Investor and Analyst Presentation

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Division President Automotive

London, 28 September 2015

Infineon

Worldwide automotive semiconductor vendor ranking 2014; Infineon overpasses Renesas in H1 CY15

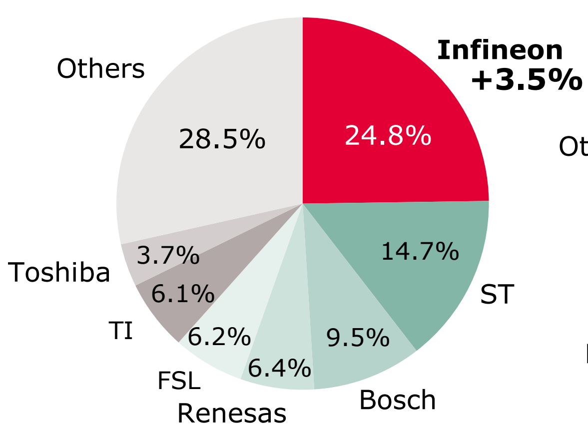
Global market shares

		2013	Delta	2014
1	Renesas	13.3%	-1.3%pt	12.0%
2	**Infineon**	**9.6%**	+0.9%pt	**10.5%**
3	STM	7.9%	-0.1%pt	7.8%
4	Freescale	7.4%	+0.1%pt	7.5%
5	NXP	6.5%	+0.3%pt	6.8%

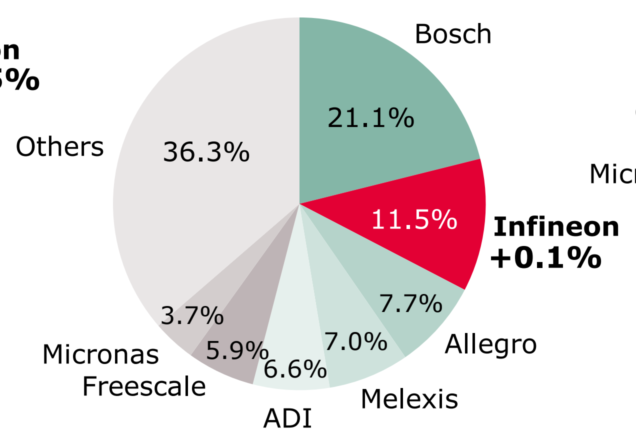
According to financial figures, Infineon becomes **#1** in H1 CY15 reaching $1.362m vs. $1.341m for Renesas.

Market shares by product

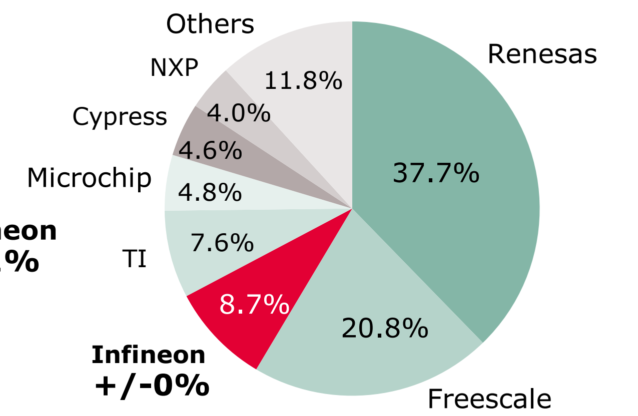
Power



Sensors



Microcontroller



Source: Strategy Analytics, April 2015

4 megatrends are shaping ATV market, significantly increasing the semiconductor content of vehicles

ADAS/Autonomous driving

- From ADAS to semi-automated and finally autonomous driving
- Every world region is striving for "0-accident"

xEV/eMobility

- Mandated CO_2 reductions make electrification of powertrain inevitable

Connectivity

- Advanced connectivity is driven by making the car part of the Internet
- The car will be fully connected (V2I, V2V, in-vehicle)

Advanced security

- Increased connectivity and software content increase risk exposure to hackers
- Internal/external connectivity must be secured

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The 5 levels of increased automation (VDA/SAE definition)

Level 0-1 | Level 2 | Level 3 | Level 4 | Level 5

Permanent monitoring by the driver

System is driving, with more or less backup by the driver. In case of failure the system must run for a certain time on a backup.

No Automation or Assisted
Driver only

E. g.: Lane Departure Warning, Blind spot Detection

Partial Automation
Driver monitors the automated functions

E. g.: Traffic Jam Assist, Parking Assistant, Lane Keep Assist

High Automation
System monitors the car environment and gives control to driver beyond defined parameter values

E. g.: Traffic Jam Chauffeur, Highway, Chauffeur, Garage Parking

Full Automation
System can take full control beyond defined limits of a specific application

