



# Third Quarter FY 2021 Quarterly Update

Infineon Technologies AG  
Investor Relations

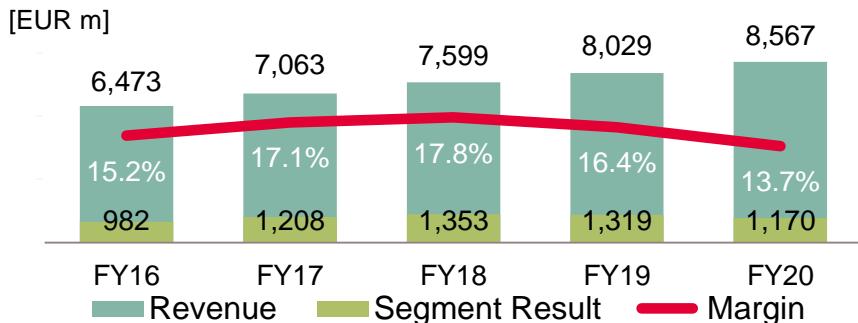


# Infineon at a glance

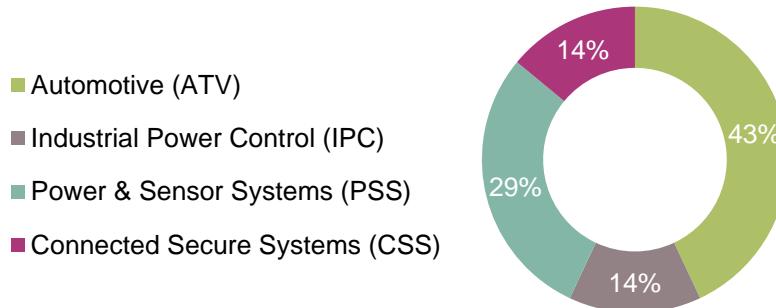
## Addressing long-term high-growth trends

-  IoT (edge comp., data center, 5G, sensing, connectivity)
-  electro-mobility
-  assisted driving, autonomous driving
-  energy efficiency, renewables, EV infrastructure
-  security

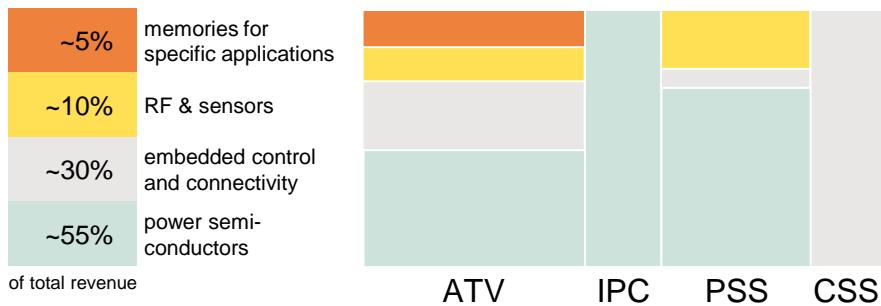
## Financials



## Illustrative aggregated FY20 revenue by segment



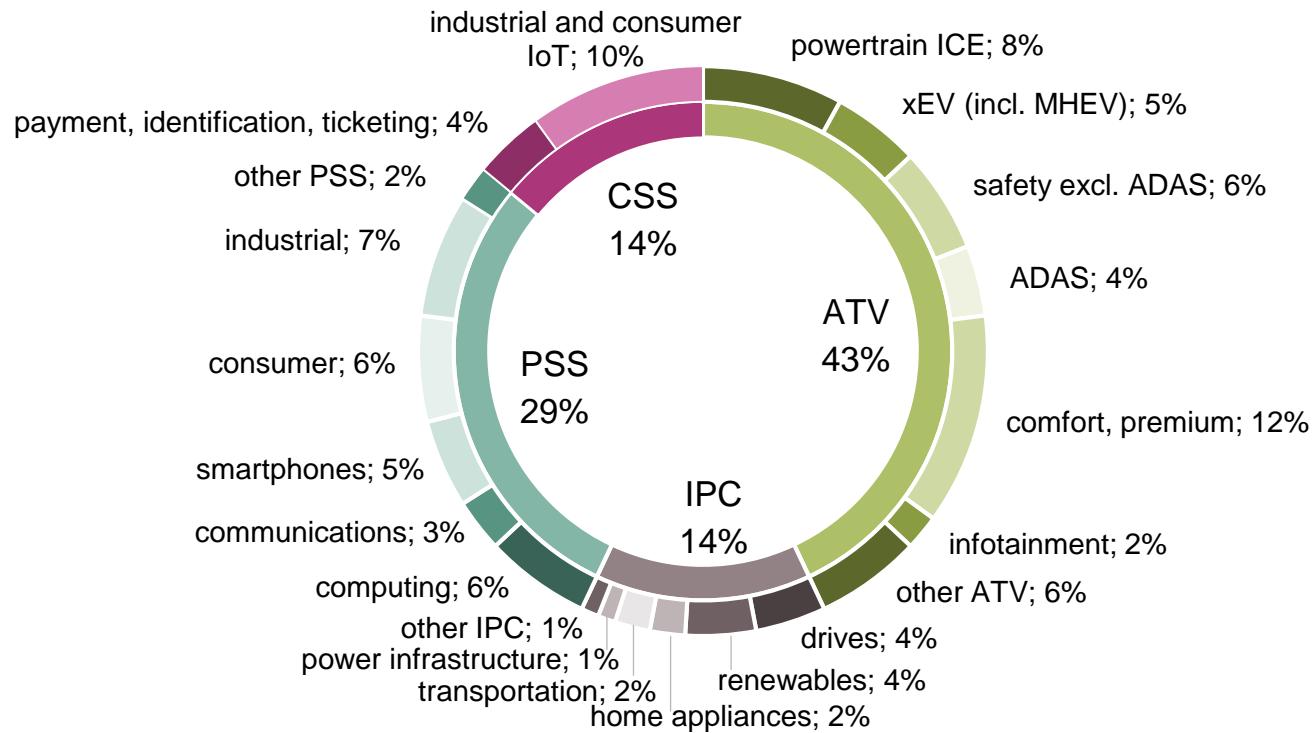
## Illustrative aggregated FY20 revenue by product category



# Illustrative aggregated FY20 revenue including contribution from Cypress of ~€1,900m from 1 Oct 2019 through 30 Sep 2020



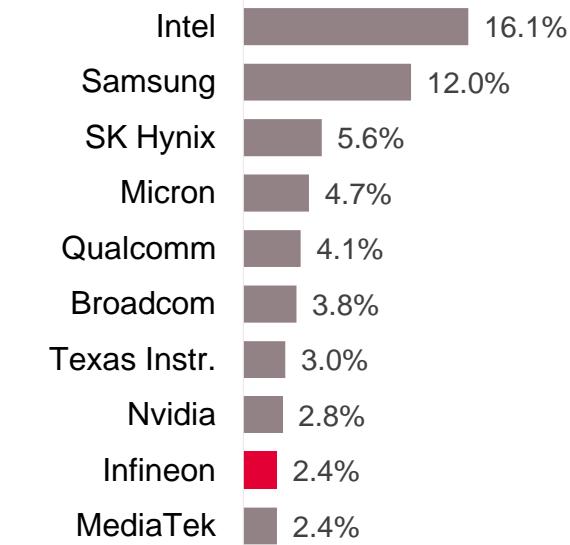
## Illustrative aggregated FY20 revenue of ~€9,600m by target application



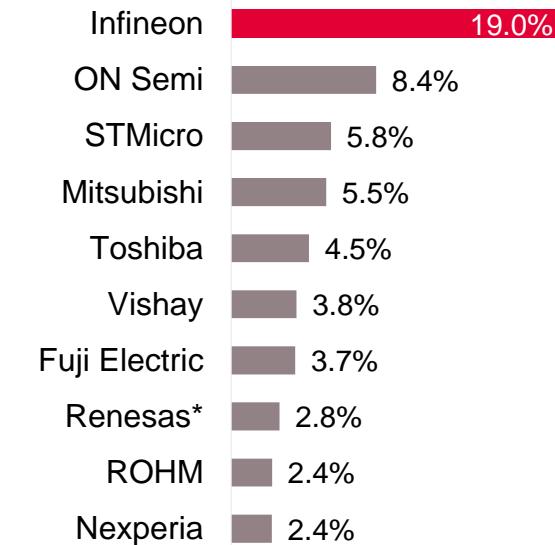
Infineon is a global top-10 player, #1 in power semiconductors, and ranked #3 in the overall microcontroller market



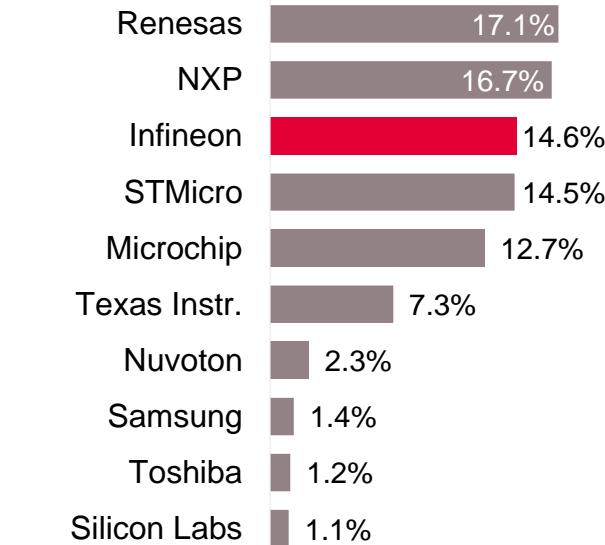
**Semiconductor suppliers**  
2020 total market: \$473bn<sup>1)</sup>



**Power discretes and modules**  
2019 total market: \$21.0bn<sup>2)</sup>



**MCU suppliers**  
2020 total market: \$17.3bn<sup>1)</sup>



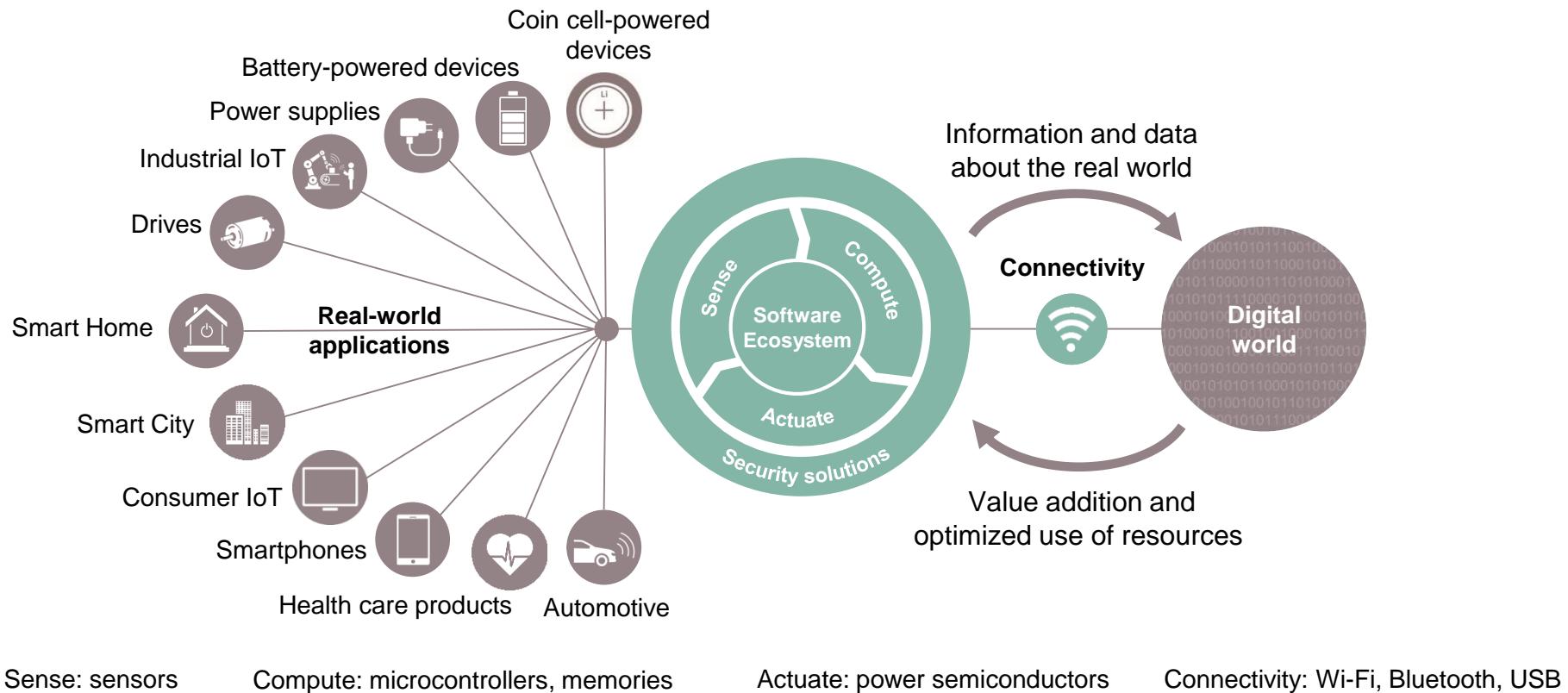
\* Renesas acquired Integrated Device Technology in March 2019. Both companies were combined as Renesas in the 2019 ranking.

1) Based on or includes research from Omdia: *Annual 2001-2020 Semiconductor Market Share Competitive Landscaping Tool – Q4 2020*. March 2021.

2) Based on or includes research from Omdia: *Power Semiconductor Market Share Database – 2020*. September 2020.

Results are not an endorsement of Infineon Technologies AG. Any reliance on these results is at the third party's own risk.

# Infineon offers a unique portfolio that links the real and the digital world



# Outlook for Q4 FY21 and FY21

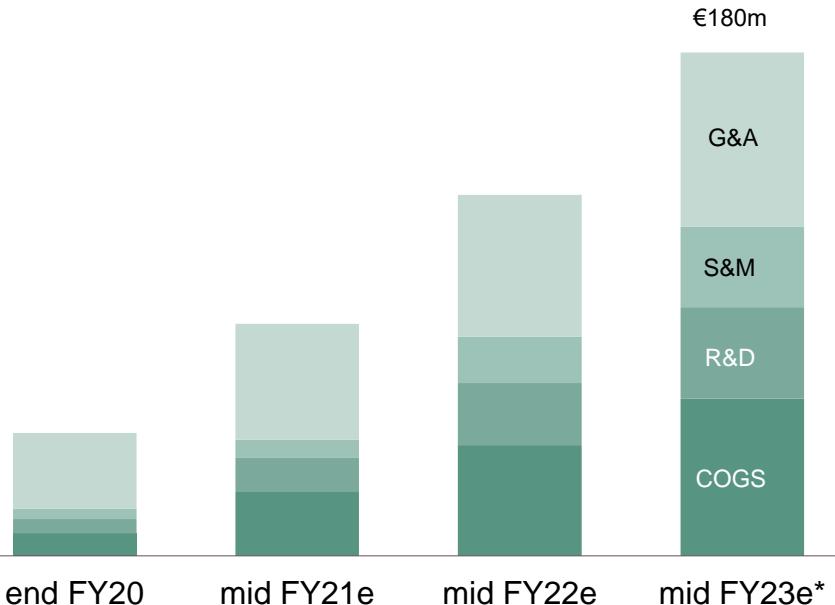
	Outlook Q4 FY21*	Outlook FY21*
Revenue	~ €2.9bn	~ €11.0bn
Segment Result Margin	~ 19%	> 18%
Investments in FY21		~ €1.6bn
D&A in FY21		€1.5bn – €1.6bn**
Free cash flow in FY21		~ €1.5bn (prev.: > € 1.2bn)

\* Based on an assumed average exchange rate of \$1.20 for €1.00

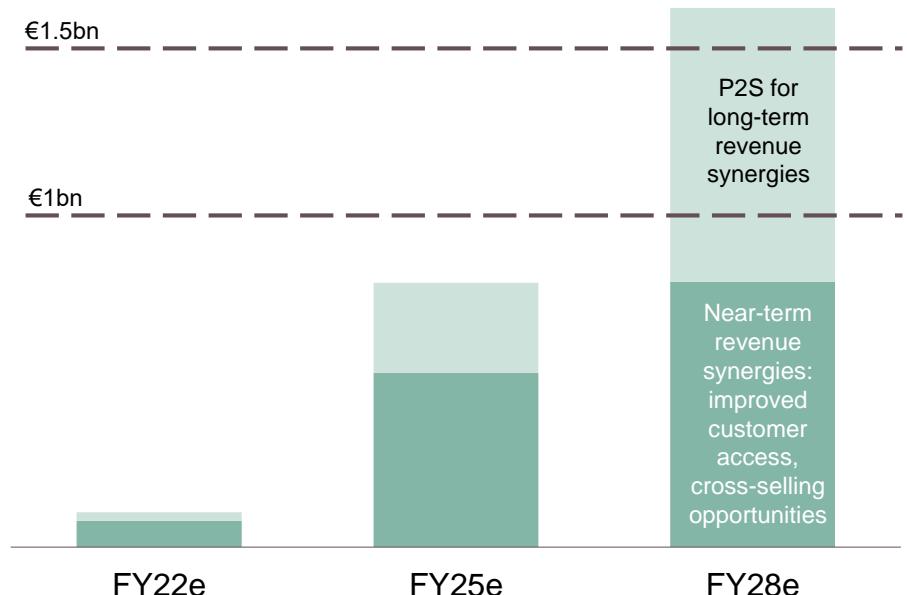
\*\* Including the effects of the purchase price allocation for Cypress and, to a lesser extent, International Rectifier

# Reaping of synergies on track

## Planned ramp-up of cost synergies



## Planned ramp-up of revenue synergies



Expected integration and restructuring costs equivalent to ~1x cost synergies one-off over time.

\* Expected cost synergies of €180m p.a. gradually ramping up over approximately three years after closing (16 April 2020).

# Infineon's through-cycle target operating model

## Target Operating Model

Infineon financial performance to approach targets  
as Cypress integration progresses

Revenue growth



9%+

Segment Result Margin



19%

Investment-to-sales



13%



ESG: targets and achievements



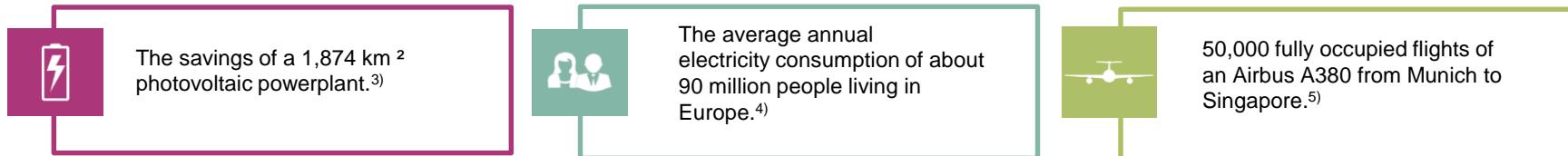
# Our products and innovations together with an efficient production are key elements to deal with climate change

## We contribute a CO<sub>2</sub> reduction of more than 54 million tons



\* The increase in the burden of CO<sub>2</sub> equivalents can mainly be explained by including manufacturing service providers for the first time into the calculation

## Our net ecologic CO<sub>2</sub> benefit is equal to...



For explanatory notes see appendix

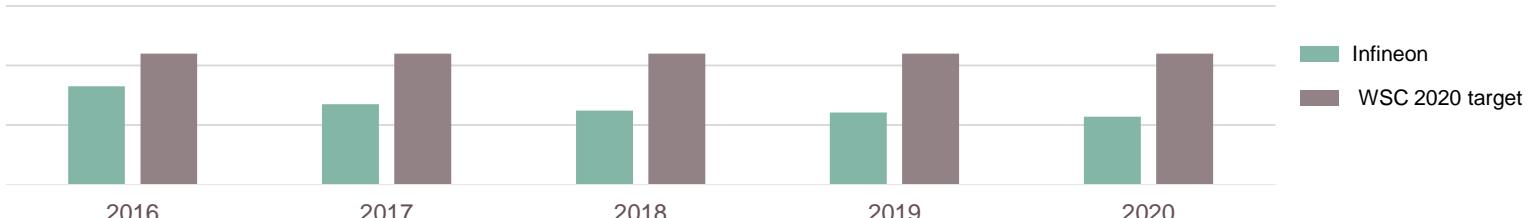
# Infineon will become carbon-neutral by 2030

## 70% CO<sub>2</sub> emissions reduction target in 2025 (scope 1 and 2 emissions)

1. Avoiding direct emissions and further reducing energy consumption
2. Purchasing green electricity with guarantees of origin for unavoidable emissions
3. Compensate the smallest part by certificates that combine development support and CO<sub>2</sub> abatement

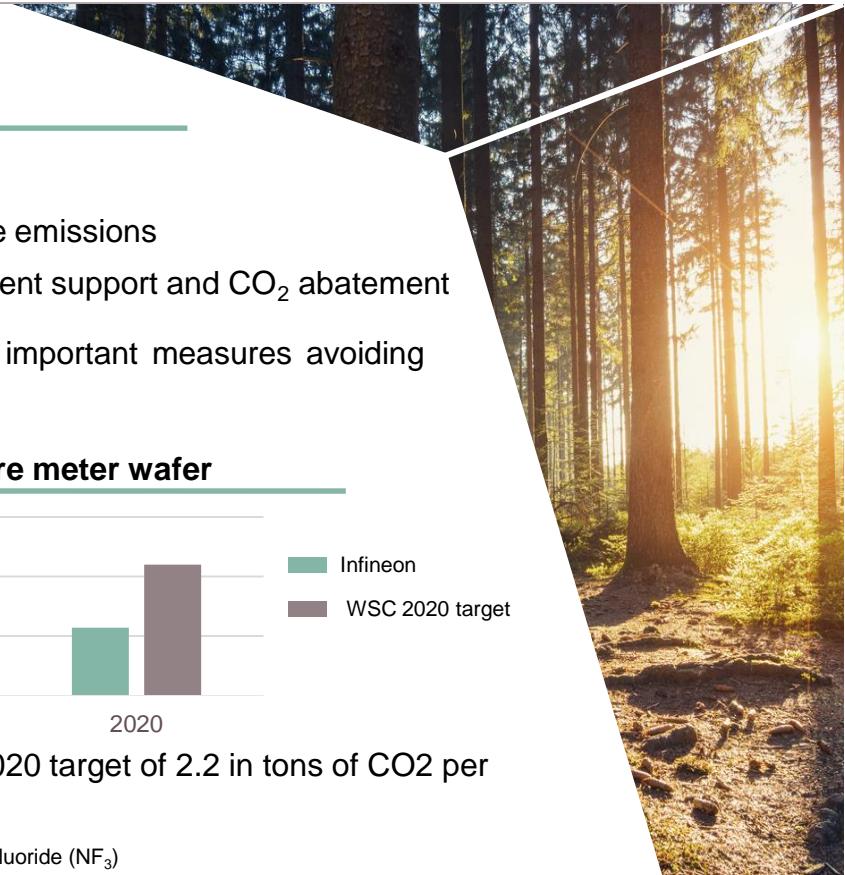
Abatement of Perfluorinated Compounds (PFC's)<sup>1)</sup> is one of the most important measures avoiding direct emissions.

