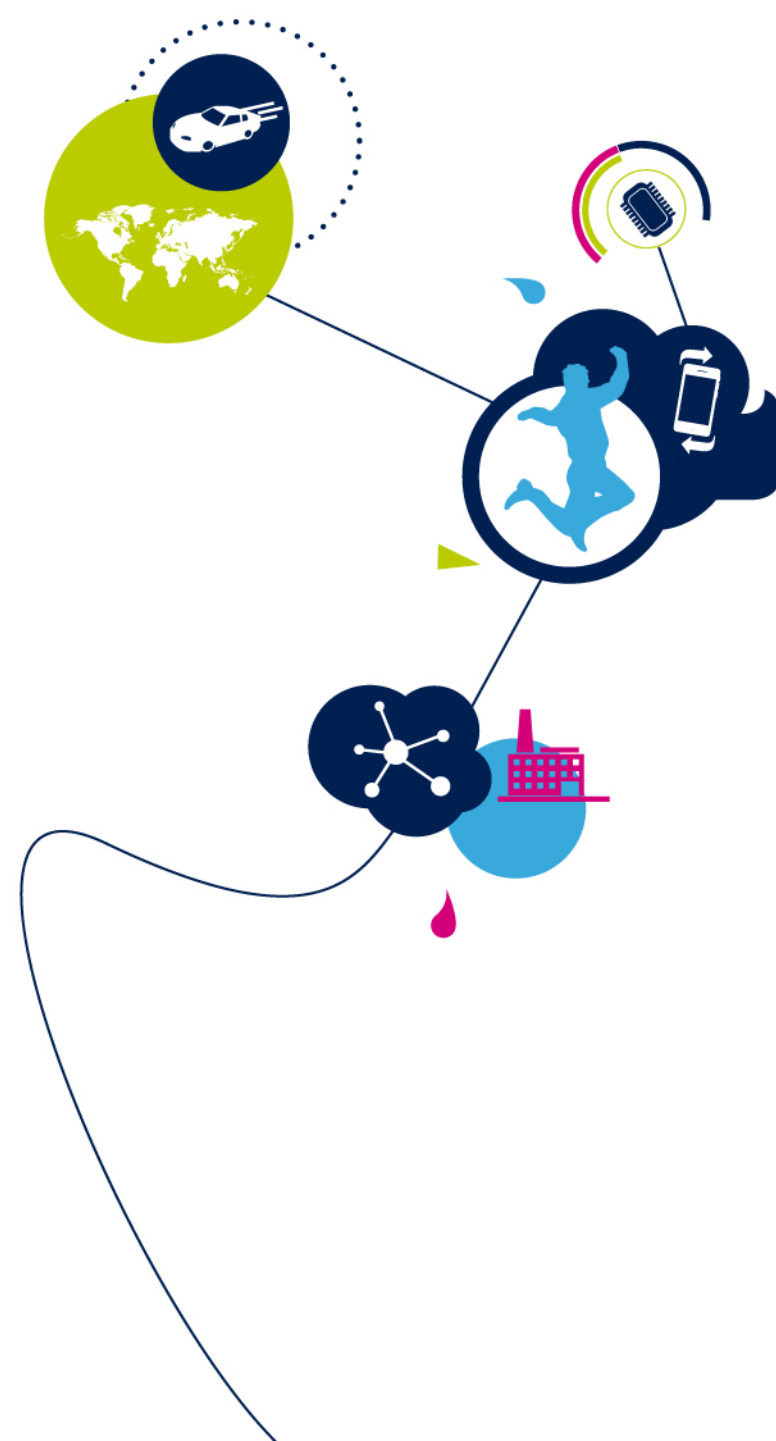




STMicroelectronics

February 27, 2018
Barcelona



Forward Looking Statements

2

Some of the statements contained in this release that are not historical facts are statements of future expectations and other forward-looking statements (within the meaning of Section 27A of the Securities Act of 1933 or Section 21E of the Securities Exchange Act of 1934, each as amended) that are based on management's current views and assumptions, and are conditioned upon and also involve known and unknown risks and uncertainties that could cause actual results, performance, or events to differ materially from those anticipated by such statements, due to, among other factors:

- Uncertain macro-economic and industry trends, which may impact end-market demand for our products;*
- Customer demand that differs from projections;*
- The ability to design, manufacture and sell innovative products in a rapidly changing technological environment;*
- Unanticipated events or circumstances, which may impact our ability to execute the planned reductions in our net operating expenses and / or meet the objectives of our R&D Programs, which benefit from public funding;*
- Changes in economic, social, labor, political, or infrastructure conditions in the locations where we, our customers, or our suppliers operate, including as a result of macro-economic or regional events, military conflicts, social unrest, labor actions, or terrorist activities;*
- The Brexit vote and the perceptions as to the impact of the withdrawal of the U.K. may adversely affect business activity, political stability and economic conditions in the U.K., the Eurozone, the EU and elsewhere. While we do not have material operations in the U.K. and have not experienced any material impact from Brexit on our underlying business to date, we cannot predict its future implications;*
- Financial difficulties with any of our major distributors or significant curtailment of purchases by key customers;*
- The loading, product mix, and manufacturing performance of our production facilities;*
- The functionalities and performance of our IT systems, which support our critical operational activities including manufacturing, finance and sales, and any breaches of our IT systems or those of our customers or suppliers;*
- Variations in the foreign exchange markets and, more particularly, the U.S. dollar exchange rate as compared to the Euro and the other major currencies we use for our operations;*
- The impact of intellectual property ("IP") claims by our competitors or other third parties, and our ability to obtain required licenses on reasonable terms and conditions;*
- The ability to successfully restructure underperforming business lines and associated restructuring charges and cost savings that differ in amount or timing from our estimates;*
- Changes in our overall tax position as a result of changes in tax rules, new or revised legislation, the outcome of tax audits or changes in international tax treaties which may impact our results of operations as well as our ability to accurately estimate tax credits, benefits, deductions and provisions and to realize deferred tax assets;*
- The outcome of ongoing litigation as well as the impact of any new litigation to which we may become a defendant;*
- Product liability or warranty claims, claims based on epidemic or delivery failure, or other claims relating to our products, or recalls by our customers for products containing our parts;*
- Natural events such as severe weather, earthquakes, tsunamis, volcano eruptions or other acts of nature, health risks and epidemics in locations where we, our customers or our suppliers operate;*
- Availability and costs of raw materials, utilities, third-party manufacturing services and technology, or other supplies required by our operations;*
- Industry changes resulting from vertical and horizontal consolidation among our suppliers, competitors, and customers;*
- The ability to successfully ramp up new programs that could be impacted by factors beyond our control, including the availability of critical third party components and performance of subcontractors in line with our expectations; and*
- Theft, loss, or misuse of personal data about our employees, customers, or other third parties, and breaches of global privacy legislation, including the EU's General Data Protection Regulation ("GDPR").*

Such forward-looking statements are subject to various risks and uncertainties, which may cause actual results and performance of our business to differ materially and adversely from the forward-looking statements. Certain forward-looking statements can be identified by the use of forward looking terminology, such as "believes," "expects," "may," "are expected to," "should," "would be," "seeks" or "anticipates" or similar expressions or the negative thereof or other variations thereof or comparable terminology, or by discussions of strategy, plans or intentions.

Some of these risk factors are set forth and are discussed in more detail in "Item 3. Key Information — Risk Factors" included in our Annual Report on Form 20-F for the year ended December 31, 2016, as filed with the SEC on March 3, 2017. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in this release as anticipated, believed, or expected. We do not intend, and do not assume any obligation, to update any industry information or forward-looking statements set forth in this release to reflect subsequent events or circumstances.



Agenda

3

Agenda

- 9:30 am ST Making Everything Smarter
- Smart Driving
- Making Industrial & IoT Applications Smarter
- Questions & Answers
- 11:00 am End

Speakers

Carlo Ferro
Chief Financial Officer

Marco Monti
President, ADG

Marie-France Florentin
Group VP, GM SMD

Benedetto Vigna
President, AMS



IF IT'S SMART, WE'RE THERE

Carlo Ferro

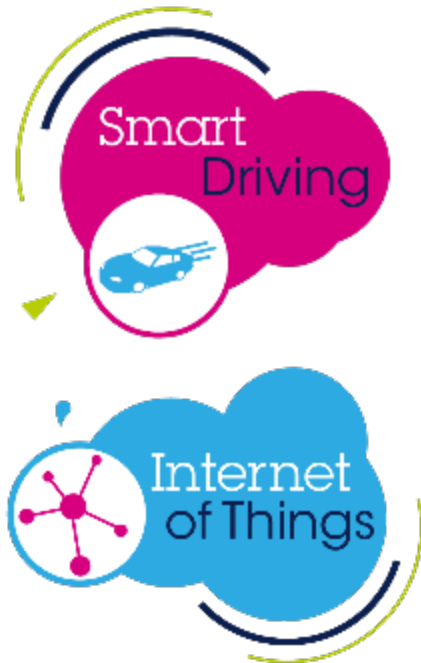
Chief Financial Officer



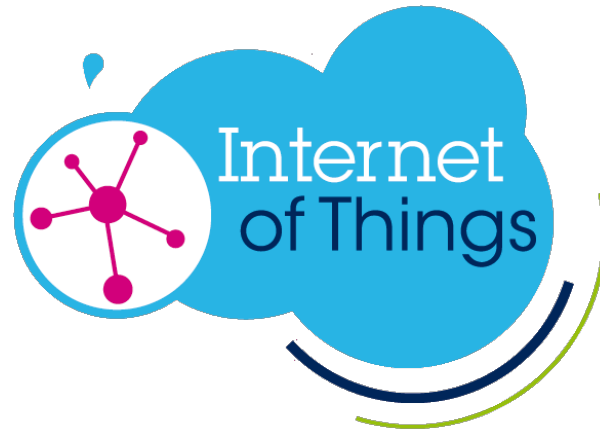


ST stands for life.augmented

Everywhere microelectronics make a positive contribution to people's lives, ST is there



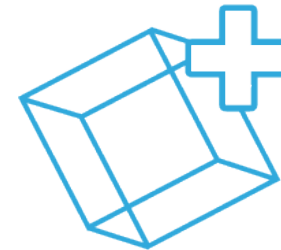
- A global semiconductor leader with an application strategic focus
- 2017 revenues of **\$8.35B** with year-on-year growth of **19.7%**
- Listed: NYSE, Euronext Paris and Borsa Italiana, Milan
- Approximately **45,500** employees worldwide
- Approximately **7,400** people working in R&D
- Portfolio of over **9,500** patent families
- **11** manufacturing (front and back-end) sites
- Over **80** sales & marketing offices



Smart Industry



Smart Home & City



Smart Things



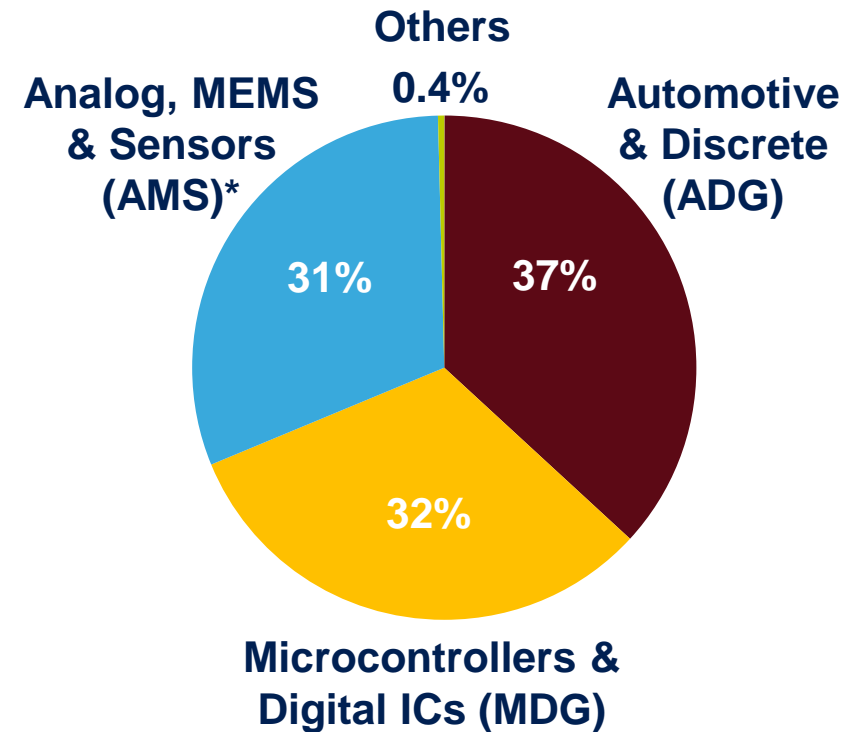
Smart Driving



FY17 Revenues: \$8.35B

7

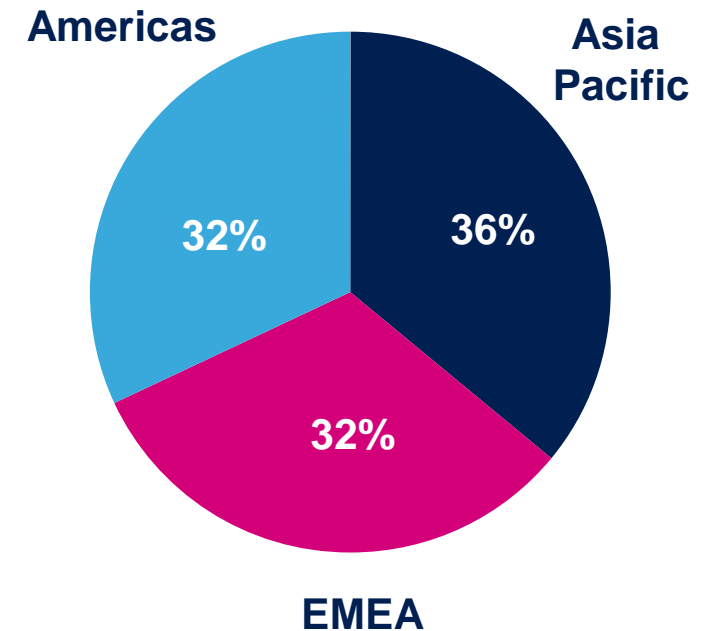
% by product group



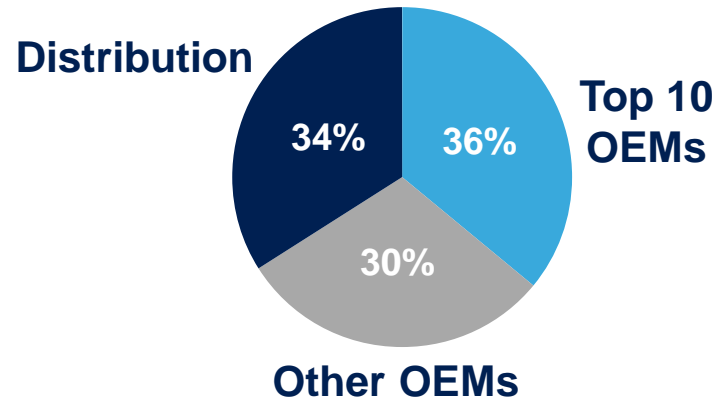
Top 10 Customers
(alphabetical order)

