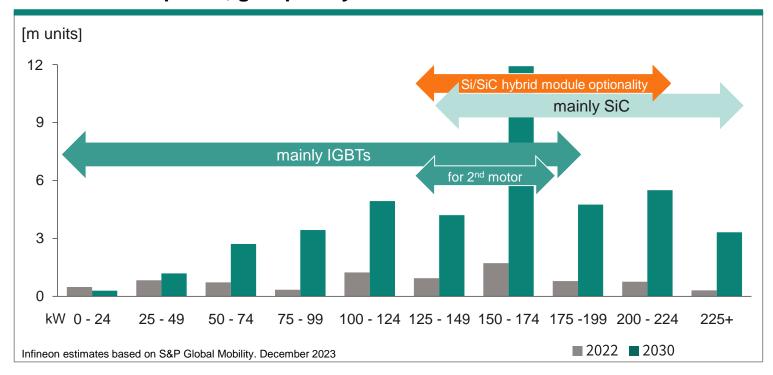
### Freedom of choice

- IGBT and SiC in 750/1,200 V scale up to preferred power class
- HybridPACK™ Drive CoolSiC™ Gen2 continuous operation at 175°C
- EiceDRIVER™ gate driver Gen3 optimized for CoolSiC™
- Optimized 32-bit AURIX™ MCU

## Leading the growth in IGBTs (bare die, discrete and modules) including Si/SiC hybrid designs



#### Electric motor power, grouped by 25 kW increments



- IGBTs will still account for ~40% of power semis in traction inverters in 2030;
   also benefitting from Si/SiC hybrid (fusion) solutions and modules
- IGBTs are essential for the growth of affordable electric cars
- Infineon can leverage scale effects in packaging R&D and S&M for SiC

#### First SiC-MOSFET/IGBT fusion module



#### Infineon's revenue growth



## World-scale capacity, unmatched portfolio breadth and our worldwide customer base lead to accelerated growth in SiC



#### Leading SiC technology and production efficiency

- Unrivaled productivity with worldscale fab and most diversified supplier network
- Superior trench technology and highest reliability
- Extensive packaging portfolio and complete system competence



#### Most scalable SiC auto portfolio

650 V

750 V

V 1,200 V



#### Continued strong SiC design-win momentum

















































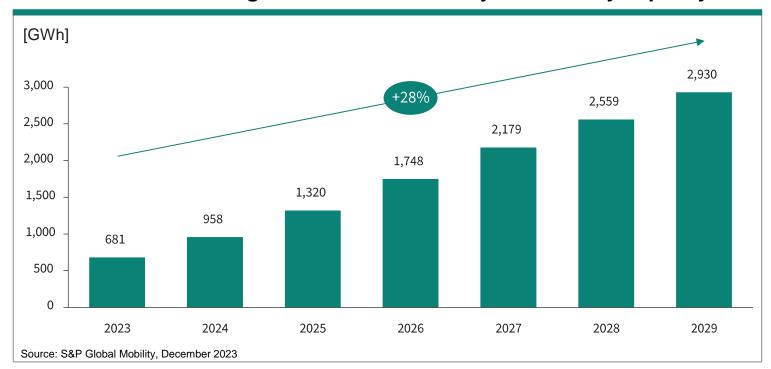




# Infineon's extended BMS (battery management system) product portfolio paves the way for an exceptional growth story



#### Demand for BMS analog frontend ICs driven by BEV battery capacity

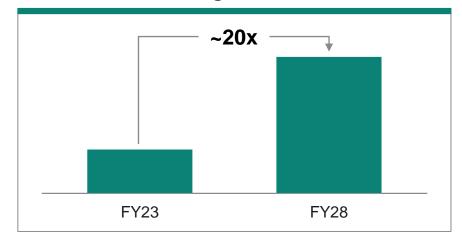


- Drivers for BoM: increasing battery capacity, more cells, more channels
- Triple-digit million € design-win in pipeline
- Additional upside from non-automotive markets: ESS, street lighting, forklifts

#### **BMS** analog frontend IC



#### Infineon's revenue growth



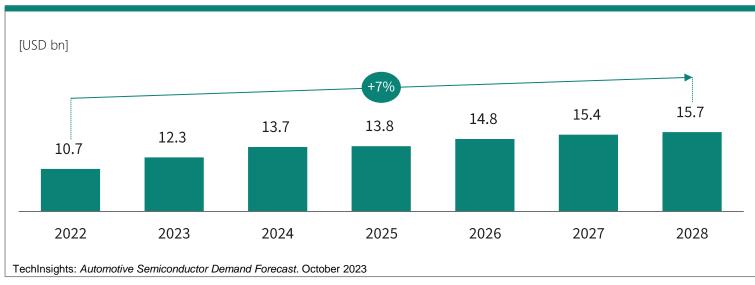
# **Automated Driving**



### AURIX™ MCU is the gold standard for ADAS/AD, control, safety, and high-speed in-vehicle network



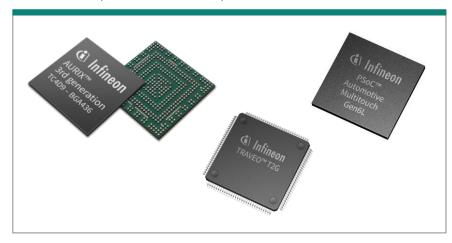
#### Total automotive MCU market development, excl. MPUs and SoCs



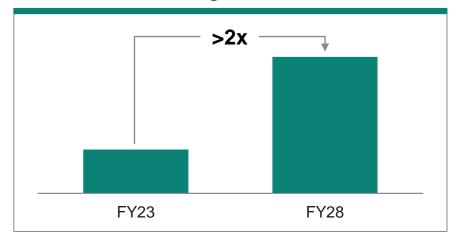
### €19bn MCU design-win volume secured

- Total automotive MCU design-win volume in the last four years exceeded €19bn
- Design-wins covering current and next decade ensuring robust and long-lasting growth
- Up to 40 MCUs per vehicle awarded to Infineon
- Strongest momentum in essential MCUs for E/E architecture, ADAS/AD, and xEV
- Around €3bn of revenues already in 2023

#### **AURIX™**, **TRAVEO™**, and **PSoC™** families



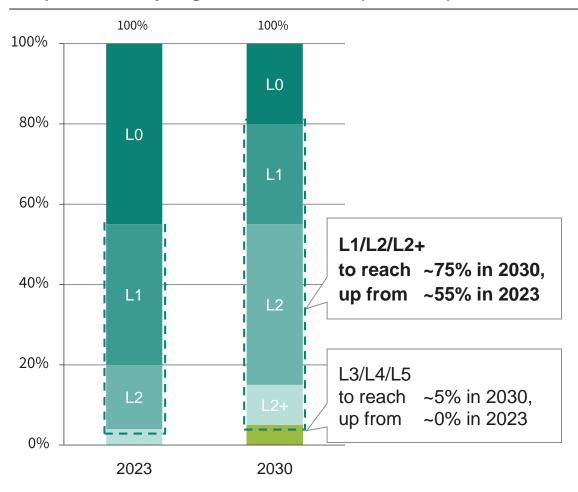
#### Infineon's revenue growth



### Growth of L1/L2/L2+ is the main driver of ADAS semiconductor content until 2030

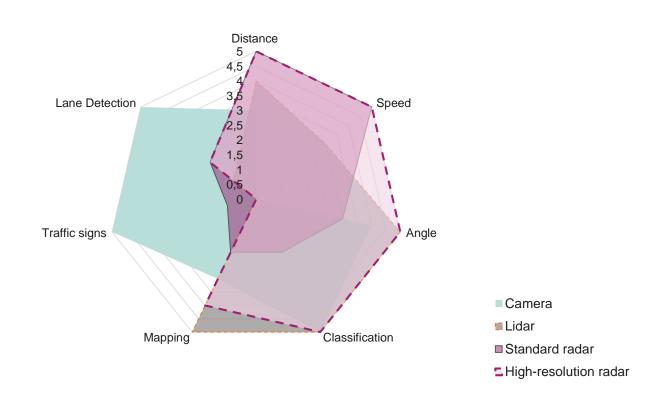


#### Car production by degree of automation (SAE level)



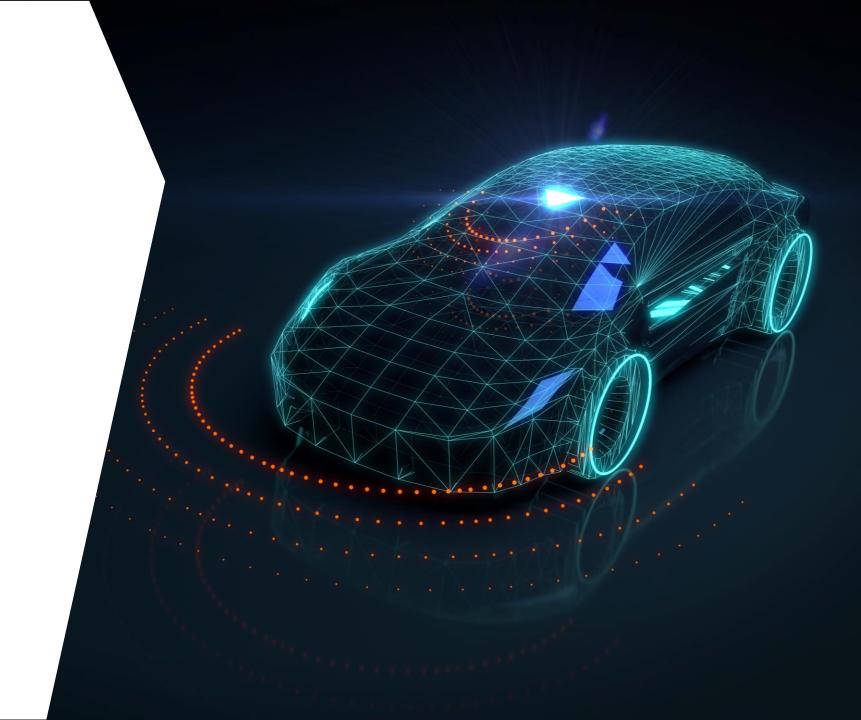
#### Market research companies; Infineon

#### 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

### E/E architecture



### Infineon and Vitesco intensify long-term partnership: AURIX™ TC4x MCUs for E/E architecture to reach volume of > €1bn



#### **AURIX™ TC4x MCU family in new E/E architectures**

- The multi-year agreement takes effect starting in 2027 and will last until mid of next decade
- Joint objective to further improve efficiency and system costs for electrified vehicles
- Functional safety and cybersecurity in compliance with ISO 26262 and ISO/SAE 21434
- The high-performance AURIX™ TC4x MCUs will be used in electronic systems for new vehicle E/E architectures
- Potential use cases of Infineon AURIX™ TC4x MCU in vehicle motion applications:
  - next-generation domain and zone controllers
  - next-generation software-defined vehicle
  - xEV: traction inverter, OBC, DC-DC converter, BMS
  - power distribution, cybersecurity, network functions



zone controller unit

DC-DC converter

HV/LV electronics

e-motor electronics

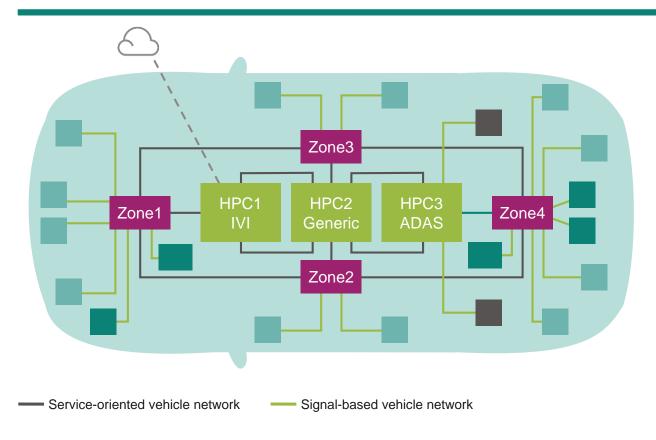




# Infineon strongly benefits from new E/E architectures that drive centralization of data and decentralization of power distribution



#### E/E architecture in a software-defined vehicle



New E/E architectures lead to more centralized processing of data and signal while more decentralized power distribution.