### Normalized PFC emissions rate in tons of CO<sub>2</sub> equivalent per square meter wafer



Historically, Infineon's normalized emission rate has been below WSC 2020 target of 2.2 in tons of CO<sub>2</sub> per square wafer

1) Namely perfluorinated and polyfluorinated carbon compounds, sulfur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>)



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



	Rating/Score	Scale	Date
	MSCI ESG	AA	CCC to AAA 02/2021
	CDP	B climate scoring B water scoring	F to A 12/2020
	Ecovadis	98 <sup>th</sup> percentile "Gold" award	0 to 100 11/2020
	Dow Jones Sustainability Index	81 Dow Jones Sustainability™ World and Europe Index listing	0 to 100 11/2020
	Ethibel Sustainability Index Excelence Europe"	Index member	- 05/2020
	ISS ESG Corporate Rating	B- Prime Status	D- to A+ 01/2021
	FTSE4Good Index	Index member	- 06/2021
	Euronext Vigeo Eurozone 120 Index Euronext Vigeo Europe 120 Index	Indices member	- 06/2020
	Sustainalytics	77 "Outperformer" level	0 to 100 06/2020

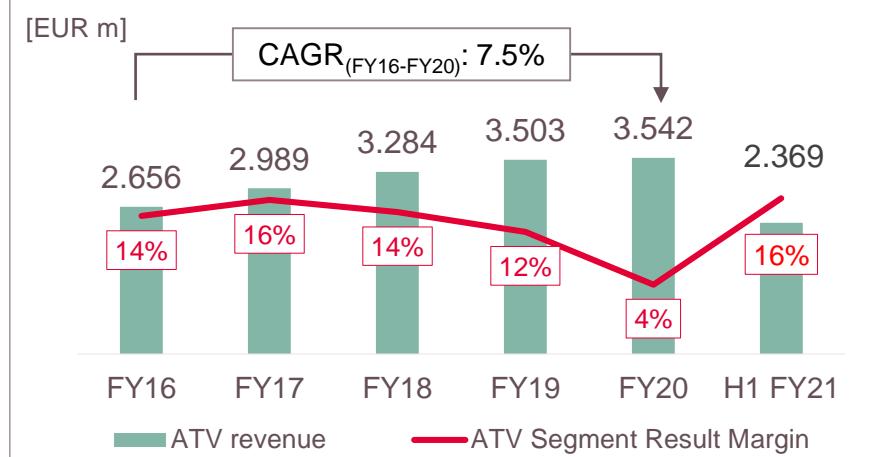


# Automotive

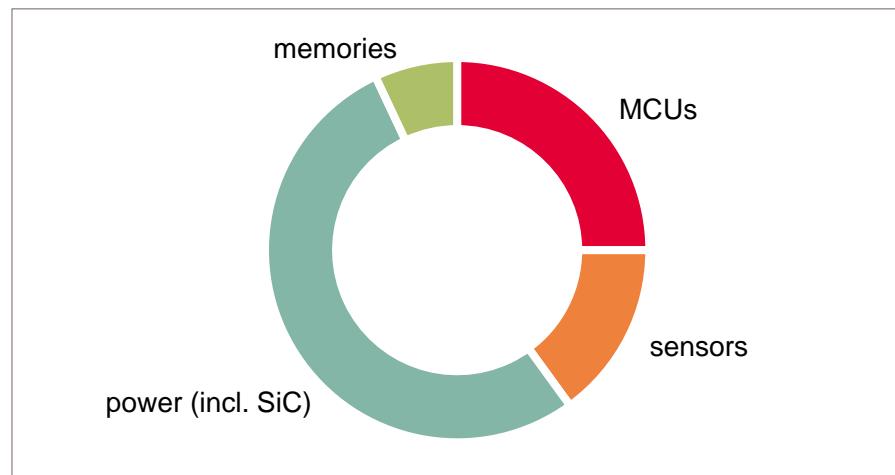
**infineon**

# ATV at a glance

## ATV revenue and Segment Result Margin



## FY20 revenue split by product group



## Key customers

• A P T I V •

 KEIHIN

 BOSCH

 比亚迪汽车

 Continental

 DENSO

 HELL

 HITACHI

 HYUNDAI

 LEAR CORPORATION

 Mando

 MITSUBISHI ELECTRIC

 Nidec

 Valeo

 veoneer

 ZF

# Market outlook for ATV division's target applications

## Applications



## Market Outlook for CY21



- › CY21 market recovery hindered by semiconductor shortages as well as new COVID-19 outbreaks
- › Continued market uncertainties mainly due to COVID-19 pandemic

## Market Outlook for CY22



- › Gradual easing of semiconductor shortages is expected
- › Uncertainties around COVID-19 pandemic into CY22
- › Around 90m light vehicles expected to be produced



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- › Incentives and CO<sub>2</sub> regulations should keep demand high
- › Improving consumer sentiment around sustainability theme
- › Steady investments in EV charging infrastructure further lowers reservation towards EVs



- › Electro-mobility momentum expected to continue
- › Government incentives, CO<sub>2</sub> regulations as well as consumer demand expected to support the growth momentum



- › Further increase in L1 and L2 penetration expected
- › L2+ shipments still at the initial phase

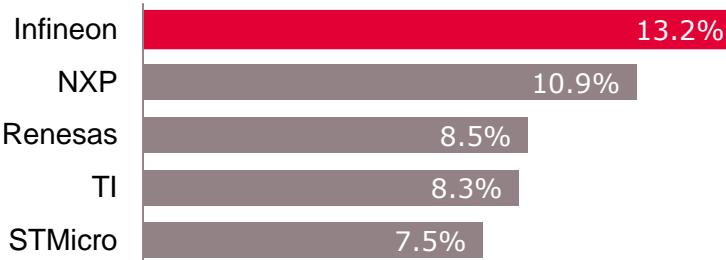


- › L1 and L2 will see strong growth at the expense of L0
- › L2+ shipments will grow from a comparatively small base

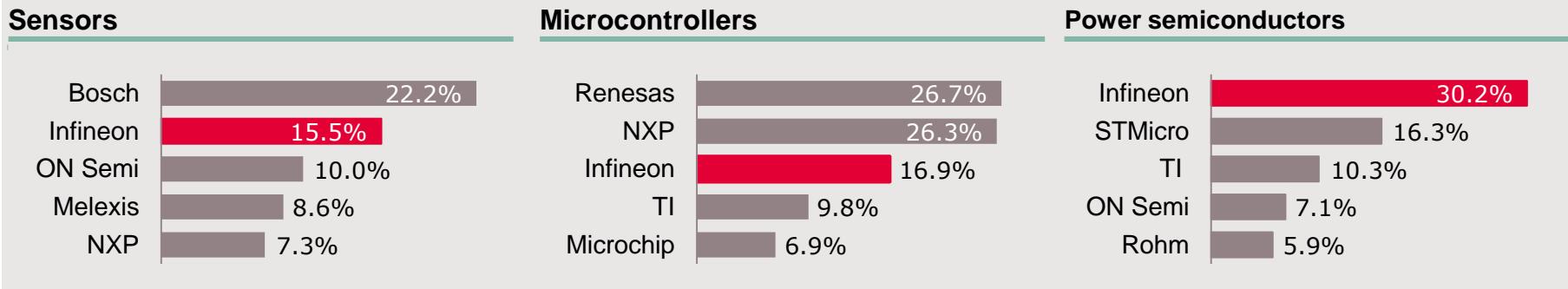
# Infineon's top market position is built on system competence based on an industry-leading product portfolio



## Automotive semiconductors (2020 total market: \$35.0bn)



- › Strengthened #1 position; increasing distance to #2
- › #1 in power semiconductors
- › Undisputed #1 in automotive NOR Flash memory ICs
- › #2 position in sensors
- › Solid #3 position in microcontrollers due to strong demand in AURIX™, TRAVEO™ and PSoC™ families



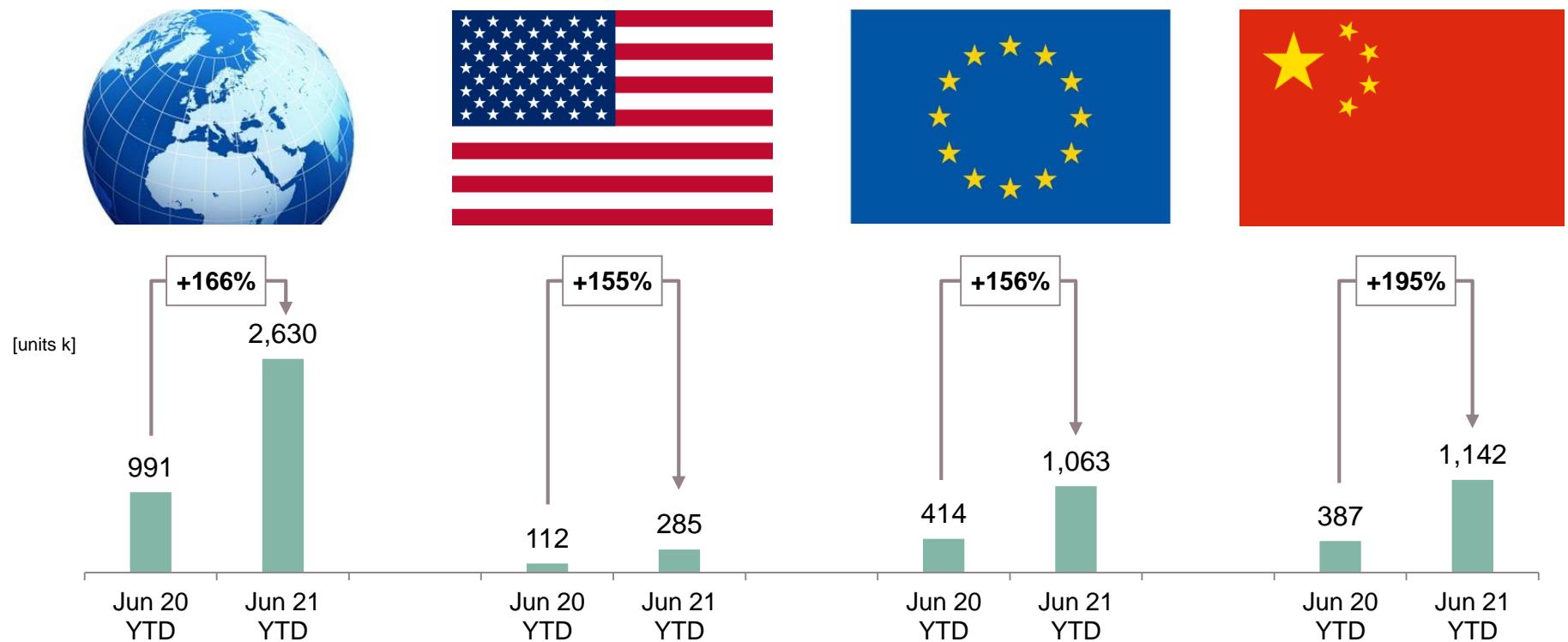
Strategy Analytics: Automotive Semiconductor Vendor Market Shares. April 2021.



# Electro-mobility



During H1 CY21, xEV (PHEV + BEV) sales more than doubled y-y in all regions; market figures indicate no slow down of e-mobility boom



Source: IHS Markit: PEV Volumens, preliminary numbers. July 2021

# The road to emission-free cruising: Governments and OEMs indicated when to ban the ICE

## I Government regulations

2035:

- EU: all new cars zero-emission.
- China: public transport vehicles to be fully electrified.
- Canada: no new ICE on sales.
- California, Massachusetts, New Jersey, Thailand: no ICE on the street.

2030:

- Japan: no ICE on the street.
- UK, Denmark, Sweden, Ireland, Netherlands: no ICE on sale.
- IEA: no new ICE car sales recommended. 60% of global car sales to be BEV or H<sub>2</sub>.

2025:

- Norway: no new ICE on sale.
- Mallorca: no Diesel car on sale.
- Netherlands, special zones: only electrified trucks and delivery vehicles allowed.

2023: Spain, cities with > 50,000 inhabitants: only zero-emission vehicles allowed.

2050: Spain, cities with > 50,000 inhabitants: no ICE on the street.

2040: Spain, cities with > 50,000 inhabitants: no new ICE on sale.

2050

2040:

- Honda: "All new vehicles will be BEV."

2040

2039:

- BMW: "All new vehicles will be BEV."

2035:

- GM: "All new vehicles will be BEV."
- VW brand: "To end sales of ICEs in Europe."

2033:

- Audi: "All new vehicles will be BEV."

2030

2030:

- Volvo: "All new vehicles will be BEV."
- Ford: "All new vehicles in Europe will be BEV. 40% of Ford global vehicle volume to be BEV."
- Jaguar: "No new ICEs."
- BMW: "50% of all new vehicles to be BEV."

2025:

- Lamborghini: "All new vehicles will be BEV or PHEV."
- Mercedes: "The upcoming S class generation will be available as BEV only."

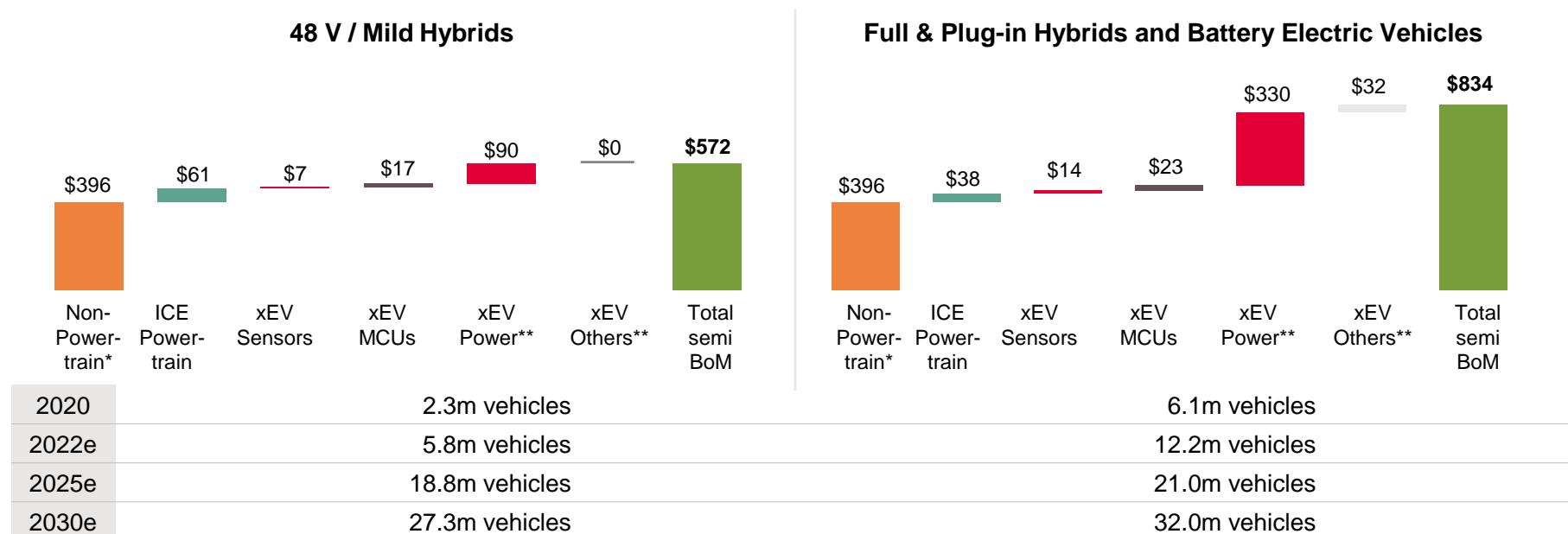


## OEM statements

# The incremental content of power semiconductors in xEV is a significant opportunity for Infineon



## 2020 average xEV semiconductor content by degree of electrification



\* Non-Powertrain: average semiconductor content in body, chassis, safety and infotainment application segments

\*\* "power" includes voltage regulators and ASIC; "others" include opto, small signal discretes, memory

Sources: Infineon; based on or includes content supplied by IHS Markit, Automotive Group: *Alternative Propulsion Forecast*. July 2020;  
Strategy Analytics: *Automotive Semiconductor Demand Forecast 2018-2027* and *Automotive Sensor Demand 2018-2027*. July 2020



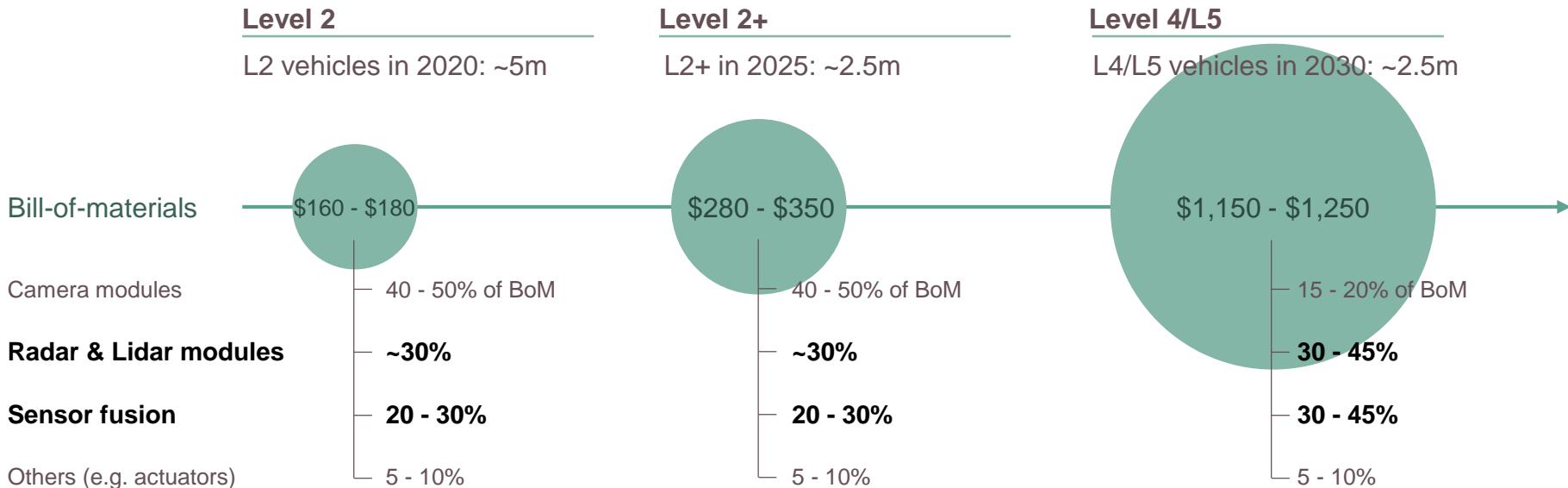
# Automated Driving



# Radar/Lidar modules and sensor fusion will grab the lion's share of semiconductor BoM in ADAS/AD-equipped cars



## Incremental average semiconductor content per car by level of automation at the given years

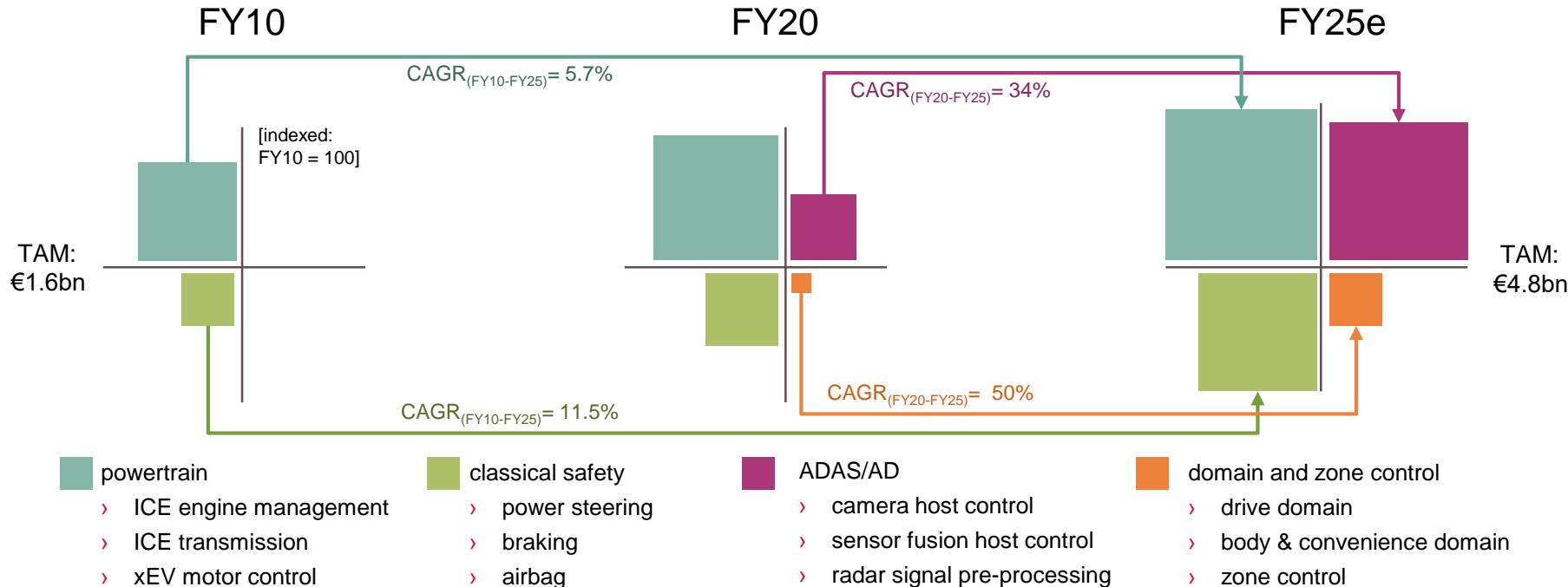


BoM contains all type of semiconductors (e.g. radar modules include µC); sensor fusion does not include memory. BoM are projected figures for the respective time frame  
Sources: Strategy Analytics: *Automated Driving Semiconductor Market Estimate*. August 2020; Infineon.

# The Infineon AURIX™ µC family has become the first-choice automotive architecture for high-growth and safety-critical applications



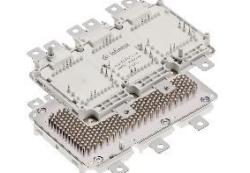
## Infineon AURIX™ revenue development over time



Sources: Infineon; Strategy Analytics: *Automotive Semiconductor Demand Forecast*. February 2020. Covering Infineon target markets; excl. body, comfort, infotainment.