Apple
Bosch
Cisco
Conti
HP
Huawei
Nintendo
Samsung
Seagate
Western Digital

% by region of origin



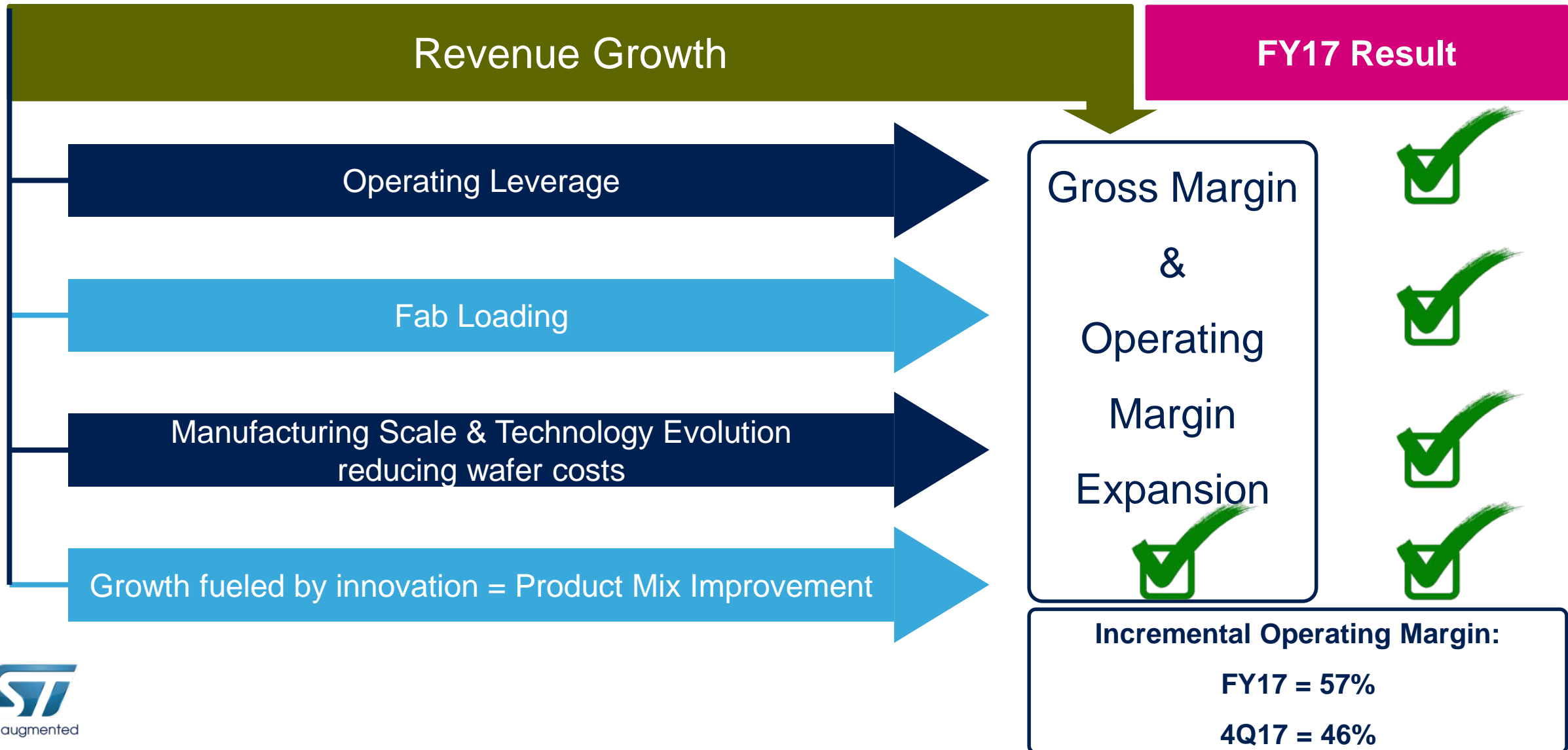
% by customer type



Revenue Growth to Improve Operating Margin

Four Drivers

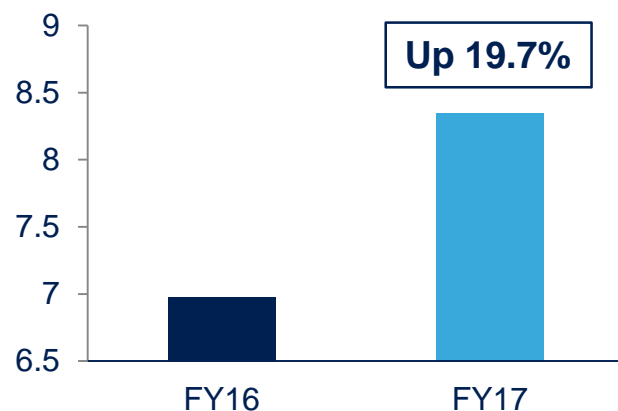
8



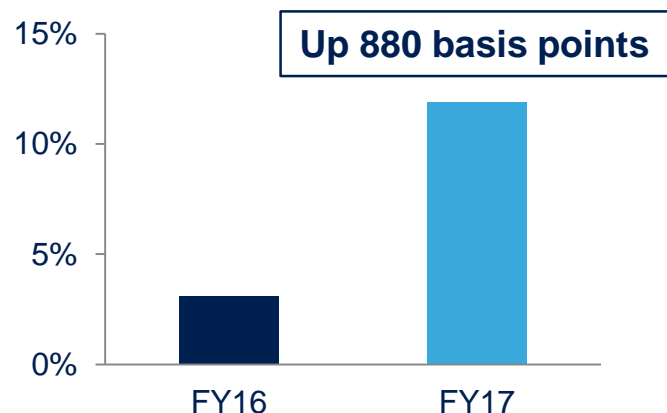
FY17 Financial Highlights

9

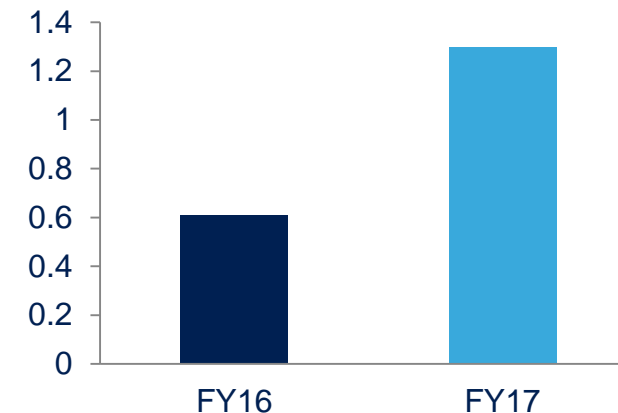
Revenues = \$8.35B



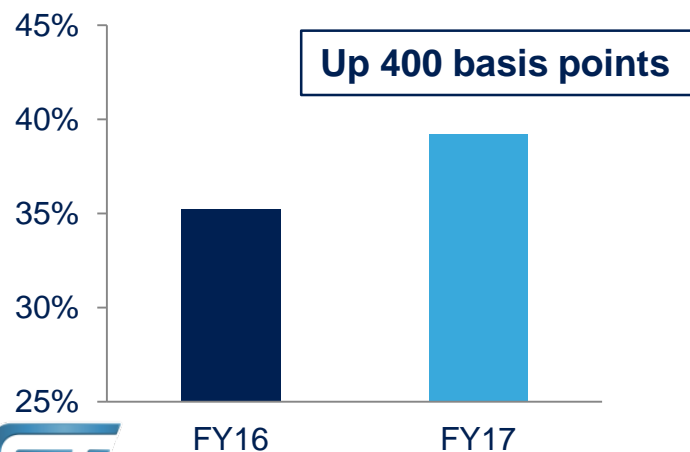
Operating Margin = 11.9%



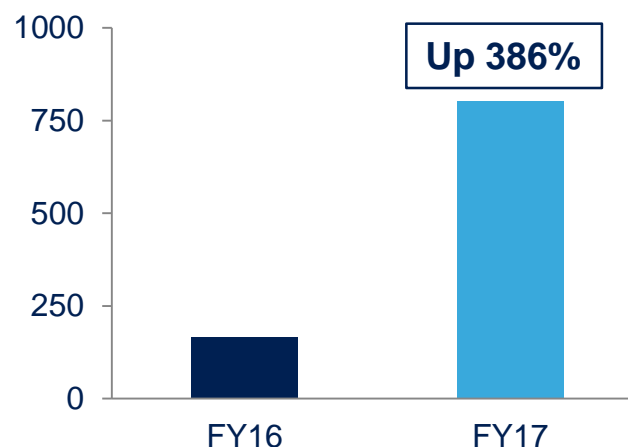
Capex= \$1.30B



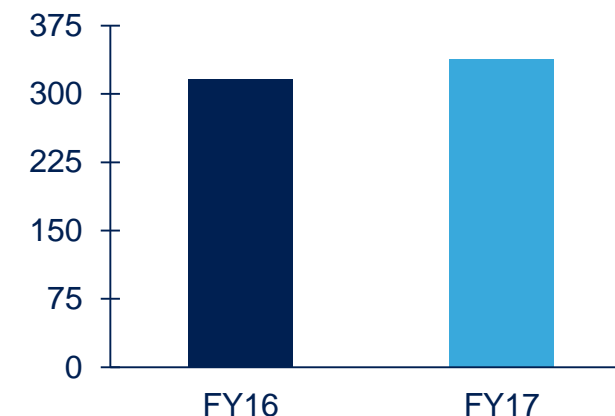
Gross Margin = 39.2%



Net Income = \$802M

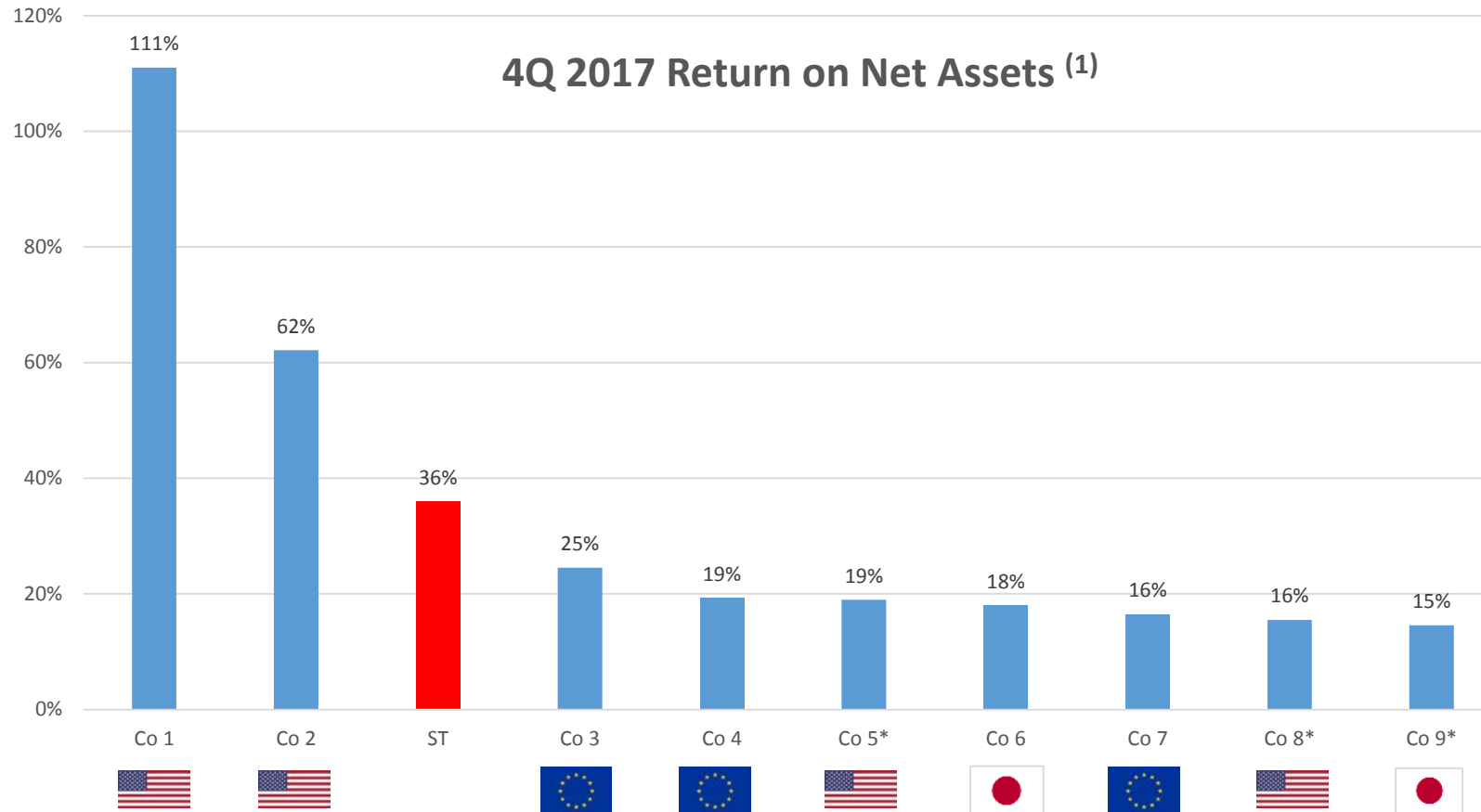


Free Cash Flow* = \$338M



Turning Capital into Profits

10



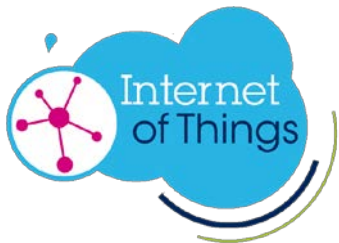
Focus Areas Remain Highest Growth Areas in our SAM