E. g.: Automated Driving (Highway Pilot, Valet Parking)

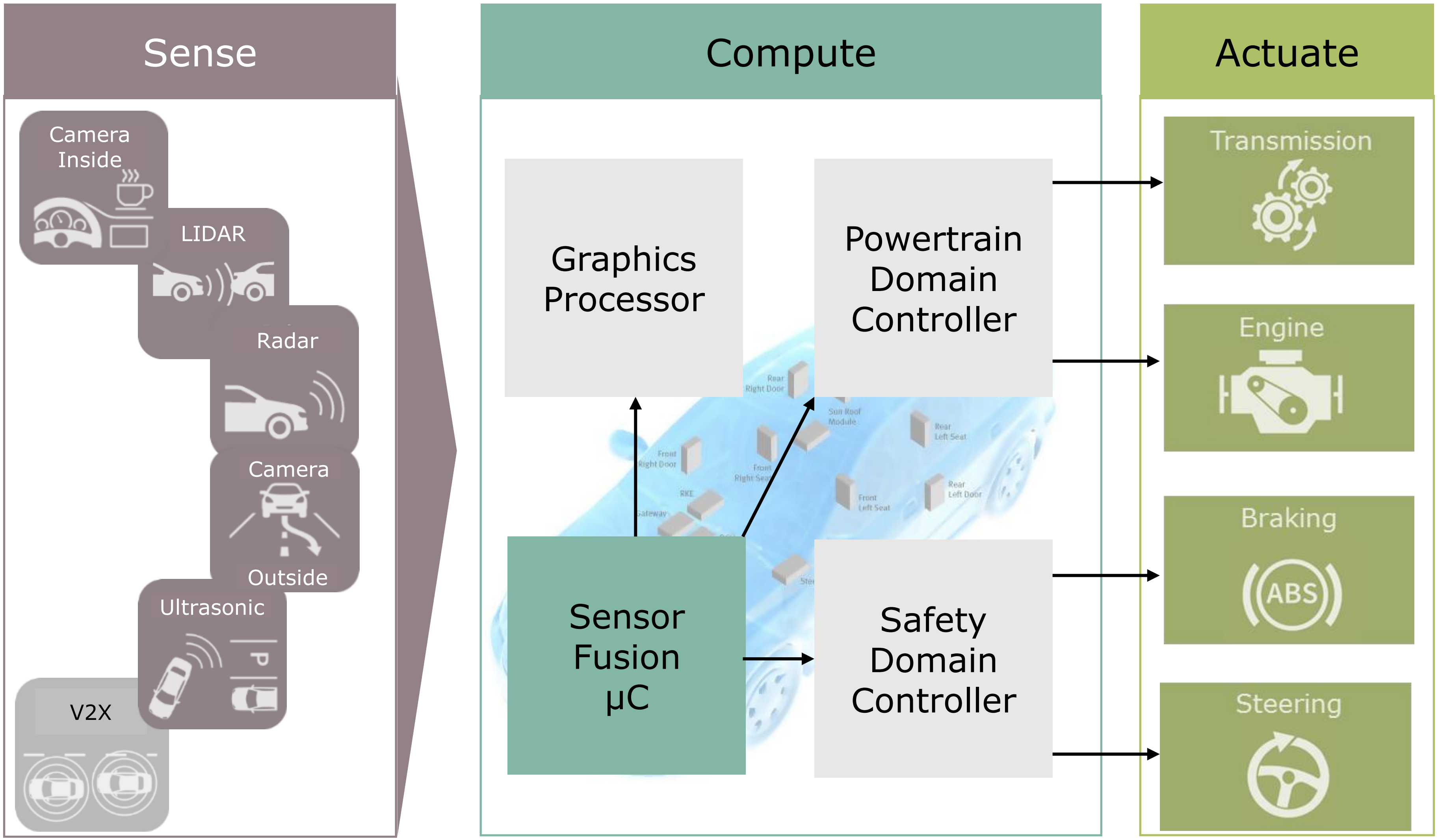
Autonomous Driving/Driverless
System can tackle all driving situations. No Driver necessary from start to destination.

E. g.: Google Car, Robot Taxi

Amendments of current regulations are necessary (e.g. Vienna StVO, ECE-R79)

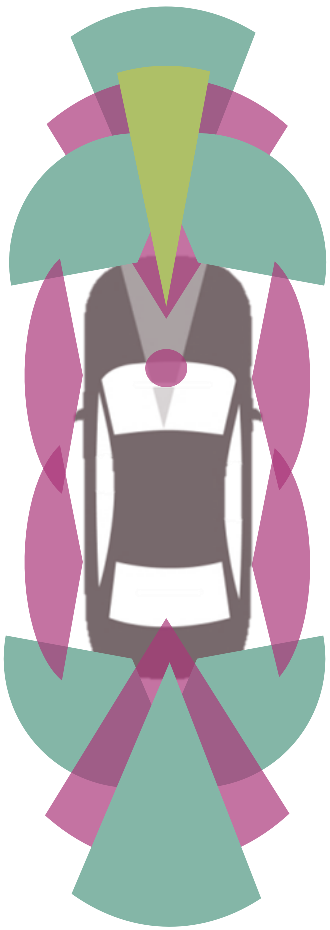
Source: BASt und VDA

ADAS system overview



More sensors required for each automation level

Sense



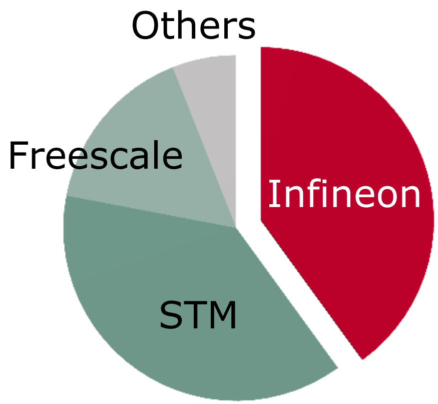
Radar Camera Lidar

Sensor technologies	2015 Euro-NCAP*	2018 Euro-NCAP*	Level 2	Level 3	Level 4/5
Front looking camera	0.5	1	1	1	1
Front looking radar	0.5	1	1	1	1
Front looking lidar	–	–	–	–	1
Surround camera	–	–	–	–	4
Corner radar	–	2	2	4	4
Surround radar	–	–	–	–	4
Rear looking camera	–	–	–	1	1
Rear looking radar	–	–	–	–	1
Driver monitoring Camera	–	–	–	1	1
V2X Sensor	–	–	–	–	1
Ultrasonic sensors	10-12 sensors per car				
Surround Radar	8 radar sensors e.g. for garage parking				

* Euro-NCAP is focusing on collision avoidance, requirements are changing over time

Infineon is the market leader in Radar, 10 millions chips shipped already

Sense

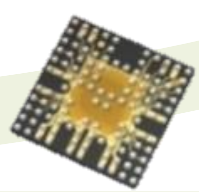


Vision Zero
+ Autonomous
Driving

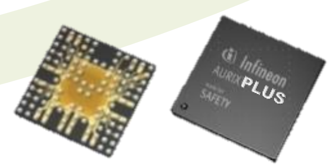
Innovations for driver, road and pedestrian safety

ATLAS IC
1st SiGe 77GHz Transceiver

Mid Range Radar
1st 77GHz product in eWLB package



Dual Chip Radar Solution
1st complete System solution: 400 GHz RF, µC, Power Supply



Next Gen. of Dual Chip Radar Solution
600 GHz RF, AURIX™ 3rd Gen, Power Supply

Single Chip Radar Solution (CMOS)