# Design-win at an Asian OEM: Infineon semiconductors worth more than €500 in an upper mid-range EV platform with SAE L2 automation



Category	Major products	Main applications (comprising 14x AURIX™ ●)				
ADAS		sensor fusion	mid-range radar	front camera	parking system	remote vehicle assistance
comfort, premium, standard safety, infotainment		ABS	HVAC	PTC heater	integrated central gateway unit	full redundant EPS
EV drivetrain		black box system	audio, video, navigation	oil pump	interior lamp	integrated electronic brake
		electronic gear shifter	seat heater	water pump	charge lamp	drive video record system
		SiC-based main inverter	high-voltage BMS	inverter gate board	OBC / Low DC-DC converter	vehicle control unit



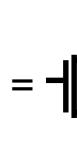
# Infineon's Power Strategy



# Infineon's portfolio covers the entire range of power and frequency

## What is a power switch?



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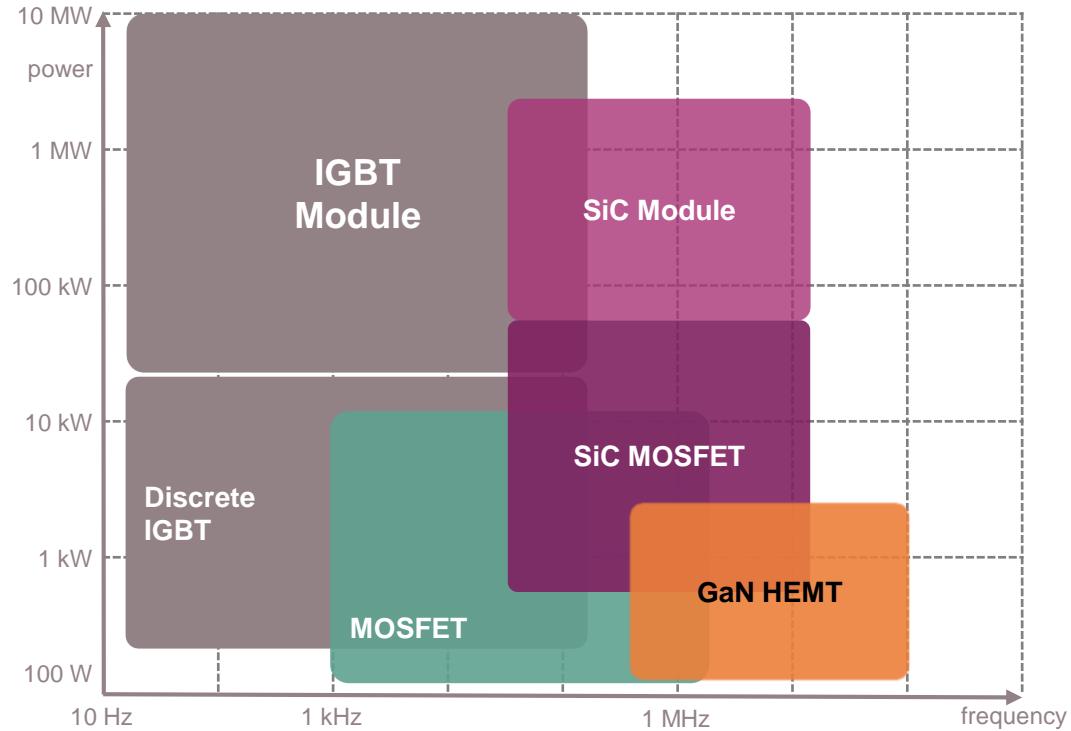
When turned on  
→ current flows

When turned off  
→ current is blocked

## What counts?

- › Losses in on-state ( $R_{(DS)on}$ )
- › Heat dissipation
- › Max. switching frequency
- › Die size
- › Package size (form factor)

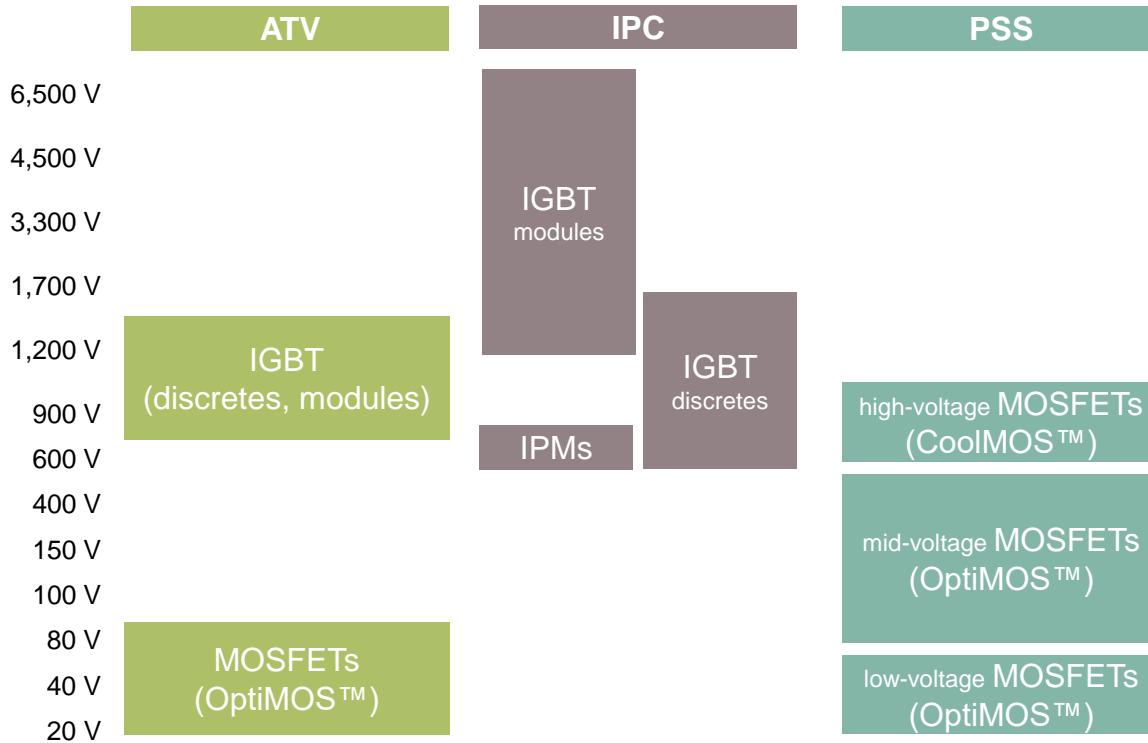
## How are power switches categorized?



# Overview of Infineon's discrete and module power semiconductor portfolio\*



## Silicon-based power switches



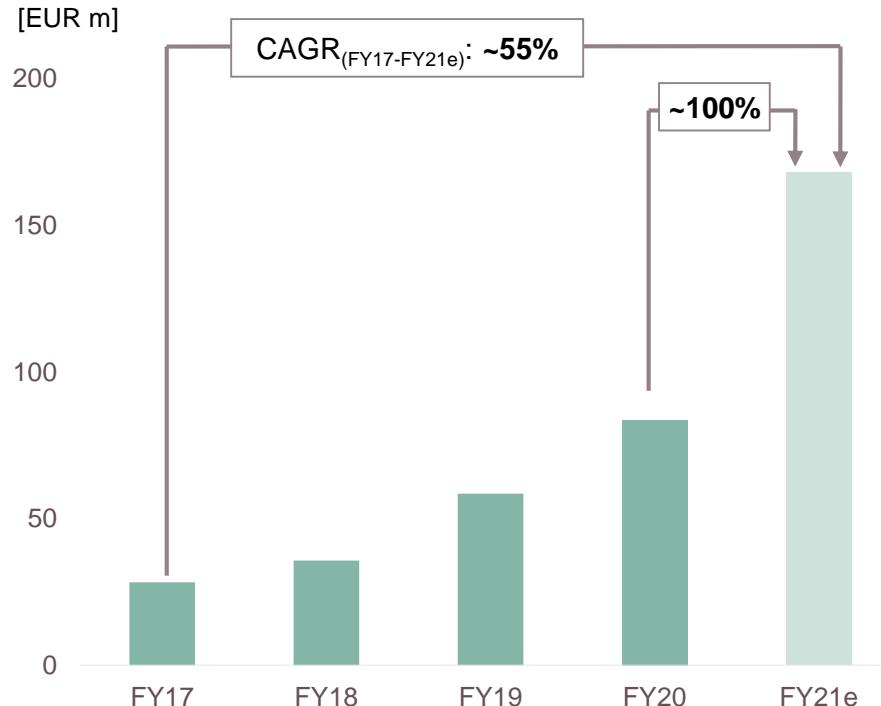
## Compound semiconductors



\* excluding driver ICs and control ICs

# SiC revenue forecast increased: now doubling in FY21 – more than half of the incremental growth contributed by automotive

## Industrial and automotive applications driving the growth



~200 different CoolSiC™  
products

~3,000 total active customers  
including distribution



# Strong CoolSiC™ portfolio expansion: by packages and by voltages

## Broadest and best-in-class SiC portfolio

		Industrial						Automotive grade			
package options	voltages	CoolSiC™ Diode	CoolSiC™ Hybrid		CoolSiC™ MOSFET			CoolSiC™ Diode	CoolSiC™ Hybrid	CoolSiC™ MOSFET	
		Discrete	Discrete	Module	Discrete	IPM	Module	Discrete	Discrete	Discrete	Module
	600 V										
	650 V										
	1200 V										
	1700 V										

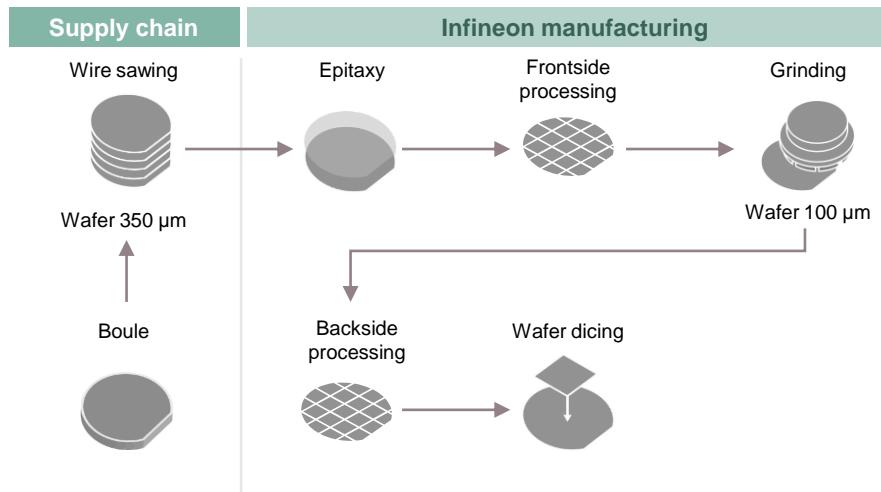
**Continuous expansion of portfolio**

# Traditional wire sawing wastes ~3/4 of the raw material

## Current status of SiC device manufacturing

The supplier cuts the boule into 350 µm thick wafers thereby losing almost half of the material as kerf. The resulting wafers are processed and ground to ~100 µm before finishing them. Thereby losing another half of the material.

→ ~¾ of raw material lost

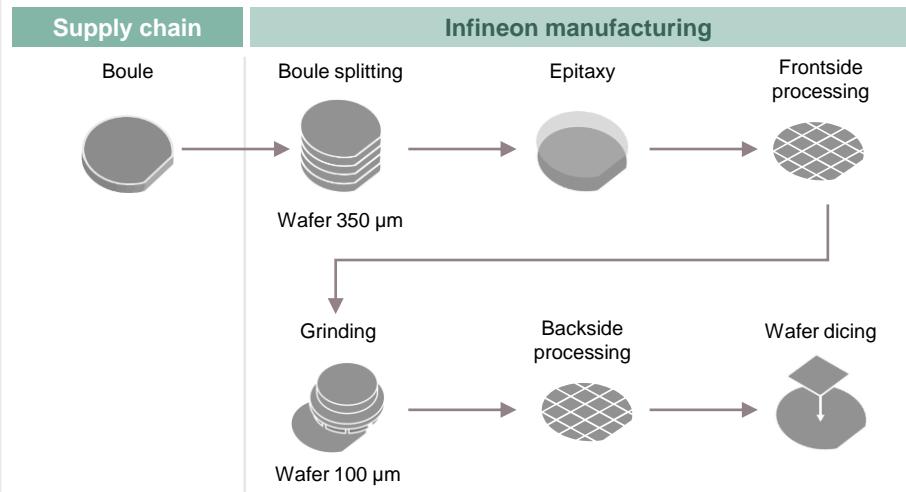


The kerf and grinding consume ~75% of the raw material

## Phase 1: boule splitting in volume prod. starting FY22

We source boules and use our splitting technology to cut it into wafers. The process is kerf-free and therefore losses are minimal. The resulting 350 µm thick wafers are processed according to the current process flow.

→ Raw material losses reduced by half



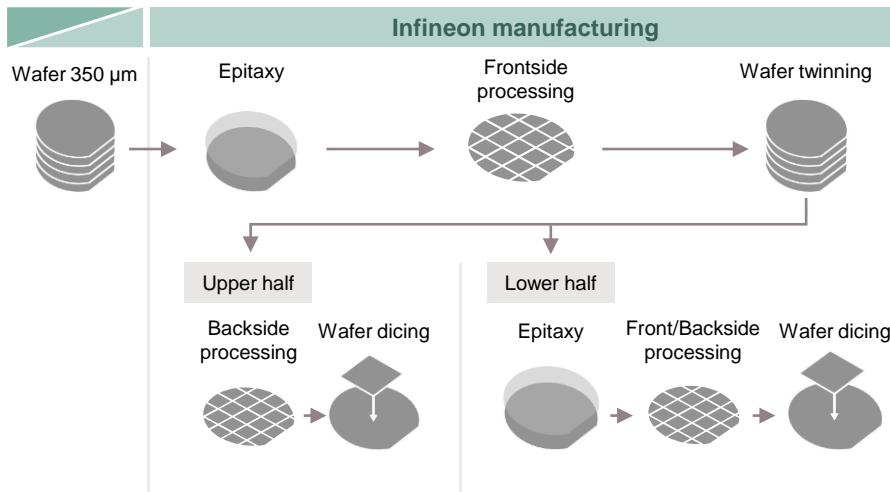
~2x number of wafers per boule compared to wire sawing

# Boule splitting plus wafer twinning or advanced boule splitting quadruples output out of a given boule

## Phase 2: wafer twinning

The starting material are either wafer from the phase 1 boule splitting process or sourced wafer. The 350 µm thick wafer is processed and instead of grinding it down to 100 µm the lower part is split off and processed again.

→ Combining boule and wafer twinning → minimal raw material losses

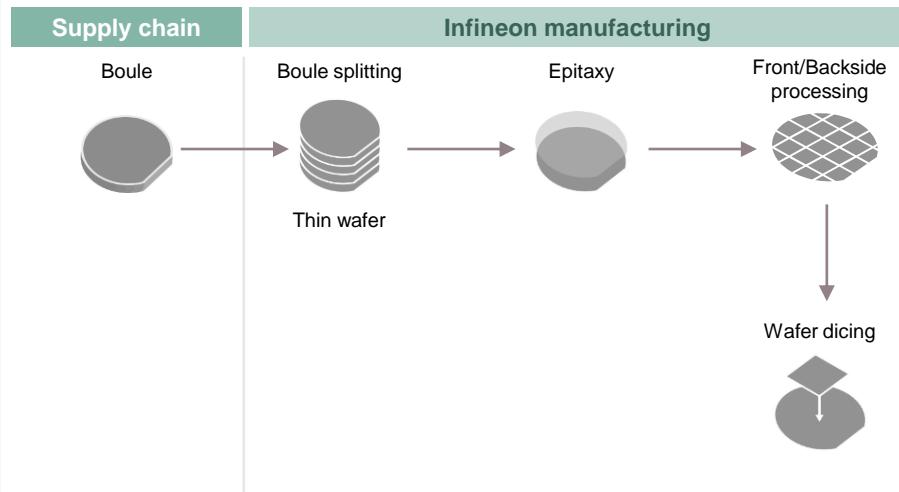


~2x – 4x number of wafers per boule

## Phase 3: advanced boule splitting

The advanced boule splitting results in thin wafers that can be processed directly.

→ Most efficient process with minimal raw material losses



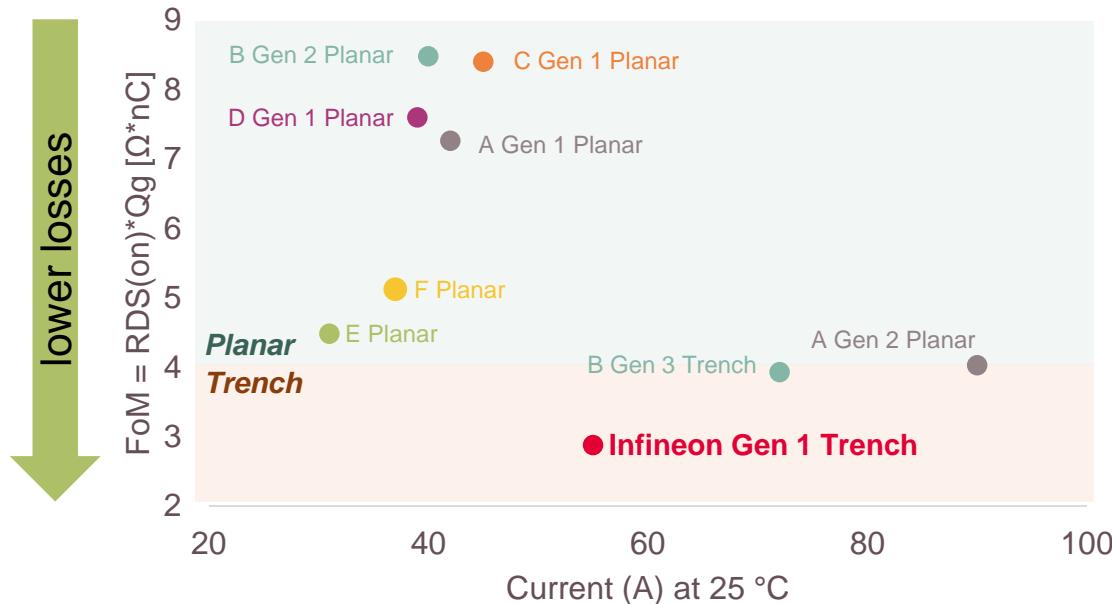
~4x number of wafers per boule

# Second generation (2<sup>nd</sup> Gen.) CoolSiC™ Trench MOSFET will increase the addressable market



1<sup>st</sup> Gen. with lowest losses is the leading technology today

2<sup>nd</sup> Gen. will expand the lead



- 2<sup>nd</sup> Gen. CoolSiC™ Trench MOSFET is in advanced development phase
- Enhanced power handling capability by 25% – 30%
- Enhanced safe operating area without compromising quality
- Enabling SiC in further high volume applications

2<sup>nd</sup> Gen. CoolSiC™ Trench MOSFET will significantly enlarge the market size for SiC MOSFETs

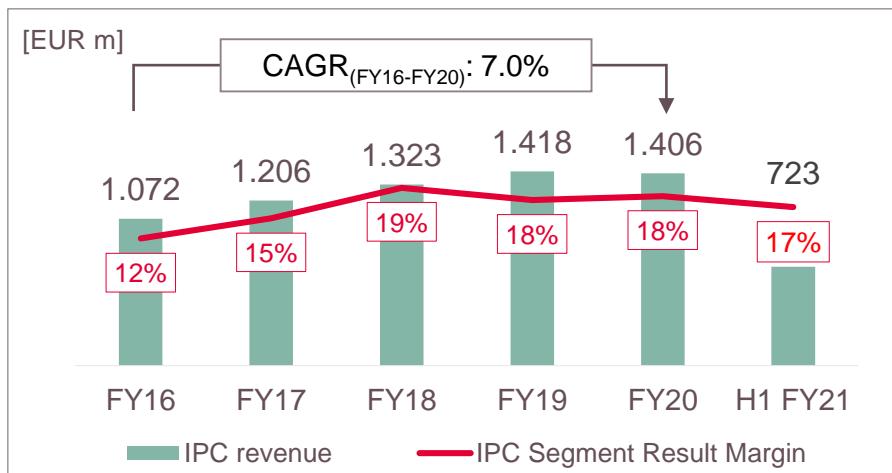


Industrial Power Control

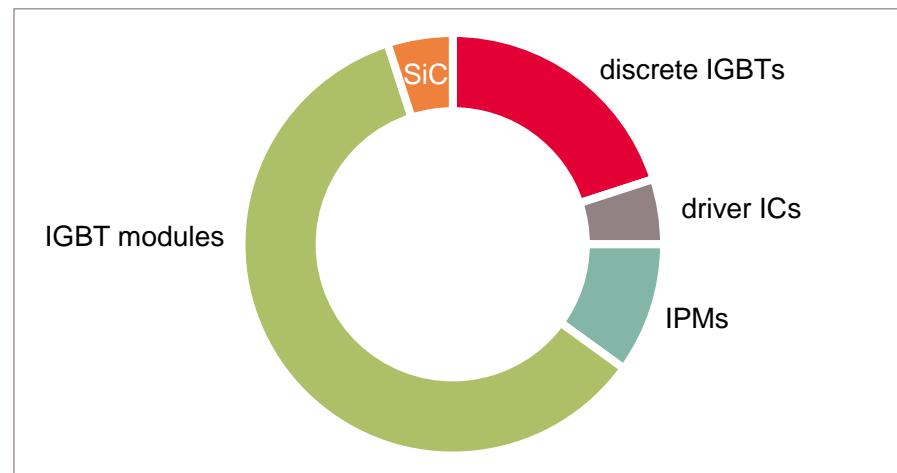


# IPC at a glance

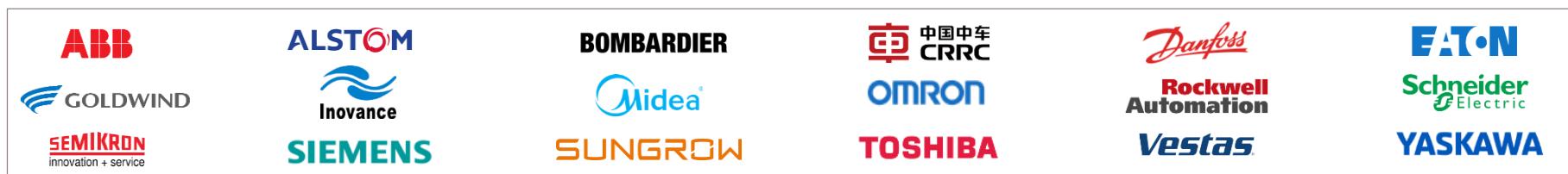
## IPC revenue and Segment Result Margin



## FY20 revenue split by product group



## Key customers



# Market outlook for IPC division's target applications

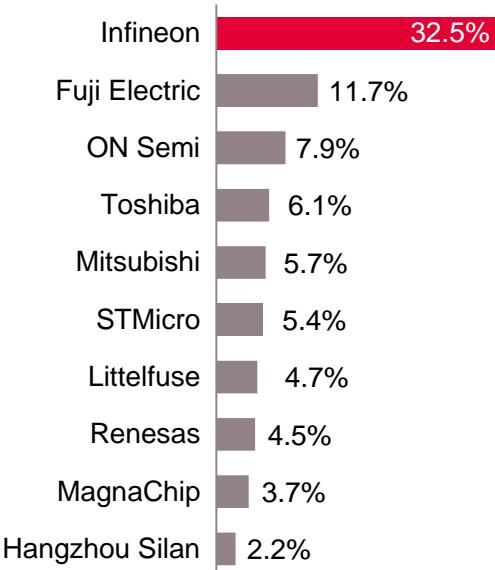
Applications (% of FY20 segment revenue)	Market Outlook for CY21	Market Outlook for CY22
 ~30%	 <ul style="list-style-type: none"> <li>Industrial Drives recovering in high single digits with demand growing mainly in GC region</li> </ul>	 <ul style="list-style-type: none"> <li>Recovery expected to last well into FY22 due to demand exceeding supply and long lead times</li> </ul>
 ~24%	 <ul style="list-style-type: none"> <li>Wind: demand remains on a high level (incentive-driven pull-in effects in CY20 without impact on CY21 shipments)</li> <li>PV: ongoing double-digit y-y growth in installations</li> </ul>	 <ul style="list-style-type: none"> <li>Wind: installations forecasted at similar level as in CY21</li> <li>PV: ongoing double-digit y-y growth in installations</li> </ul>
 ~16%	 <ul style="list-style-type: none"> <li>Catch-up of delayed purchases and energy efficiency incentive programs will drive growth</li> </ul>	 <ul style="list-style-type: none"> <li>Demand still driven by energy efficiency incentive for China room air conditioners</li> </ul>
 ~13%	 <ul style="list-style-type: none"> <li>Diminished COVID-related travel activities caused further push-out of construction of passenger trains and e-Busses</li> </ul>	 <ul style="list-style-type: none"> <li>Infrastructure program in China (HST grid density) expected to drive growth for rail; emission free cities regulations growth driver for delivery vehicles and eTrucks</li> </ul>
 ~9%	 <ul style="list-style-type: none"> <li>Growing demand in EV charging infrastructure, Industrial UPS and energy storage systems</li> <li>Delays in Transmission &amp; Distribution projects</li> </ul>	 <ul style="list-style-type: none"> <li>Strong growth of xEV driving charging infrastructure; continuous installation of renewable energy generation driving Energy Storage Systems</li> </ul>
 8%	 <ul style="list-style-type: none"> <li>Growth driven by general market recovery</li> </ul>	 <ul style="list-style-type: none"> <li>Long term positive outlook driven by general trend of electrification in emerging applications (e.g. e-Marine)</li> </ul>