11



Automotive

Smart
Industry

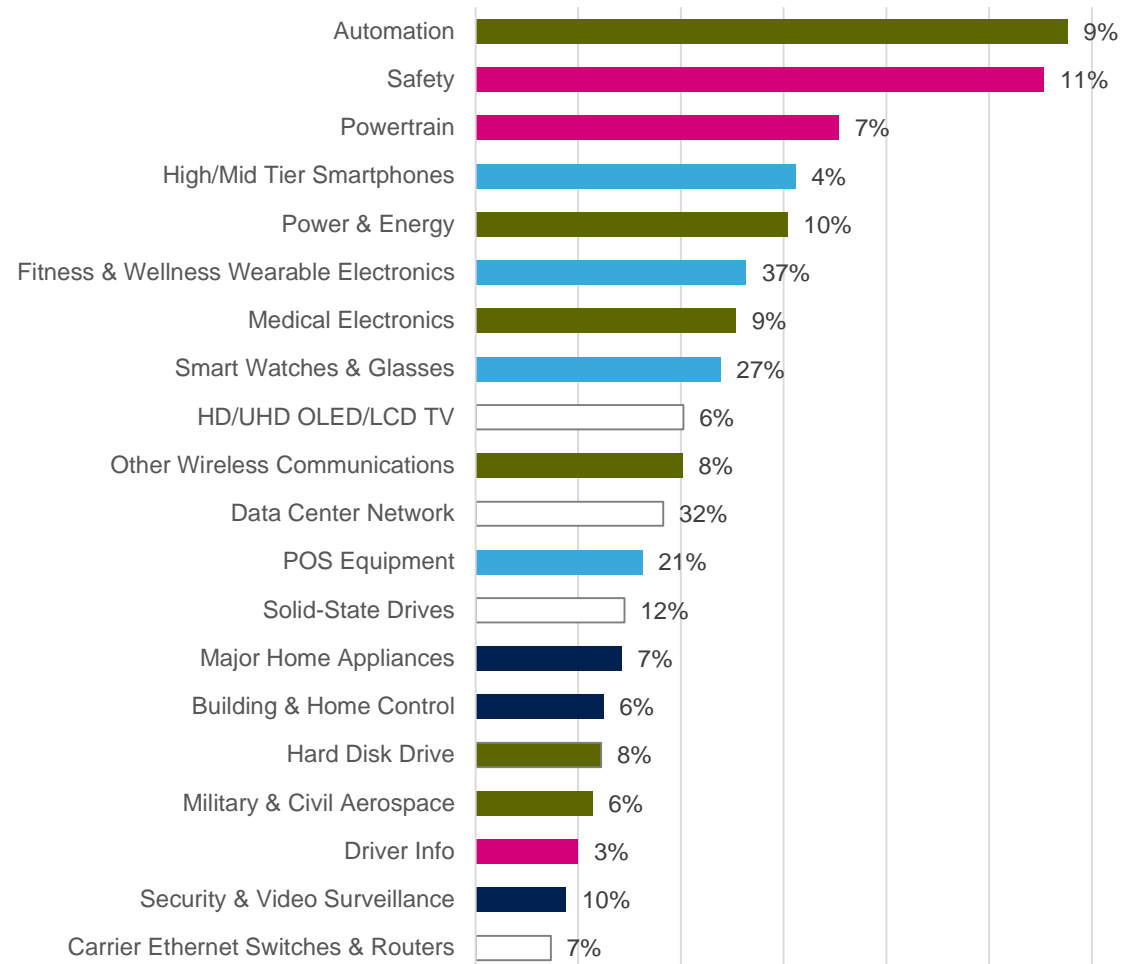


Smart Home &
City

Smart
Things



2017-2020 ST SAM Growth
Top 20 Applications



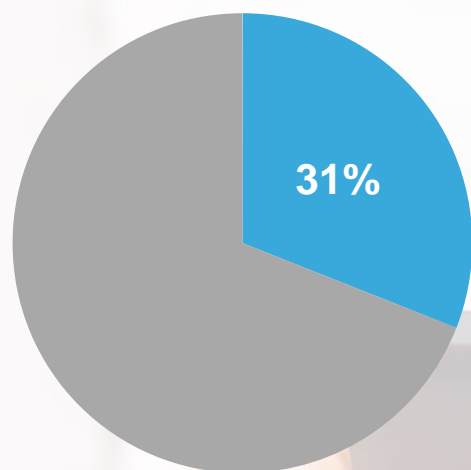
Source: IHS Markit, 3Q17, Strategy Analytics

ST Exposure to Wireless Applications

12

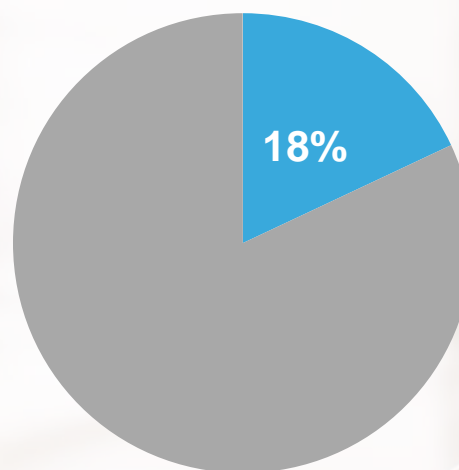
Wireless

% of Semi TAM



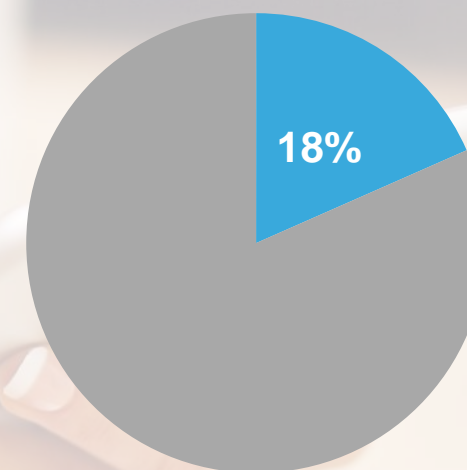
~\$130B TAM

% of Semi SAM



~\$27B SAM

% of ST Revenues



~\$1.5B Revenue



Targeted Smartphone Opportunities

13

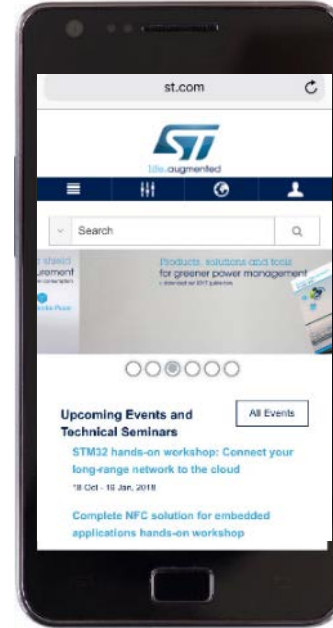
Sensors & Actuators

3,6-axis, OIS gyro, pressure, temperature



Specialized Imaging Solutions

Depth/3D sensing (ToF, SL Sensors)



Wired & Wireless Charging

Wireless charging ICs, USB-C



Display Controllers & Display Power Management

Touchscreen controller, AMOLED PMIC
















NFC & Secure Element

NFC receiver, Secure MCU, NFC & SE combo



ST Building Blocks

14

Processing	Security	Sensing & Actuating	Connectivity	Conditioning & Protection	Motor Control	Power & Energy Management
 Ultra-Low Power to High Performance 	 Scalable security solutions 	 Full range of sensors and actuators 	 10 cm to 10 km 	 Nano Amps to Kilo Amps 	 Power conversion Monitoring Drivers 	 Nano Watt to Mega Watt 



Continue Sustainable Profitable Growth

- Year-over-year sales growth across all products families, regions and customer groups
- Continued innovation leadership, supporting customers with industry-leading products and optimized application-oriented solutions
- Investment for growth, maximizing innovation with R&D spend and turning manufacturing investments into timely ramp-up of major programs
- Continued discipline on operating expenses
- Year-over-year improvement in operating profitability as a result of all the above

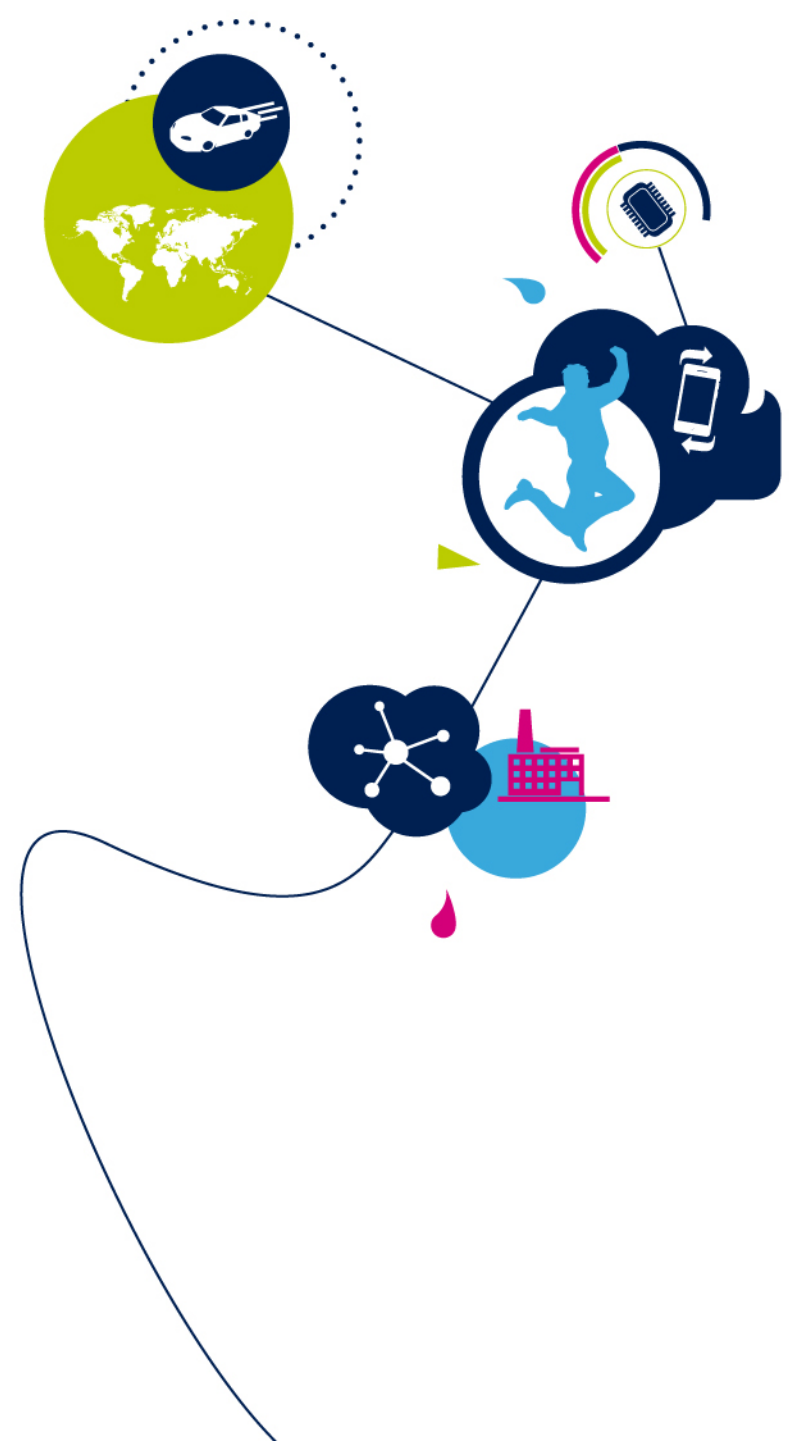


Smart Driving

Marco Monti

President

Automotive and Discrete Group



ST Global & Broad Range Automotive Supplier

Over 30 Years Experience

17


ST Automotive 2017 Sales



\$2.4B

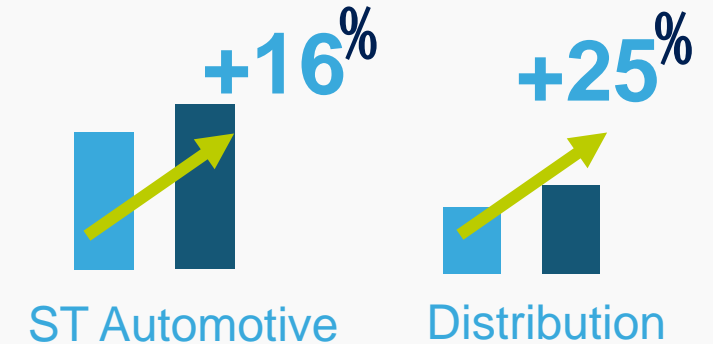
Semiconductor Sales

Strong YoY Growth



+10% vs. +6.3%
Semiconductor
Automotive
Market (SAM)

4Q17 vs. 4Q16

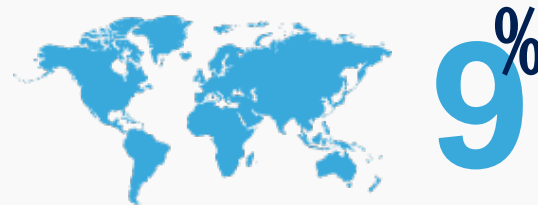


Solid ST Contribution



% of 2017 Company Revenue

ST Automotive Market Share



Market Share (on SAM)

Market Position



- Smart Power
- Engine Management
- Car Audio Amplifier
- GNSS Positioning
- 24 GHz Radar
- ADAS Safety
- Entry & Mid-end Telematics

Leveraging ST Automotive Leadership

18

Combustion Engine



Market Share ASIC/ASSP
in **Engine** Control

Body & Convenience



Market Share
in **Car Lighting**

Infotainment



Market Share
in **Audio** Amplifiers

ADAS Safety



Market Share
in **RF and Vision** systems

Steady growth in 2017 with a broad range and innovative portfolio

>15%
YoY Growth



Car Radio Processors
Electric Power Steering
General Purpose Analog
Power & Discrete