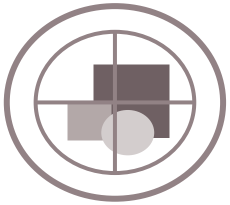
2009 — **Today** — > 2022

*Source: IHS ADAS Sensor Market Shares –2014

Camera system overview

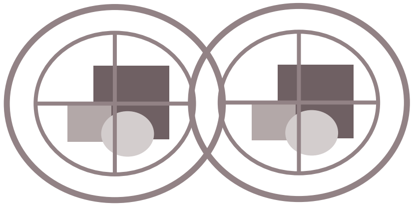
AURIX™ as Host Controller

› Mono camera



+ Image processor (e.g. Mobileye, Nvidia) +

› Stereo camera



+ Image processor/ FPGA +

› Time-of-flight camera

+ Image processor +

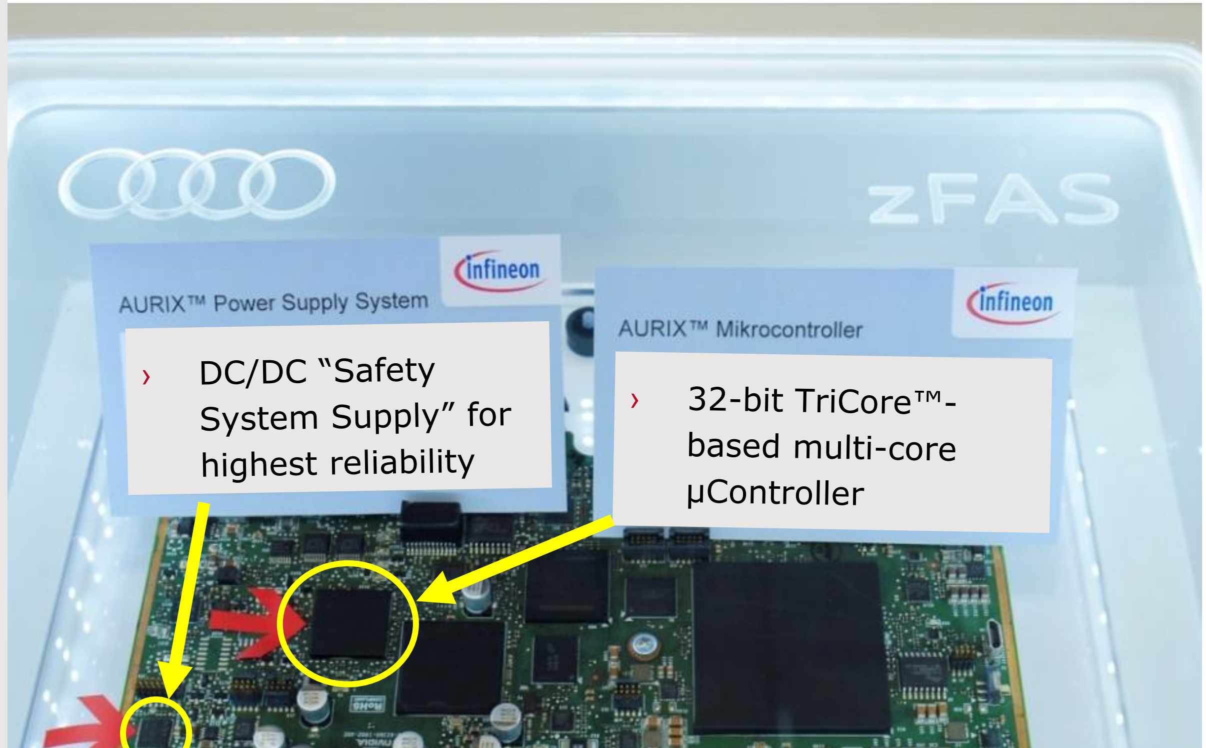
Infineon AURIX™ microcontrollers make autonomous driving reliable

Compute

During the CES 2015, Audi demonstrated their autonomous driving capabilities. Audi's piloted driving concept car "Jack", an Audi A7 Sportback, completed a 550 mile piloted drive from Silicon Valley to Las Vegas.

The central driver assistance ECU ("zFAS") is the core of future systems for piloted driving for Audi.

Within zFAS Infineon's AURIX™ is the interface to the car architecture, hosts different functions and acts as safety monitor.



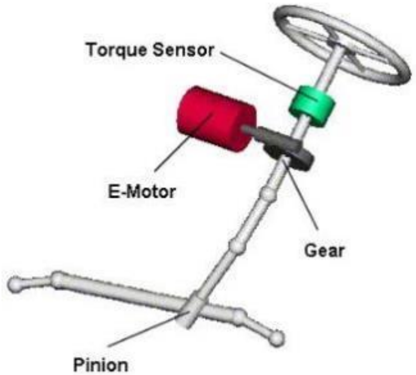
Courtesy: AUDI

* zFAS = zentrales Fahrerassistenzsystem = German term for central driver assistance ECU.

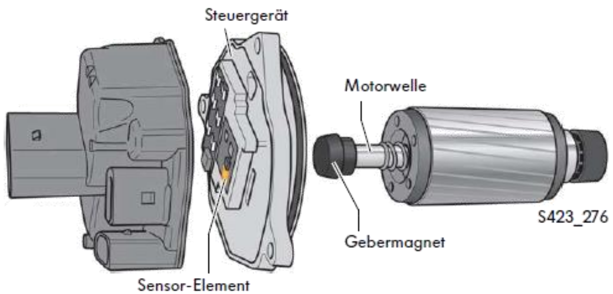
Fail operational actuators: BOM to grow by factor 1.3 with level 3 to 5