### Components of E/E architecture and corresponding applications addressed by Infineon

High Performance Computing (HPC)	Safety companion MCU for service- oriented SoCs, secure trust anchor, fail-safe power supply
Zone	Zone controller, gateway controller, incl. protocol translation, smart power distribution
Control	Smart real-time mechatronics (e.g. transmission, motor control, power steering, braking), BMS
Complex sensors and actuators	Radar, incl. signal pre-processing, bus connections, dedicated Al accelerators, camera
Simple sensors and actuators	Smart functional ECU (e.g. seat adjustment, power window, central lock, wiper), touch pad

### Power distribution becomes a critical aspect of the E/E architecture and the SW-defined vehicle



#### New applications for intelligent power distribution ...



& isolation



Load control &

self protection





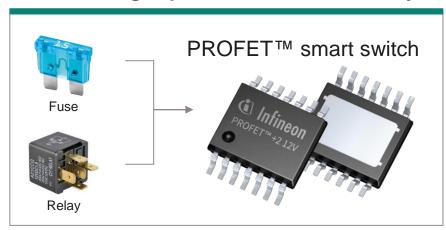


Wire protection

Load supply protection

Active during parking

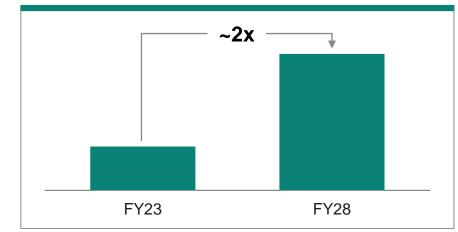
#### ... are driving replacement of fuses/relays



#### Smart switches are mandatory for SAE L3 and above

- Superiority of semiconductors over fuses and relays:
  - Fast failure isolation (< 500 μs) and activation of an alternative supply</li>
  - Configurable wire protection
  - Diagnosis and non-destructive recovery
- Mandatory for SAE levels L3, L4 and L5
- Growth of smart switches per car:
  - Volume OEMs: from today's ~50 pieces/car towards ~200 pieces/car by 2028+
  - Innovator OEMs: already ~200 pieces/car today

#### Infineon's revenue growth



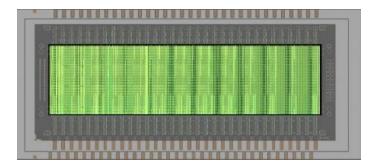
## Industry-leading, premium lighting technology offers enhanced user experience on the road



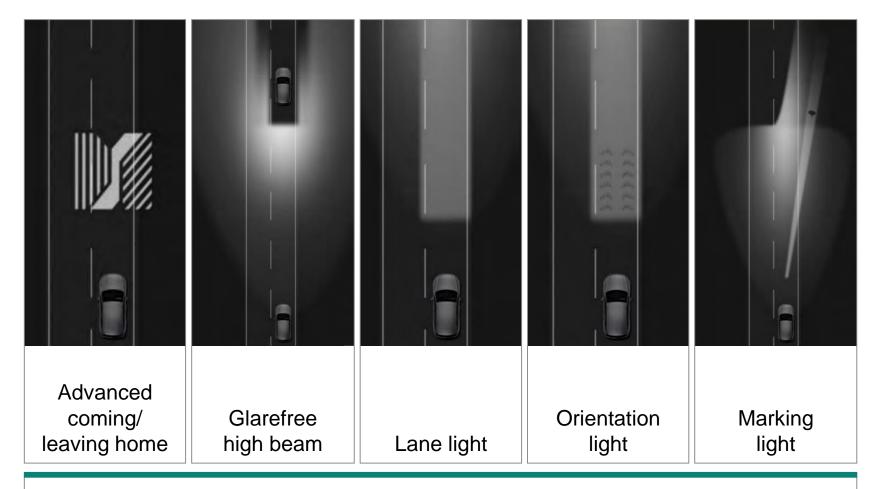
#### **Key facts**

- Infineon driver IC controls each of the 16K µLEDs individually with outstanding luminous intensity
- Lead customer:
   German premium OEM
- Next-generation lighting technology under development

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



Courtesy: Nichia



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

Courtesy: Audi AG

# 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

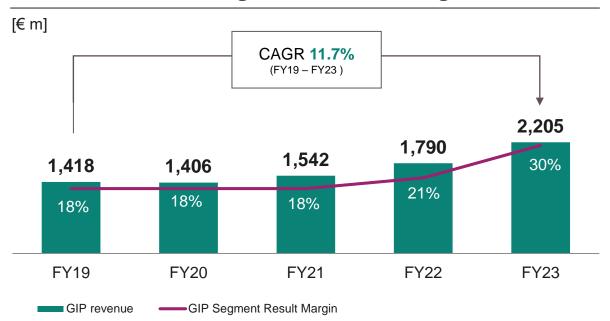
# **Green Industrial Power**



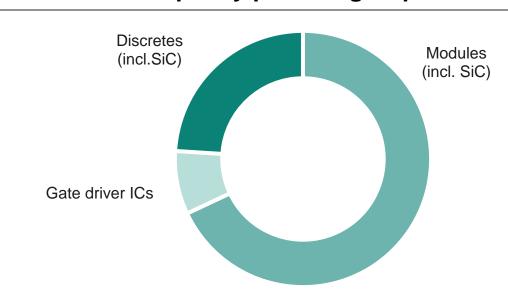
### GIP at a glance



#### **GIP revenue and Segment Result Margin**



#### FY23 revenue split by product group



#### **Key customers**



































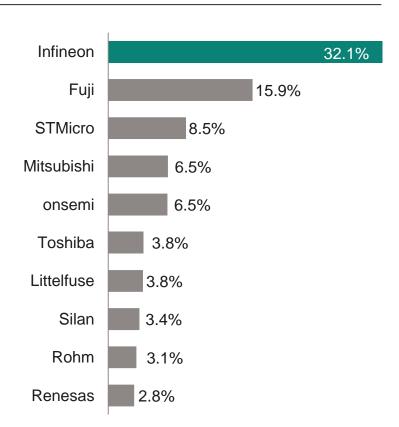






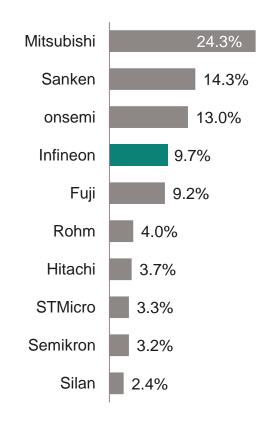
**Discrete IGBTs** 

2022 total market: \$2.5bn



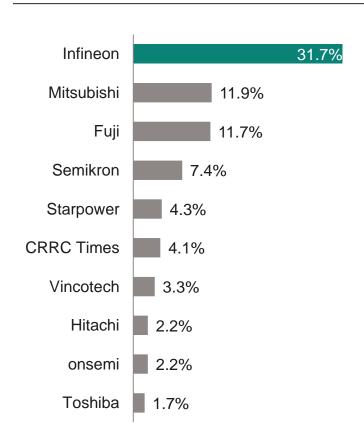
#### IPMs<sup>1</sup>

2022 total market: \$2.1bn



#### IGBT modules<sup>2</sup>

2022 total market: \$4.4bn



 $<sup>^{\</sup>rm 1}$  Including MOSFET-based IPMs and IGBT-based IPMs

<sup>&</sup>lt;sup>2</sup> Including standard (non-integrated) IGBT modules and power integrated modules (PIMs)/converter inverter brake (CIB) modules. Based on or includes content supplied by Omdia, "*Power Semiconductor Market Share Database 2022*", Final Version V2 September 2023. Results are not an endorsement of Infineon Technologies AG. Any reliance on these results is at the third party's own risk.