# Clear leader in discrete IGBTs and IGBT modules; fostering position in IPMs



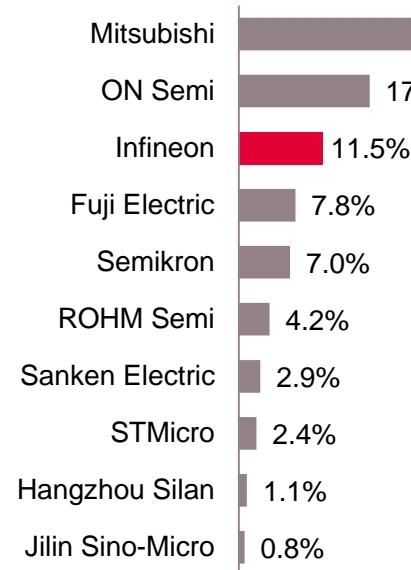
## Discrete IGBTs

2019 total market: \$1.44bn



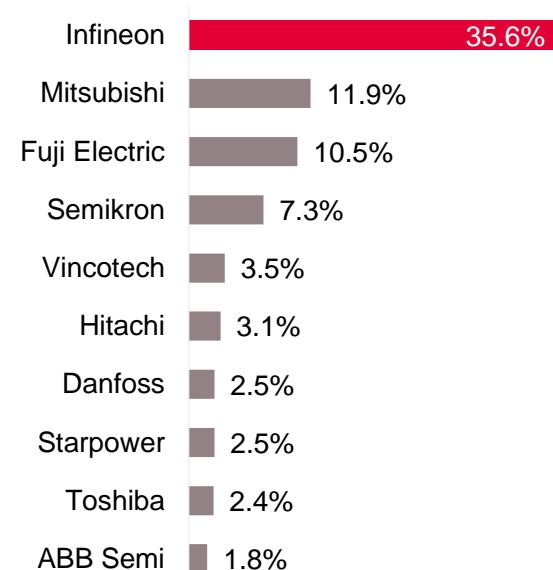
## IPMs

2019 total market: \$1.59bn



## IGBT modules<sup>1)</sup>

2019 total market: \$3.31bn



<sup>1)</sup> 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 2020*. September 2020

# Infineon serves all applications in the field of renewable energy

## Onshore



- › Application: Full Converter & Partial/DFIG\* converter based wind turbine
- › Output: 1 MW – 6 MW
- › Power semi content: €2,000 - €3,250 per MW

## Offshore



- › Application: Full Converter based wind turbine
- › Output: 3 MW – 14 MW
- › Power semi content: €3,250 - €3,500 per MW

## HVDC\*\*



- › Application: HVDC - VSC
- › Output: 100 MW – 4 GW
- › Power semi content: €5,200 - €18,000 per MW

## String inverter



- › Application: residential, commercial and utility-scale PV plants
- › Output: 1 kW – 200 kW
- › Power semi content: €2,500 – €5,000 per MW

## Central inverter

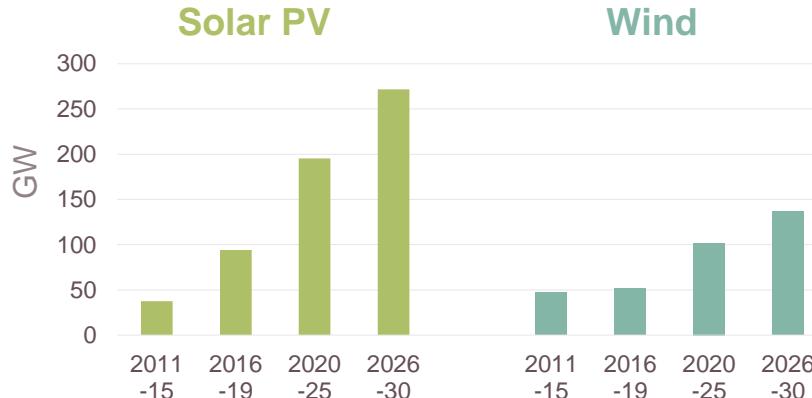


- › Application: utility-scale PV plants
- › Output: 600 kW – 1,250 kW
- › Power semi content: €2,000 – €3,000 per MW

\*DFIG – Doubly fed induction generator \*\* HVDC - High-voltage direct current transmission

# We are the #1 semiconductor enabler of renewable energies

## Average annual solar PV and wind capacity additions\*



Source: World Energy Outlook 2020, Average annual solar PV and wind capacity additions in the Sustainable Development Scenario to 2030 p. 109

## All leading renewable energy players are our customers\*

### PV inverter

- 1 | Huawei
- 2 | Sungrow
- 3 | SMA
- 4 | TBEA Sunoasis
- 5 | Wuxi Sineng
- 6 | ABB
- 7 | Kstar
- 8 | Goodwe
- 9 | Growatt
- 10 | Power Electr.

### Wind

Rank	Company	Wind Player	Customer
1	Siemens/Gamesa	✓	✓
2	Vestas	✓	✓
3	Goldwind	✓	✓
4	GE	✓	✓
5	Enercon	✓	✓
6	Envision	✓	✓
7	Nordex	✓	✓
8	Senvion	✓	✓
9	United Power	✓	✓
10	Mingyang	✓	✓

## Enabling Technologies



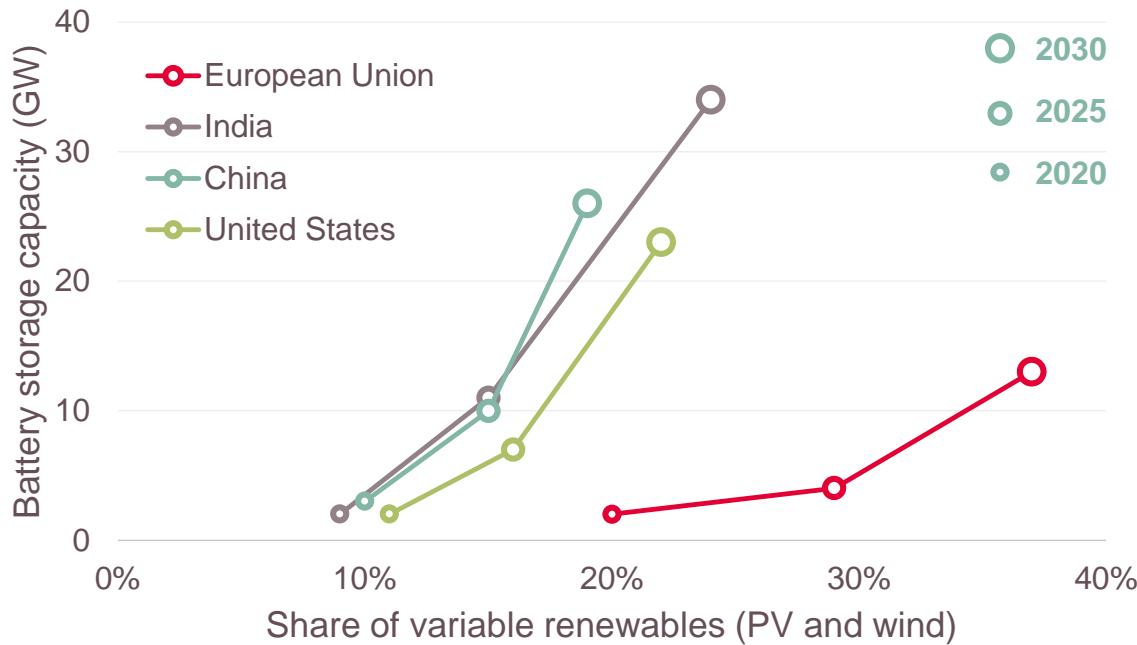
- › Reduces System Size
- › Reduced power losses up to 50% compared to a traditional IGBT



- › Increased lifetime of IGBT Modules
- › Highest reliability for remote places

# Energy storage is essential to further deploy decentral and renewable energy generation

## Battery storage capacity and share of variable renewables<sup>1)</sup>



## Key drivers

- › **Decentralization** of power generation
- › **Peak shaving** of energy generation and energy consumption
- › **Limited capacity** and flexibility of today's grids
- › **Reduction of standby cost** of fossil power plants

~€3,200 of power semiconductor content per MW of installed energy storage capacity<sup>2)</sup>

1) International Energy Agency: *World Energy Outlook 2020*, p. 248; variable renewables consist of solar and wind energy.

2) Infineon estimate

# What comes next? Mid- to long-term structural growth opportunities

## Core



new material



## Adjacent



solar pumps



energy storage



eDelivery vehicles

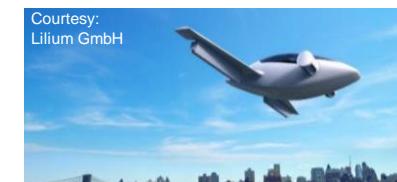
## New area



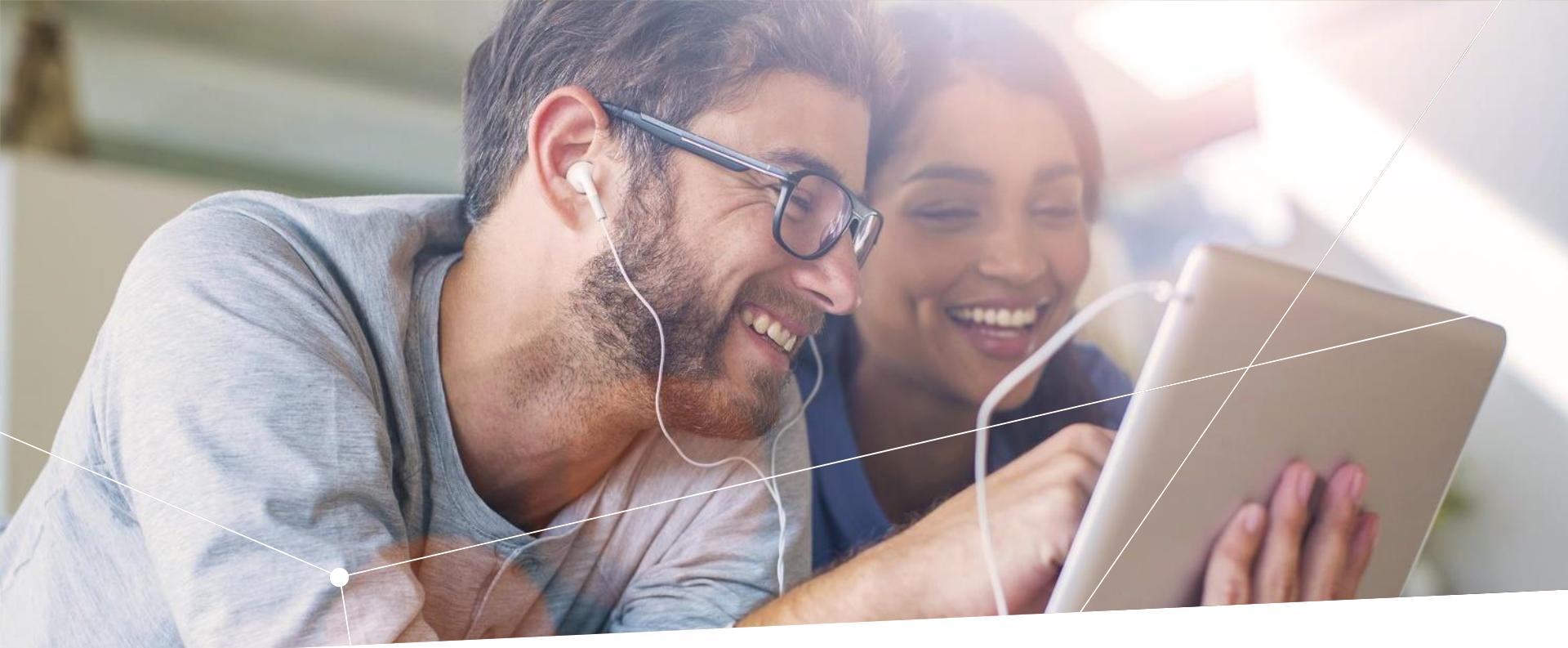
fuel cell



eMarine



eAviation

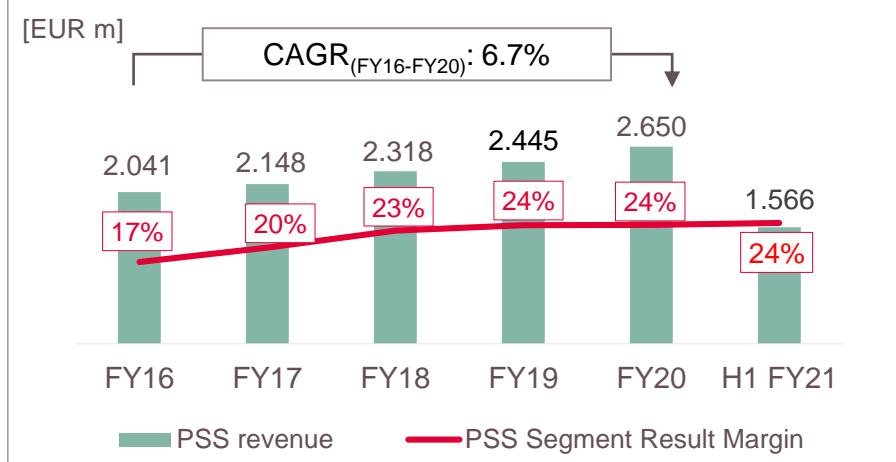


Power & Sensor Systems

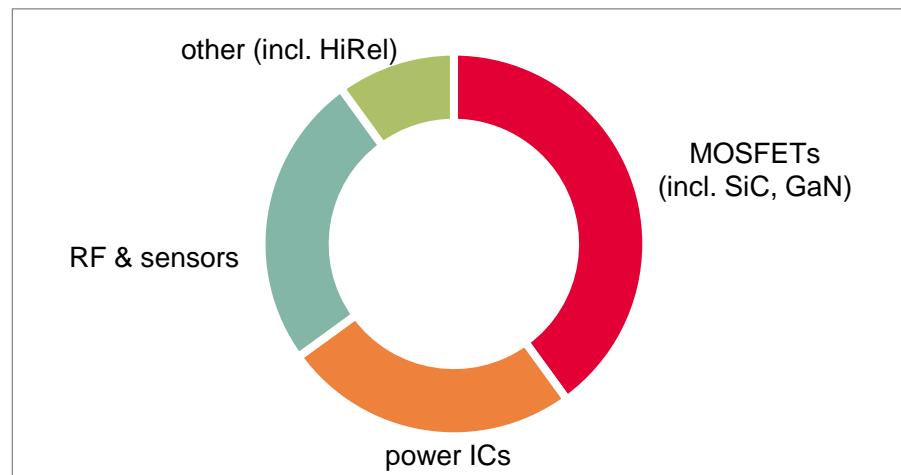


# PSS at a glance

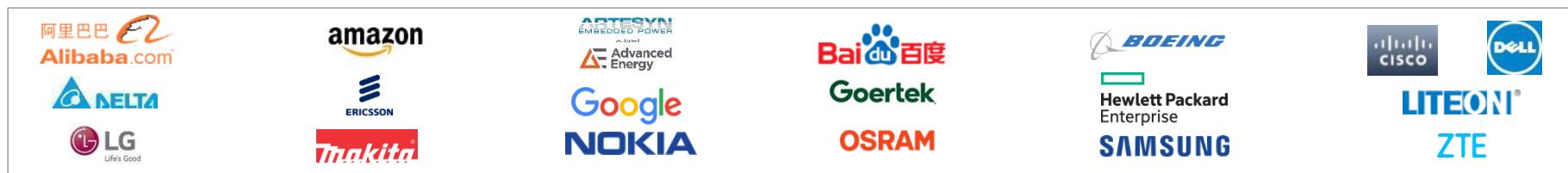
## PSS revenue and Segment Result Margin



## FY20 revenue split by product group



## Key customers



# Market outlook for PSS division's target applications

Applications (% of FY20 segment revenue)*	Market Outlook for H2 CY21	Market Outlook for CY22
 ~20%	 <ul style="list-style-type: none"> <li>Acceleration towards cloud computing to continue</li> <li>Pandemic-driven stay at home and work at home effects continue to favor notebook sales</li> </ul>	 <ul style="list-style-type: none"> <li>Structural drivers expected to stay in cloud computing and good momentum for enterprise servers</li> <li>Demand for CY22 supported by limited supply in CY21 (catch-up effects)</li> </ul>
 ~9%	 <ul style="list-style-type: none"> <li>In general, long-term drivers due to 5G still intact</li> <li>However, trade tensions generate some uncertainty around speed of roll-out in China and other regions</li> </ul>	 <ul style="list-style-type: none"> <li>5G cycle will continue to drive telecom equipment spending in CY22</li> </ul>
 ~19%	 <ul style="list-style-type: none"> <li>Strong rebound expected driven mainly by economic recovery and migration towards 5G phones</li> <li>Potential risk due to reduced smartphone growth due to shortages, regional weaker demand (India/ China), 5G slower boost than expected</li> </ul>	 <ul style="list-style-type: none"> <li>5G replacement cycle expected to continue to drive demand growth</li> </ul>
 ~20%	 <ul style="list-style-type: none"> <li>Consumer electronics, including e.g. game consoles, clear beneficiaries from stay at home</li> <li>Battery-powered tools continue to show strong momentum</li> <li>Consumer spending may be re-allocated to more leisure-oriented activities</li> </ul>	 <ul style="list-style-type: none"> <li>Demand expected to decline in some consumer areas as TVs in light of re-allocation of consumer spending</li> </ul>
 ~23%	 <ul style="list-style-type: none"> <li>Automotive and other industrial segments show strong recovery; however, automotive production has taken hits from chip shortages</li> </ul>	 <ul style="list-style-type: none"> <li>Demand in renewable energy, EV charging and automotive expected to be healthy</li> <li>Tailwinds from stimuli packages for EV and green energy in US and EU</li> </ul>

\* 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

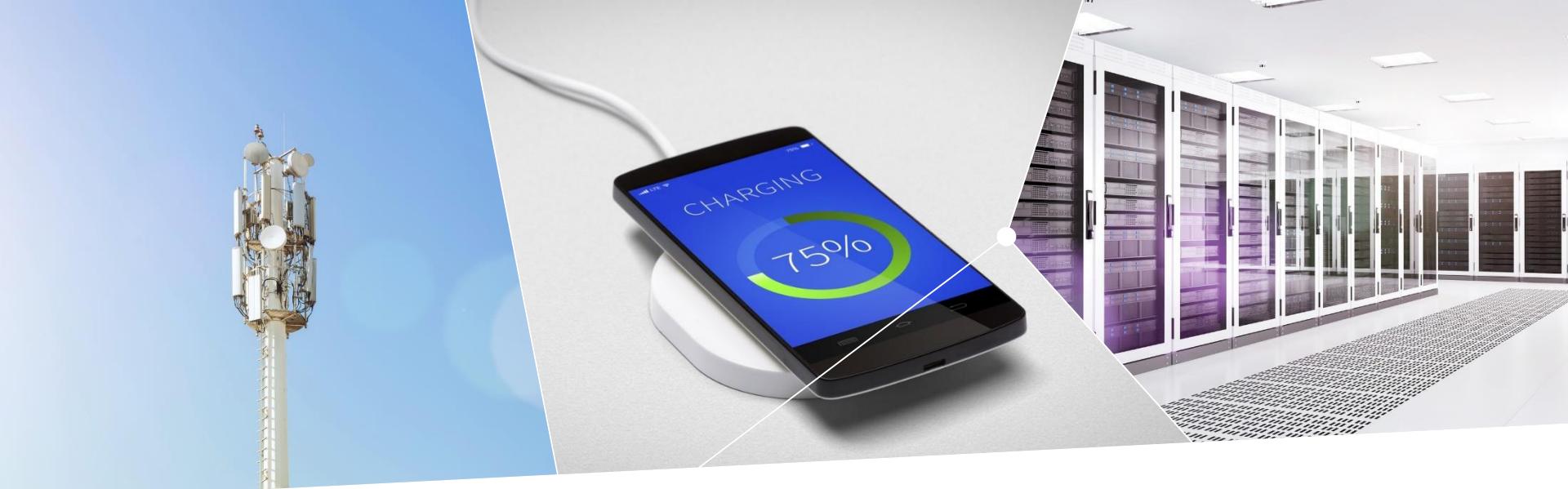


- › eBikes, eScooter
- › multicopter
- › LSEV
- › gaming
- › TV sets
- › smart home

## Industrial



- › power supplies
- › EV on-board charger
- › charging infrastructure
- › PV inverter
- › power tools
- › lighting
- › Industry 4.0
- › space