>30%
YoY Growth



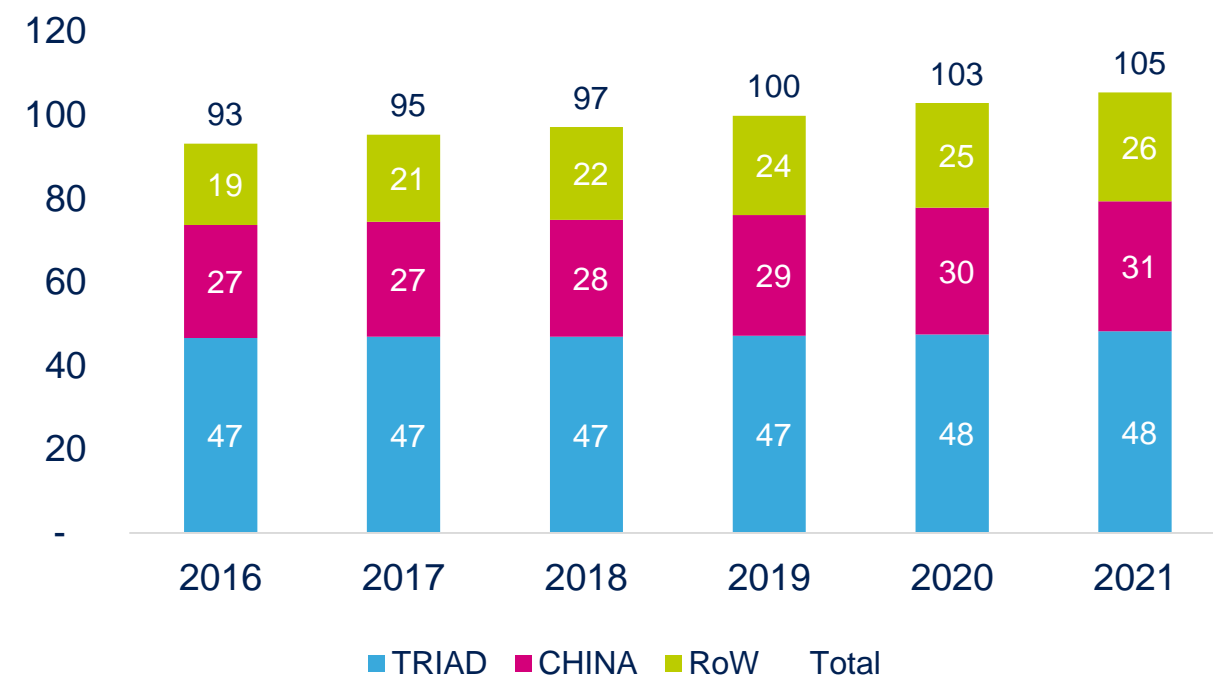
ADAS Imaging Processors
Automotive Microcontrollers
Electric Motor Control
RADAR
MEMS Sensors
Premium Audio
Transmission

Solid Growth in Automotive Market

Silicon Content Growth Outpacing Vehicle Unit Growth

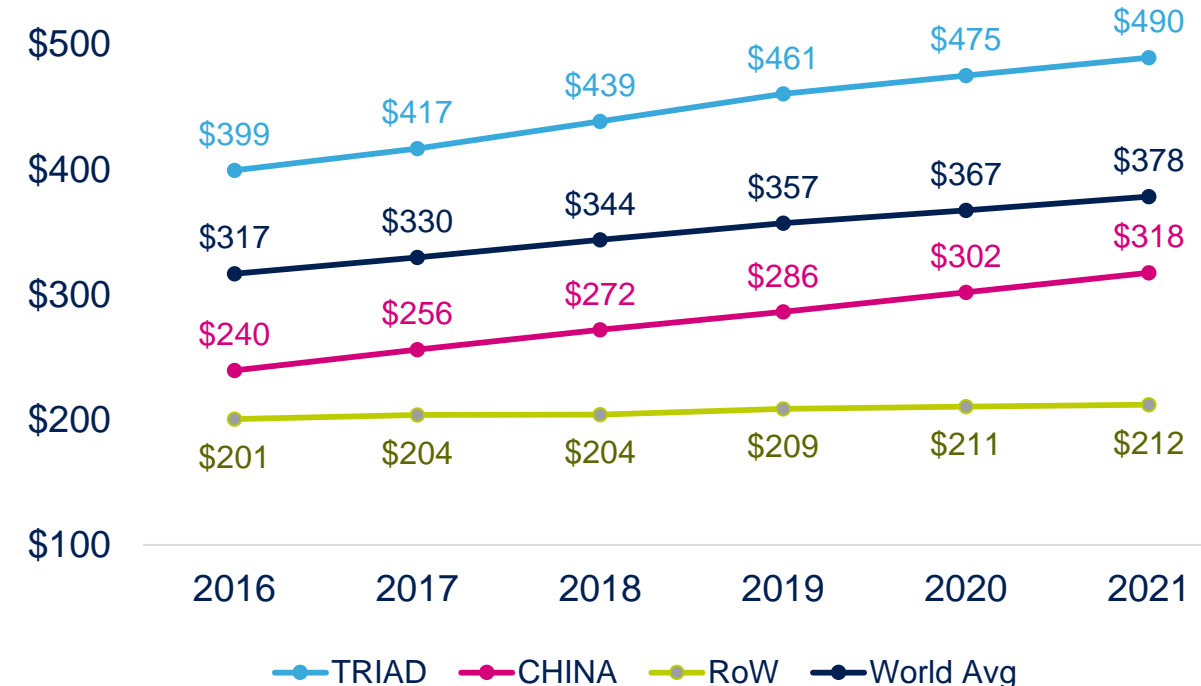
19

Vehicle Production (Million units)



CAGR 2016-2021: +2.5%

Silicon Content (\$)



CAGR 2016-2021: +3.6%

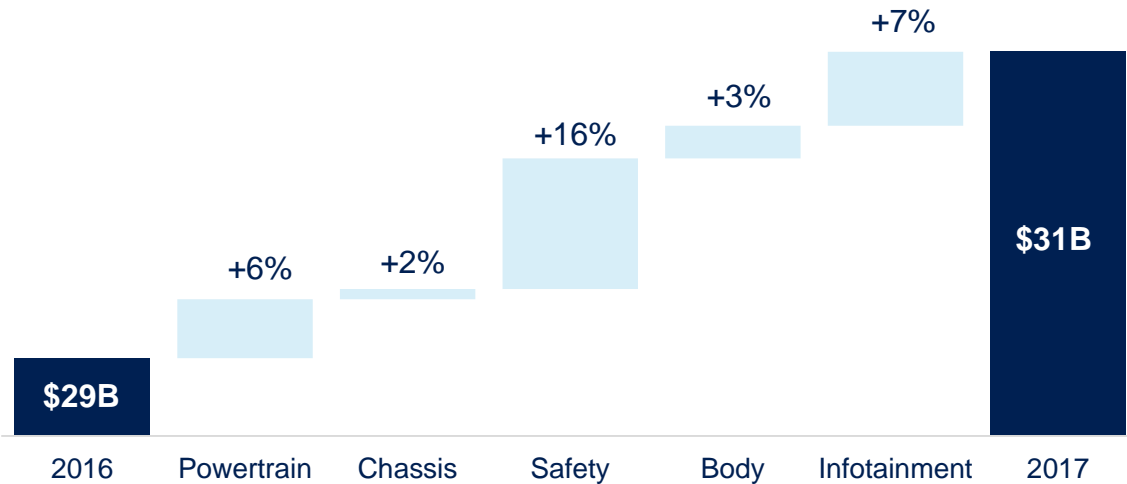
ST Automotive: Outperforming the Market

Increased Penetration in all Automotive Domains

20

Automotive Silicon by Application Domain (\$B)

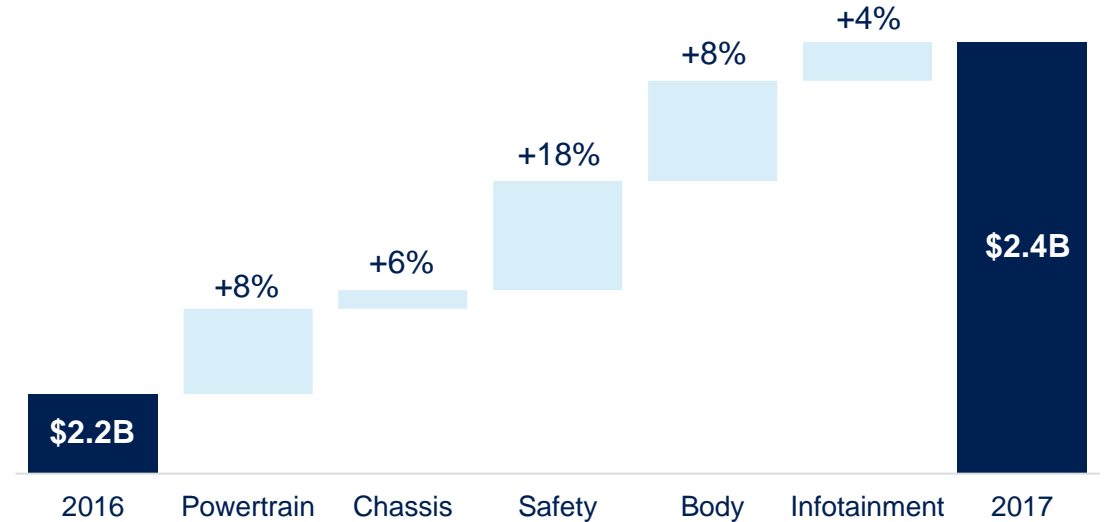
2017 vs. 2016 Growth



Market 2017 Growth: +6.3%

ST Automotive by Application Domain (\$B)

2017 vs. 2016 Growth



ST 2017 Growth: ~+10%

Automotive in ST

A Business With Solid Foundations

21

Radical Innovation

anticipating
market needs

Enabling Transformation

emerging trends

High Volume Applications

gaining market share

~25%

of ST Auto
Revenue

~75%

of ST Auto
Revenue

Applications and Trends

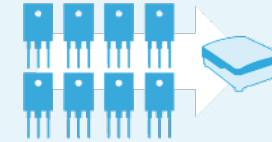
Autonomous Driving



V2X Communication



Integration & Miniaturization



Active Safety



Greener



Connectivity



ICE Power Train: 33% Share
Market Leader ASIC/ASSP



Car Audio: 40% Share
#1 in Amplifiers, strong in
Premium Audio, DAB, Tuners



Passive Safety: 17% Share
Integrated solutions for
Airbag and Braking



Body: 45% Share
Market Leader in
Door Control, Lighting



Core Technologies

SiC (Silicon Carbide)
GaN (Gallium Nitride)
FD-SOI PCM
(28 nm FD-SOI + PCM)

BCD10 (90 nm)
40 nm eFlash
FD-SOI (28 nm)
RF-CMOS BiCMOS

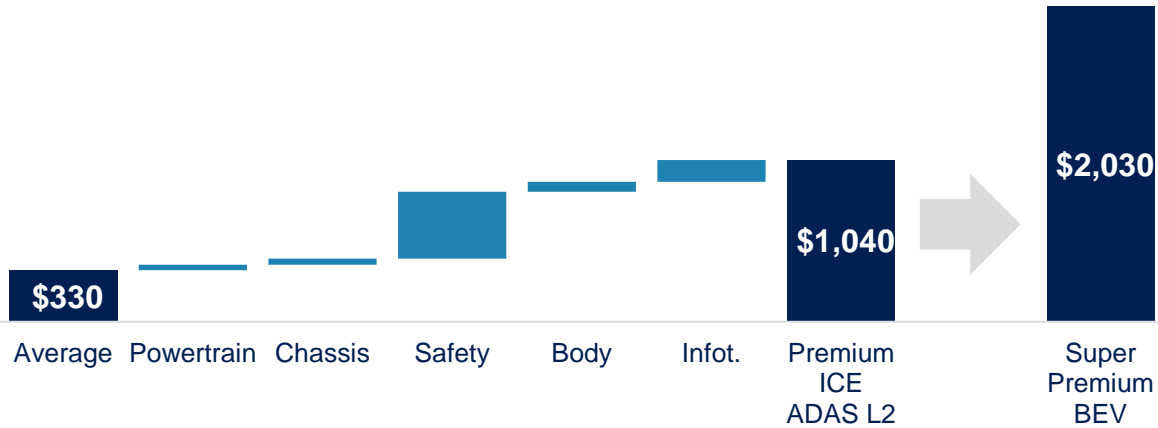
BCD9 (110 nm)
90 nm eFlash
VIPOWER
LV-PMOS

Transformational Trends: an Opportunity

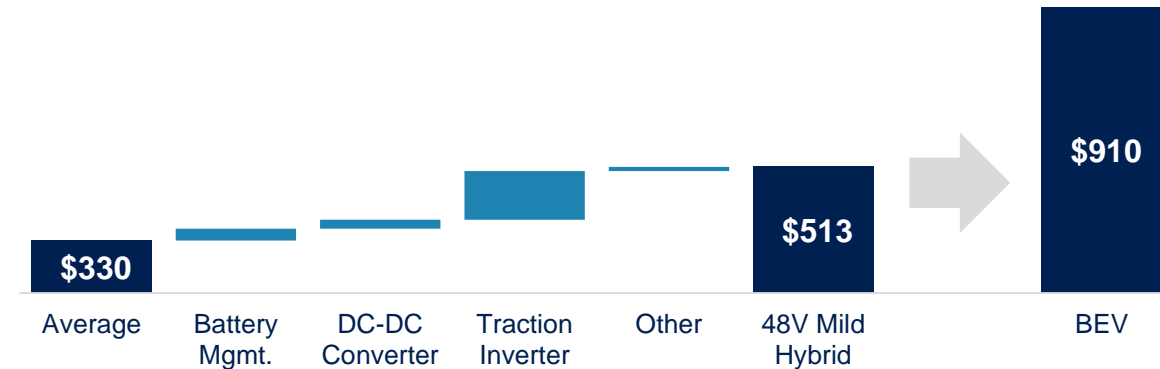
Silicon Content (\$)