# Positive outlook in Green & Efficient Energy applications and moderate growth in Drives confirm positive GIP market outlook



#### **Applications**

% of FY23 segment revenue<sup>1</sup>



~26% Renewable

Renewable Energy Generation



~11%

Power Infrastructure



~12%

Transportation



~28%

Automation

& Drives



~11% Heating, Ventilation, Air condition



~6%
Home
Appliance

#### Market outlook for CY24



- Photovoltaic installations continue to grow but channel inventory limits PV inverter shipments and respective semi demand
- Growth in wind installations mainly relies on onshore projects (85% onshore, 15% offshore)



- Growth in EV charging infrastructure is further fueled by government programs
- Grid requirements for expansion, modernization and flexibility drive growth in Transmission & Distribution and storage solutions



- Rail transportation units expected to grow high single digits
- E-bus outpacing EV adoption rate and rapid improvement in economics of e-trucks



- New order growth for drives has slowed down, analysts expect market to enter a period of adjustment with drives demand bottoming in 2H CY 2024 and returning to normalized trend
- Global diversification of manufacturing operations support midterm growth



 Steady residential and commercial air condition demand expected, China's government financial support in housing sector shows positive impact on construction completion activity



 Still limited visibility for a recovery, semiconductor demand expected to grow above GDP; continuous increasing demand in selected areas such as smart appliances

<sup>&</sup>lt;sup>1</sup> Does not sum up to 100% due to other applications not shown here

### **GIP** markets accelerate growth – enabling green energy and driving decarbonization



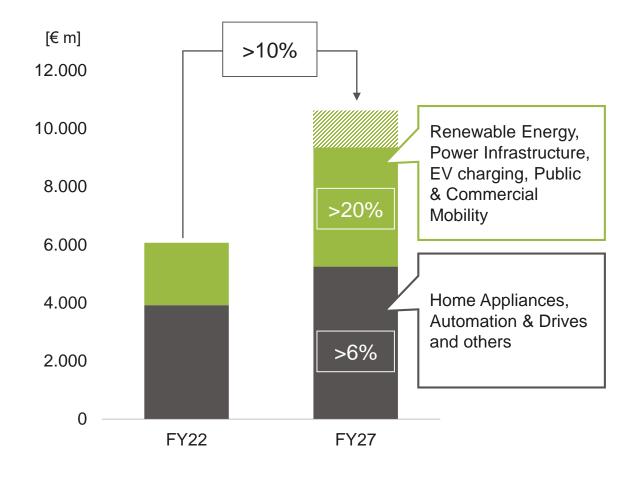
#### **Key facts**

Growth

SiC

**Profitability** 

- The acceleration of the energy transition drives GIP markets
- SiC penetration accelerates
- SiC is a key point of differentiation and drives GIP profitability



Infineon analysis



x% | CAGR FY22-27e

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





#### Generation

Photovoltaic	+4,600 GW
Wind power	+1,900 GW

#### Infrastructure

贯	Grid network	\$600bn annual investments
為	Grid storage	+900 GW
<u>_</u> 5	EV charging	+185m chargers (public and private)
H <sub>3</sub> •           •     •     •     •     •     •	Electrolysis	+560 GW

#### Consumption

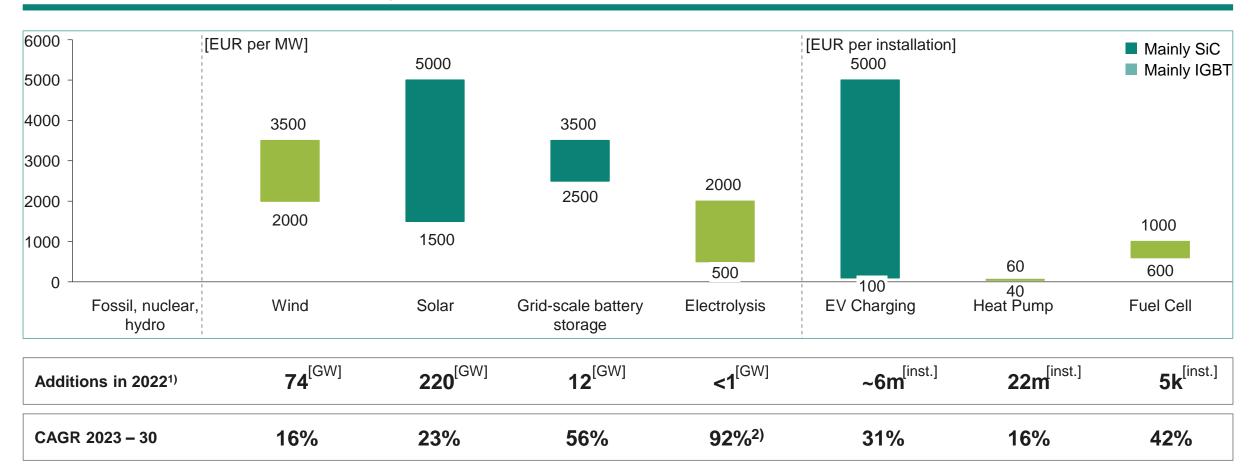
≣₩	Heat pump	+420m units
H2	H <sub>2</sub> Fuel cell <sup>1</sup>	+200k FC EV +200k FC Trucks
Ü	eAviation   eMarine	

Note: Based on Net Zero Scenario (IEA) | Source: IEA - World Energy Outlook, October 2023, 1 Internal Analysis



### Green energy generation provides large business opportunities

#### Power semiconductor content by application

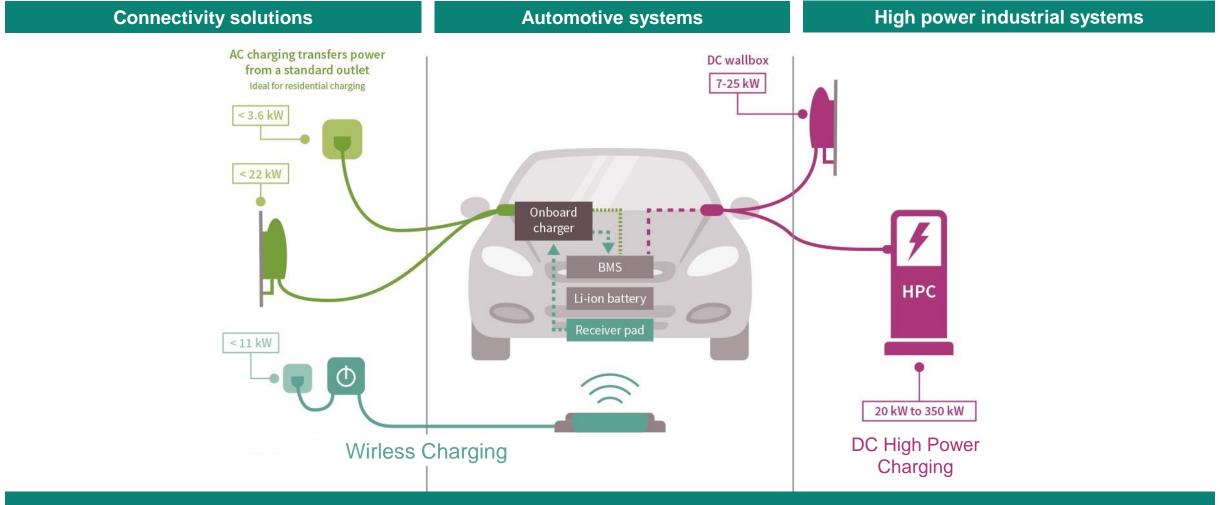


<sup>&</sup>lt;sup>1</sup> IEA: World Energy Outlook, October 2023; Sector Tracking reports October 2023; internal Analysis

<sup>&</sup>lt;sup>2</sup> Based on 270 GW pipeline (midpoint), >100% based on NZE requirements of 560GW

# EV charging is a key strategic application for Infineon We cover the full ecosystem from AC to high power DC charging





Infineon targets the complete EV charging ecosystem from AC to high-power DC

# Different use cases require different types of chargers, incentives and cost positioning will drive the total market



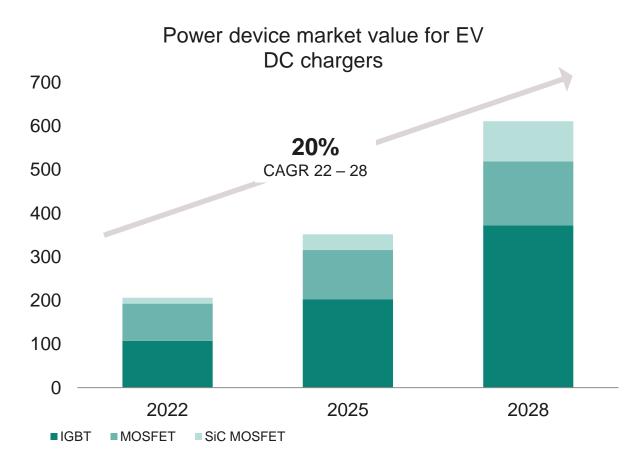
		Residential AC wallbox	Residential DC wallbox	Commercial mid-power charger	Commercial high-power charger
Characteristics	Time to charge 40kWh battery	>2h	>2h	<1h	<20min
	Place of installation	Residential and public domains	Residential and public domains	Cities, commercial, shopping areas	Charging parks, highways
	Typical output power	7-22kW	≤22kW	22kW to 50kW	>50kW
	Bi-directionality possible	yes, with On-board charger	yes	yes	yes for (Bus) fleets
	Preferred power	No power content in	Discret	e power	
	implementation	charger		Mode	ule solutions
	Beyond Power	·Ö· 🖟 🛱			

# We have a complete system solution for the fast growing EV Charger market



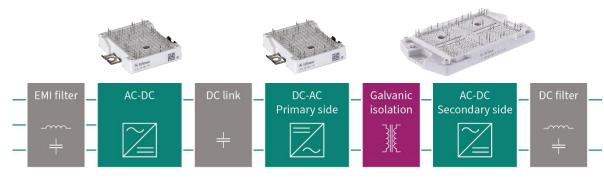
#### **EV** charging is an attractive business opportunity

[\$ m]



#### Infineon extends its market leadership

- Significant CRA signed for EASY 3B SiC-modules
- Infineon offers the full solution for power conversion, control and connectivity



Yole, DC Charging for Automotive 2023

## Energy efficient and reliable rail transport is key to reducing the greenhouse gas emissions



#### **Traction application – Key requirements**

- Energy efficiency
- High power density
- Long lifetime (> 30 years) with demanding mission profiles



#### 3.3 kV CoolSiC™ MOSFET XHP™ 2

- 10% overall losses reduction
- 10% to 25% system volume reduction
- Robust modules with high cycling capabilities
- Less noise



**Enjoy the silence** 

### 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









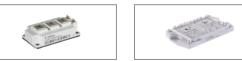














solaredge

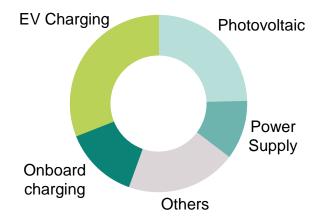














<sup>&</sup>lt;sup>1</sup> Excluding Auto Drivetrain

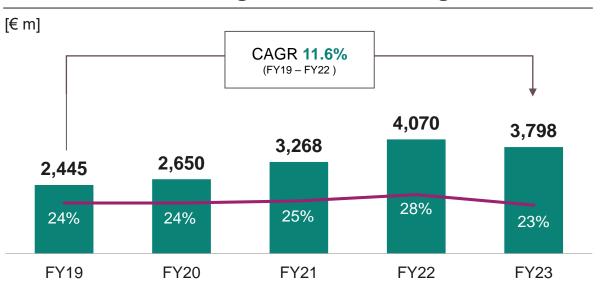
# Power & Sensor Systems



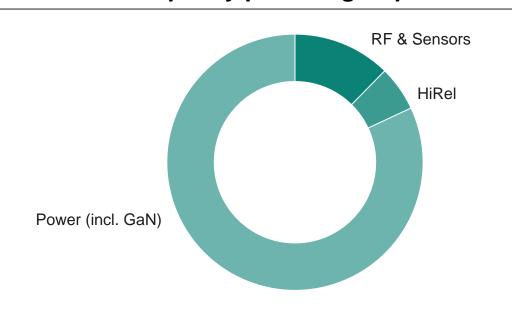
### **PSS** at a glance



#### **PSS revenue and Segment Result Margin**



#### FY23 revenue split by product group



#### **Key customers**

PSS revenue





----PSS Segment Result Margin























### Weakness in most verticals to persist with expected improvement during the course of CY 2024

Market outlook for CY24



#### **Applications**

% of FY23 segment revenue<sup>1</sup>



~15% Computing



~10% Communications



- Server weakness to extend through H1 CY24 with potential recovery in H2 benefits from AI opportunities due to increasing semi content
- PC market shipments are expected to recover in course of CY24, but to remain below pre-pandemic levels