## PSS – Power

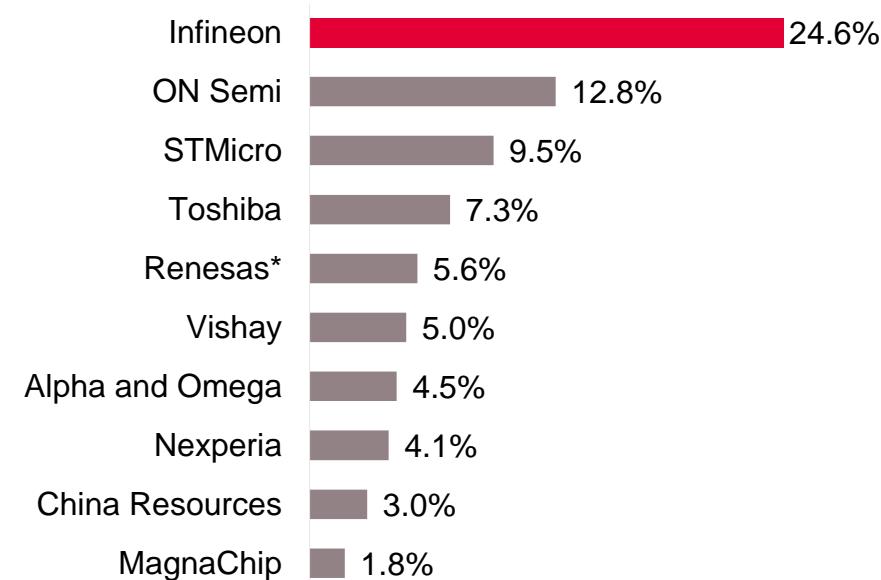


# Infineon is the clear leader in MOSFETs; growth potential in power ICs



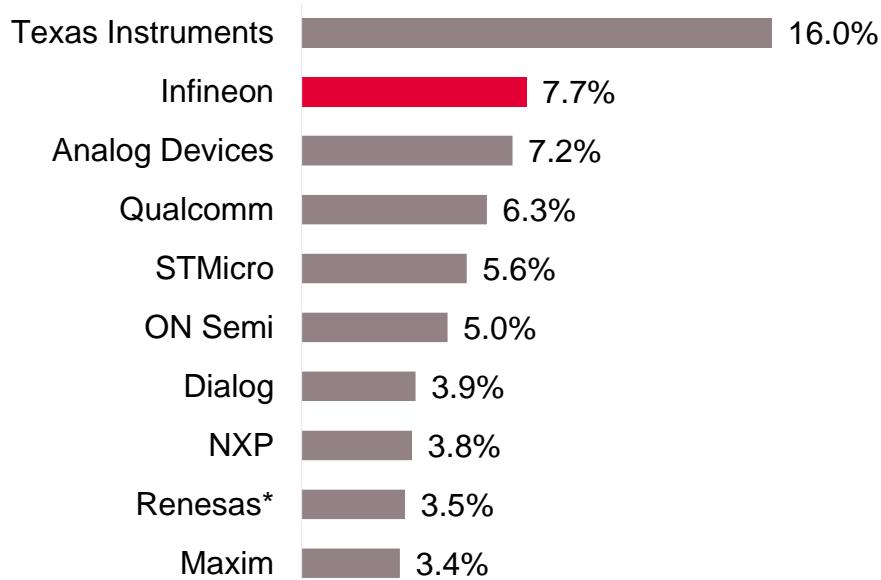
## Discrete Power MOSFETs

2019 total market: \$8.10bn



## Power ICs

2019 total market: \$24.4bn



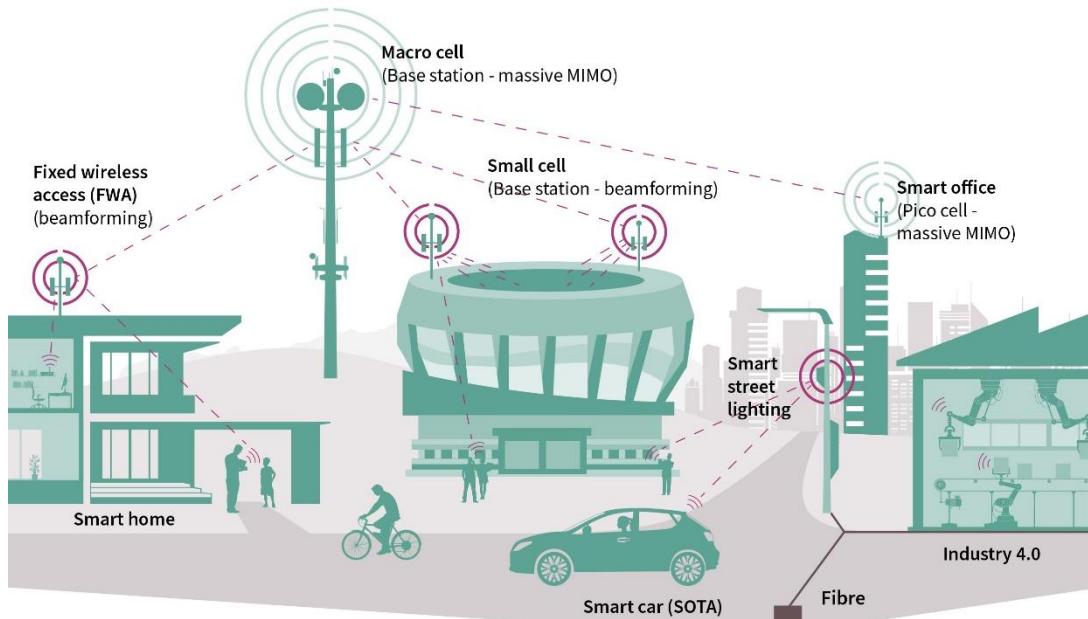
\* Renesas acquired Integrated Device Technology in March 2019. Both companies were combined as Renesas in 2019.

Discrete Power MOSFET market includes automotive MOSFETs, protected MOSFETs, SiC MOSFETs and GaN power transistors. Power IC market includes automotive power ICs.

Based on or includes research from Omdia: *Power Semiconductor Market Share Database 2020*. September 2020.

# Transition from 3G/4G to 5G drives demand in power semis for antennas and power supplies

Smart and connected - the communication of tomorrow with 5G



- › **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

 Base station (Macro cell, massive MIMO) < 6GHz

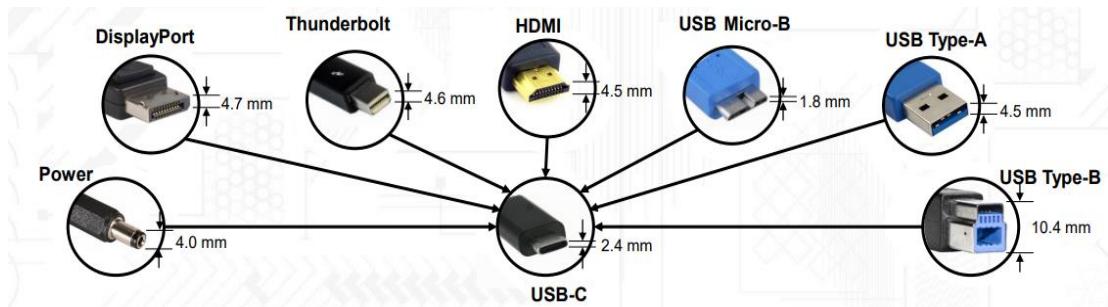
 Small Cell (Beamforming) > 6 GHz

SOTA (Software over the air)

Infineon is well positioned to benefit from the conversion to the de-facto standard USB Type-C

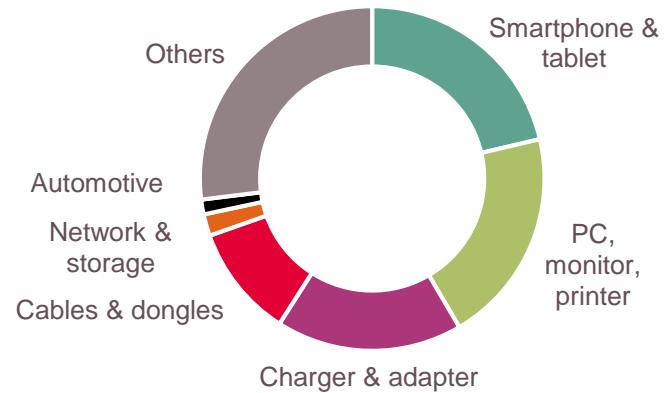


## USB Type-C becomes de-facto interface form factor



## Infineon USB business split by appl.

[FY20]



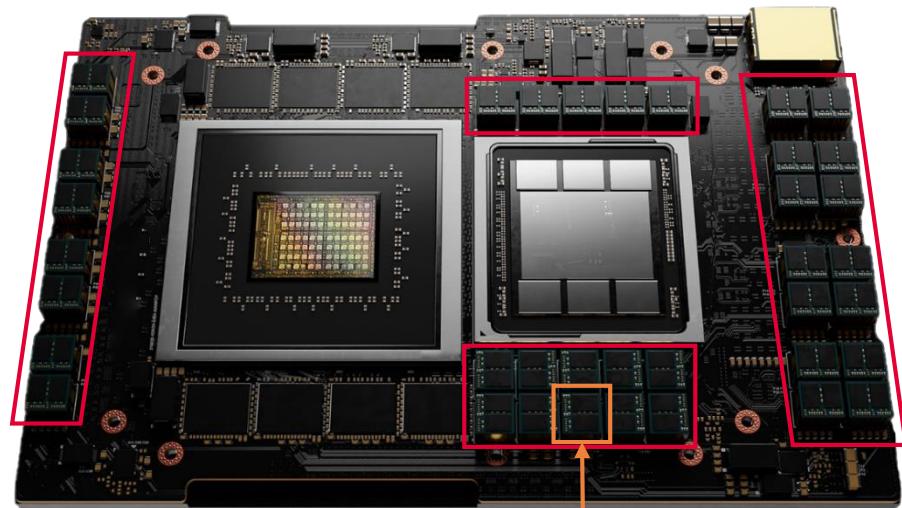
- › Infineon USB business dominated by USB Type-C and USB Type-C PD
- › USB Type-C PD in automotive is a nascent segment with good growth opportunities
- › USB Type-C PD offers revenue synergies for Infineon in AC-DC chargers and adapters

# Infineon provides leading-edge DC-DC power conversion for high-performance acceleration boards



## Next-generation accelerator boards are driving the need for ultra-high density and robust power conversion solutions

- › Exponential increase in compute power driven by AI training and high-performance compute (HPC) systems resulting in power consumption of > 1 kW per board
- › 15% to 25% higher DC-DC power semiconductor content with every xPU generation
- › Infineon's robust and high-efficiency power management solutions are optimized to support high-performance xPUs, ASICs and SoCs with superior power density
- › Infineon's high-density Smart Power Stages enable system designs with highest power density and quality



Courtesy: a leading CPU, GPU, and AI accelerator manufacturer

Infineon high-density 90 A Smart Power Stage  
in 4 mm x 6 mm package

# e-mobility beyond cars: Infineon covers the vast majority of semiconductor content in eScooters



## Application in eScooters

battery management system

charging

connectivity

HMI & control

sensor Systems

motor drive

### Power semis

- › protection FET
- › cell balancing IC

- › MOSFET
- › gate driver



### Control & connect

- › PSoC™ MCU

- › XMC™ MCU
- › XMC™-SC MCU

- › Wi-Fi
- › Bluetooth

### Sensors

- › current sensor
- › pressure sensor
- › gas sensor

- › positioning sensor
- › capacitive-sensing

- › radar sensor
- › ToF 3D sensor
- › positioning sensor

- › positioning sensor

### Security

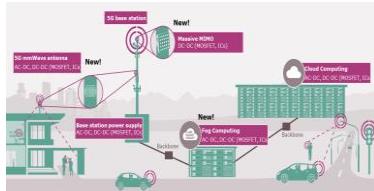
- › battery authentication

- › eSIM
- › communication
- › authentication

- › CIPURSE™ security controller for mobile payment

# What comes next? Mid- to long-term structural growth opportunities

## Core



5G infrastructure



hyperscale AI data center



new material

## Adjacent



smart building



wireless charging



on-board charger

## New area



smart speaker



health & lifestyle



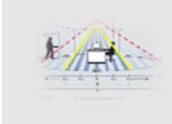
environmental sensor solutions



# PSS – RF and Sensing



# Main applications addressed by PSS sensors portfolio

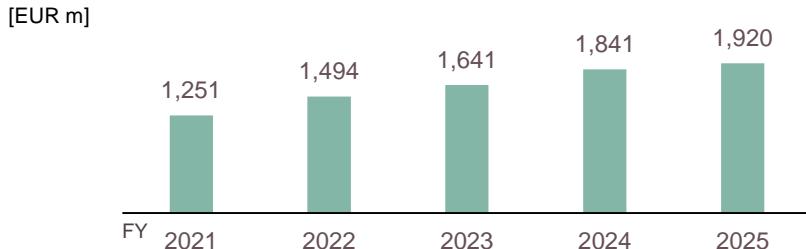
MEMS microphone	3D radar (24/60 GHz)	3D ToF image sensor	Environmental
 	 	 	 
<p>Best audio performance</p> <p>Low power consumption</p>	<p>Ultra-low power consumption</p> <p>Presence detection/ Vital Sensing</p>	<p>Best price / performance</p> <p>Face ID (biometrics), VR/AR</p>	<p>High precision and Small form factor</p> <p>Measure CO<sub>2</sub></p>

## Main applications

<ul style="list-style-type: none"> <li>› Smartphone</li> <li>› True wireless stereo headsets</li> <li>› Smart speaker</li> <li>› Laptop &amp; Tablet</li> </ul>	<ul style="list-style-type: none"> <li>› Automotive</li> <li>› Smart home</li> <li>› TV</li> <li>› Security camera</li> <li>› Smart building</li> </ul>	<ul style="list-style-type: none"> <li>› Smartphone: world-facing and user-facing</li> <li>› Robotics</li> <li>› Automotive in-cabin sensing</li> <li>› Payment terminals</li> </ul>	<ul style="list-style-type: none"> <li>› Heating, ventilation, air conditioning (HVAC)</li> <li>› Air purifier</li> <li>› Smart thermostat</li> <li>› CO<sub>2</sub>/virus risk reduction</li> </ul>
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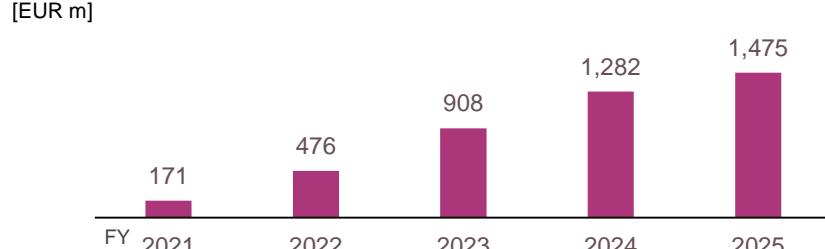
# Sensor markets targeted by PSS offer attractive growth potential

## MEMS microphone market



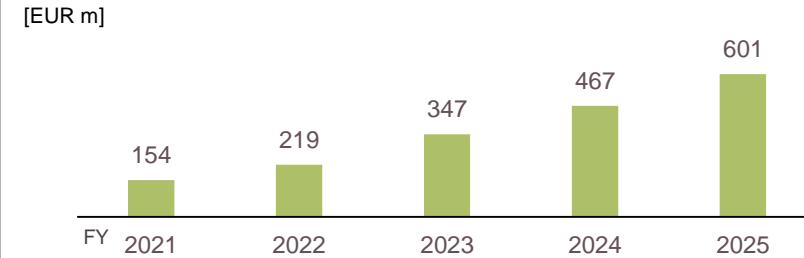
Source: Infineon estimates

## 3D ToF image sensor market



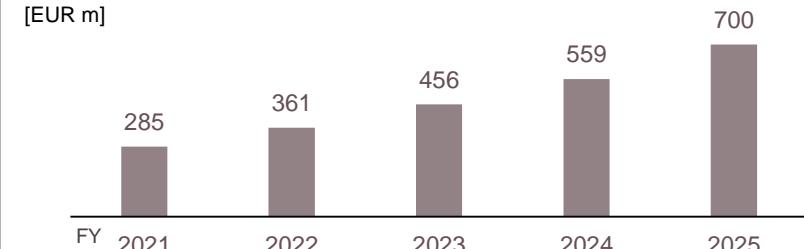
Source: Infineon estimates

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



Source: Infineon estimates

## Environmental sensor market\*

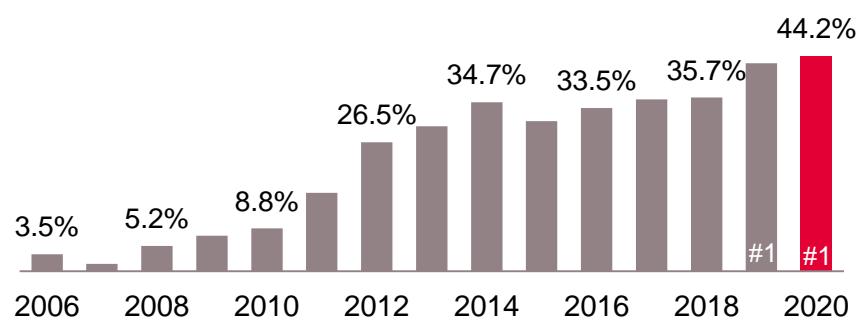


\* Infineon is addressing smart building, smart home, smart appliances, consumer IoT devices and automotive.  
Source: Infineon estimates

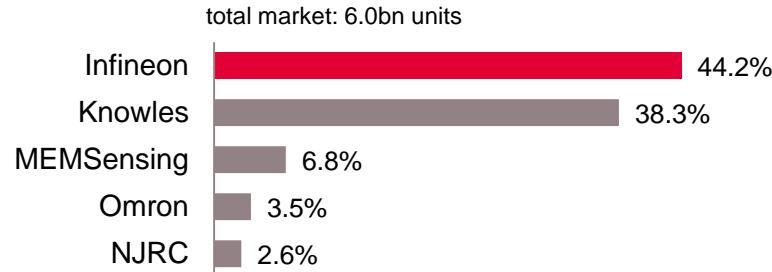
# Unparalleled audio characteristics of our XENSIV™ MEMS microphones made Infineon #1 in 2019 with further m/s gain in 2020



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

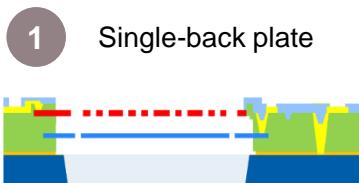


## 2020 MEMS die market share

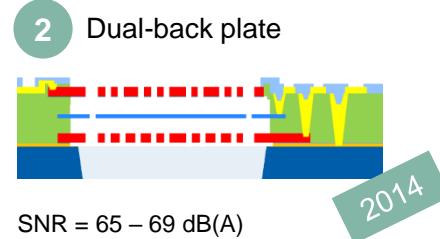


Based on or includes research from Omdia: *MEMS Microphones Dice Market Shares 2021*. July 2021

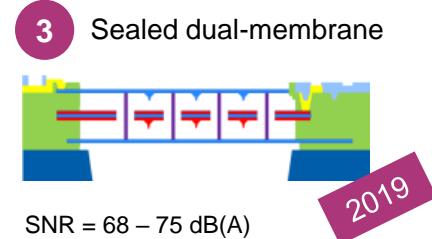
## Technological progression of Infineon XENSIV™ MEMS microphones



SNR = 62 – 65 dB(A)



SNR = 65 – 69 dB(A)



SNR = 68 – 75 dB(A)

# Radar offers several use cases for presence detection and health monitoring

## Presence detection

### › Room Occupancy Devices

e.g. human localization and counting

### › Occupancy based heating and ventilation

e.g. reduction of CO<sub>2</sub> level to prevent spreading of diseases

### › Device switch on/off

e.g. reduction of energy consumption (e.g. lamp, TV, air conditioning...)

### › Directional audio effects on individuum

e.g. to improve audio quality (e.g. smart speaker, TV)

### › Home surveillance

e.g. detection of intruders

## Health monitoring

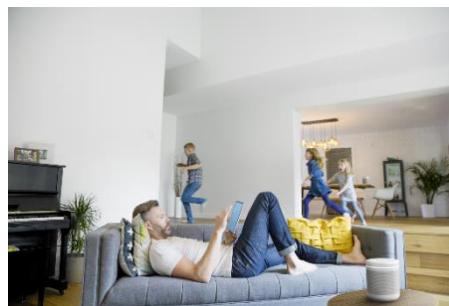
### › Sleep monitoring

Sleep detection, sleep quality, apnea & snoring detection (radar combined with MEMS microphone)

### › Vital sensing for home Fitness

Heart rate and breathing rate measurement (person standing still after exercise)

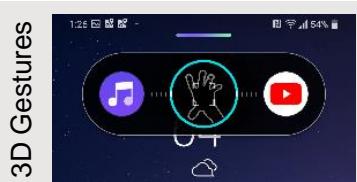
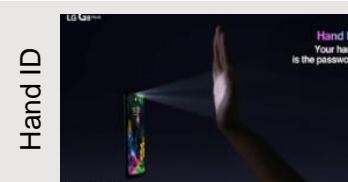
**Segmentation with radar enables smart devices to recognize each person in the room**



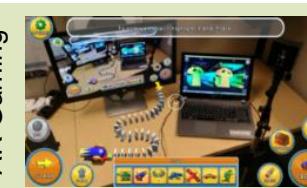
# Infineon 3D ToF is a versatile technology for many consumer applications



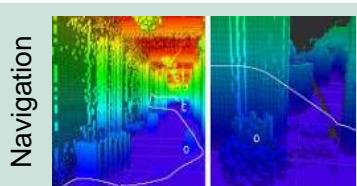
## Mobile Phones – User Facing



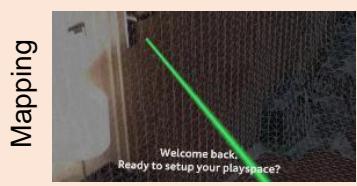
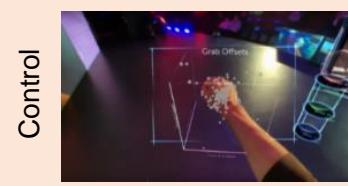
## Mobile Phones – World Facing



## Consumer Robotics



## Augmented- & Virtual Reality



# Infineon XENSIV™ PAS CO2 sensor enables highly-precise CO<sub>2</sub> measuring in an extremely small size

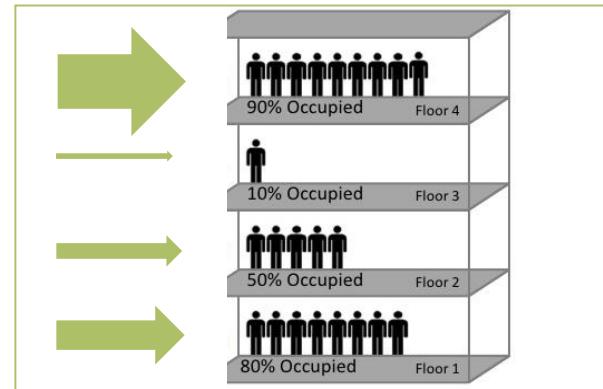


## Photoacoustic spectroscopy (PAS) technology based on Infineon's high (SNR) signal-to-noise ratio MEMS microphone

- › Infineon XENSIV™ PAS CO2 sensor enables highly-precise, cost-effective and space saving CO<sub>2</sub> measuring
- › The technology offers an exceptionally small form factor (14 mm x 13.8 mm x 7.5 mm) that is 4x smaller and 3x lighter (2 grams) than the typical NDIR (non-dispersive infrared) sensor, allowing for more than 75% space savings in customer systems
- › The SMD package ensures compatibility with high-volume manufacturing standards, enabling cost-effective, fast assembly and system integration
- › Advanced compensation and configuration algorithms enable a plug-&-play sensor performance and fast design-to-market

## XENSIV™ PAS CO2 leads to demand-oriented and energy efficient control of air conditioning systems

XENSIV™ PAS CO2 sensor measures the CO<sub>2</sub> level



# Infineon system solution addresses IoT market via combining XENSIV™ sensors, PSoC™ 6 MCU and connectivity

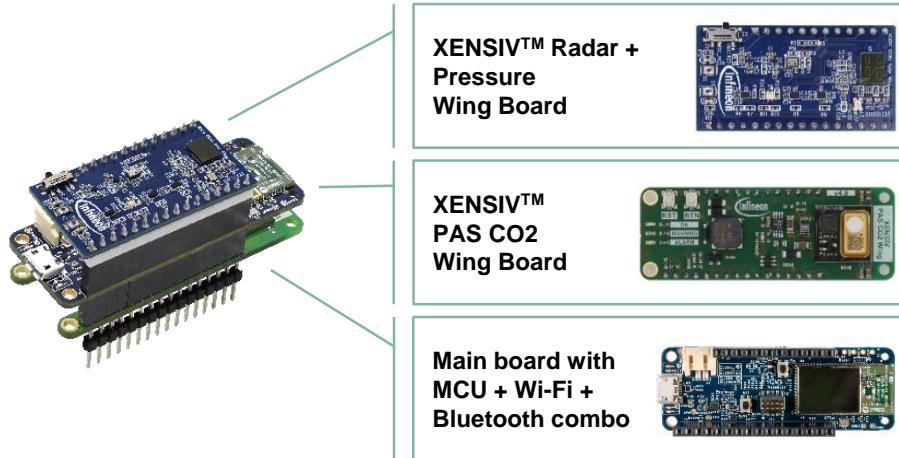


## Key facts

- › Infineon offers system solutions comprising of sensor, MCU, connectivity and software libraries (apps, SDKs)
- › BLE functionality monolithically integrated on MCU
- › IoT target applications for radar: entrance control or presence detection for smart home and smart building
- › Radar solutions are anonymous and therefore respecting privacy
- › First orders for presence detection received from several Asian customers
- › Radar solution can perfectly be combined with Infineon's XENSIV™ PAS CO2 sensor for air quality monitoring