22

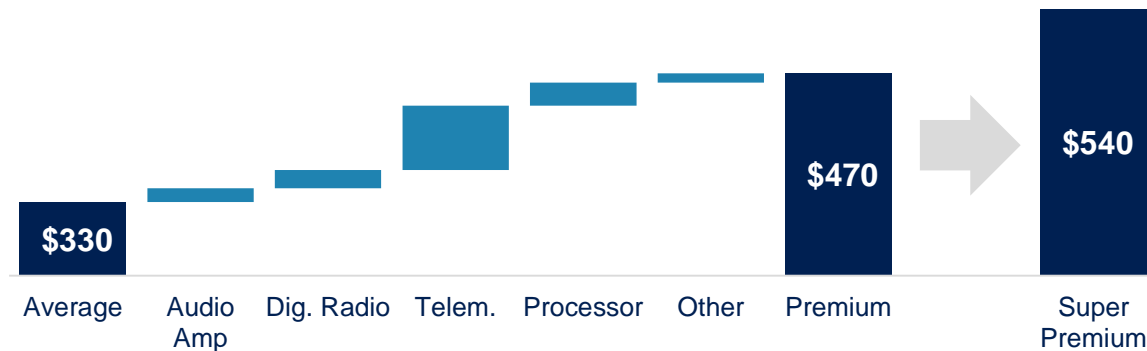
Premium vs. Average Vehicle



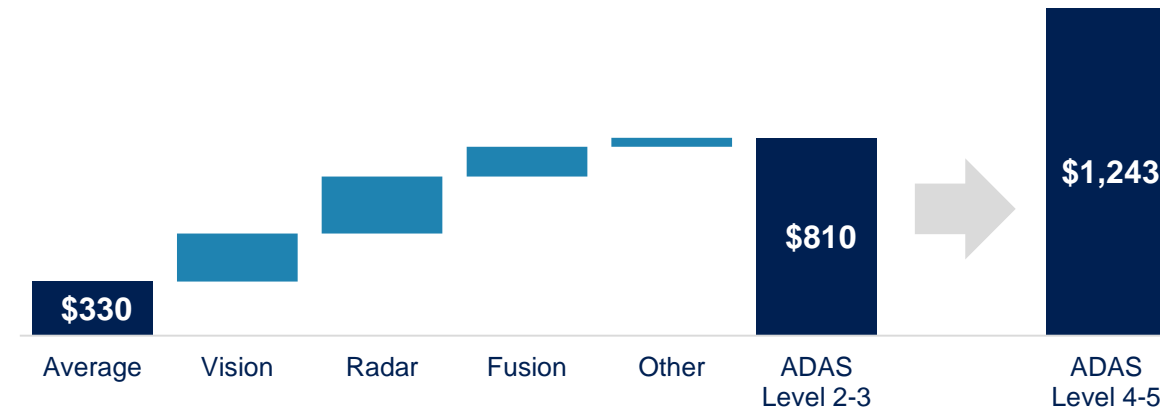
Electrification



Infotainment & Telematics



Autonomous Driving



Environmental Impact

23

ST Addresses All Segments With a Complete Range of Solutions

Internal Combustion Engine

Reducing Emissions

Silicon content growth driven by regulation
Higher value silicon content

\$2.6B 2017 ICE Semi market value



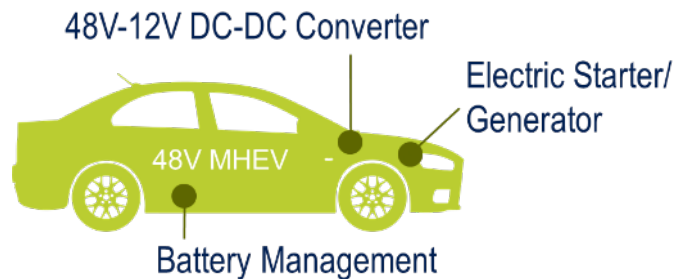
Euro4 vs. Euro6
\$23 → \$34
Semiconductor Content

~65% less NOx(*)

Mild Hybrid 48 V

Low-end entry level electrification

Affordable solution for entry level electrification
Added electronic content compared to ICE

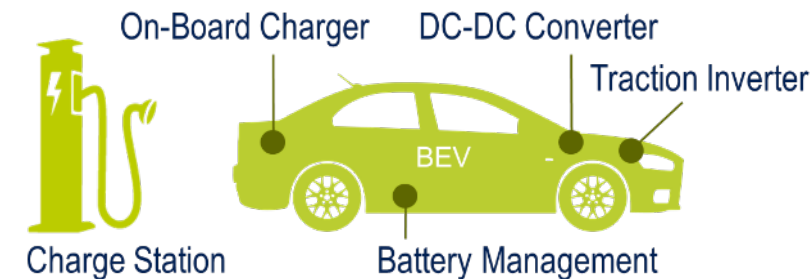


~15% less CO₂

Battery Electric Vehicle

High-end battery-based full electric car

Disruptive market change vehicle boosting
electronic content per vehicle



Zero CO₂ Emissions

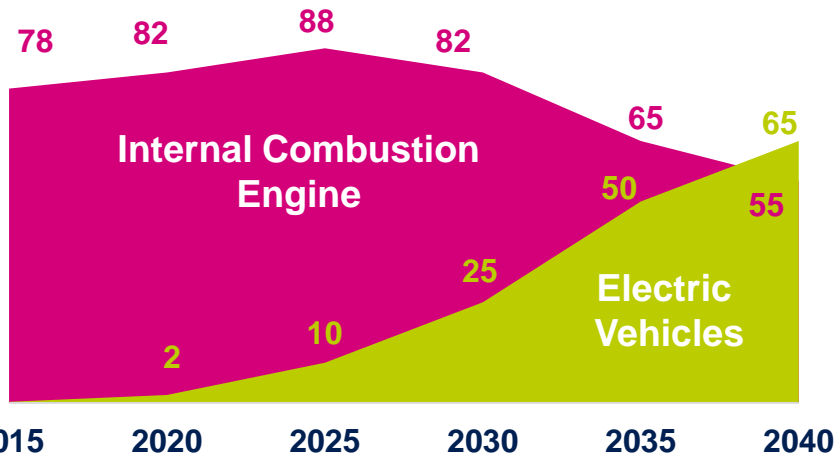
Lower Emissions and Increasing Semiconductor Content

Improving the Internal Combustion Engine

Emission Regulation Boosting Silicon Content and Value

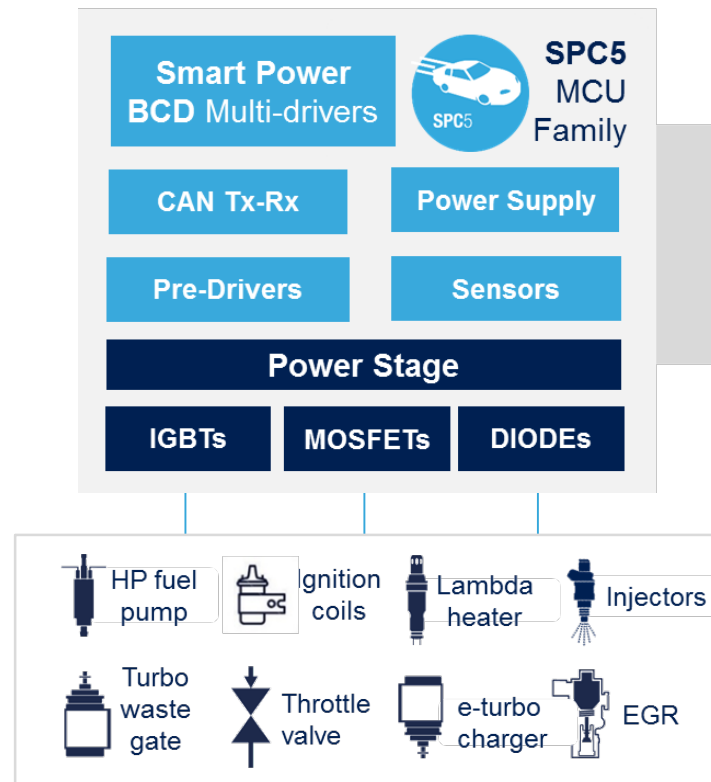
24

ICE still strong in the years to come...

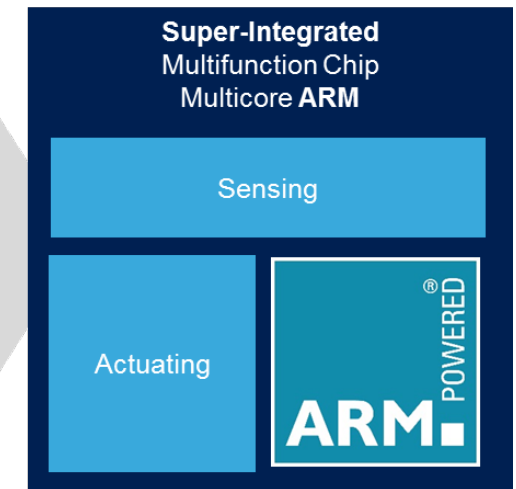


Electric vs. ICE Vehicle Sales (Million Units)

2018 Complete System Solution



Leading Edge Innovation

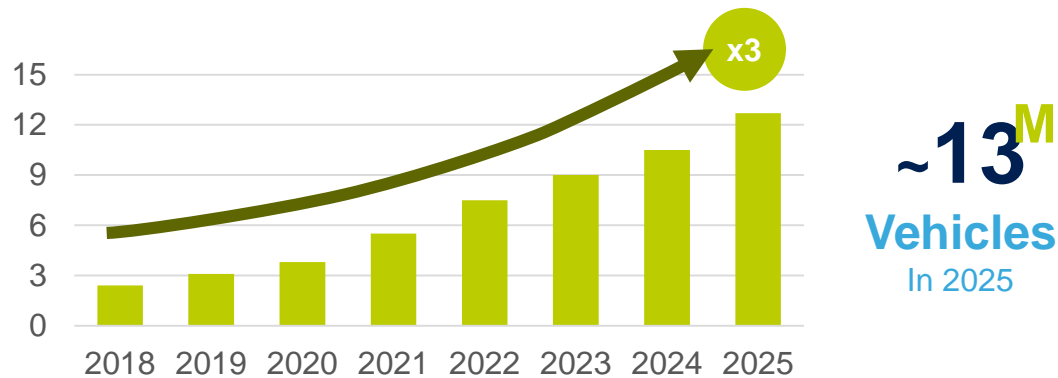


Highly Integrated Engine Management System in BCD9 with embedded Processing Power

Next Gen 2022:
BCD10 for an enhanced system integration with **NVM**

Affordable Solutions for Entry Level Electrification

Mild Hybrid Vehicles (Million units*)



48 V Mild Hybrid Benefits

CO₂ reduction due to lower power losses (start-stop) and energy recuperation

-15% CO₂

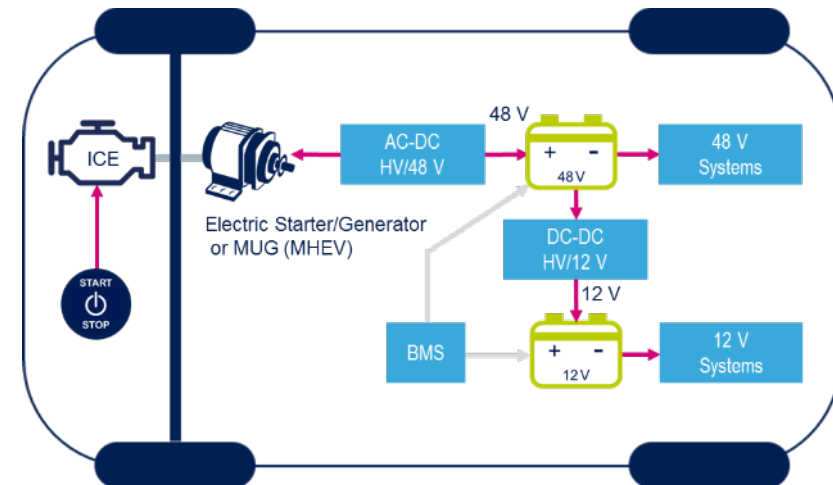
Affordable Access to Electrification with significant benefits

\$\$\$ 48 V

Enabling quicker engine start, sharper acceleration, and higher performance in-car applications



ST Solutions for Mild Hybrid Vehicles



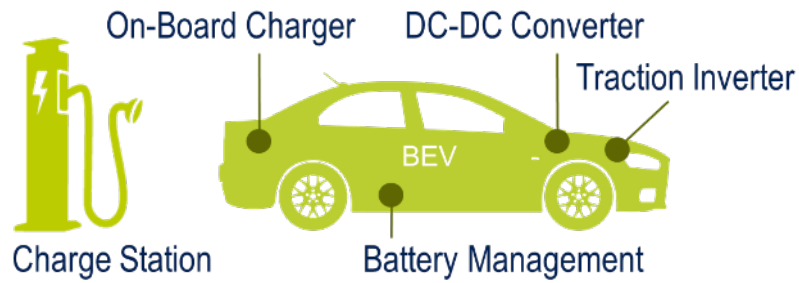
- Low Voltage Power **MOSFET** technologies
- **VIpower** intelligent power switches for 48 V power distribution
- **BCD** pre-drivers and **VIpower** integrated drivers for multi-phase motor control
- Low-power 32-bit automotive microcontrollers
- Large variety of protection, filter and companion chips

Battery Electric Vehicles

Disruptive Market Changing Vehicles

26

Battery Electric Vehicles



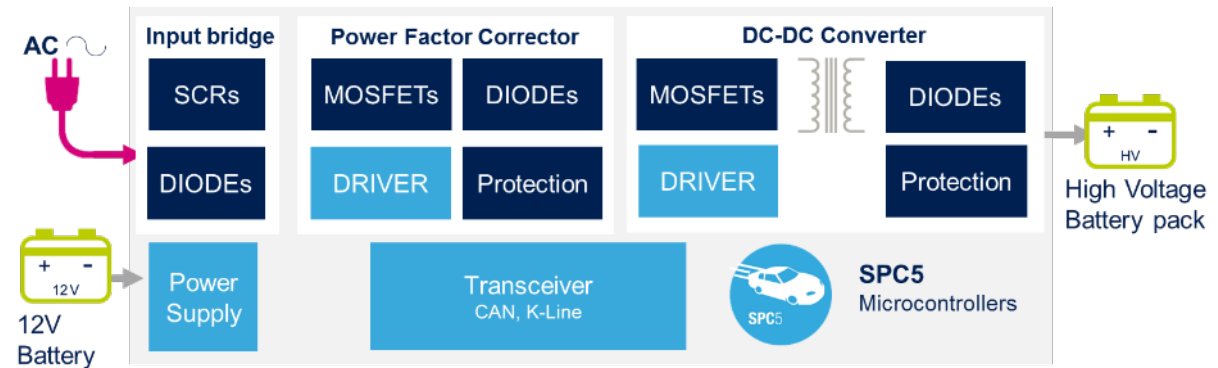
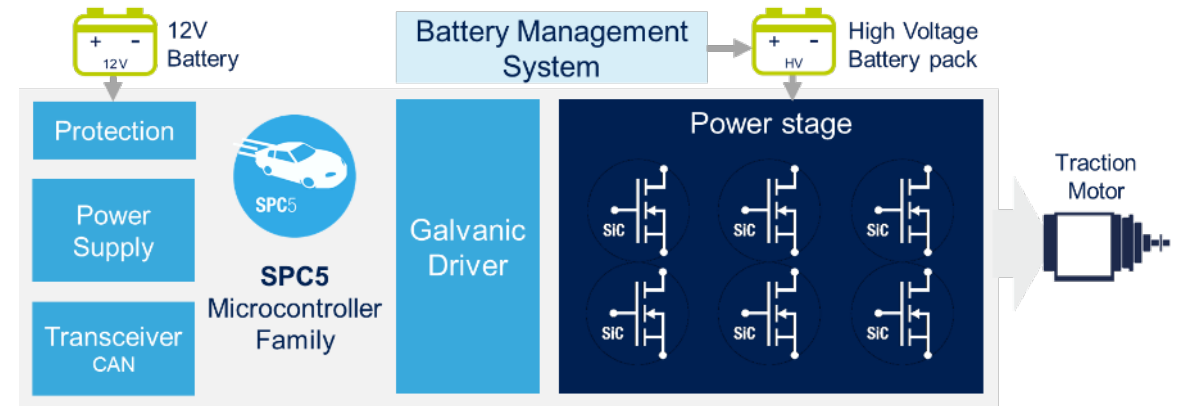
ST working closely with OEMs