- Total telco capex is forecasted to be flattish and slightly negative in wireless
- Demand in H1 CY24 expected to be weak but with some upside potential in H2



~7% **Smartphones** 



In CY24 v-o-v growth in smartphone shipments expected, recovery should have momentum in H2 CY24



~24% Consumer



Weak macro environment and related inventory digestion expected to persist in H1 CY24, return to growth possible in H2



Industrial



Flattish y-o-y development as weakness in residential solar and automotive markets came in late, reducing growth prospectives

<sup>&</sup>lt;sup>1</sup> 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**

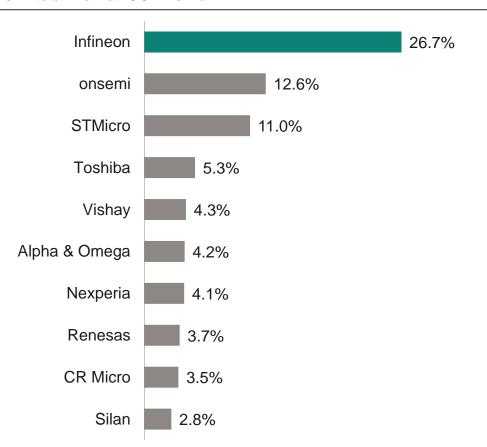


# Infineon is the clear leader in MOSFETs, additional growth potential in power ICs



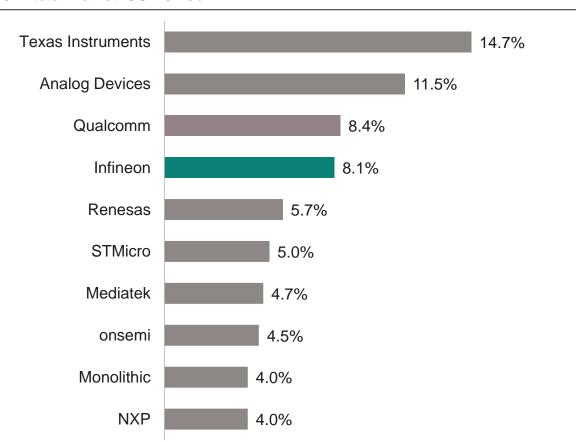
#### Discrete Power MOSFETs<sup>1</sup>

2022 total market: USD 13.1bn



#### Power ICs<sup>2</sup>

2022 total market: USD 32.3bn

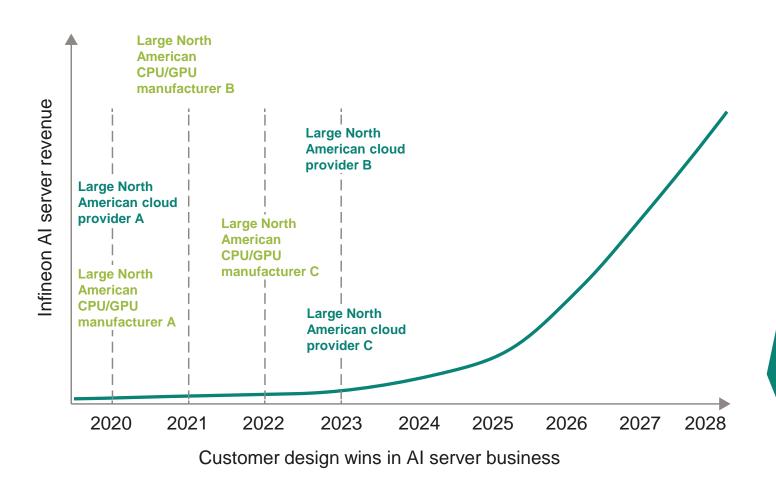


<sup>&</sup>lt;sup>1</sup> Discrete Power MOSFET market includes automotive MOSFETs, Si Power MOSFETs, Si Power MOSFETs, Si Protected MOSFETs and GaN Power Transistors <sup>2</sup> Power IC market includes automotive power ICs.

Based on or includes research from Omdia: *Power Semiconductor Market Share Database 2022*. September 2023. | Results are not an endorsement of Infineon Technologies AG. Any reliance on these results is at the third party's own risk.

### Al will be a strong driver of revenue increase for Infineon's server business





In FY24 Al revenue
in our server business is
expected to be a
low triple digit million amount

Revenue CAGR FY24-29

> 50%

### Al enabled systems demand higher power that further increase semiconductor content

2024

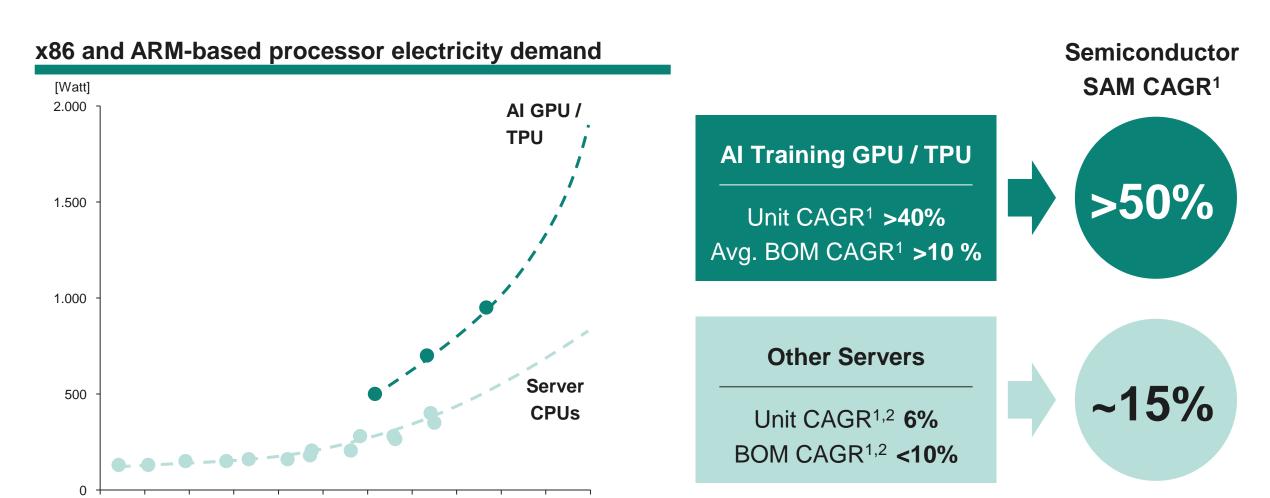
Release date

2026

2028

2030





Source: Company information; Infineon analysis

2012

2014

2010

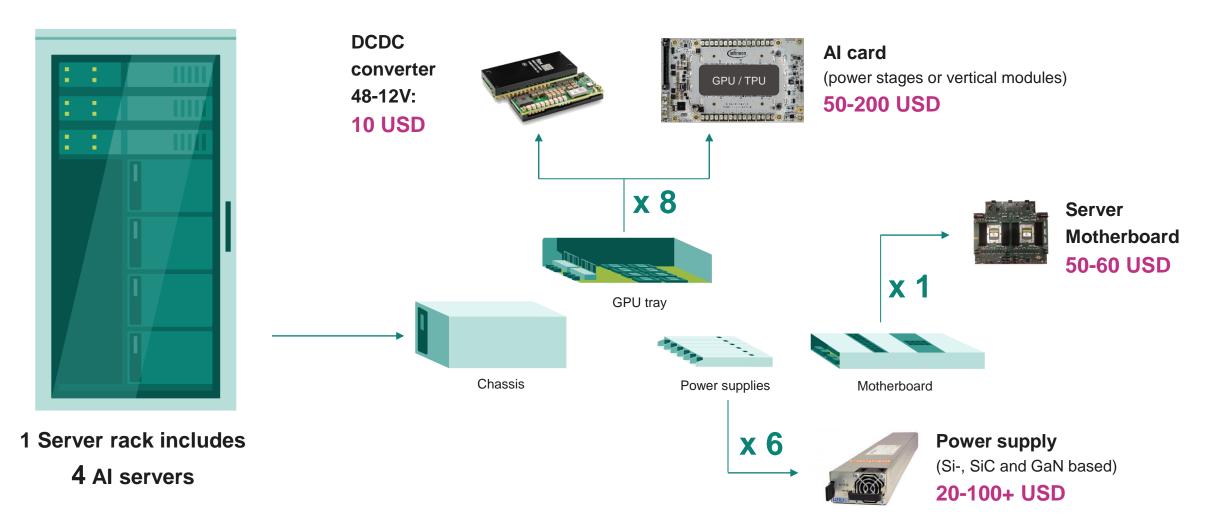
2008

<sup>&</sup>lt;sup>1</sup> CAGR 2023-2027 in Infineon relevant market

<sup>&</sup>lt;sup>2</sup> Incl. Al inference



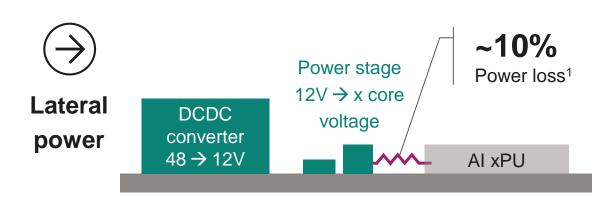
### Average Infineon BOM per Al server about 850 to 1800 USD



**USD** = potential Infineon content per Al server

## 48V architecture combined with Infineon's vertical power solutions delivers best-in-class total cost of ownership

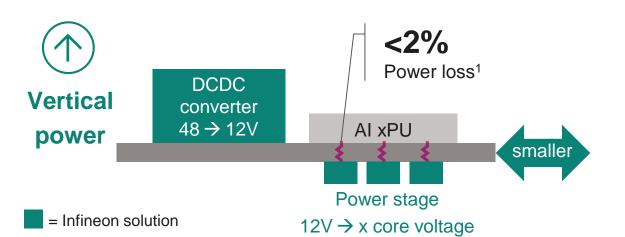




#### **Customer benefits of vertical power delivery**



**Increase power density** via smaller size to enable further increase in compute power





Reduce power losses by >7 MW for an average data center (100,000 CPU nodes)