Actuate

EPS
System



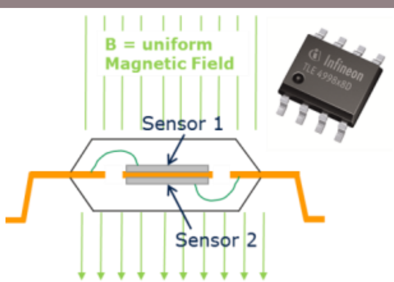
EPS
E-Motor



© ZF Lenksysteme

EPS
Electronic control unit

Sense



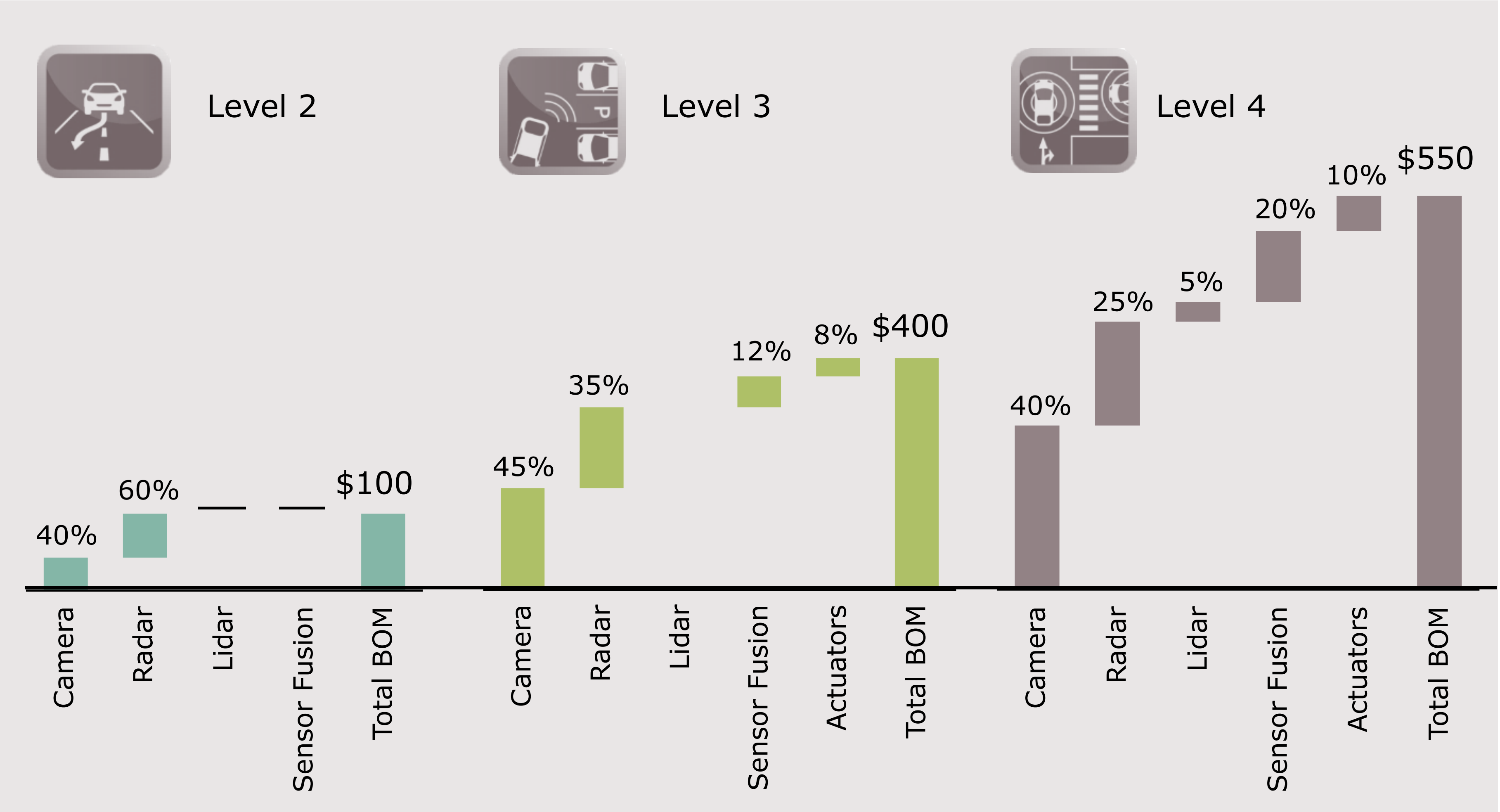
Compute

Actuate

Safe power supply

Semiconductor content itemized to automation levels

Average ADAS semiconductor content per level of automation



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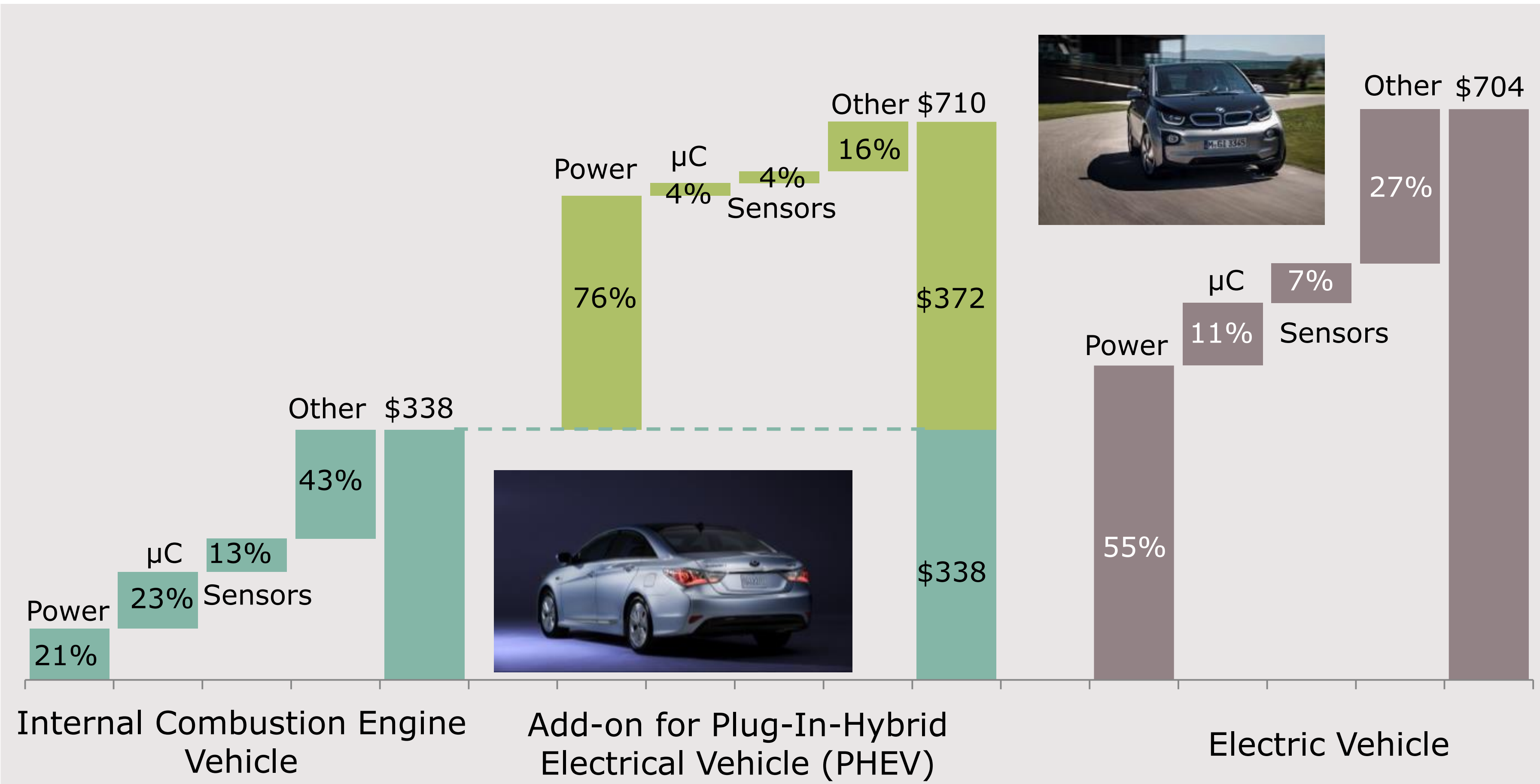
Advanced security