## Example offering: Combination of sensors, microcontrollers and connectivity in development kit



## Advantages of radar over passive infrared

- › super compact design; smaller system sizes
- › determination of person's direction, speed, distance
- › programmable; can flexibly be adapted to the target application
- › higher accuracy; more precise measurements of detected objects

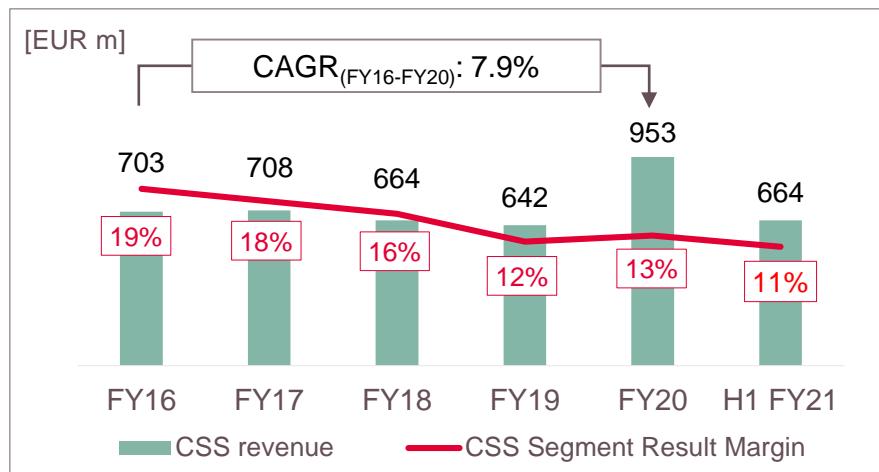


# Connected Secure Systems

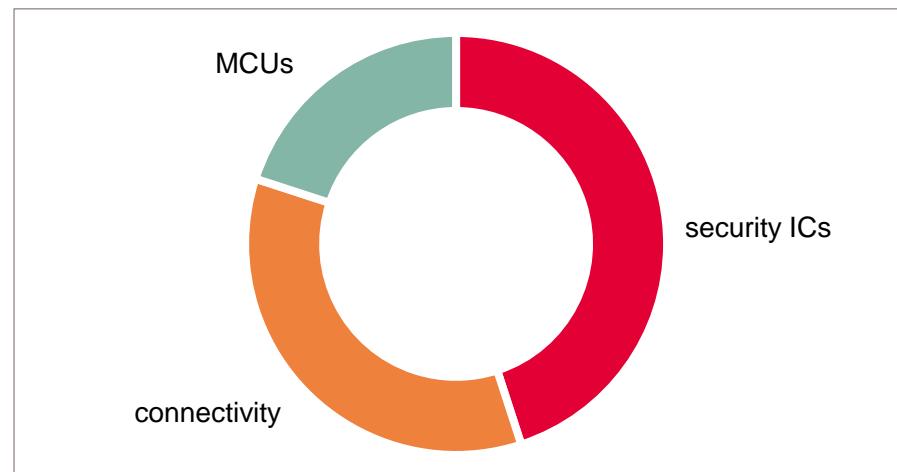


# CSS at a glance

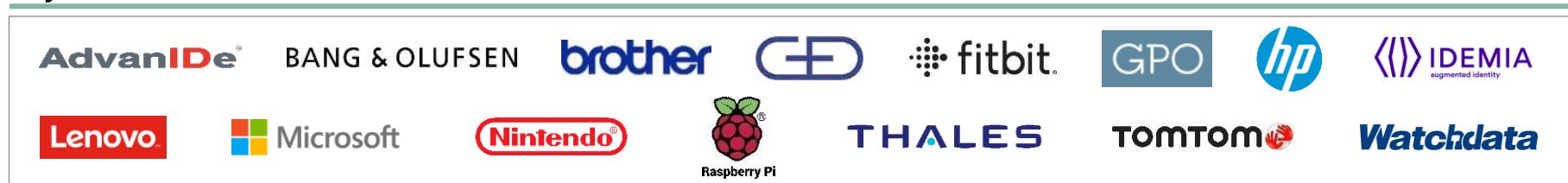
## CSS revenue and Segment Result Margin



## FY20 revenue split by product group



## Key customers



# Market outlook for target applications remains positive but foundry supply constraints might limit growth potential in 2022



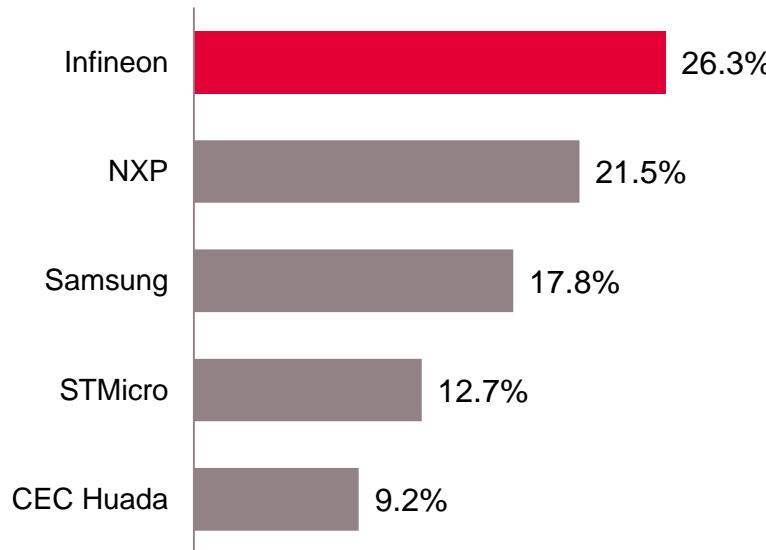
Applications (% of FY20 segment revenue)	Market Outlook for CY21	Market Outlook for CY22
Industrial and Consumer IoT ~70%	 <ul style="list-style-type: none"><li>➢ Growth driven by general market recovery in industrial automation and energy efficiency incentive programs for home appliances</li></ul>	 <ul style="list-style-type: none"><li>➢ Growth momentum in industrial segments to continue into 2022</li></ul>
	 <ul style="list-style-type: none"><li>➢ New features and technologies enter production across several devices</li></ul>	 <ul style="list-style-type: none"><li>➢ Further growth momentum across smart home devices expected</li></ul>
	 <ul style="list-style-type: none"><li>➢ Increasing penetration rate of eSIM Automotive driven by increasing connectivity requirements</li><li>➢ Connectivity technologies to improve in-car user experience</li></ul>	 <ul style="list-style-type: none"><li>➢ Increasing penetration rate of eSIM Automotive and in-car connectivity to continue along with further recovery of overall light vehicle sales</li></ul>
	 <ul style="list-style-type: none"><li>➢ Market growth driven by launch of new console models</li></ul>	 <ul style="list-style-type: none"><li>➢ The market is assumed to decline slightly from a high level after CY21</li></ul>
	 <ul style="list-style-type: none"><li>➢ New product launches expected to boost demand</li><li>➢ Further implementation of low-power processing and connectivity technologies across new models</li></ul>	 <ul style="list-style-type: none"><li>➢ Growth in wearables market is assumed to stretch in 2022 driven mainly by smart watches</li></ul>
Payment, ID, Ticketing ~30%	 <ul style="list-style-type: none"><li>➢ High demand for contactless payment solutions expected to continue while supply constraints might pose risks</li></ul>	 <ul style="list-style-type: none"><li>➢ Further migration and high demand for contactless payment solutions expected to continue however under risk of foundry supply constraints</li></ul>
	 <ul style="list-style-type: none"><li>➢ Prolonged restrictions on intercontinental travel expected to further affect the issuance of passports, partially compensated by a major eID project roll-out</li></ul>	 <ul style="list-style-type: none"><li>➢ Positive trend expected driven by recovery in passports issuance as well as project roll-out for other eDocuments</li></ul>

# Infineon remains top player in its target markets: security ICs, Wi-Fi standalone ICs



## Security ICs (excl. NFC controller; excl. NFC eSE)

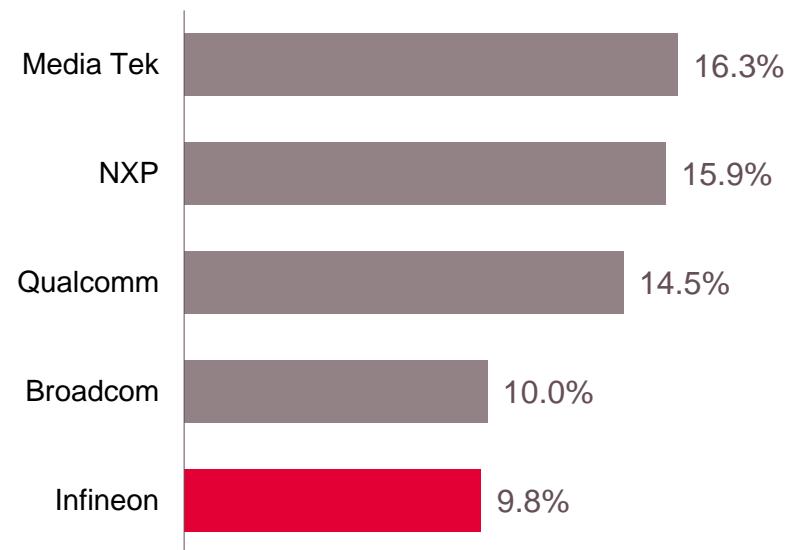
2019 total market: \$2.8bn



## Wi-Fi standalone ICs

2019 total market: 978m units

Infineon is focusing on wearables and IoT but not addressing routers, PCs, notebooks, tablets.



Applications

Industrial



Automotive



Smart Home



Gaming



Wearables



Payment, ID, Ticketing

Payment



Identification



CSS capabilities



Compute



Wireless Connectivity



Security

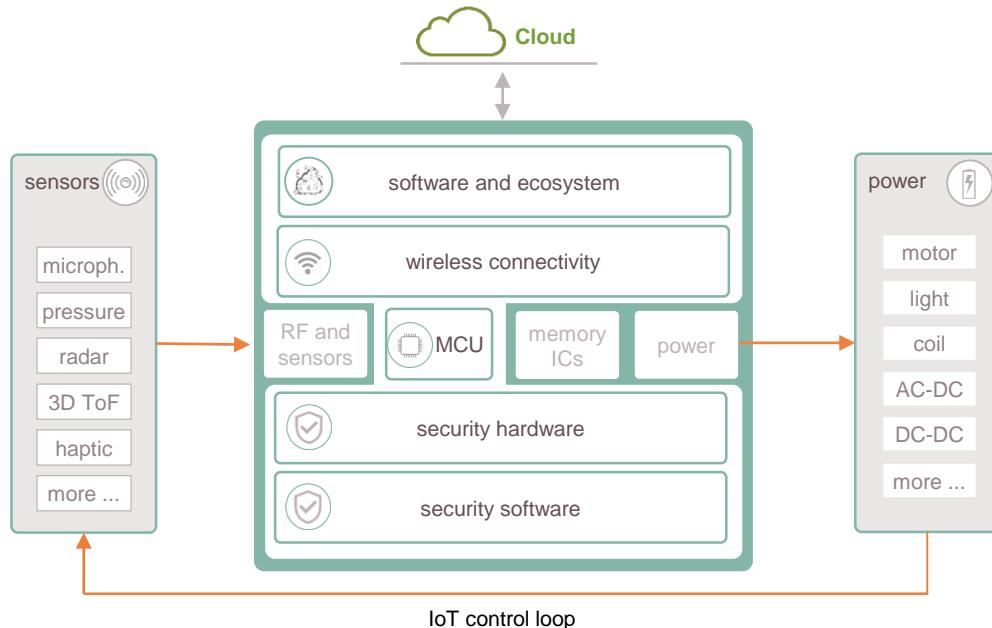


Software

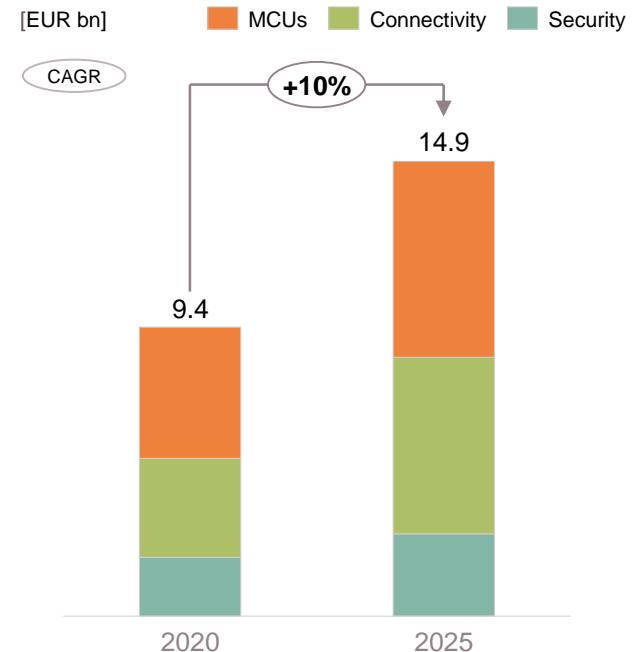
# Compute, connectivity, security and software ecosystem capabilities enable Infineon to address a growing market driven by the IoT



## Infineon offers the entire system for IoT



## CSS market\*

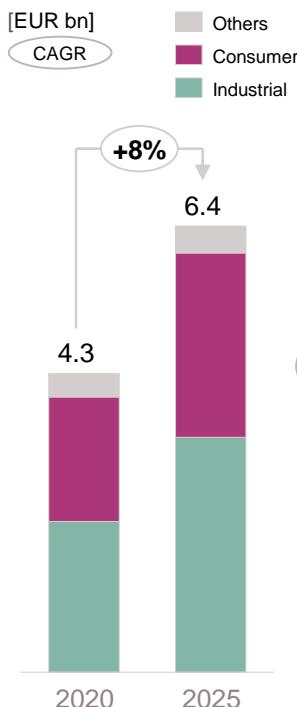


\* Source: Infineon internal market model based on SAM view

# MCUs – Dynamic market environment; CSS is well set to tackle trends in IoT & Consumer as well as Industrial markets



## MCU market\*



## Trends in MCU markets



Continued growth of MCUs in smart home, driven by home automation devices and wearables



Industrial MCUs growing across wide range of applications



Blurring cost/performance differences between MCUs and MPUs

32 bit

Beginning to embrace 32-bit MCU with machine learning (ML) acceleration for edge compute

## Segments and focus topics

### IoT & Consumer



- › Deliver core IoT blocks (MCU, radios, software) and bundled solutions
- › Pairing of MCU and connectivity
- › Prepare and enable emerging edge compute wave with ML capabilities
- › Leading integrated security features

### Industrial



- › Deliver highly differentiated MCU based industrial solutions
- › Provide easy to use sub-system solutions based on Infineon building blocks (sensor control, motor control, power management and connected MCUs)

\* Source: Infineon internal market model based on SAM view

# Wi-Fi – Market driven by a dynamic environment of specifications; CSS is addressing main growth trends



## Wi-Fi market\*

[EUR bn]

CAGR

+13%

2.7

1.4

2020

2025

## Trends in Wi-Fi markets



Specially suited for IoT devices with basic connectivity, low cost, low-power requirements



Focus on high bandwidth IoT applications to ensure data transmission



New standard Wi-Fi 6 is gaining momentum initially on high-performance applications

## Segments and focus topics

### IoT & Consumer



- › Broad portfolio with Wi-Fi 4 / 5 / 6 standalone and combo offerings
- › Lead transition to Wi-Fi 6 for IoT

### IoT low-power



- › Extend leadership on low-power devices
- › System-level power optimization using optimized Wi-Fi product architecture

### Automotive



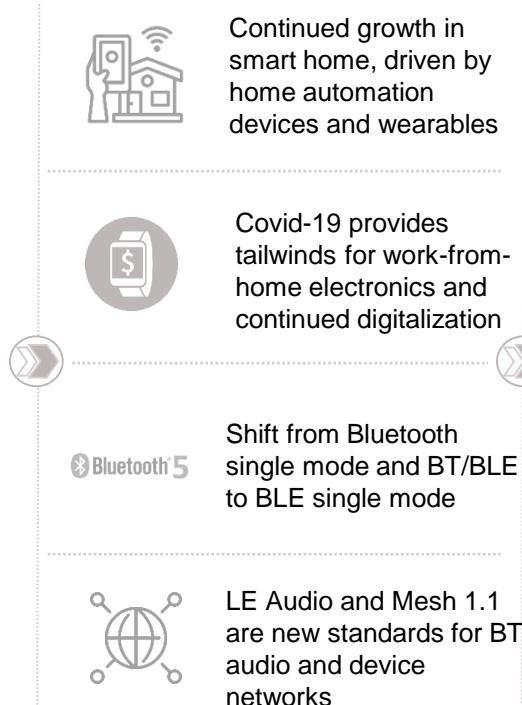
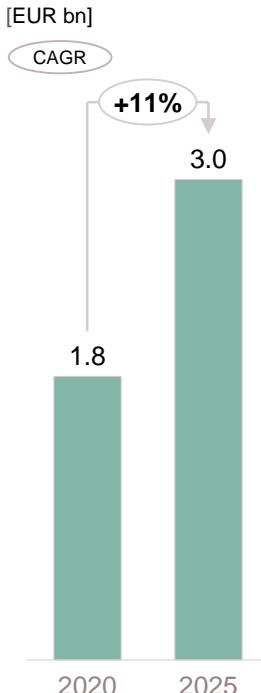
- › Extend leadership in automotive infotainment and telematics with Wi-Fi 6 combo offerings
- › Enable enhanced use cases with low-energy audio in auto infotainment

\* Source: Infineon internal market model based on SAM view

# Bluetooth – Market driven by further penetration of Bluetooth use cases across devices; CSS focus topics enable this development



## Bluetooth (BT) market\* Trends in Bluetooth markets



## Segments and focus topics

### Smart Home



- Focus on Mesh 1.1 and Mesh 2.0 (upcoming) device network protocols
- Drive engagements for emerging standards such as Connected Home over IP

### Streaming & Compute



- Grow BLE-HID (Human Interface Devices) footprint
- Drive beacons, tags with BLE Location + security in asset-tracking/industrial

### Automotive



- Leverage Infineon Automotive footprint to add auto-body and sensor connectivity
- Enhance in-cabin experience

### Wearables

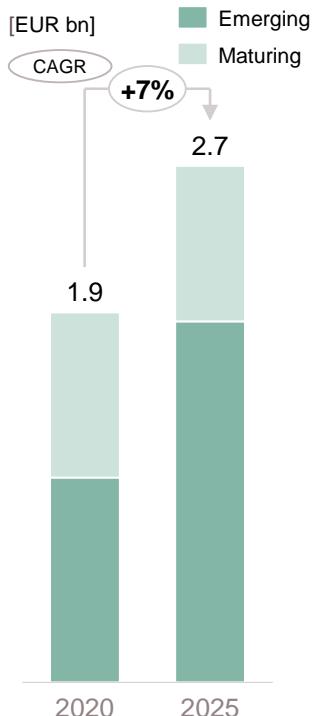


- Infineon Wireless Audio Stereo Synchronization (WASS) in BT speakers as a differentiation
- Proliferate footprint in wearables by leveraging WASS technology

\* Source: Infineon internal market model based on SAM view

# Security – Several long-term key trends driving value, generating emerging opportunities, shaping CSS' focus in the security field

## Security ICs market\*



## Trends in security ICs market

-  Proliferation of contactless payment
-  Growth of payment-enabled wearables
-  Proliferation of IoT devices with increased security requirements
-  Increasing penetration of eSIM Consumer in mobile devices
-  Anti-counterfeiting for consumer devices to protect end users' health and experience

## CSS focus

### Innovation leadership

- Leading silicon technology platforms
- Contactless performance
- Secure embedded control

### Increasing solution share

- Enhance full solutions portfolio (silicon + software) with extension of SECORA™ and OPTIGA™ families

### Prepare for market opportunities

- Address adjacent and new market opportunities like biometric cards, wireless charging, new authentication applications, among others

## Segments



### Payment

Contactless, smart wearables and accessories, biometric cards



### Identity

Electronic identification



### Ticketing & Access

eTicketing, access management



### Device Authentication

Accessories, printer authentication, battery authentication, wireless charging



### Mobile Security

eSIM Consumer, SIM



### Trust Anchors

IoT nodes & infrastructure, automotive security

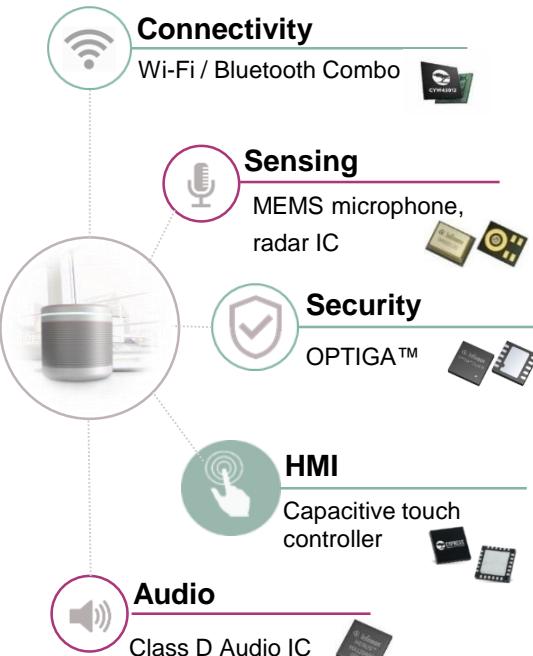
\* Source: Infineon internal market model based on SAM view

# Significant synergy potential of a combined company product portfolio

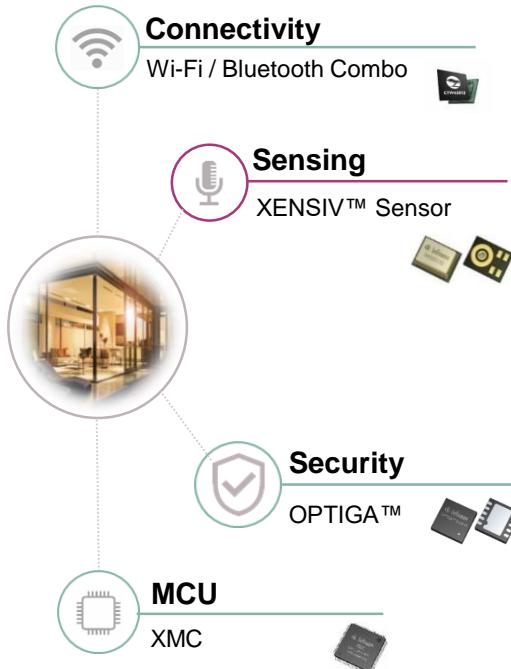
## Synergies application examples

CSS offering  Other Infineon Divisions offering

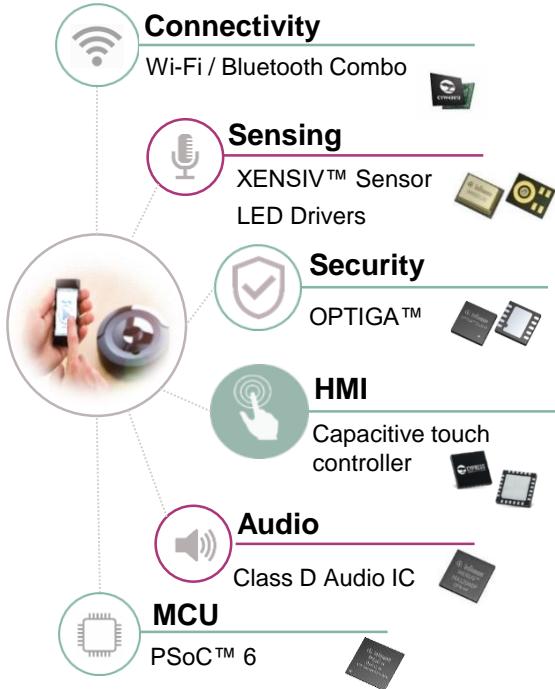
### Smart speaker



### Smart lighting



### Service robots



# Infineon's new AIROC™ Wi-Fi 6/6E and Bluetooth® 5.2 solutions bring reliable, high-performance connectivity to smart homes