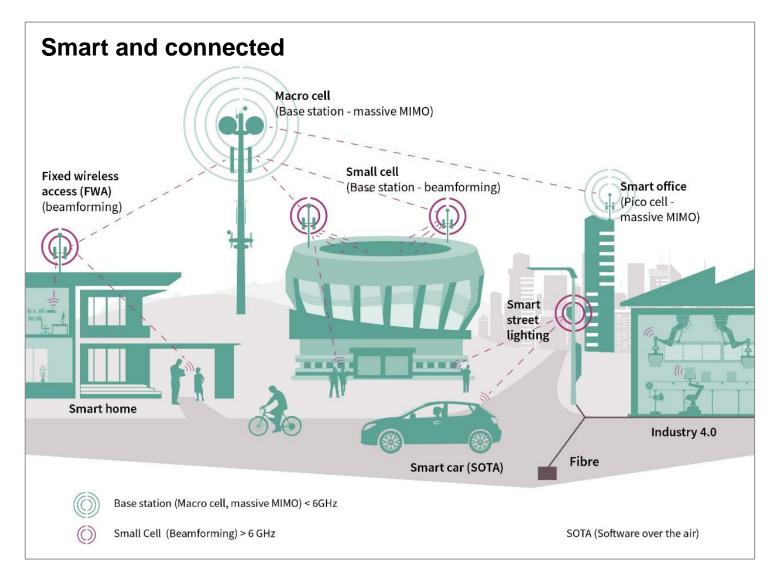


>12% total cost of ownership saving compared to lateral power delivery networks

Source: Infineon calculation <sup>1</sup> Power delivery loss in % of xPU power

# 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

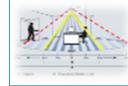


Low power consumption

#### 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 CO<sub>2</sub>

#### **Main applications**

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

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

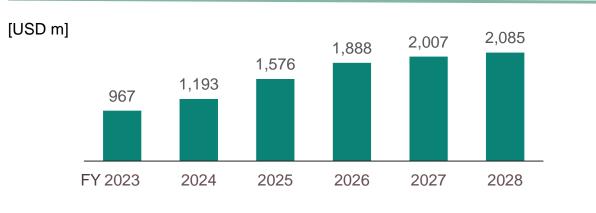
- Smartphone: World-facing and user-facing
- Robotics
- Automotive in-cabin sensing
- Payment terminals

- Heating, ventilation, air conditioning (HVAC)
- Air purifier
- Smart thermostat
- CO<sub>2</sub>/virus risk reduction



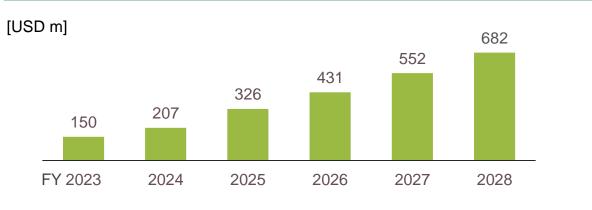
# Sensor markets targeted by PSS offer attractive growth potential

#### **MEMS** microphone market



Source: Infineon estimates

#### Radar IC market (24 GHz and 60 GHz only)



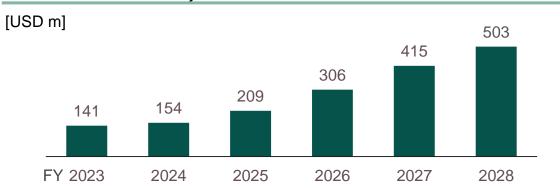
Source: Infineon estimates

#### **3D ToF image sensor market**



Source: Infineon estimates

#### **Environmental CO<sub>2</sub> sensor market\***



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

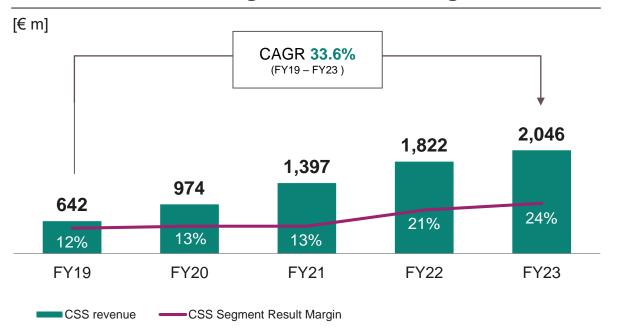
# **Connected Secure Systems**



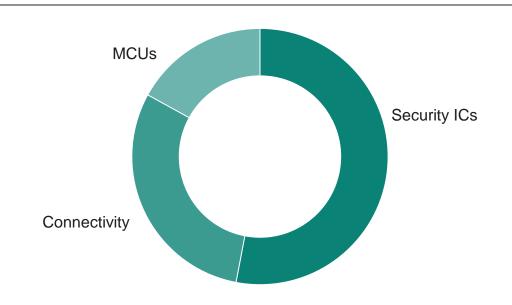
# CSS at a glance



#### **CSS revenue and Segment Result Margin**



#### FY23 revenue split by product group



#### **Key customers**

































# Market demand remains weak across consumer segments influenced by high inventories and continuing macro economic risks

Market outlook for CY24



#### **Applications**

% of FY23 segment revenue



Industrial IoT



Continued macro economic risks limit growth, while trends of Industry 4.0 and Industrial IoT remain



Home **Appliances** 



Although penetration of smart appliances increases, potential deterioration of consumer sentiment limits growth



**Smart Home** 



Stabilization of macroeconomic environment expected to trigger slight growth in the smart home segments, while risks related to consumer spending prevail



Health & Lifestyle



Stabilization of macroeconomic environment could support growth in devices like smartwatches, while risks related to consumer spending prevail



Media, Game & Compute



Main consumer markets are projected to recover later in FY24 as the macroeconomic environment and consumer sentiment improve; however no sharp rebound expected



Automotive



Automotive market is slightly slowing down after better-than-projected development in 2023 due to persisting macroeconomic risks

~37% Smart cards

Industrial and

Consumer IoT



**Payment** 



For the short-term outlook shipment declines are expected due to channel inventory digestion from high stock levels across the value chain



Identification



Stabilization of market growth after post-Covid peak in ePassports, while demand remains high

## CSS empowers the world to easily connect through smart and trusted solutions



#### **Industrial and Consumer IoT**

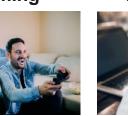
Payment, ID, Ticketing



**Automotive** 



Gaming



**Wearables** 



Identification





#### **Compute**



#### **Wireless Connectivity**



#### **Security**



**Software** 

# Infineon acquires Ultra-Wideband (UWB) pioneer 3db Access to further strengthen our connectivity portfolio



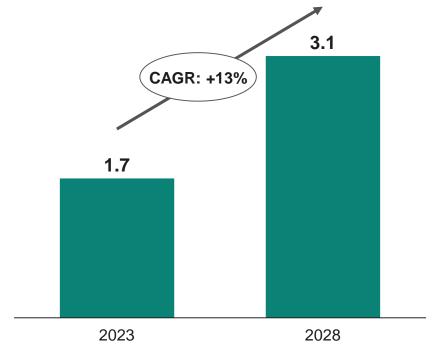


#### The acquisition of 3db Access enables Infineon to:

- Add UWB to our connectivity range, including Wi-Fi, Bluetooth/Bluetooth Low Energy and NFC solutions
- Strengthen our portfolio for secured smart access, precise localization and enhanced sensing
- Accelerate our IoT roadmap for leveraging the market opportunities of secured, connected devices
- Create full system solutions with unique features that combine low-power consumption, enhanced physical layer security, feature-rich RF front-end configurations and localization-optimized hardware architecture

#### UWB chipset market growth<sup>1</sup>





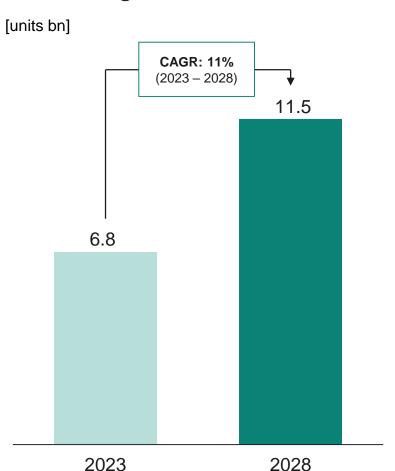
 Infineon's target applications in automotive, industrial and consumer IoT are expected to drive significant growth in the UWB market in the next years

<sup>&</sup>lt;sup>1</sup>Source: ABI Research – Wireless Connectivity Technologies (Q3-2023)





#### IoT market growth



#### Four success factors to differentiate



ABI Research: Wireless Connectivity Technology Segmentation and Addressable Markets – Q2 23 June 2023; excluding Chromebooks, desktop PCs, feature phones, media tablets, netbooks, smartphones, white box tablets.

# Financial synergy success marked by our journey to becoming a leading IoT solution provider



#### STEP 1

**Product Sell** 

**Products:** 

Sensors Power

IFX content per unit:

Up to €2



#### STEP 2

Synergy Sell

**Products:** 

Sensors Power MCU







IFX content per unit:

Up to €3.5



#### STEP 3

System Sell

**Products:** 

Wireless and MCU
Hardware Security
Power
Memory
Radar
3D ToF
NFC Energy Harvesting

IFX content per unit:

Up to €10



#### STEP 4

**Solution Sell** 

Additional offering:

Performance

Advanced sensing algorithms

Integration

Highly integrated system

AI / ML

First stage motion discrimination, acoustic event detection

**Services** 

IFX content per unit:

>€10



2021 2022

2023

2024+

# infineon

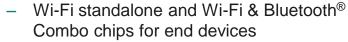
# CSS offers a compelling product portfolio and roadmap for IoT

#### Microcontrollers (PSoC™ and XMC™)

- PSoC™ family for general purpose,
   XMC™ family for industrial
- Strength in low power, high performance, and capacitive touch sensing
- Compelling roadmap focused on AI, security, and integrated connectivity



#### **AIROC™ Wi-Fi and Combos**

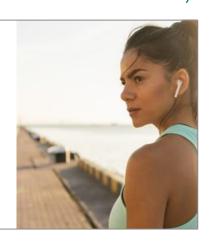


- Focus on innovation for IoT applications: reliability and power
- Strong leader for battery-operated Wi-Fi
- Recent new product introduced Wi-Fi 6
   & 6E the first IoT-focused product in the brand new 6 GHz band



#### **AIROC™ Bluetooth®**

- Portfolio of standalone and PSoC™integrated Bluetooth<sup>®</sup> and Bluetooth<sup>®</sup> Low Energy products
- Strong position in wearables, gaming, remote controls, HID, and automotive
- Introducing new products to support the newest smart-home industry standard: Matter