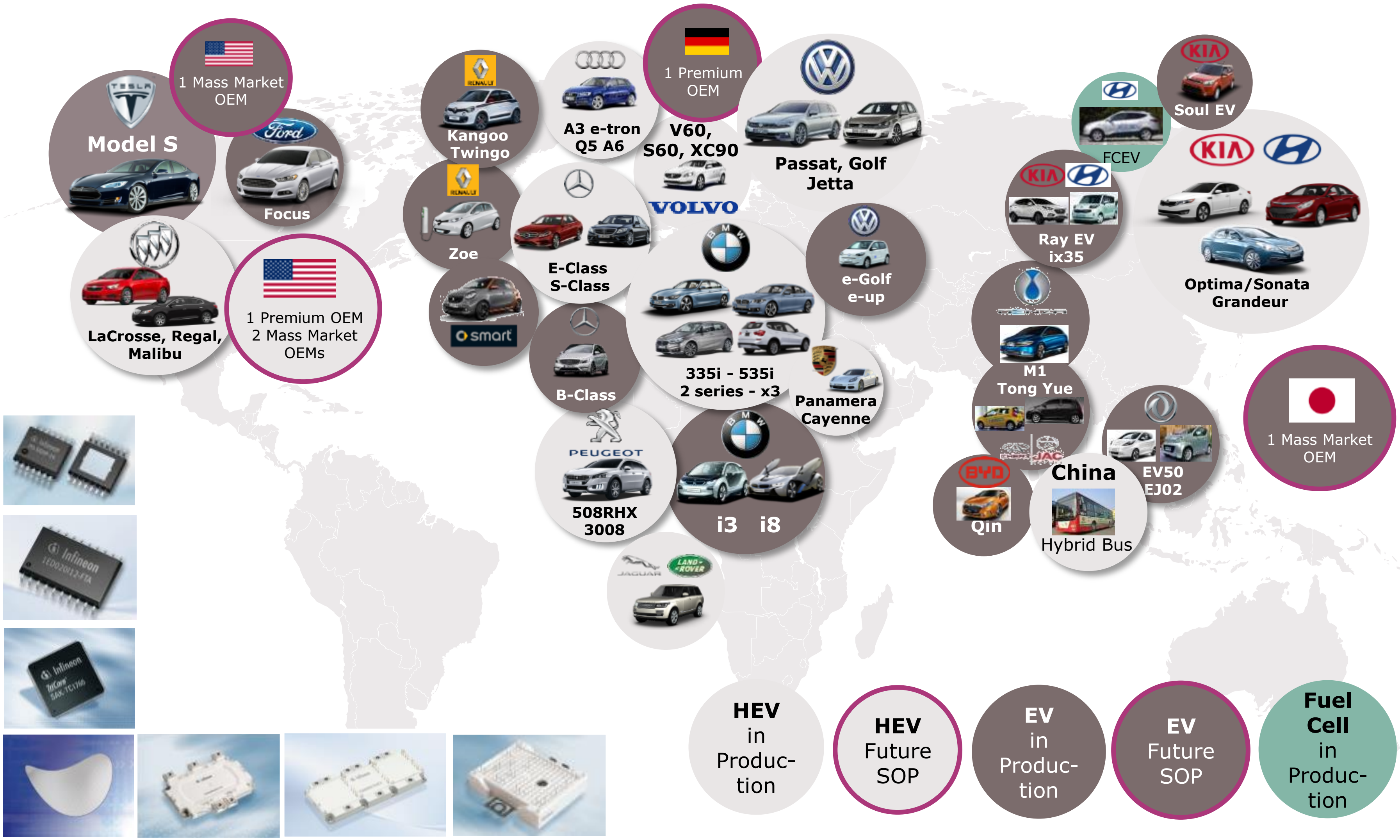
Semiconductor content of EV/HEV vehicles falls right into Infineon's core competence

Average semiconductor content



Source: Strategy Analytics, "Automotive Semiconductor Demand Forecast 2013 – 2022", June 2015.