## Key facts

- › Infineon is expanding its AIROC™ wireless portfolio of high-performance, reliable and secured offerings with combined Wi-Fi 6/6E and Bluetooth® 5.2 combo capabilities
- › Key advantages of the new solution include:
  - Doubled wireless coverage range compared to Wi-Fi 4 and 5
  - 40% more coverage than typical Wi-Fi 6/6E solutions
  - Over 20% power savings, enabling longer battery life
  - Improved connection robustness with enhanced interference mitigation
  - Multi-layer security protections enabling a higher level of security for IoT applications

## Selected target applications



streaming devices



game consoles



smart speakers



infotainment



7RE3	37.278	1.14	+0.72▲	634.270	3.984%	369,000
S421	94.107	0.73	-0.51▼	538.014	2.416%	743,000
YT64	21.744	5.63	+3.16▲	692.360	0.657%	405,000
I897	13.361	1.82	-1.23▼	237.981	0.103%	882,000



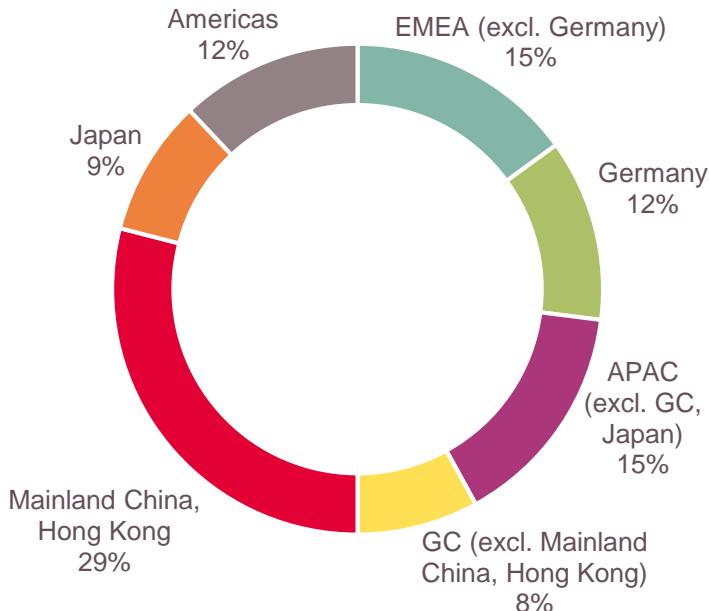
Selected financial figures



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



### FY20 revenue by region



### Revenue by sales channel\*

#### Distribution and EMS partners



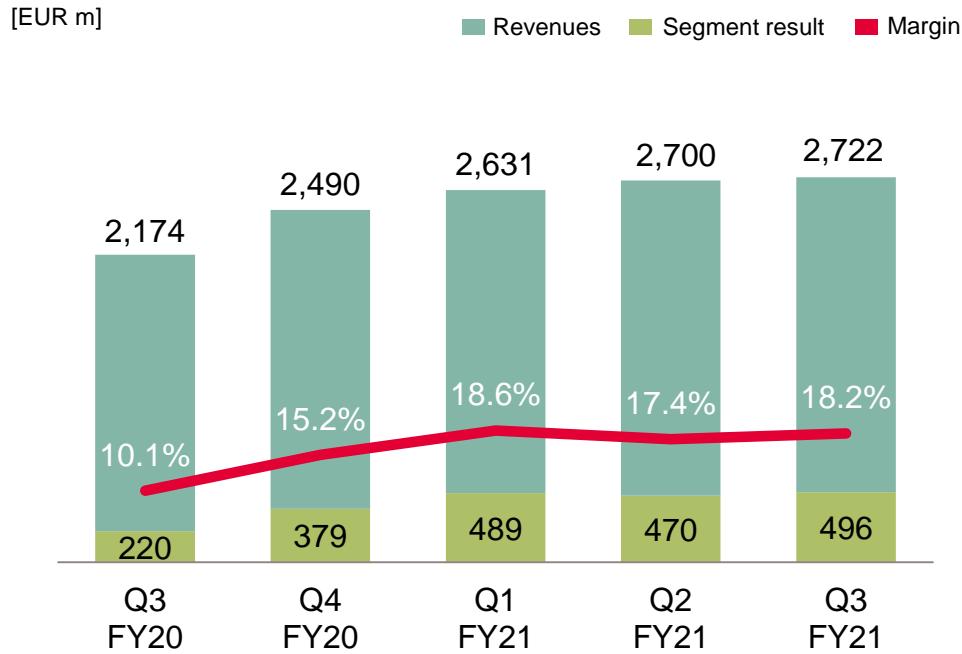
#### Top-10 direct customers



\* assuming 12-months revenue contribution of Cypress

# Group financial performance

## Revenues and segment result



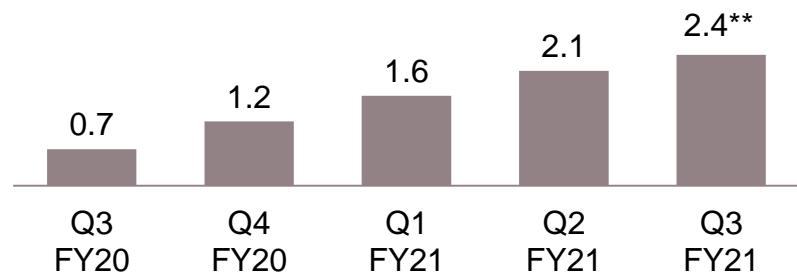
## USD exchange rate

### Average exchange rate

Ø USD/EUR	Q3 FY20	Q2 FY21	Q3 FY21
1.10	1.21	1.20	

### Book-to-bill\*

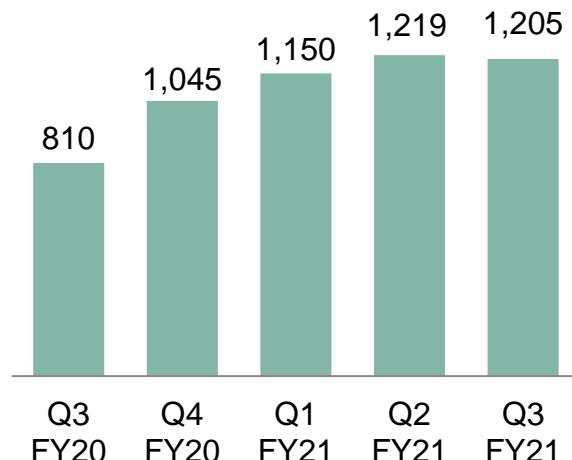
\*See notes for definition \*\*Calculated on a like-for-like basis



# Automotive (ATV)

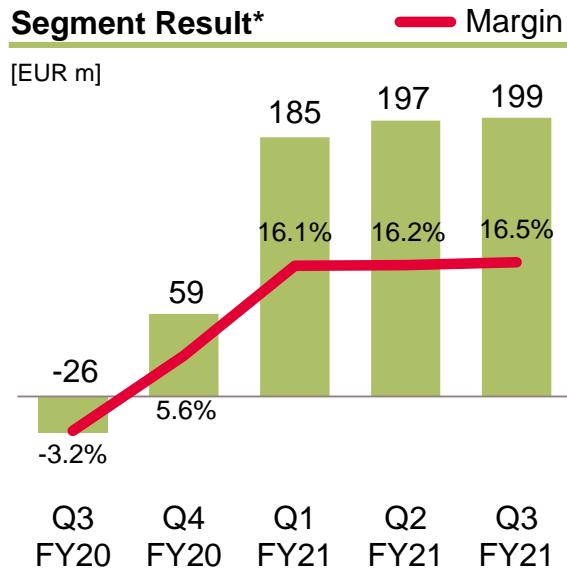
## Revenues\*

[EUR m]



## Segment Result\*

[EUR m]



## Book-to-bill

0.2

1.3

1.5

2.3

2.3\*\*

- › Significant demand across all product areas, however ...
- › ... supply constraints, in particular temporary shutdowns at Austin and Melaka sites, capped revenue growth; profitability was preserved
- › In an overall restrained car market, the adoption of electric vehicles remains on a strong trajectory

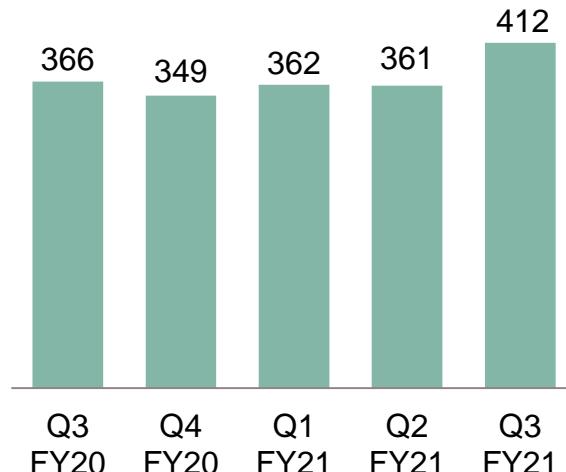
\*\*Calculated on a like-for-like basis, see notes

\* With effect from 1 Oct 2020, we transitioned a group of industrial microcontrollers with an annual sales volume of a low-double digit million Euros from ATV to CSS. Historical figures have been retroactively adjusted.

# Industrial Power Control (IPC)

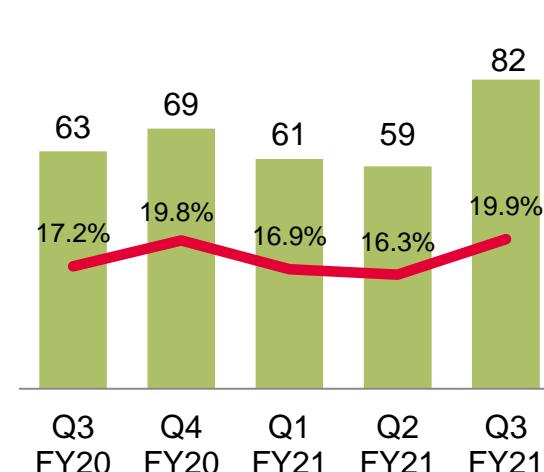
## Revenues

[EUR m]

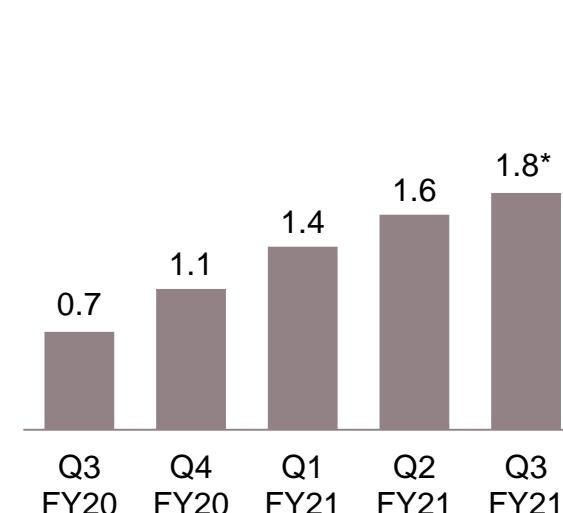


## Segment Result

[EUR m]



## Book-to-bill

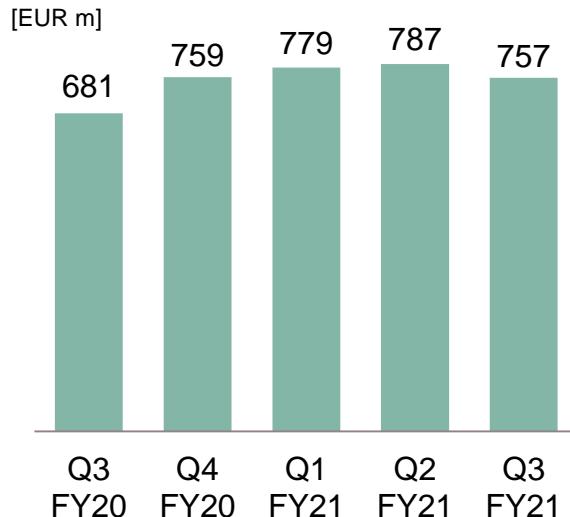


\*Calculated on a like-for-like basis, see notes

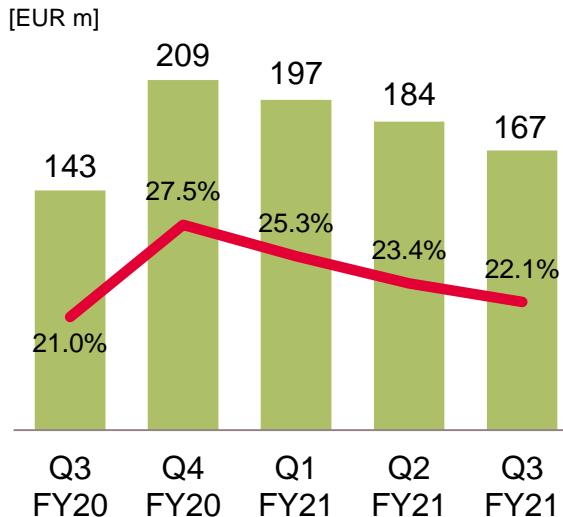
- › All application areas contributed to the strong sequential growth, in particular industrial drives and renewable energies
- › Ongoing recovery for industrial drives, driven by robust business optimism
- › Energy transition provides strong structural backdrop to several IPC target areas (renewables; energy storage; EV charging)

# Power & Sensor Systems (PSS)

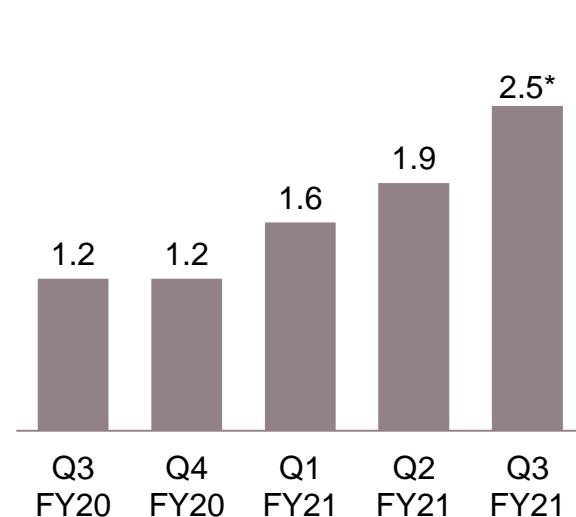
## Revenues



## Segment Result



## Book-to-bill

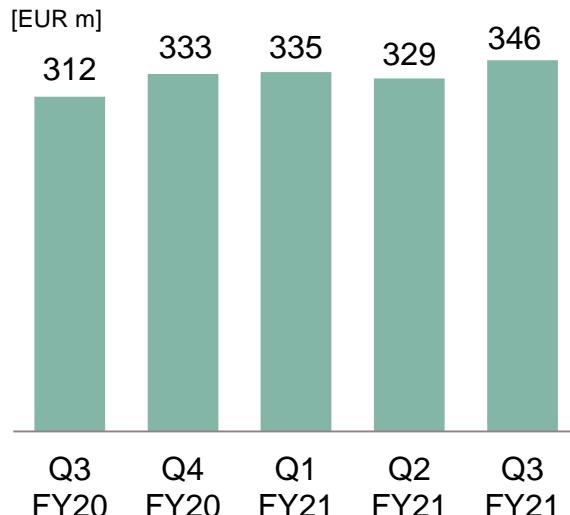


\*Calculated on a like-for-like basis, see notes

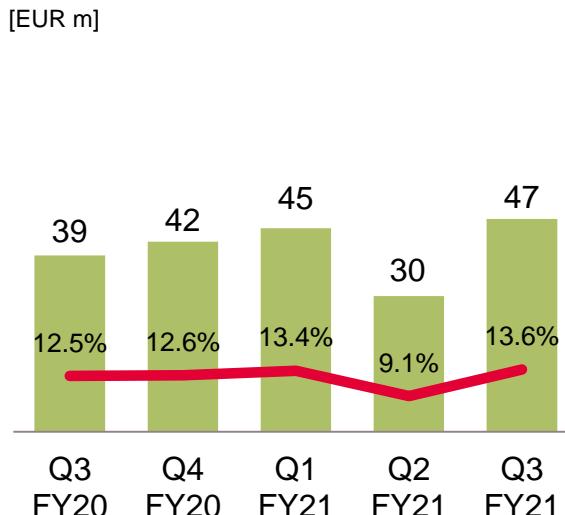
- › Sequential revenue decline caused by:
  - › Temporary drop of demand for RF and sensor components for smartphones
  - › Supply limitations resulting from constraints at our Austin and Melaka fabs and from external contract manufacturers
- › Strong demand across the entire range of power products - from server power stages to MOSFETs and ICs for battery-operated tools

# Connected Secure Systems (CSS)

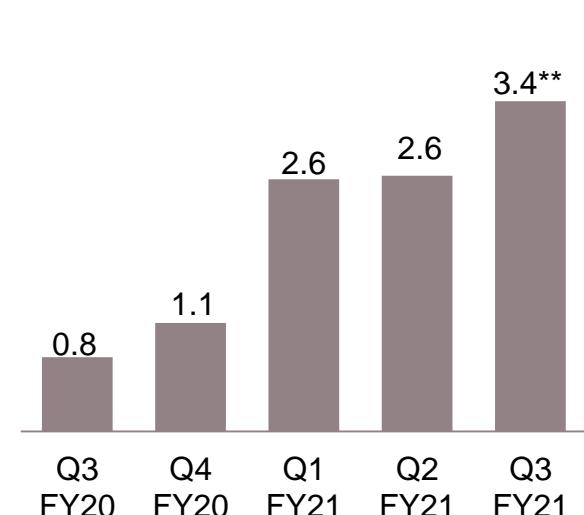
## Revenues\*



## Segment Result\*



## Book-to-bill



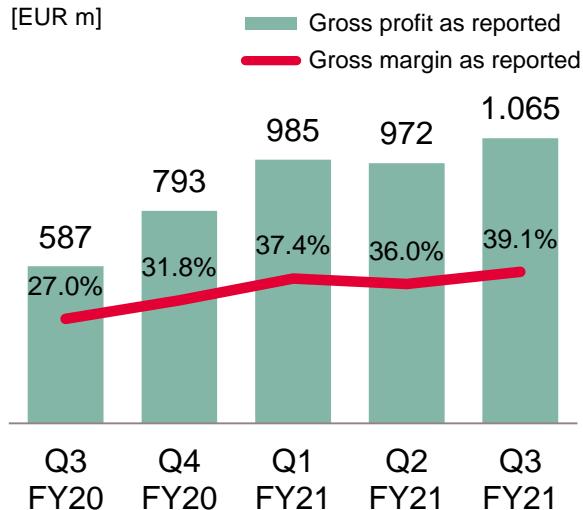
\*\*Calculated on a like-for-like basis, see notes

- › Some limited supply improvements and higher project business in identity solutions supported quarterly revenue growth
- › Brisk demand for general-purpose MCUs, Wi-Fi and Bluetooth components and security solutions
- › Ongoing design-win momentum for smart and connected devices

\* With effect from 1 Oct 2020, we transitioned a group of industrial microcontrollers with an annual sales volume of a low-double digit million Euros from ATV to CSS. Historical figures have been retroactively adjusted.