#### ModusToolbox™ and Software

- ModusToolbox™ is a rich embedded software development toolset to accelerate and simplify development for Infineon MCUs, and the core development platform for Infineon software
- Strong set of SW features in MCU and connectivity SDK's
- CIRRENT™ is a cloud services platform for data-driven improvement of connectivity and delivery of innovative IoT services





# Intelligence moves into devices - Edge-Al is a key enabler of IoT and beyond, offering a significant market opportunity



#### **Edge-Al and benefits**

- Intelligent IoT devices require substantial processing at the edge
- Edge-Al ensures optimal use of network, computing, and energy resources
- Key benefits to enable IoT are:



Low latency and deterministic response

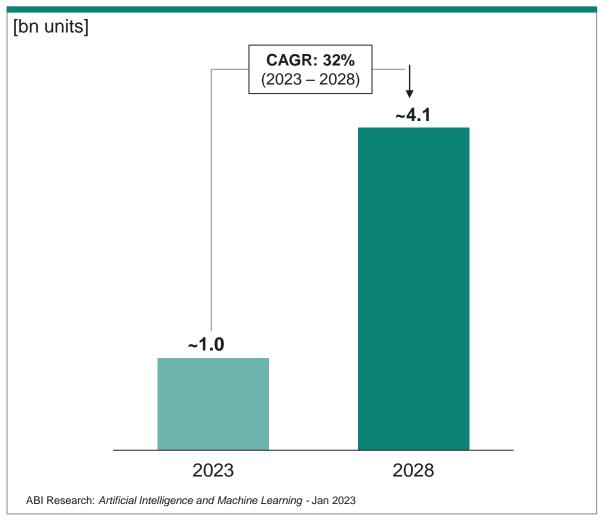


Higher power efficiency



Improved security and data privacy

#### Tiny ML worldwide device shipment



# Infineon's Edge-Al enabling ecosystem allows for portfolio expansion to offer differentiated solutions for smarter IoT devices



**Edge-Al optimized hardware products from Infineon** 

**MCU** 

Connectivity

**Sensors** 

**Additional Infineon products** 

Infineon's ecosystem as an enabler for Edge-Al

Infineon's software ecosystem



End-to-end machine learning toolchain



Al partners









Digital services





Differentiated Edge-Al based solutions for a broad selection of use cases



## Going forward, we will capture value through differentiated Edge-Al based solutions to enable new use cases for our customers



#### **Examples for Infineon's differentiated Edge-Al based solutions**

MCU connectivity sensors



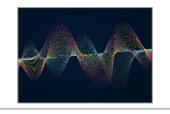
Infineon AI tools in ModusToolbox™

ModusToolbox™



Edge compute model deployment

Audio classification



Predictive maintainence



Fall detection



**PSoC**<sup>TM</sup> **AIROC™ XENSIV**<sup>TM</sup> sensors



Infineon Al tools in ModusToolbox™



ModusToolbox™

Seamless data capturing and Machine Learning models deployment for IoT devices



**XENSIV**<sup>TM</sup> sensors and edge implementation



Infineon AI tools in ModusToolbox™





Digital-twin and predictive analytics services for industrial compressors



# Leading in security solutions: Wide-spanning offering for trusted contactless transactions, trusted identities, and authentication



#### **Device Authentication**

- Battery authentication
- Printer authentication
- Smart inhaler
- Wireless charging
- Customized authentication solutions



#### **IoT Security**

- Automotive Security
- Cellular IoT Nodes
- Industrial Security
- IoT Security
- Security in PC, Laptop & Tablets
- Smart Home



#### **Payment Solutions**

- Credit and debit cards
- Dual Interface biometric cards
- Smart wearables & accessories
- Tickets for public transport
- Smart connected systems





#### **Identity Solutions**

- Electronic passports
- ID cards
- Blockchain
- NFC tags





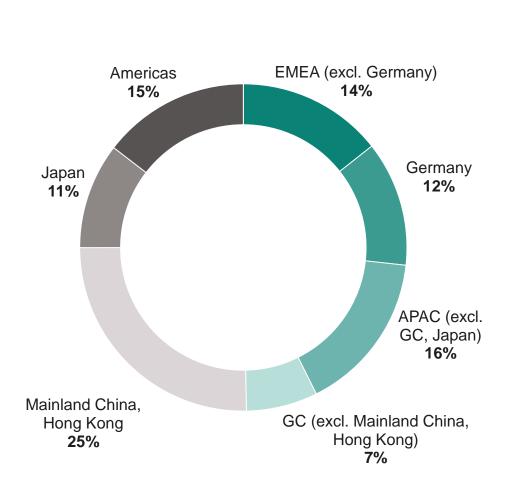
# Selected financial figures



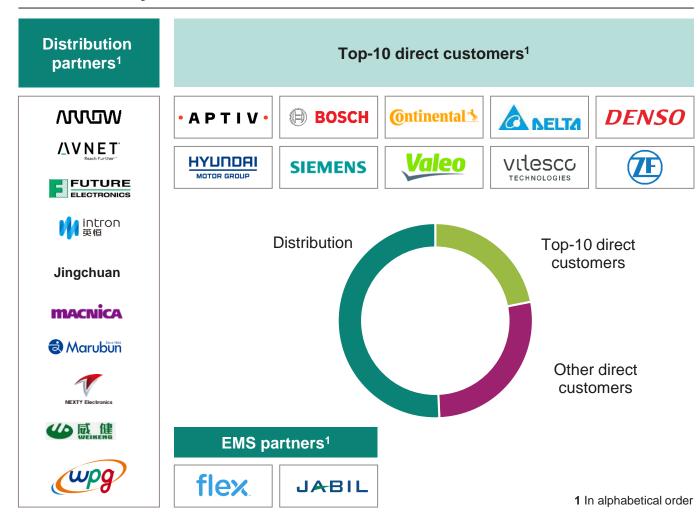
# Strong presence in all regions; well-balanced customer portfolio; no customer represents more than 10% of total sales



#### FY23 revenue by region



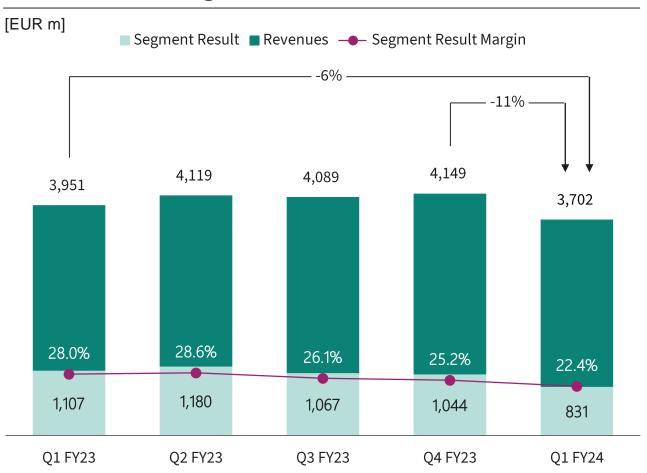
#### Revenue by sales channel



### **Group financial performance**



#### **Revenues and Segment Result**



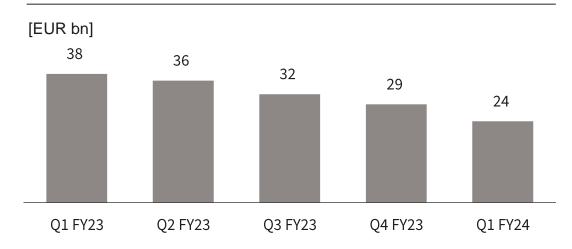
#### **USD** exchange rate

Average revenue exchange rate

ø USD/EUR

<u>Q1</u>	<u>Q4</u>	<u>Q1</u>
FY23	FY23	FY24
1.02	1.09	1.08

#### Order backlog<sup>1</sup>



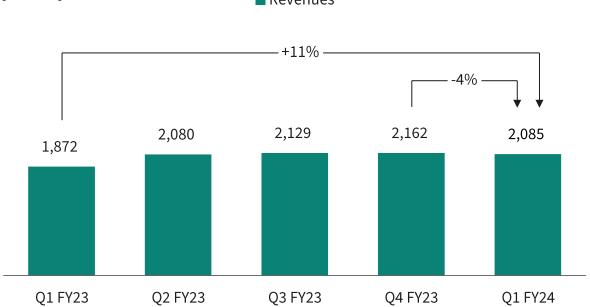
<sup>&</sup>lt;sup>1</sup> See notes for definition

## **Automotive (ATV)**

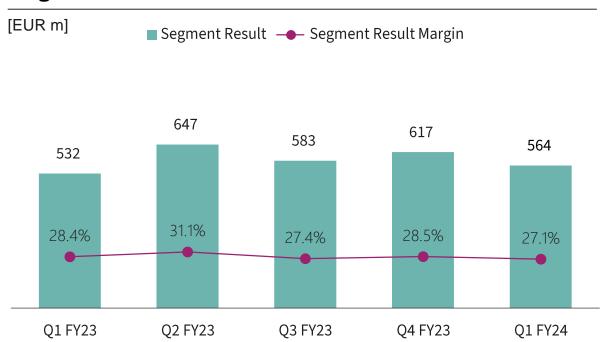


#### Revenues

# [EUR m] Revenues



#### **Segment Result**

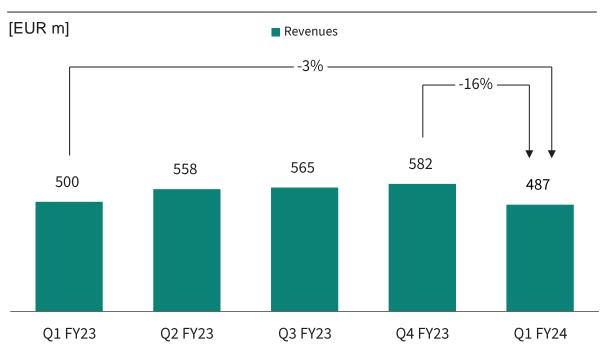


- Calendar year-end inventory management by customers resulted in expected revenue decline
- Our leading product portfolio and content expansion driven by e-mobility, ADAS and innovative electrical-electronic architectures continues to provide growth
- For FY24, anticipated revenue growth continues to be in the low double-digit percentage range, net of currency impact, with an anticipated segment result margin between 25-28%