Engaged with key players
in **Electrification** around
the globe

5x car makers in **Europe**
3x car makers in **US**
6x car makers in **China**
3x car makers in **Japan**
1x car maker in **Korea**

80% of the engagements include SiC products

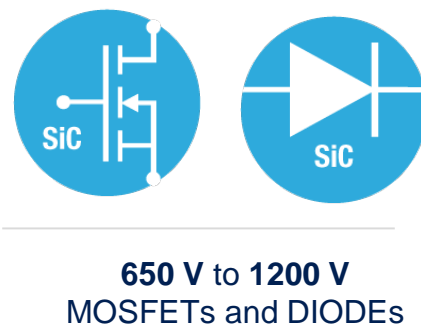
Focus on Traction Inverter, Charging & BMS



Innovation in Silicon Carbide

27

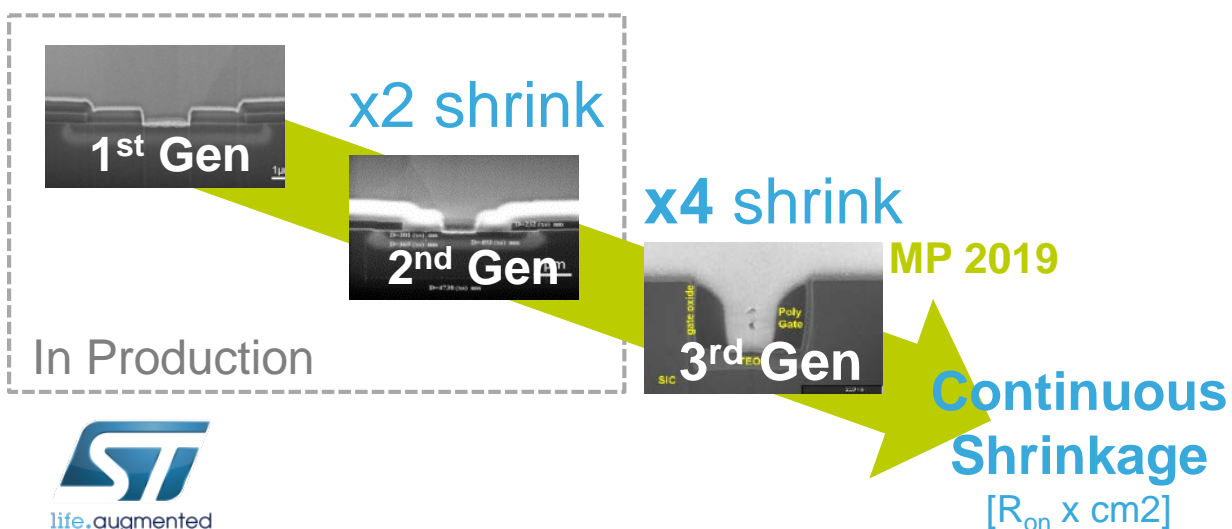
SiC adoption faster than expected



Package offer - Discrete – Mini-module – Modules



Front-end Evolution



In Production

Power Modules

SECRET

Customer dedicated
module

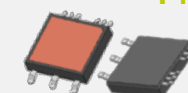


ACEPACK 1



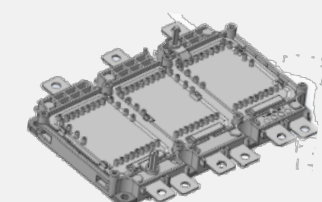
ACEPACK 2

Production 2019



SMITpak

Production 2020



ACEPACK DRIVE

Increased Data Flows

28

Require Greater Security, Processing Power and Connection Speeds

Security

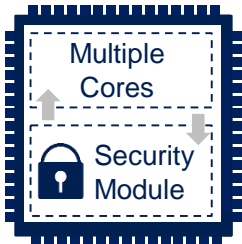
Solutions for every ECU requirement

Stand-alone Secure Element



- Security Level (EAL5+)
- Mandatory to store user sensitive information

MCUs & Processors with Embedded Security



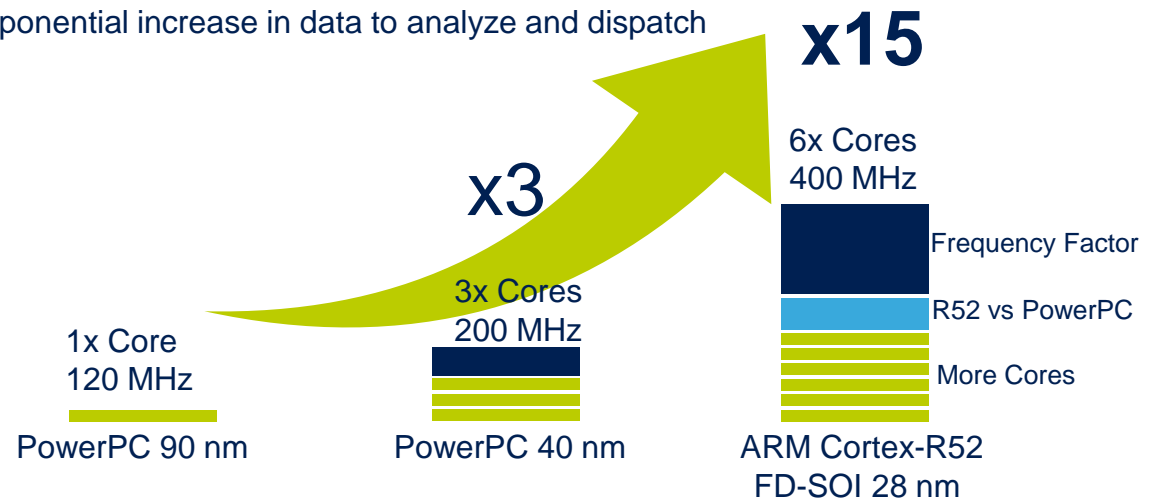
- Security Level (EAL3/4)
- Embedded Hardware Security Module
- High data-rate encryption/decryption to manage data streams



ECU Processing Capability

Increase required in many automotive domains

Exponential increase in data to analyze and dispatch



ST's New high-end 32-bit Automotive MCU Family will provide the power

- ARM Cortex-R52, 6x Cores, 400 MHz
- 16/32 Mbyte 28 nm FD-SOI
- Sampling 2018

Assisted Driving Solutions

29

Active Safety differentiated offer

2017/18

- Mobileye 4th Gen
- 2nd Gen 24 GHz
- 1st Gen 77 GHz
- Auto Parking MCU
- Surround View Video Processor & Camera (open market)

2020

- Mobileye 5th Gen
- Radar FD-SOI 28 nm
- 360° ASIC Vision Processor
- ADAS Power Management



ADAS solutions for mass market

New

10+ Projects engaged in China/Taiwan
Lead project already in production



Processor



Sensor



Packaged in a
small module

Rear View Camera



Overhead View



Basic Lane
Detection



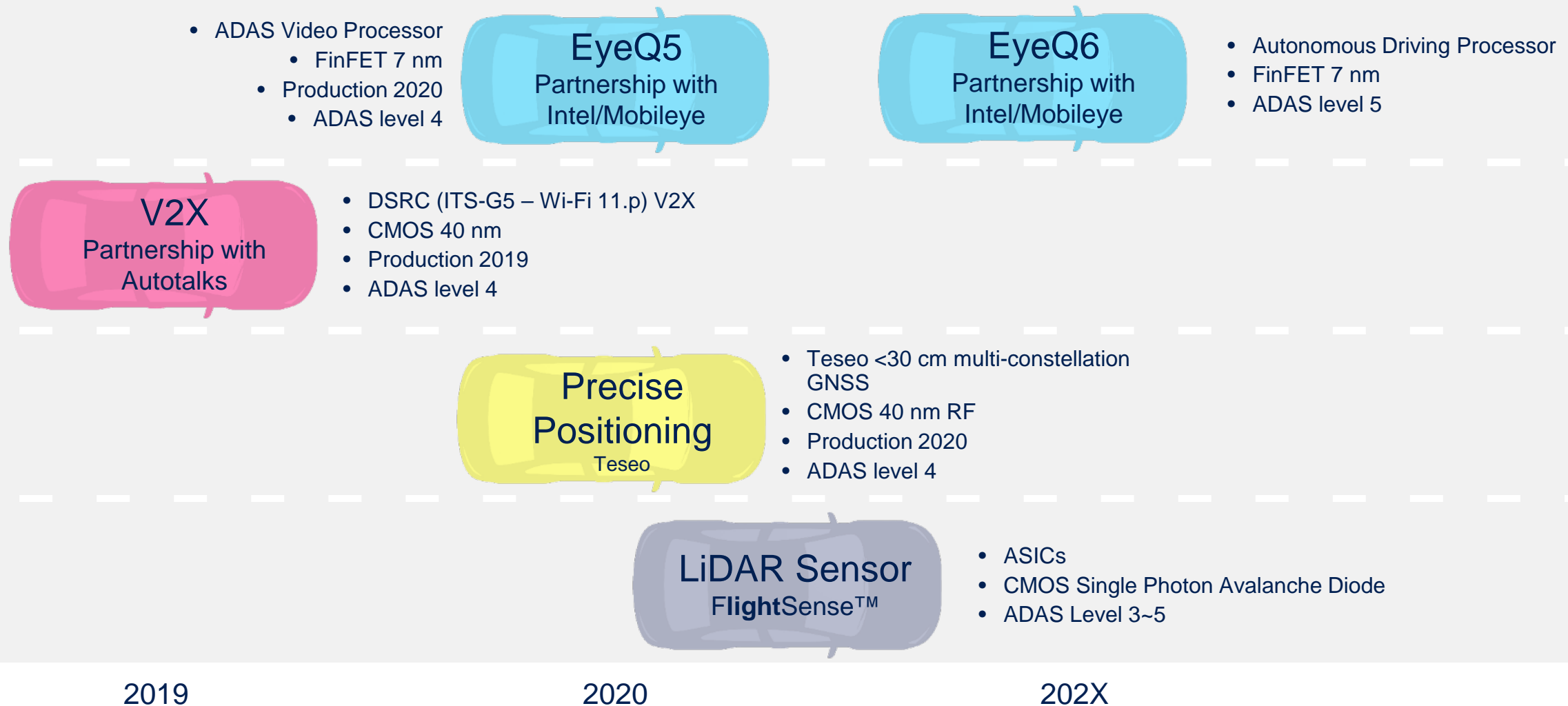
Obstacle
Detection



From Assisted to Autonomous Driving

\$400 of Additional Silicon Content to Enable Level 4/5 cars

30



- Automotive across all Groups represents about 30% of ST net revenues
- ST Automotive business is built on a solid foundation supporting the traditional automotive domains, the transformational trends and the radical innovation drivers
- ST is taking advantage of the market opportunities for increased silicon content in vehicles
- ST has all the technologies, the IP portfolio and the partner networks to lead the transformation trends of the automotive industry
- ST is disrupting the automotive industry and enabling the acceleration of EVs with its innovative Silicon Carbide Technology



Making Industrial & IoT Applications Smarter

General Purpose & Secure Microcontrollers

Marie-France Florentin

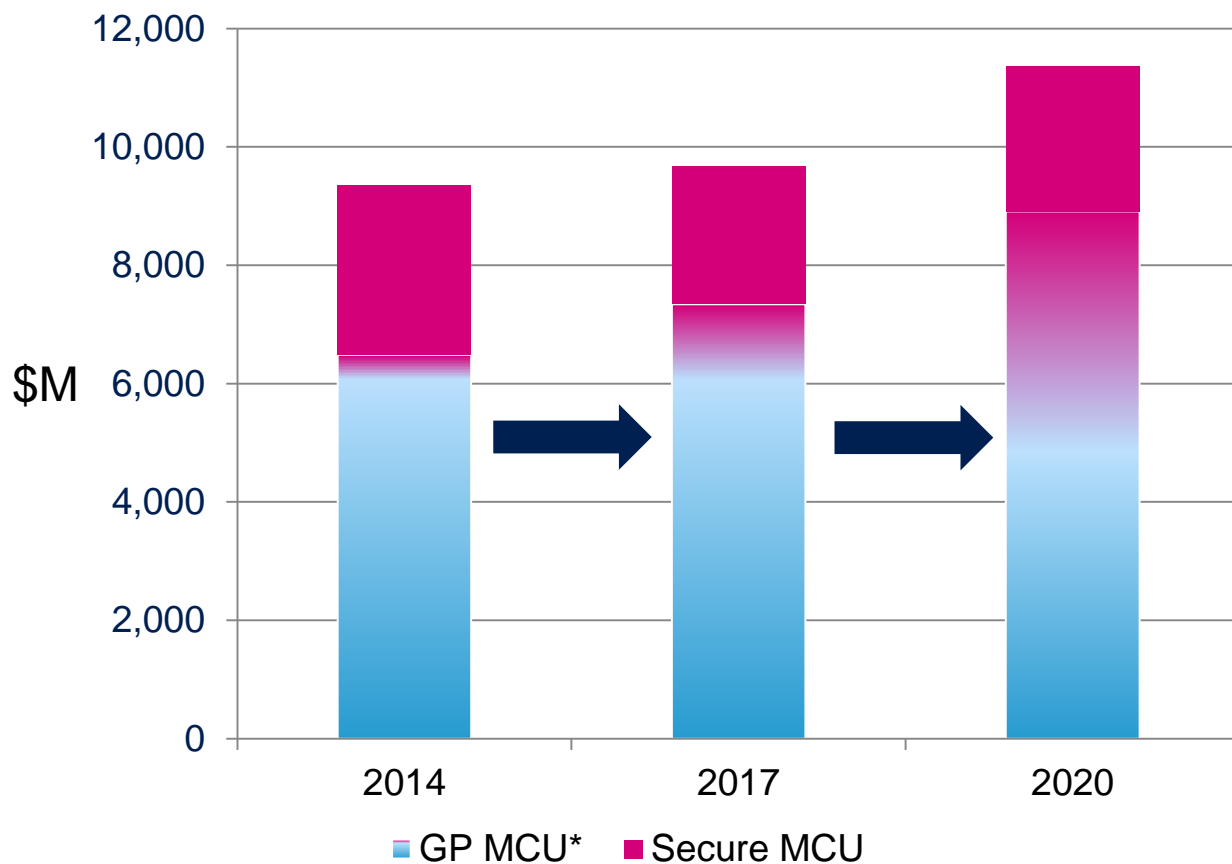
Group Vice President,
General Manager Secure Microcontroller Division