Infineon is best positioned to benefit from xEV car ramp



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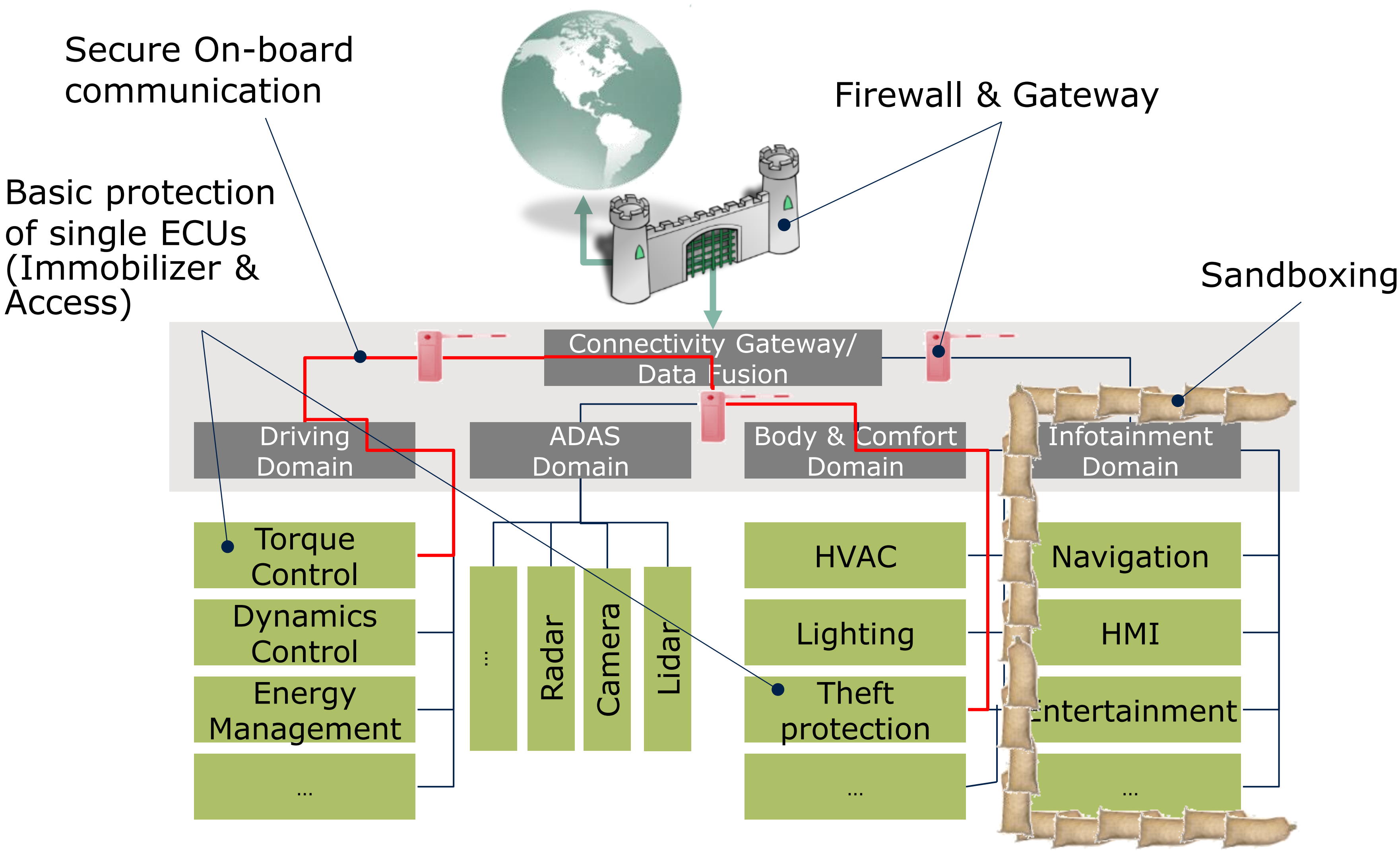
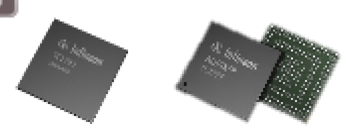
Basic security considerations



Infineon's product portfolio for security

Gateway / Firewall

Powertrain Domain Controller	Chassis Domain Controller	Body Domain Controller	Infotainment Domain Controller
Engine Control	Car2Car Com	Seat Control	Head Unit
Battery Mgmt.	ABS/ESP	Door Module	E-Call/cell wireless
Inverter	ACC	Air Condition	Connectivity ECU
…	…	Immobilizer	…



AUDO MAX **AURIX™**

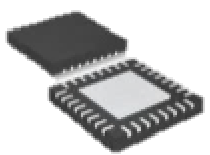
- Application: **Powertrain/Safety**
- Driver: **On Board Security**

SLI 76 **SLI 97**

- Application: **Cellular Com**
- Driver: **Network auth.**

TPM

- Application: **Car Services**
- Driver: **Standards reuse**



SLI 97 Car2Car

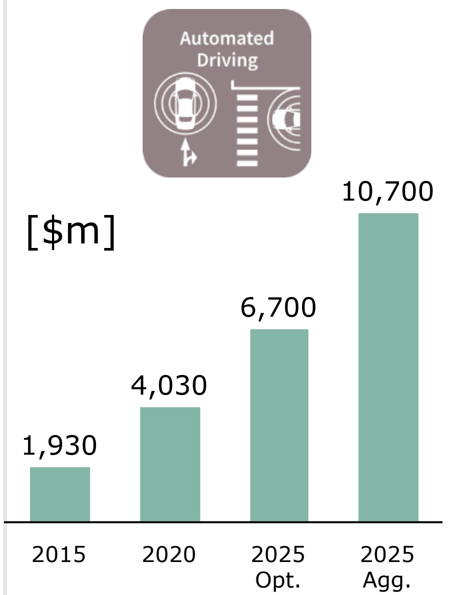
- Application: **Car2Car Communication**
- Driver: **Network integrity, Privacy**

1 Integrated

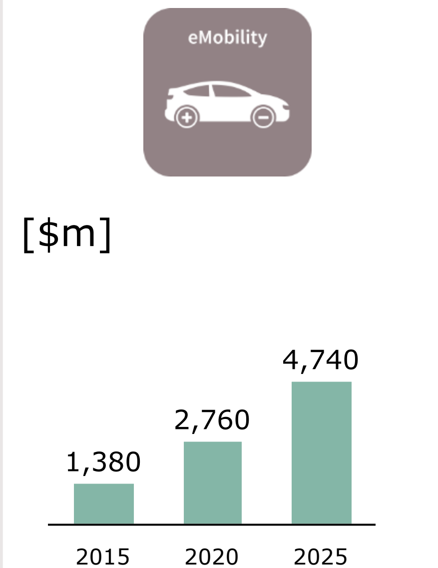
2 Discrete Hardware Security

Infineon ideally positioned to benefit most from megatrends ADAS, xEV and security

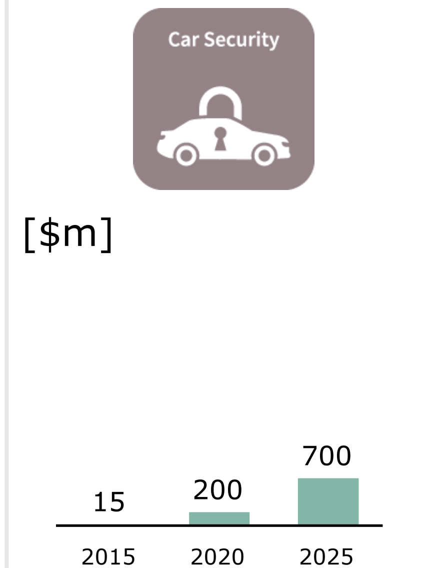
ADAS/Autonomous driving



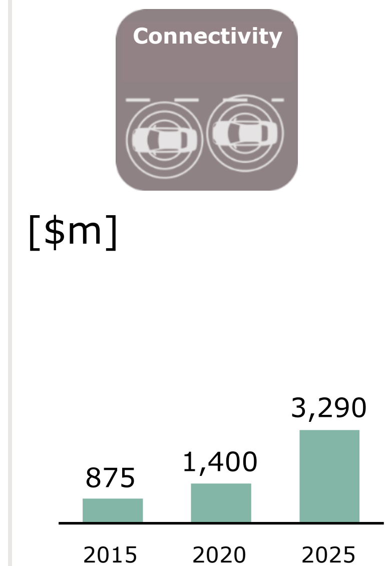
xEV/eMobility



Advanced security



Connectivity



Biggest drivers for automotive

Key enabler for connectivity

Market shaped by mobile coms players

Note: Total IFX considered (ATV - HSM value considered only, not full µC BOM + secure discrete elements from CCS)