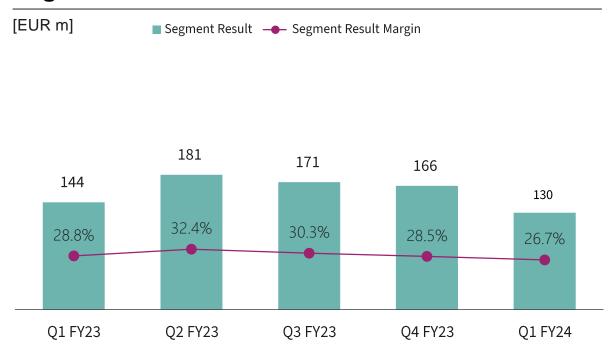




#### Revenues



#### **Segment Result**



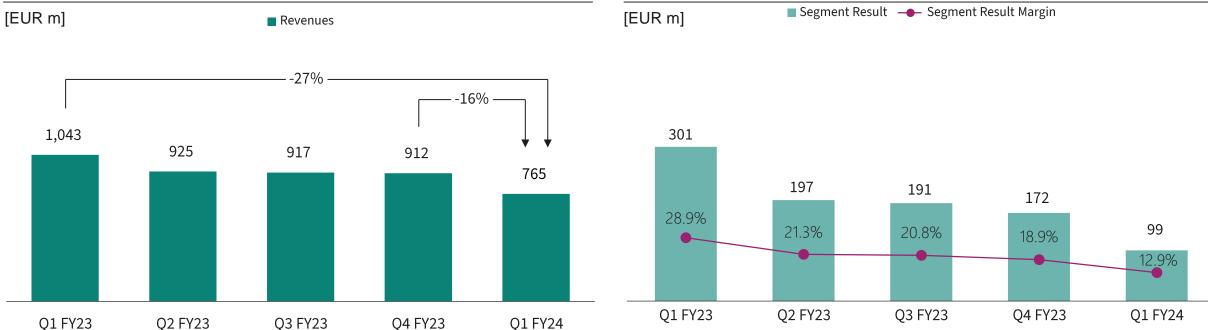
- Revenue decline partly from seasonality as well as from inventory adjustments by industrial customers
- Demand for industrial drives is expected to further weaken, while markets for home appliances continue to be subdued
- Robust demand for decarbonization-related applications, but currently seeing areas of high inventory levels







# Segment Result

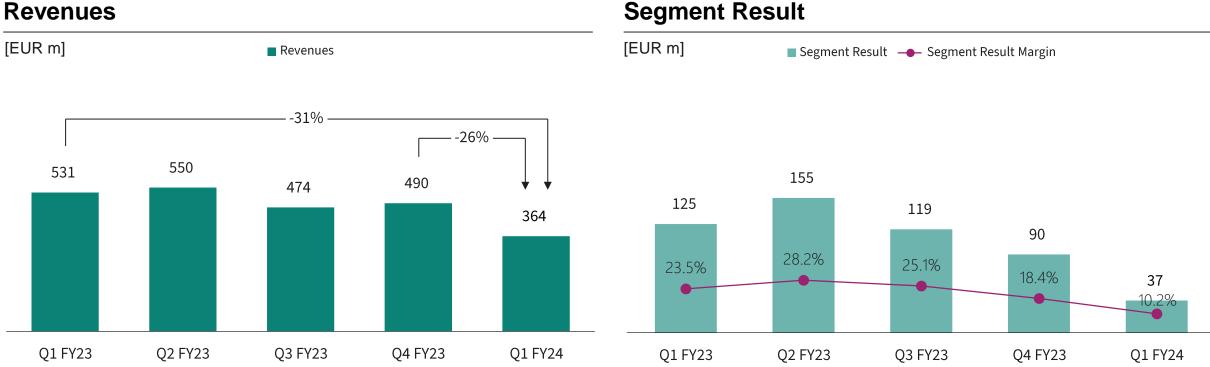


- Revenue decline mainly driven by MOSFETs for consumer-facing applications, whereas smartphone components saw a small uptick
- Most end markets of PSS are facing weak demand and are experiencing a prolonged phase of inventory digestion
- Initial signs for increased customer uptake for our leading AI power management solutions





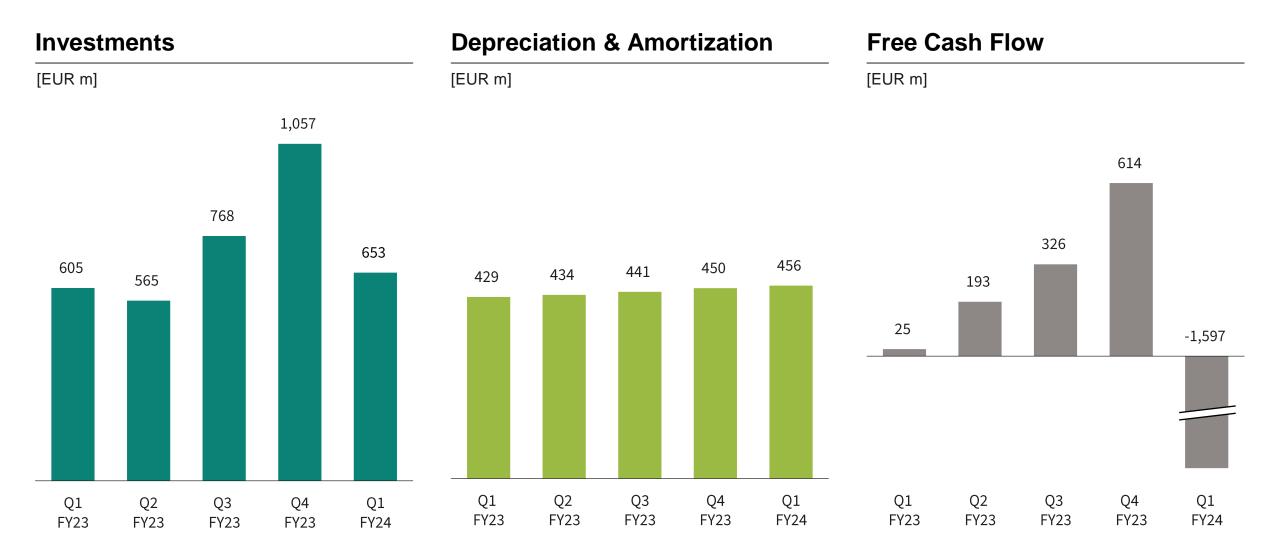
### Revenues



- Revenue and segment result decrease driven by end market weakness and on-going inventory correction
- Consumer, compute, communication and IoT as well as security markets characterized by high inventory levels and the need for depletion periods
- We continue to see attractive structural growth opportunities from IoT adoption, and will keep fostering innovation



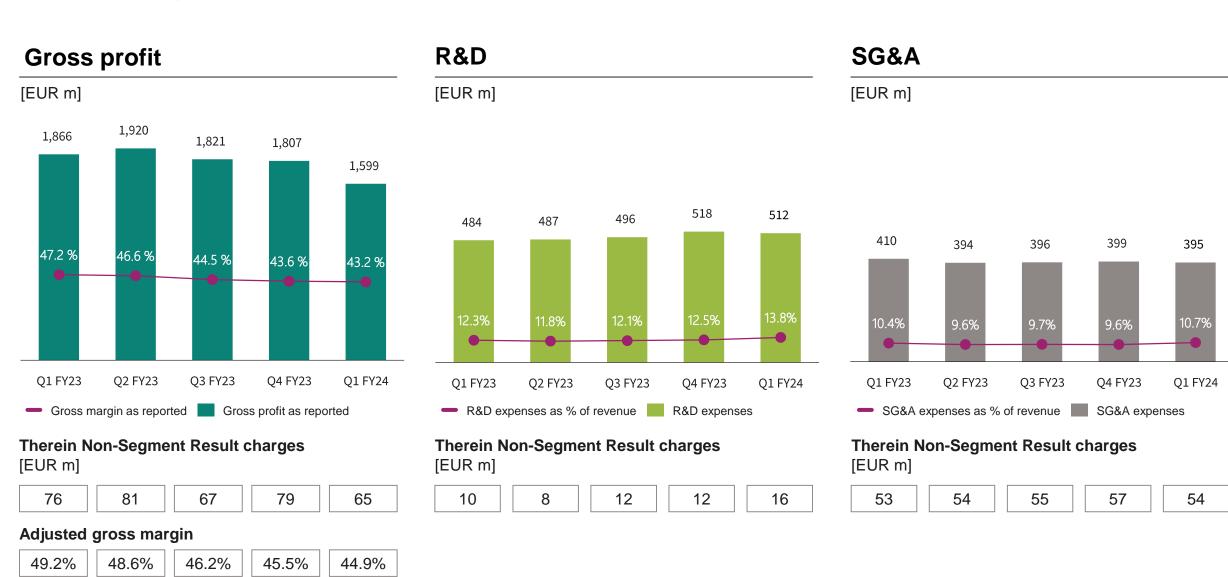
### Investments, Depreciation & Amortization and Free Cash Flow