Microcontroller Market Trend

33

Consolidated MCU* TAM



Market Dynamics

2014–17 Consolidated MCU* CAGR: +1.2%

- General Purpose MCU: CAGR +4.2% driven by the Industrial market and IoT deployment
- Secure MCU: CAGR -6.6% due to price erosion of traditional Smartcard market (SIM & Banking cards)

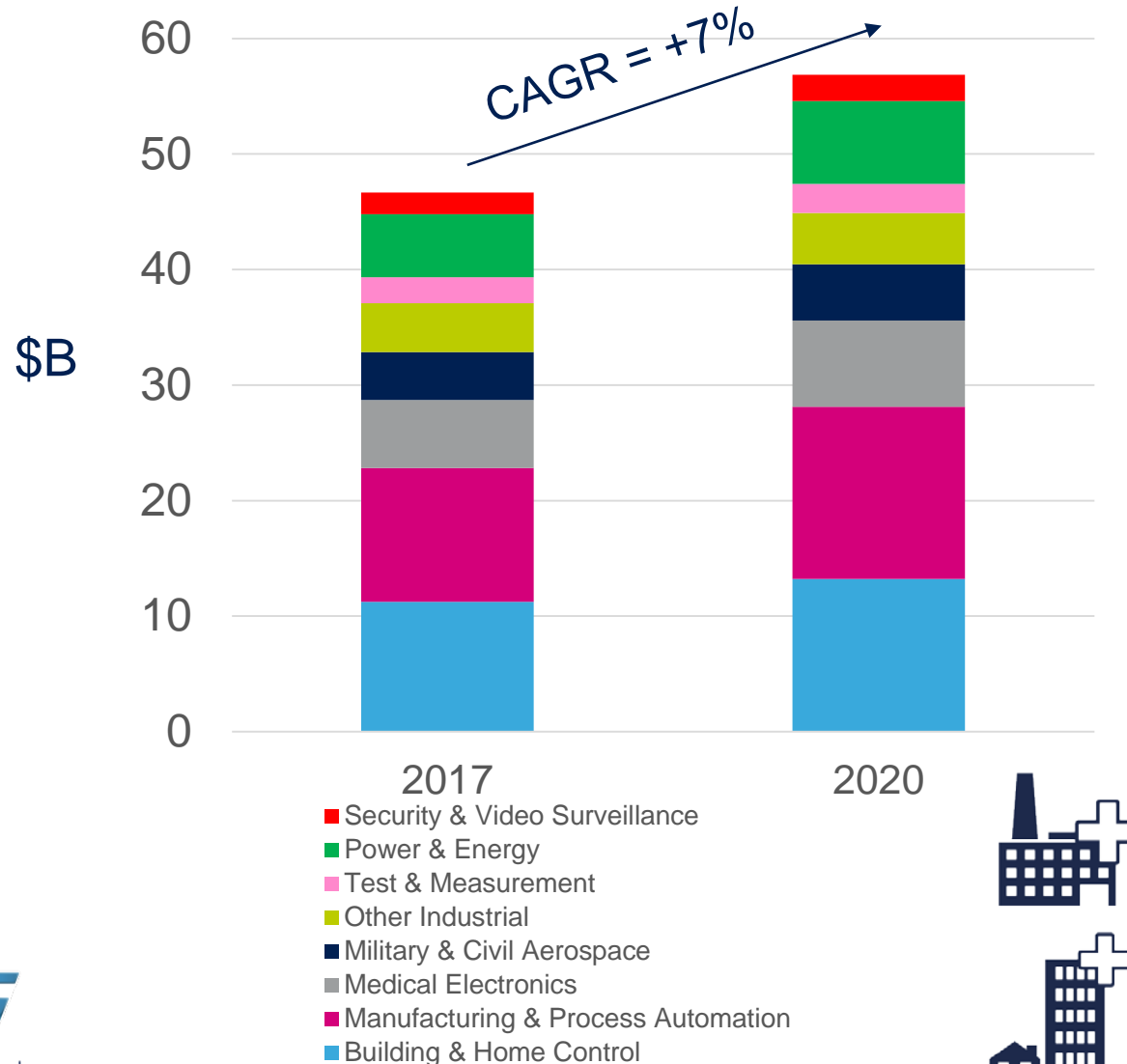
2017–20 Consolidated MCU* CAGR: +5.5%

- Solid growth for General Purpose MCU embedding advanced connectivity and more security features for Industrial applications: CAGR +6.7%
- Secure MCU: CAGR +1.7%
 - Traditional Smartcard market erosion due to price pressure and eSIM pervasion
 - Growth driven by Industrial applications and secure mobile transaction deployment

Industrial Application Trends

34

Industrial Semiconductor TAM (\$B)



Processing

Sensing & Actuating

Security

Conditioning & Protection

Connectivity

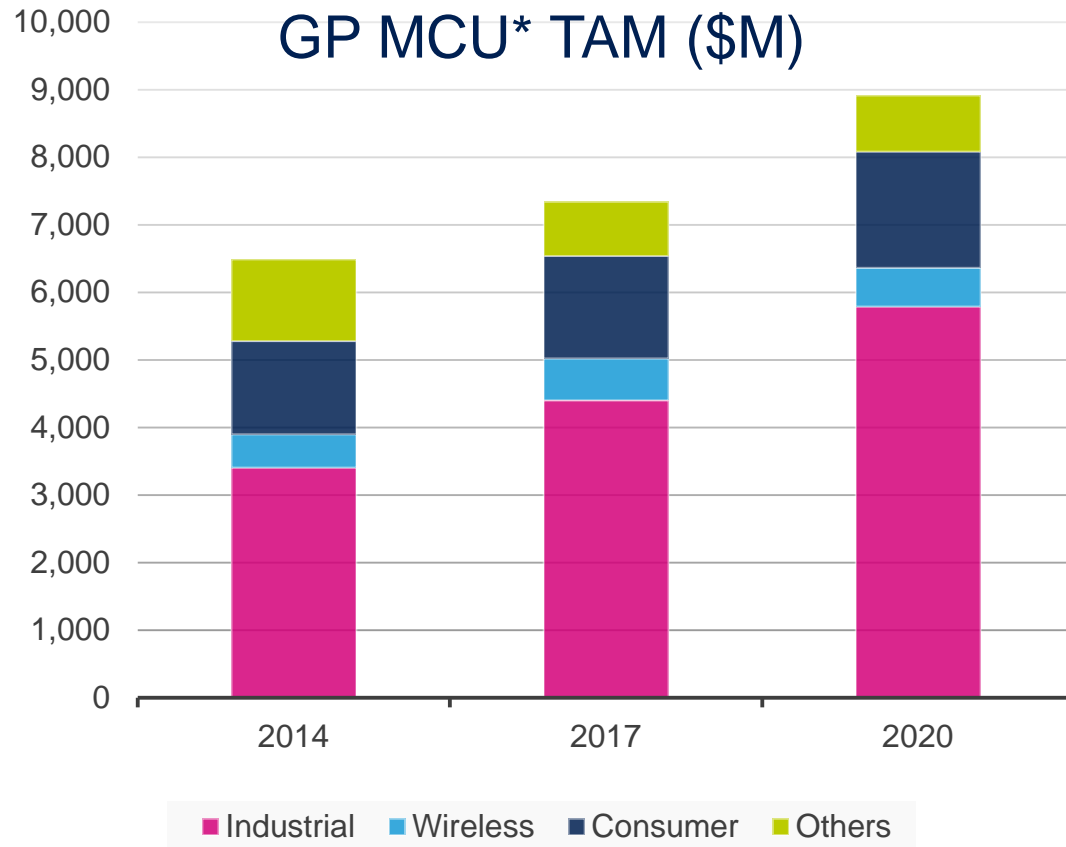
Motor Control

Power & Energy Management

General Purpose MCU* TAM

35

GP MCU* TAM (\$M)



Market Dynamics CAGR 2017-20: **+7%**

Industrial

- Factory automation, medical, security & video surveillance, building & home control, power & energy, aerospace