Source: IHS, Strategy Analytics, IFX internal estimations

ADAS, CO_2 reduction and adoption of premium features drive Infineon growth

Vehicle production

- ~2% growth per annum
- highest growth in emerging markets
- Western Europe recovering, the US on high level

Drivers for semiconductor content per car

CO_2 reduction

- driven by legislation
- improvements of ICE (e.g. electric steering, electric pumps and motors)
- adoption of EV/HEV

Advanced safety

- current:
  crash avoidance
- next:
  assisted Driving
- future:
  autonomous driving

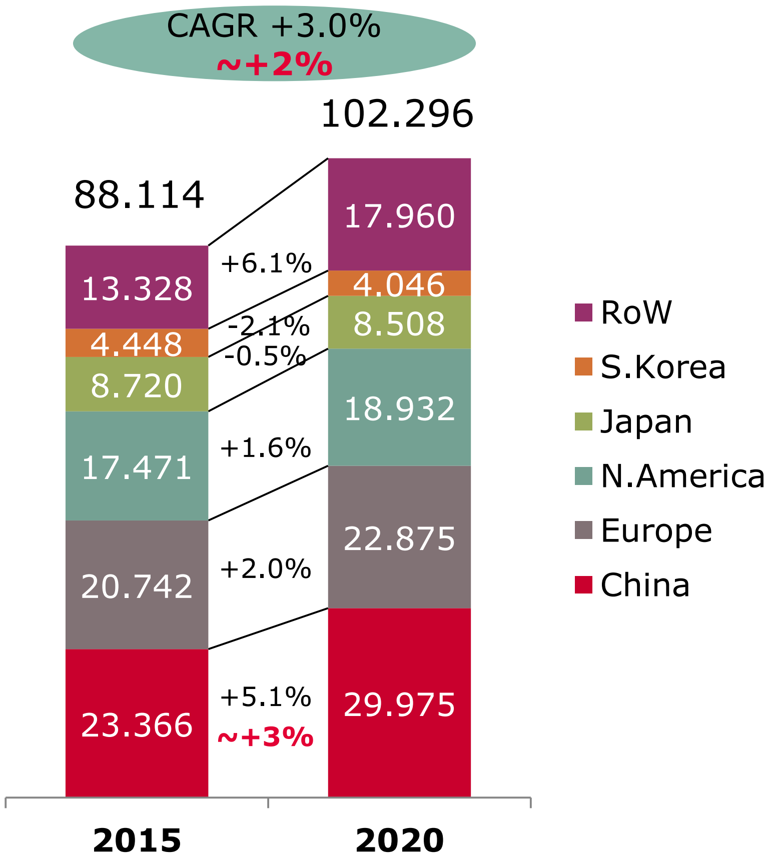
Comfort, premium

- premium cars are early adopters of high-end comfort and safety features
- trickling down to mid-range

Sources: IHS Inc., Strategy Analytics, Infineon

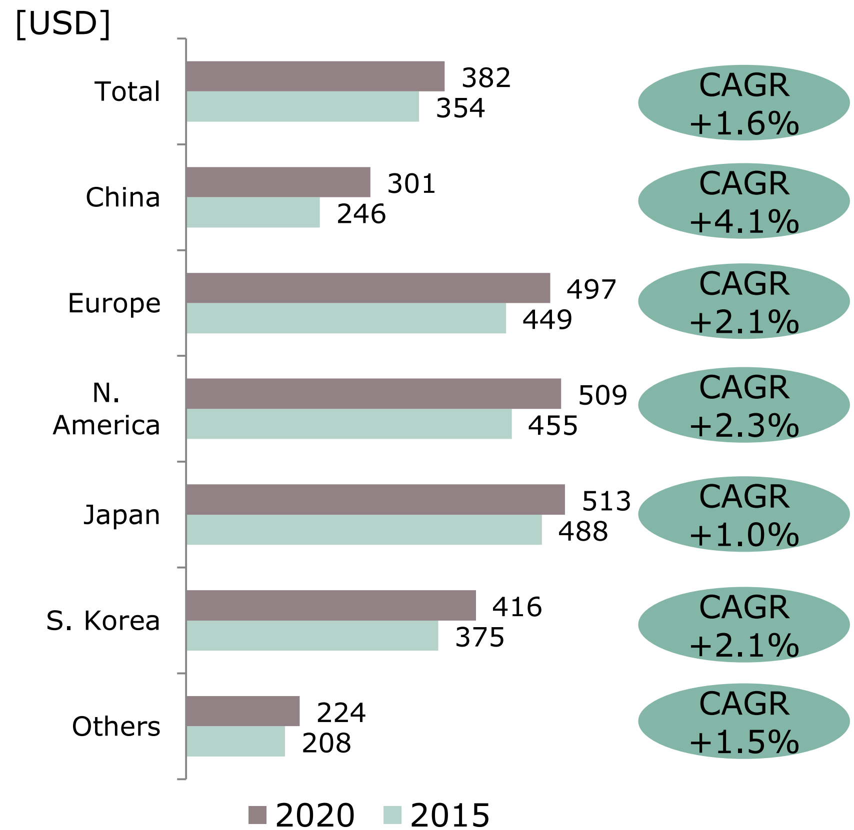
Market growth based on car production growth and increasing number of features

Light vehicle production forecast



Source: IHS, September 2015

Semiconductor value per car by region



Source: Strategy Analytics, based on LMC production forecasts Q1 2015

Infineon is strong in all markets, balancing exposure to slower growth in China

World

⇨ 1. Renesas 12.0%
⇨ **2. Infineon 10.5%** (+0.9%pt)
⇨ 3. STMicro 7.8%
⇨ 4. Freescale 7.5%
⇨ 5. NXP 6.8%

Europe

⇨ **1. Infineon** (+1.0%pt) **14.1%**
↑1
↑1
↓2
⇨
↑1
↓1

APAC & RoW(*)