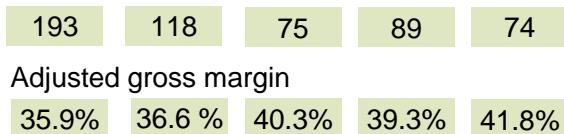
# Gross margin and Opex

## Gross profit

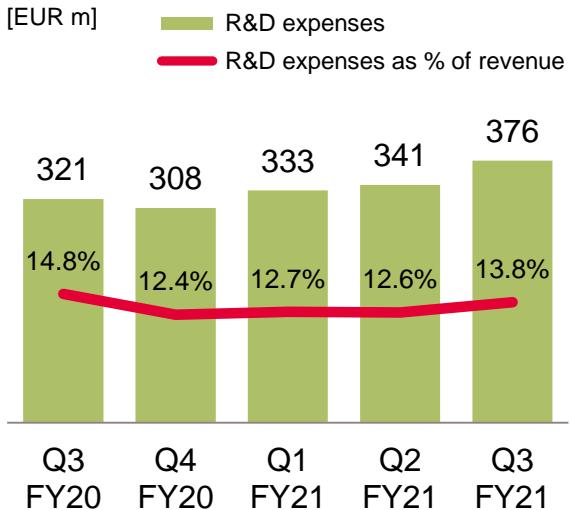


Therein non-segment result charges

[EUR m]

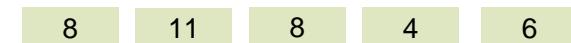


## R&D

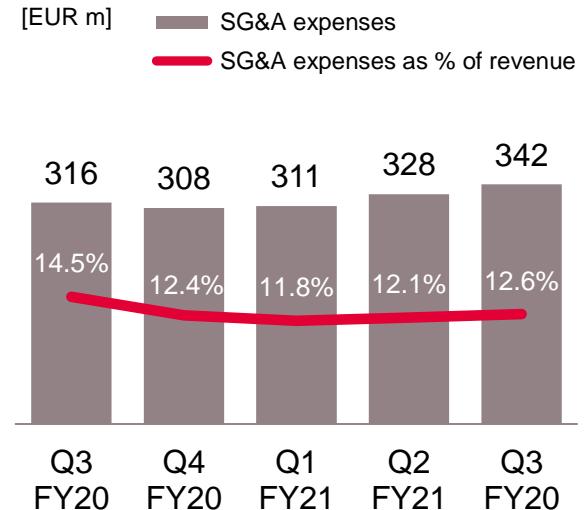


Therein non-segment result charges

[EUR m]

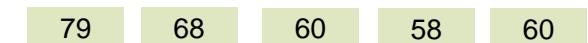


## SG&A

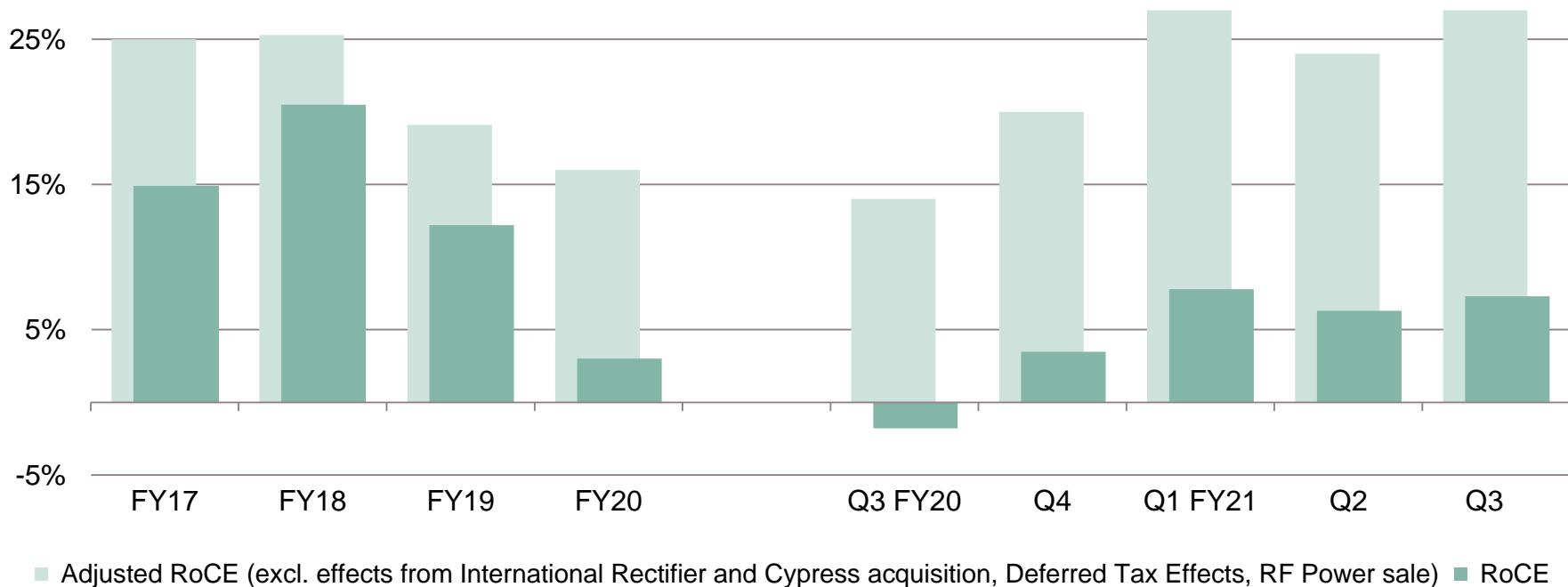


Therein non-segment result charges

[EUR m]



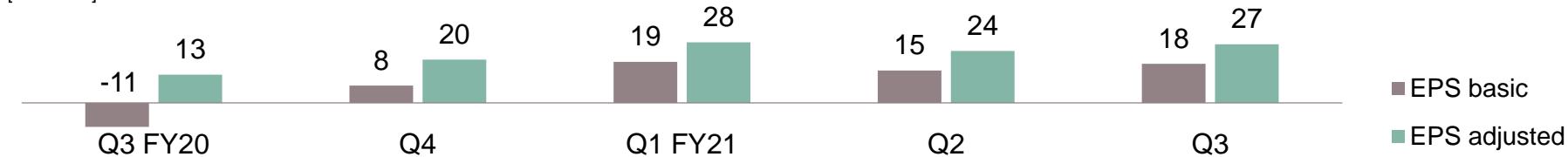
## RoCE and adjusted RoCE



# Earnings-per-share and total cash return

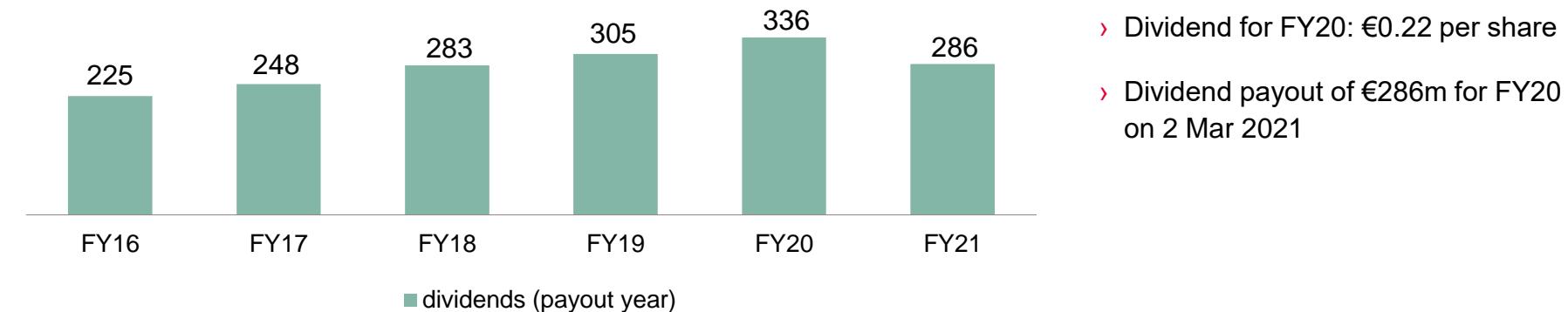
## Development of earnings-per-share (EPS) from continuing operations

[EUR cent]



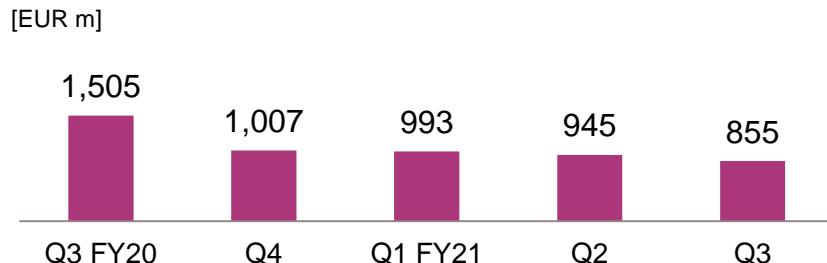
## Total cash return to shareholders

[EUR m]

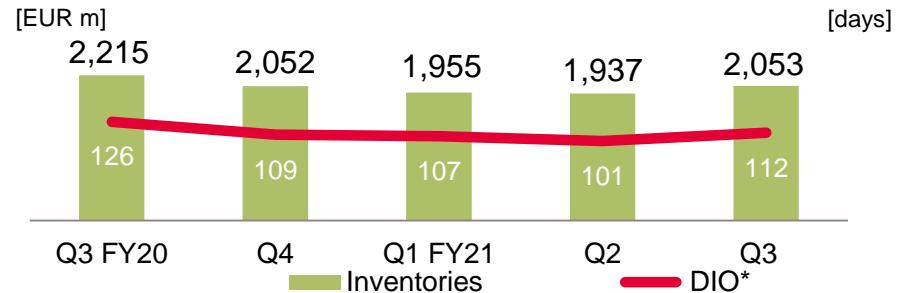


# Working Capital, in particular trade working capital components

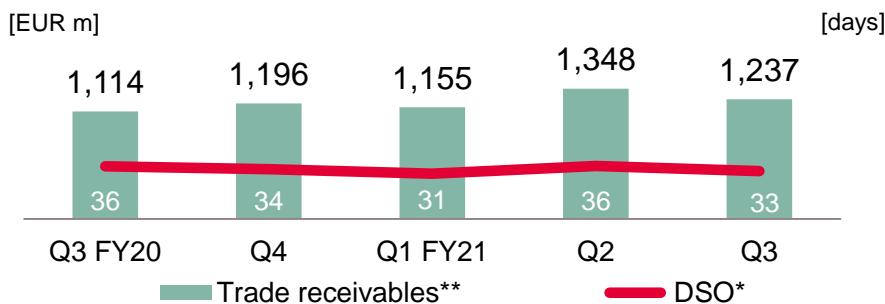
## Working capital\*



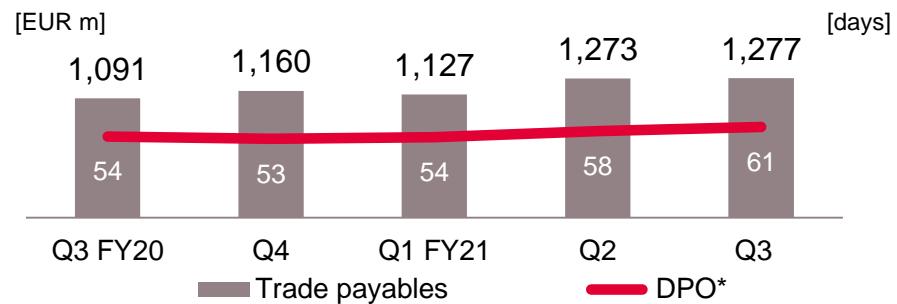
## Inventories



## Trade receivables



## Trade payables



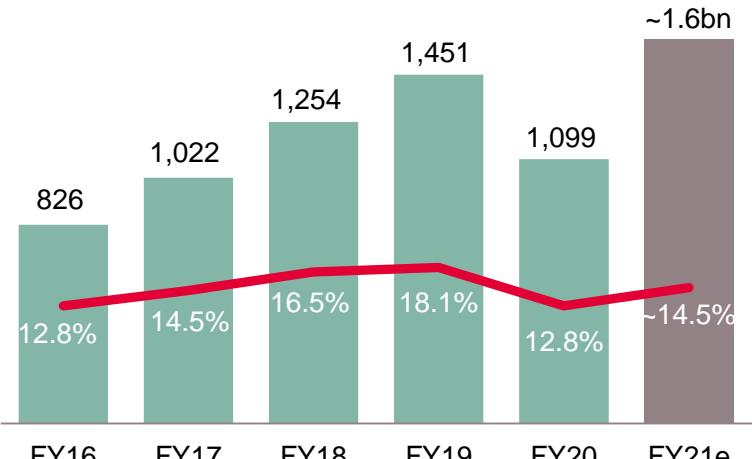
\* For definition please see page "Notes".

\*\* Along with the integration of Cypress refund liabilities to customers are presented under "other current liabilities" instead of "trade receivables". Prior quarters' figures were adjusted accordingly for better comparability.

# D&A impacted by Cypress consolidation and PPA

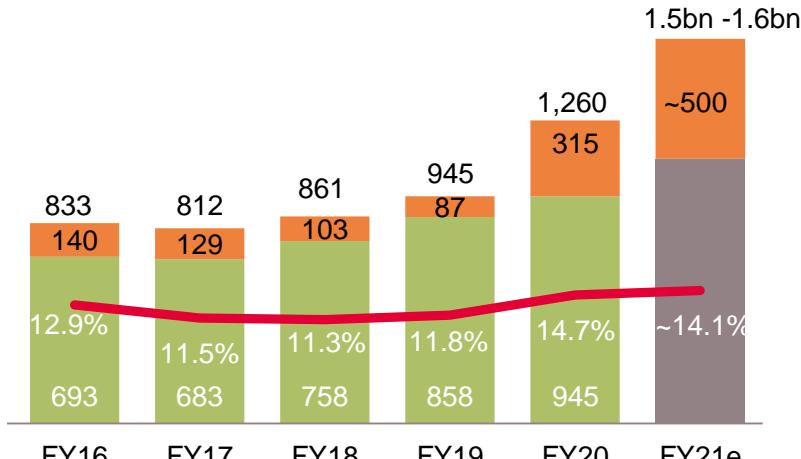
## Investments\*

[EUR m]



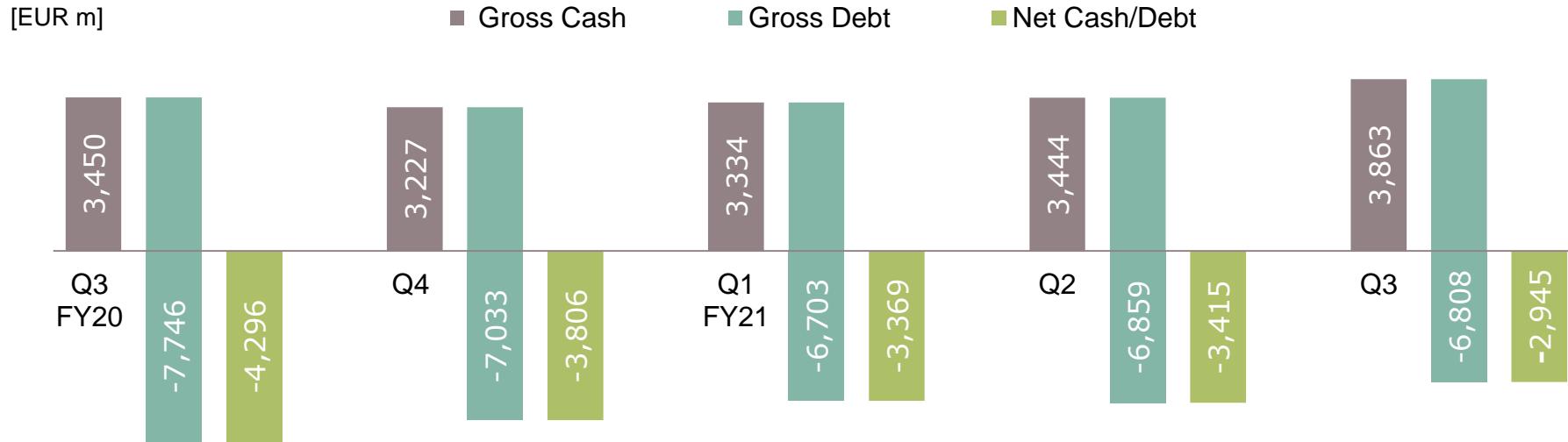
## Depreciation & Amortization

[EUR m]



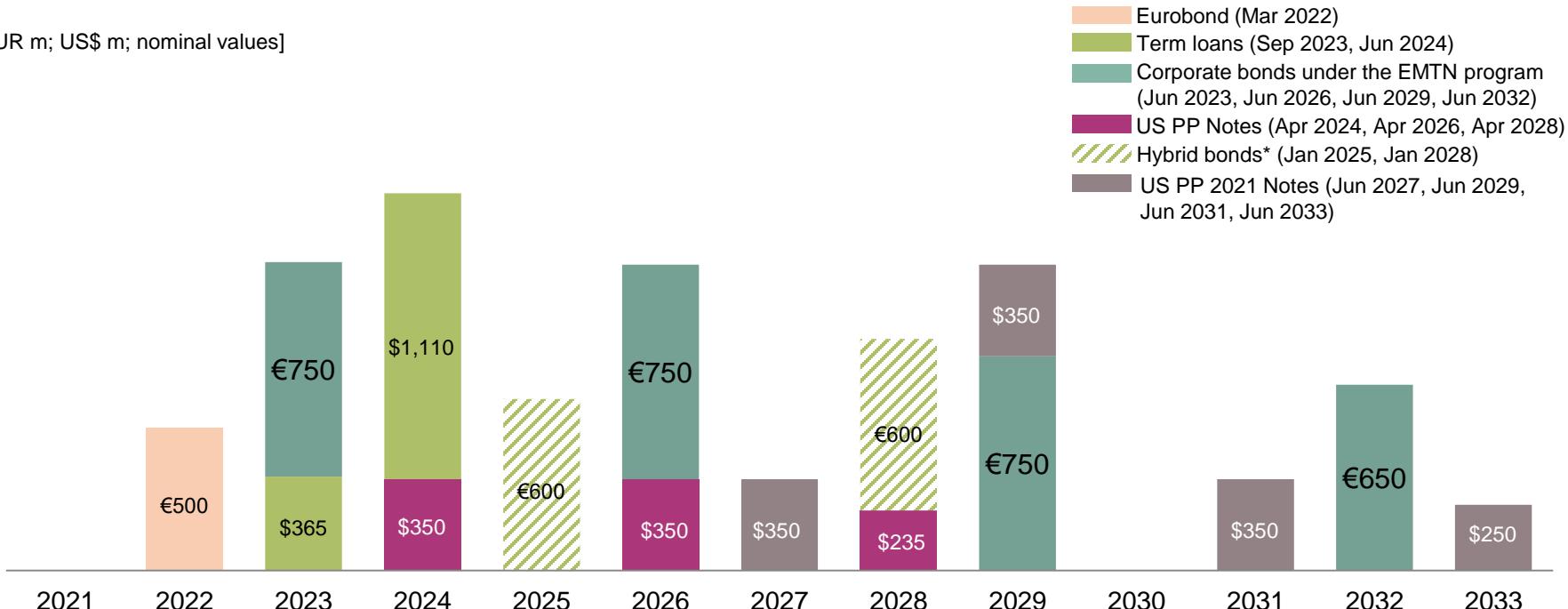
\* For definition please see page "Notes".

# Liquidity development



# Maturity profile

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



Graph excludes pre-existing Cypress convertibles of ~\$382m repayment value, maturing latest 2022, and additional debt with maturities between 2021 and 2023 totaling €6m.

\* 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.



Part of your life. Part of tomorrow.

# Glossary (1 of 2)

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ABB	accelerated book building	ECC	error correction code
ABS	anti-blocking system	ECU	electronic control unit
AC	alternating current	EPS	electric power steering
AC-DC	alternating current - direct current	eSIM	embedded subscriber identity module
AD	automated driving	ESS	energy storage system
ADAS	advanced driver assistance system	EV	electric vehicle
AEB	automatic emergency braking	FHEV	full hybrid electric vehicle
AFS	advanced frontlight system	FPGA	field programmable gate array
AI	artificial intelligence	G2M	go-to-market
AR	augmented reality	GaN	gallium nitride
ASP	average selling price	GPS	global positioning system
BEV	battery electric vehicle	GPU	graphics processing unit
BGA	ball grid array	HEV	mild and full hybrid electric vehicle
BLE	Bluetooth Low Energy	HMI	human machine interaction
BMS	battery management system	HSM	hardware security module
BoM	bill of material	HST	high-speed train
BT	Bluetooth	HVAC	heating, ventilation, air conditioning
CL	contactless	HW	hardware
CPU	central processing unit	IC	integrated circuit
CRC	cyclical redundancy check	ICE	internal combustion engine
DC	direct current	IGBT	insulated gate bipolar transistor
DC-DC	direct current - direct current	IoT	Internet of Things
DIF	dual-interface (contact-based and contactless)	IPM	intelligent power module
DIY	do it yourself	IVN	in-vehicle networking
DPM	digital power management	iPol	image processing line
eCall	emergency call	IRFPoP	International Rectifier

## Glossary (2 of 2)

IVN	in-vehicle networking	PTC	positive temperature coefficient
LCD	liquid crystal display	PV	photovoltaic
LDO	low dropout voltage regulator	RF	radio frequency
LED	light-emitting diode	rhs	right-hand scale
LSEV	low-speed electric vehicle	Si	silicon
LSPS	LS Power Semitech Co. Ltd.	SiC	silicon carbide
µC	microcontroller	SiGe	silicon germanium
Mb	megabit	SMD	surface mounted device
MCU	microcontroller unit	SMPS	switch-mode power supply
MEMS	micro electro-mechanical systems	SNR	signal-to-noise ratio
MHA	major home appliances	SoC	system-on-chip
MHEV	mild hybrid electric vehicle	SOTA	software over-the-air
MIMO	multiple input, multiple output	SPI	serial peripheral interface
micro-hybrid	vehicles using start-stop systems and limited recuperation	SRAM	static random access memory
mild-hybrid	vehicles using start-stop systems, recuperation, DC-DC conversion, e-motor	SW	software
MOSFET	metal-oxide silicon field-effect transistor	TAM	total addressable market
MPU	microprocessor unit	TCO	total cost of ownership
OBC	on-board charger	ToF	time-of-flight
OEM	original equipment manufacturer	TPM	trusted platform module
P2S	Infineon's strategic product-to-system approach	UPS	uninterruptible power supply
PAS	photo-acoustic spectroscopy	USB	universal serial bus
PFC	power factor correction	V2X	vehicle-to-everything communication
PHEV	plug-in hybrid electric vehicle	VR	virtual reality
PMIC	power management IC	VSD	variable speed drive
Pol	point-of-load	Wi-Fi	wireless fidelity
PSoC	programmable system-on-chip	xEV	all degrees of vehicle electrification (EV, HEV, PHEV)

# Disclaimer

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## Disclaimer

This presentation contains forward-looking statements about the business, financial condition and earnings performance of the Infineon Group. These statements are based on assumptions and projections resting upon currently available information and present estimates. They are subject to a multitude of uncertainties and risks. Actual business development may therefore differ materially from what has been expected. Beyond disclosure requirements stipulated by law, Infineon does not undertake any obligation to update forward-looking statements.

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# Financial calendar

Date	Location	Event
1 Sep 2021	Chicago → virtual	Jefferies Annual Semiconductor Conference
2 Sep 2021	Frankfurt → virtual	Commerzbank Corporate Conference
2 Sep 2021	London → virtual	dbAccess European TMT Conference
5 Oct 2021	London // virtual	Infineon Capital Markets Day "IFX Day 2021"
10 Nov 2021*		Q4 FY21 and FY 2021 Results

\* preliminary

# Notes and ESG footnotes

<b>Investments</b> =	'Purchase of property, plant and equipment' + 'Purchase of intangible assets and other assets' incl. capitalization of R&D expenses
<b>Capital Employed</b> =	'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')
<b>RoCE</b> =	NOPAT / Capital Employed = ('Income from continuing operations' – 'financial income' – 'financial expense') / Capital Employed
<b>Working Capital</b> =	('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')
<b>DIO (days inventory outstanding; quarter-to-date)</b> =	('Net Inventories' / 'Cost of goods sold') x 90
<b>DPO (days payables outstanding; quarter-to-date)</b> =	('Trade payables' / ['Cost of goods sold' + 'Purchase of property, plant and equipment']) x 90
<b>DSO (days sales outstanding; quarter-to-date)</b> =	('Trade receivables' - 'reimbursement obligations')* / 'revenue*' x 90 *without debtors with credit balances

<b>Book-to-bill</b> =	Orders received / Revenue in Euro per quarter
	Orders received contains order backlog and external customer forecast. External customer forecast includes consignment stock forecast by customers. Not included are internal consignment replenishment orders.
	Orders received does not include unconfirmed orders received. Unconfirmed demand will be reported as orders received and in book-to-bill when it gets confirmed.
	Orders received may not coincide with the IFRS 15 definition of a contract with a customer.

Like-for-like calculation in Q3 FY21: In the light of continued strong order intake, Infineon has temporarily switched from automatic to manual order confirmation. As a result, comparatively fewer orders are being confirmed. To provide a comparable view, the book-to-bill figure has been adjusted by assuming the same confirmation rate of newly received orders as in the previous quarter.

## ESG footnotes:

- 1) This figure considers manufacturing, transportation, function cars, flights, materials, chemicals, water/waste water, direct emissions, energy consumption, waste, etc. and is based on internally collected data and externally available conversion factors. All data relate to the 2020 fiscal year. Manufacturing service providers are not included.
- 2) This figure is based on internally established criteria, which are explained in the explanatory notes. The figure relates to the calendar year 2019 and considers the following fields of application: automotive, LED, induction cookers, server, renewable energy (wind, photovoltaic), mobile phone chargers as well as drives. CO<sub>2</sub> savings are calculated on the basis of potential savings of technologies in which semiconductors are used. The CO<sub>2</sub> savings are allocated on the basis of Infineon market share, semiconductor content and lifetime of the technologies concerned, based on internal and external experts' estimations.
- 3) Calculation based on average polycrystalline photovoltaic cells and the average yearly solar radiation of central Germany.
- 4) Based on the average electricity consumption of private households in Germany and official energy conversion factors.
- 5) Calculation based on average passenger capacity and direct flight route using externally available data and conversion factors.

## For further reading

ATV Business Update Call  
Peter Schiefer  
5 October 2020



<https://www.infineon.com/2020atvcall>

IPC Business Update Call  
Dr. Peter Wawer  
6 May 2021



<https://www.infineon.com/2021ipccall>

CSS Business Update Call  
Thomas Rosteck  
3 March 2021



<https://www.infineon.com/2021csscall>

PSS Business Update Call  
Andreas Urschitz  
1 July 2021



<https://www.infineon.com/2021psscall>

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