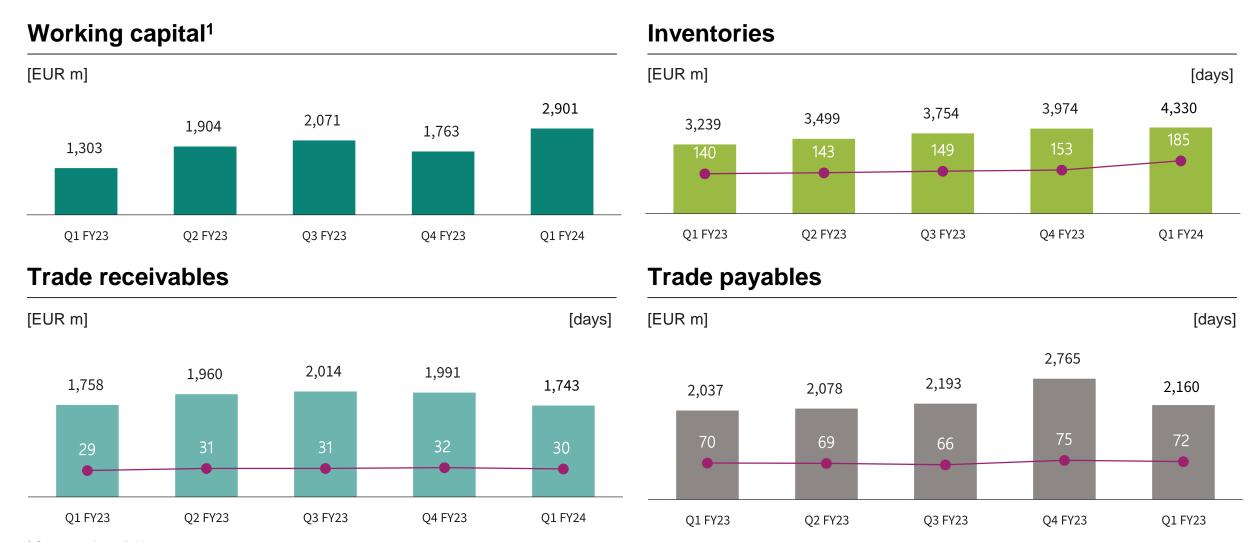


### **Gross margin and Opex**





# Working capital, in particular trade working capital components



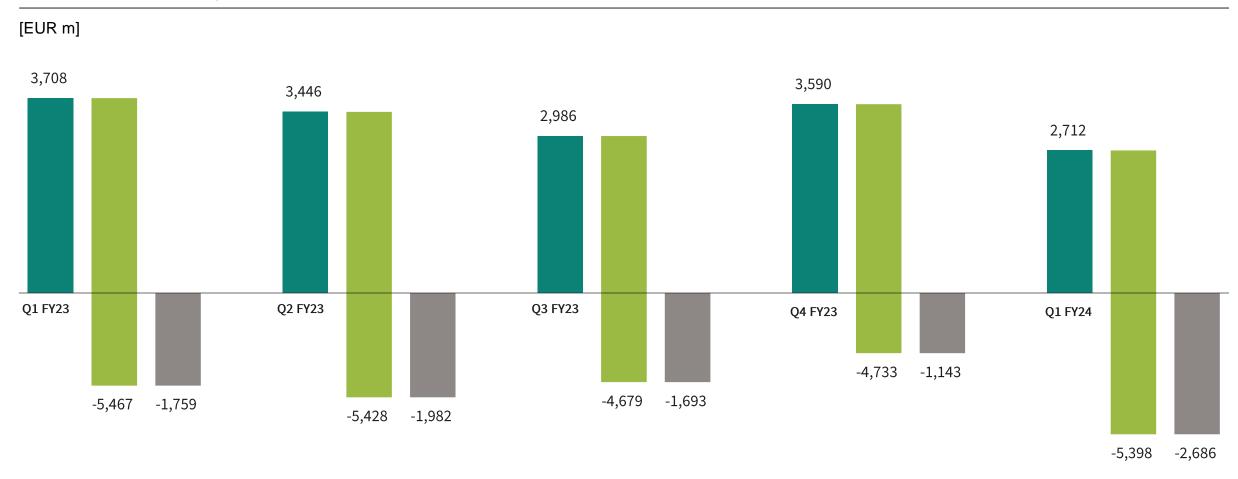
<sup>&</sup>lt;sup>1</sup> See notes for definition

# **Liquidity development**



#### **Historical liquidity development**

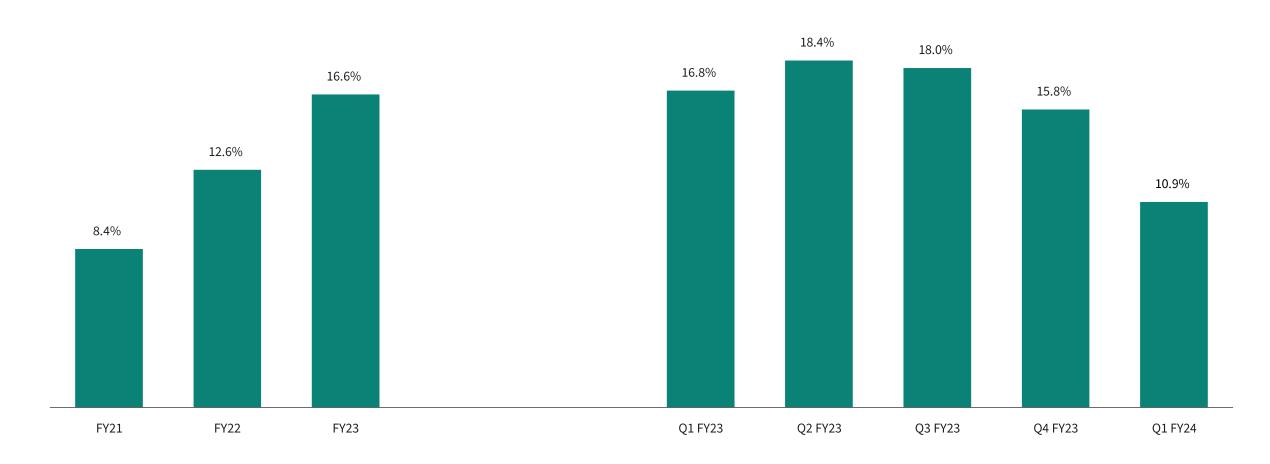
Gross Cash Gross Debt Net Cash/Debt



# Return on capital employed



#### **Historical development**



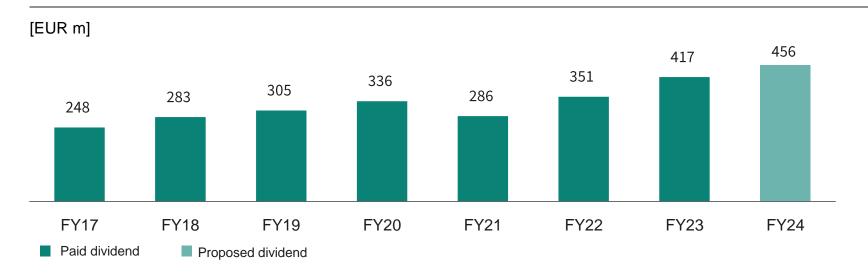


### **Earnings-per-share and total cash return**

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



#### Total cash return to shareholders via dividends



- Proposed dividend for FY23: €0.35 per share
- Proposed dividend payout of €456m for FY23

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

Investment grade



	Financial Policy Targets	Status Quo (LTM 31 December 2023)	
Gross Cash <sup>1</sup>	€1bn + at least 10% of revenues → €2.6bn	€1bn + 11% of revenues → €2.7bn	
Gross Debt <sup>2</sup>	≤ 2.0x EBITDA	1x EBITDA	
Comfortable liquidity position	<ul> <li>Flexibility for financing operating activities and investments through the cycle</li> <li>Cushion for net pension liabilities and contingent liabilities</li> </ul>		
Balanced debt position	<ul> <li>Gross debt target commensurate with investment-grade rating</li> <li>Successful de-leveraging offers ample headroom</li> </ul>		

Rating

**BBB+** stable outlook (by S&P Global Ratings)

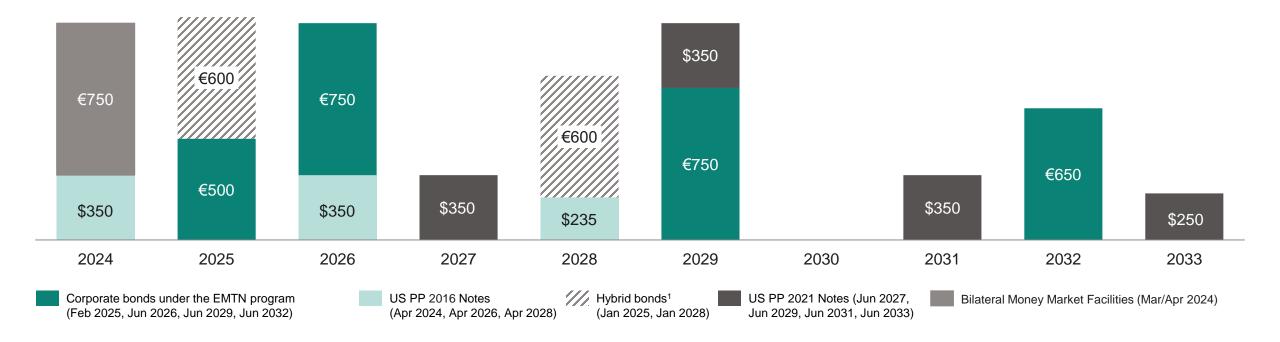
<sup>&</sup>lt;sup>1</sup> Gross cash position is defined as cash and cash equivalents plus financial investments | <sup>2</sup> Gross debt is defined as short-term debt and current maturities of long-term debt plus long-term debt. EBITDA is calculated as the total of earnings from continued operations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

### **Maturity profile**



#### Calendar years 2024 to 2033

[EUR m; USD m; nominal values]



<sup>&</sup>lt;sup>1</sup> 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.



#### **Disclaimer**



#### **Disclaimer**

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# **Glossary**

AC	alternating current
ACC	adaptive cruise control
AD	automated driving
ADAS	advanced driver assistance system
AEB	autonomous emergency braking
Al	artificial intelligence
AR/VR	augemented/virtual reality
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
DSC/SSC	double/single sided cooling
E/E	electrical/electronic architecture
ECU	electronical control unit
eSE	embedded secure module
eSIM	embedded subscriber identity module
EMS	electronics manufacturing service
ESS	energy storage system
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
HEMT	high-electron-mobility transistor
HID	human interface device
HMI	human machine interaction
HV	high voltage
HVAC	heating, ventilation, air conditioning
IC	integrated circuit

ICE	internal combustion engine
IGBT	insulated gate bipolar transistor
IoT	internet of things
IPM	intelligent power module
LED	light-emitting diode
MCU	microcontroller uni
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
NFC	near-field communication
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
RAM	random access memory
RF	radio frequency
SAE	Society of Automotive Engineers
SDK	software development kit
Si	silicon
SiC	silicon carbide
SNR	signal-to-noise ratio
ToF	time-of-flight
UWB	ultra-wideband
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. CO<sub>2</sub> savings are calculated based on the potential savings generated by technologies in which semiconductors are used. The CO<sub>2</sub> 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.

<sup>&</sup>lt;sup>1</sup> Without debtors with credit balances



## **Financial calendar**

Date	Event	Location
23 Feb 2024	Annual General Meeting	
29 Feb 2024	Morgan Stanley The Investment Forum Middle East	Abu Dhabi
1 Mar 2024	Susquehanna Technology Conference	virtual
4 Mar 2024	Morgan Stanley US Technology, Media & Telecom Conference	San Francisco
7 Mar 2024	Oddo BHF TMT Forum	virtual
21 Mar 2024	Stifel German Corporate Conference	Copenhagen
26 Mar 2024	Société Générale European ESG Conference	Paris
7 May 2024 <sup>1</sup>	Earnings Release for the Second Quarter of the 2024 Fiscal Year	
15 May 2024	JP Morgan European TMT Conference	London
29 – 30 May 2024	Goldman Sachs Semiconductor Conference	New York
5 – 6 Jun 2024	Exane BNP Paribas CEO Conference	Paris
5 Aug 20241	Earnings Release for the Third Quarter of the 2024 Fiscal Year	
12 Nov 20241	Earnings Release for the Fourth Quarter of the 2024 Fiscal Year	

<sup>&</sup>lt;sup>1</sup> Preliminary

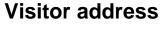
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