↑1 **1. Infineon** (+1.2%pt) **10.9%**
↓1
⇨
⇨
⇨
↑4
↑4

APEC

North America

⇨
↑5
↓1 **3. Infineon 8.8%** (+0.2%pt)
⇨
↓2

Japan

⇨
⇨
↑3
↓1 **4. Infineon(*) 5.2%** (+0.9%pt)
⇨

China

⇨
↑1
↑2 **3. Infineon 8.9%** (+0.7%pt)
↓2
↓1

Korea

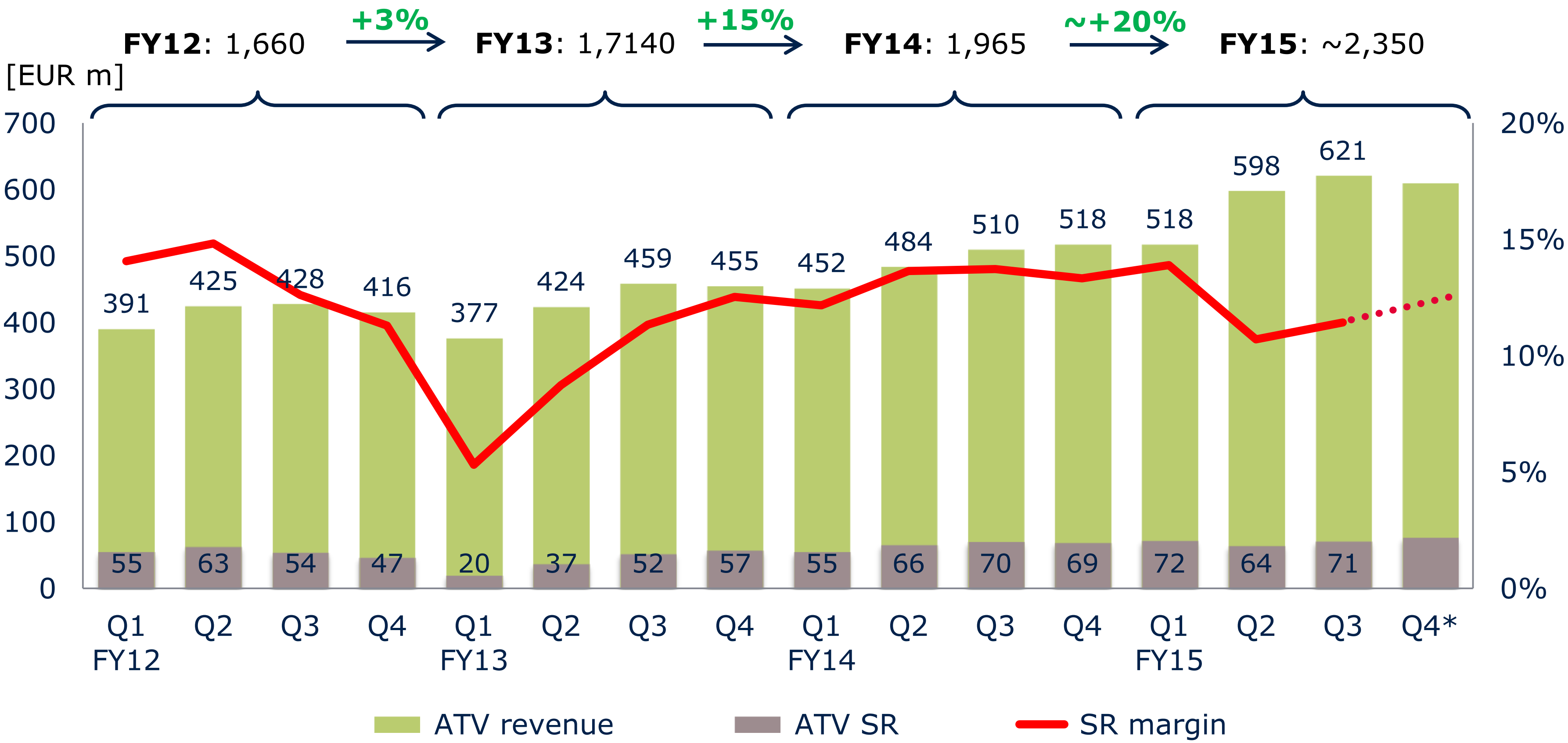
⇨ **1. Infineon 14.6%** (+1.3%pt)
↑6
↓1
⇨
↑1

(*: China, Korea, Russia, India, South America & further countries

Source: Strategy Analytics, April 2015

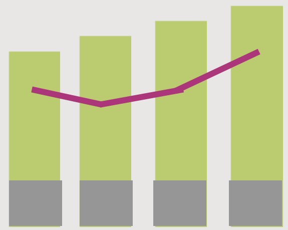
Automotive financials at a glance

Revenue and segment result development



* Based on Q4 guidance, as of 30 July 2015

Summary

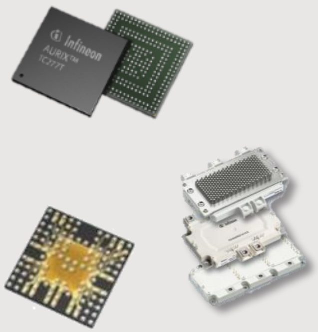


Automotive track record for 40 years:

› #2 in Automotive globally – first time double digit market share, closing gap to Renesas
› Consistent revenue growth and profitability

Growth drivers:

› Compound annual car production growth of ~2%
› Compound annual semiconductor content growth of 3%-4%
› CO_2 reduction, Advanced safety and comfort



Differentiators:

› System leader in Safety/ADAS, CO_2 reduction
› Security expertise
› Quality excellence
› Broad regional customer base

Part of your life. Part of tomorrow.

Glossary

ABS	Anti-lock braking system	PMD	PMD Technologies GmbH
ACC	Adaptive Cruise Control	ROW	Rest of world
AEB	Autonomous Emergency Braking	SAE	Society of Automotive Engineers
ADAS	Advanced driver assistance systems	SOP	Start of production
ATV	Automotive segment	StVO	Road traffic act
BASt	The Federal Highway Research Institute	VDA	German Association of the Automotive Industry
CAGR	Compound annual growth rate		
DC/DC	Direct current/Direct current converter	V2X	Vehicle to Infrastructure
ECU	Electronic control unit	xEV	EV and HEV
EMS	Engine management system		
EPS	Electric power steering		
ESC	Electronic stability control		
EV	Electric vehicle		
eWLB	embedded wafer-level ball grid array		
HEV	Hybrid electric vehicle		
IC	Integrated circuit		
ICE	Internal combustion engine		