CAGR 2017-20: +10%

Wireless

- Mobile phones
- Smartphone

CAGR 2017-20: -3%

Consumer

- Gaming, wearable
- TV, audio, video, camera

CAGR 2017-20: +4%

Others

- Computer and peripherals, tablets
- POS, printers
- Wired communication

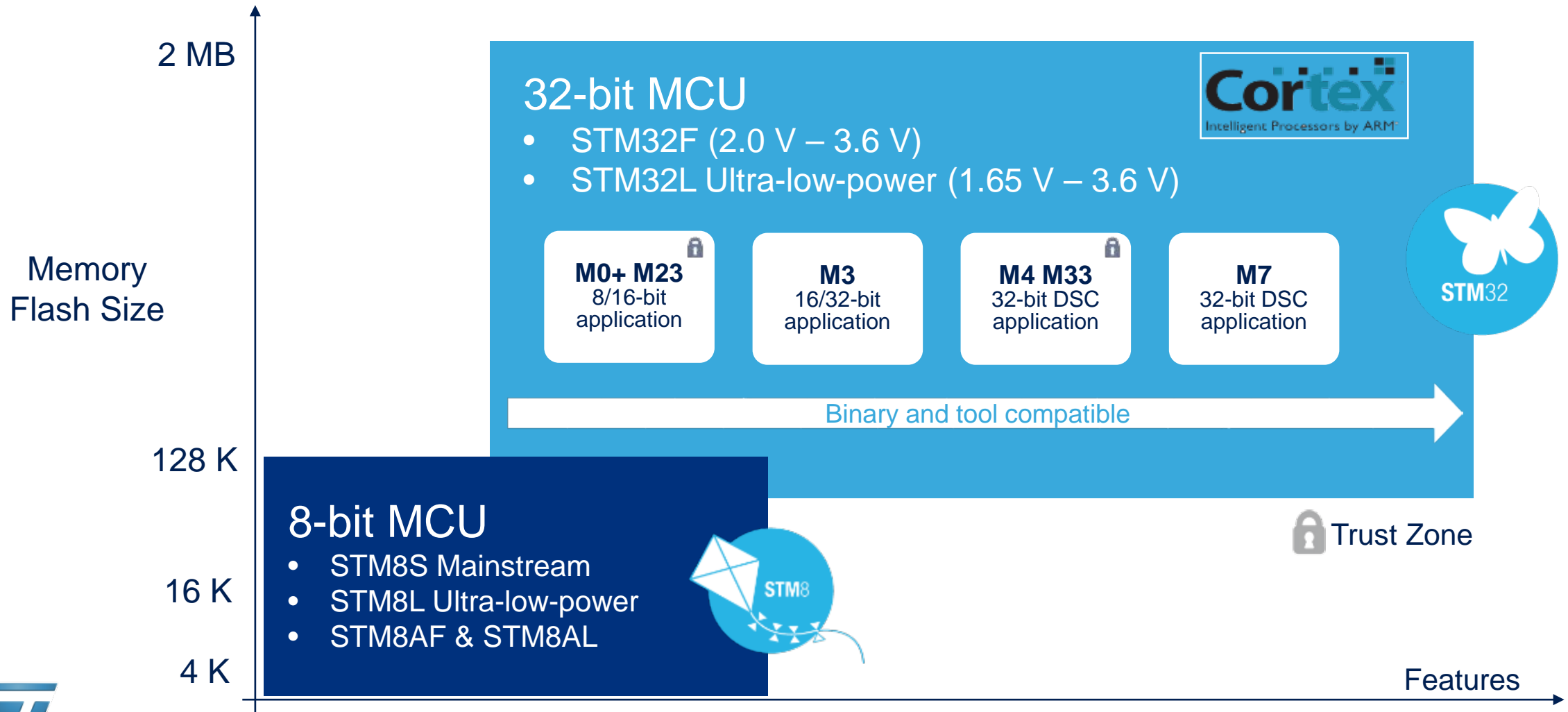
CAGR 2017-20: +1%

* Excluding Automotive MCU

Source: WSTS, 2018 and ST

GP Microcontroller Foundations

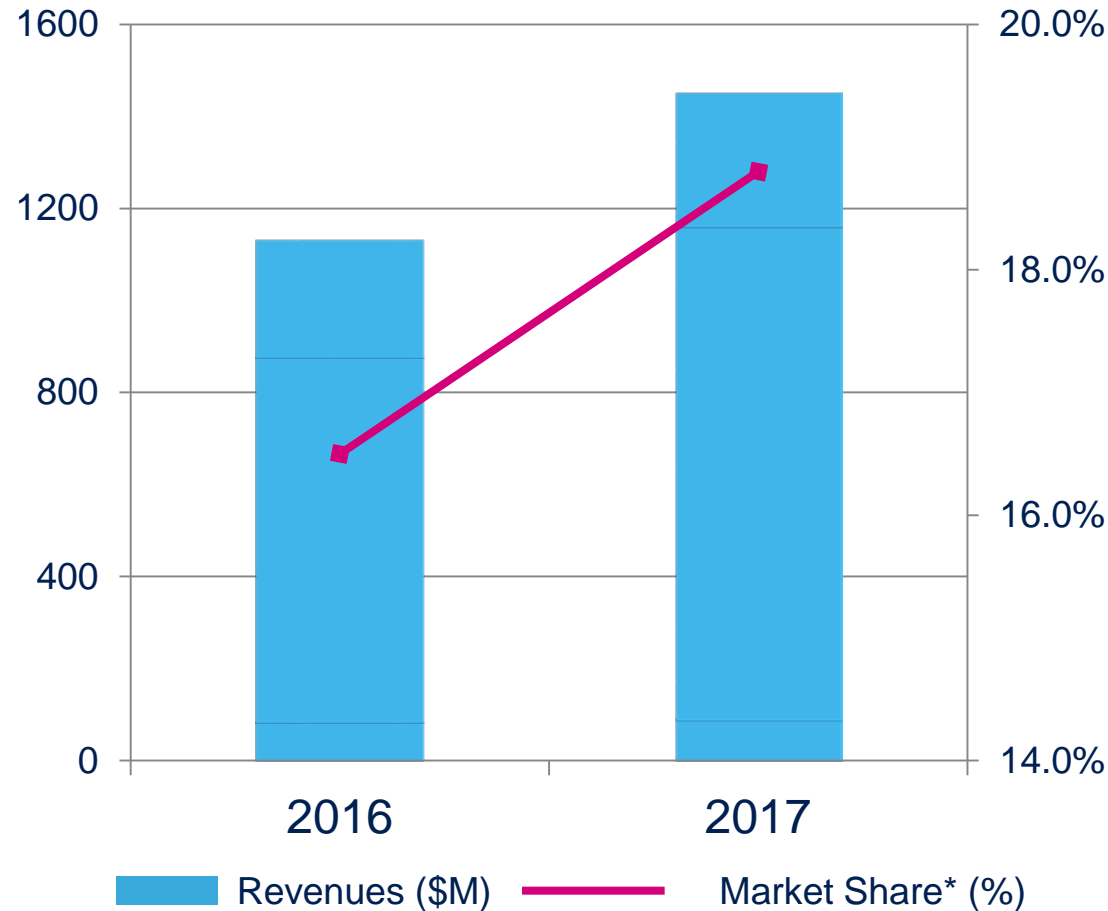
36



Targeting Global GP MCU Leadership

37

GP MCU Revenues & Market Share*



2017

- ~30% revenue growth
- ~19% WW market share
- > 2 Billion MCUs shipped
- > 1 Billion STM32 shipped
- > 800 STM32 products
- > 50,000 customers
- Expanded ecosystem



STM32

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The Brain of Many Industrial Applications

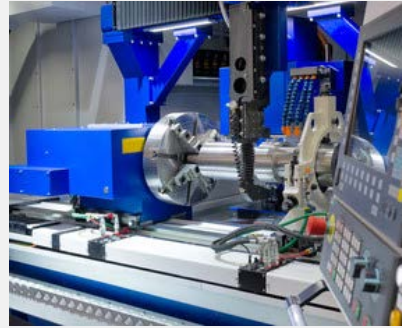
Appliances



Metering



Robotics & Automation



Healthcare



Power Tools



Secure Locks



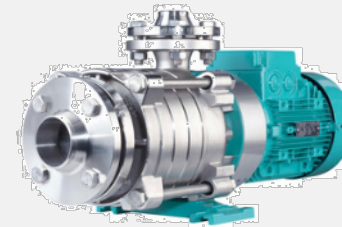
Surveillance



Smart Homes & Buildings



Drives, Pumps, Compressors



Lighting



Expanding Product Portfolio to cover the Industrial Market

Enhanced Performance



From entry level to high end

- More advanced peripherals
- More flexibility & efficiency
- More processing power
- Lower power consumption
- AI capabilities



More Communication



Embedded dedicated connectivity

Connected world requiring connectivity capabilities for all devices from 10 cm to 10 km



Stronger Security

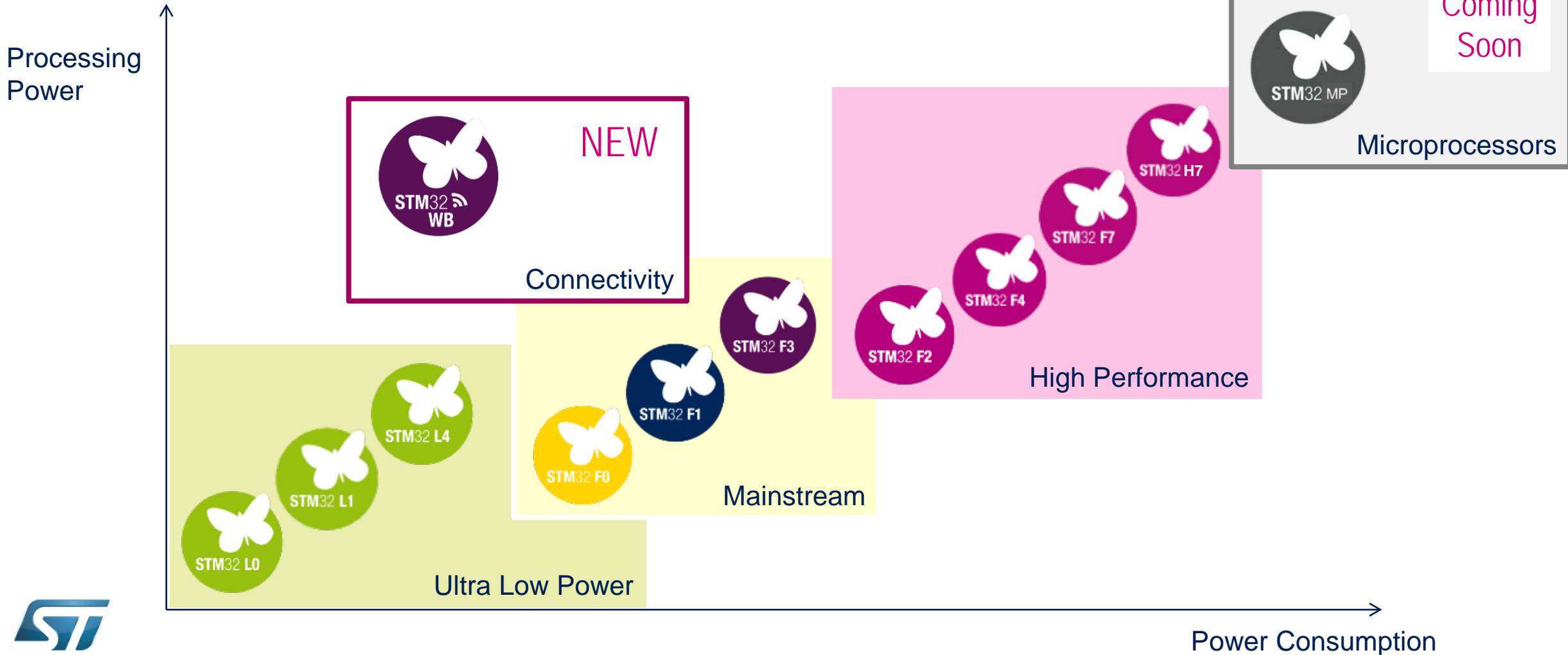


Adapted security level

Scalable Security solutions mandatory in a smarter connected world



Broadest Portfolio of 32-bit MCUs in the Industry

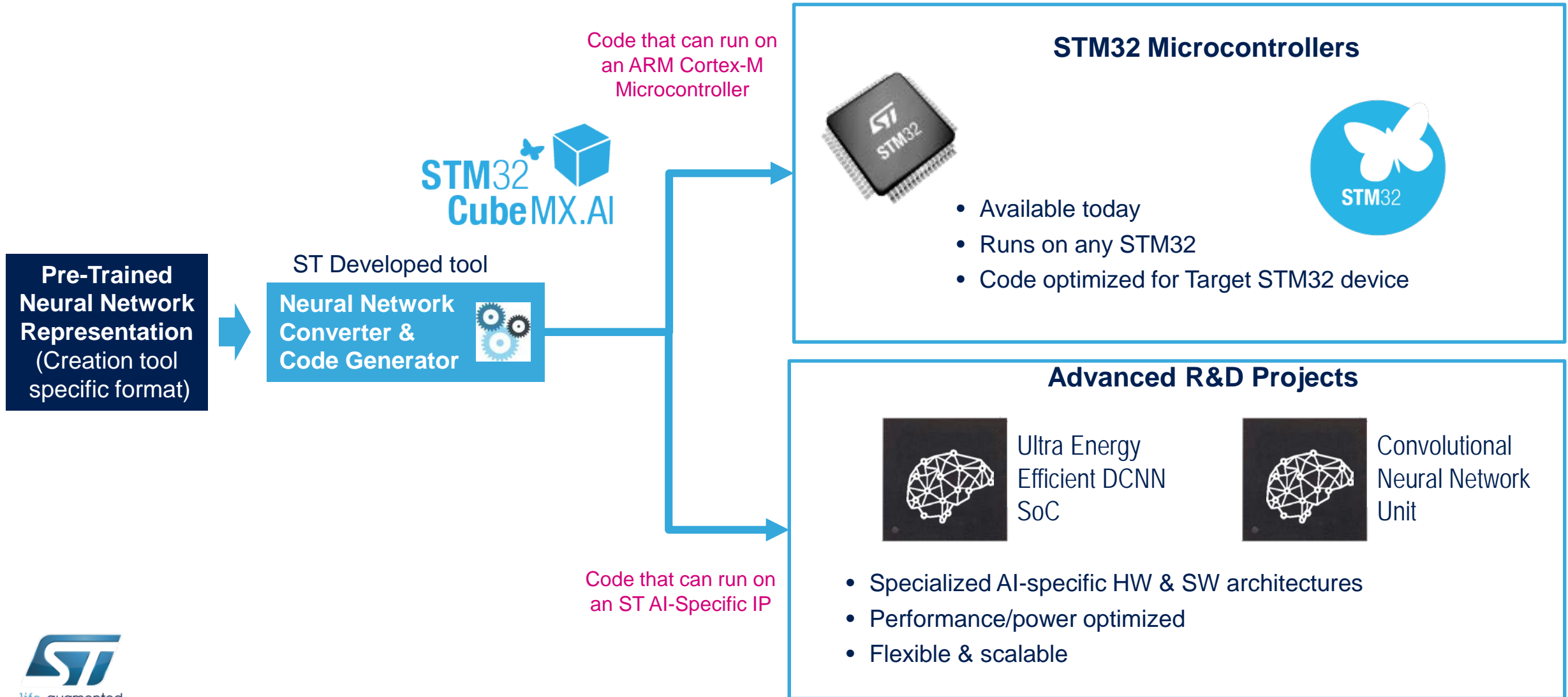




Artificial Intelligence

ST Solutions to Run Neural Networks

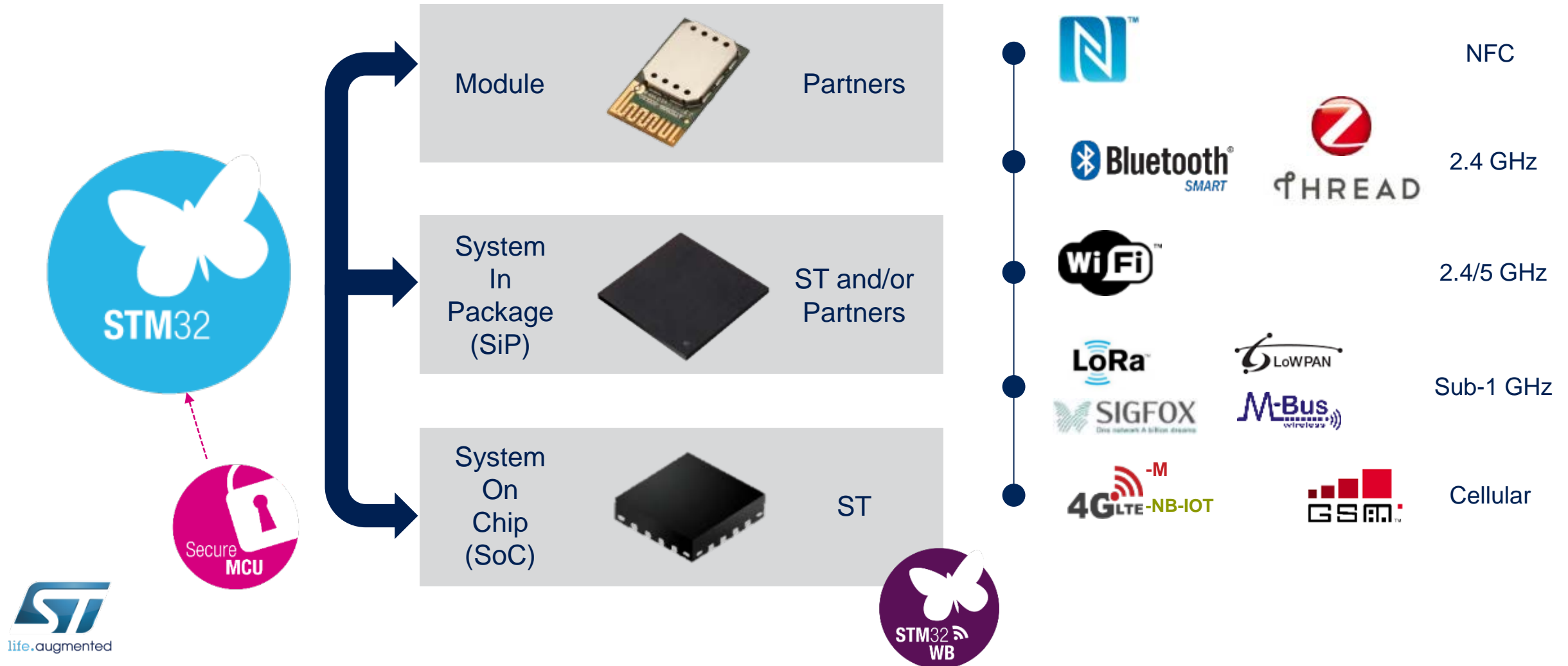
41



Connectivity Powered by the STM32

from Module to Integrated Solutions

42



Security in Industrial Applications

43

End-to-end solutions to ensure network security & trusted systems



M2M embedded SIM

GP MCU embedding security

Authentication Secure Element



To ensure secure communication

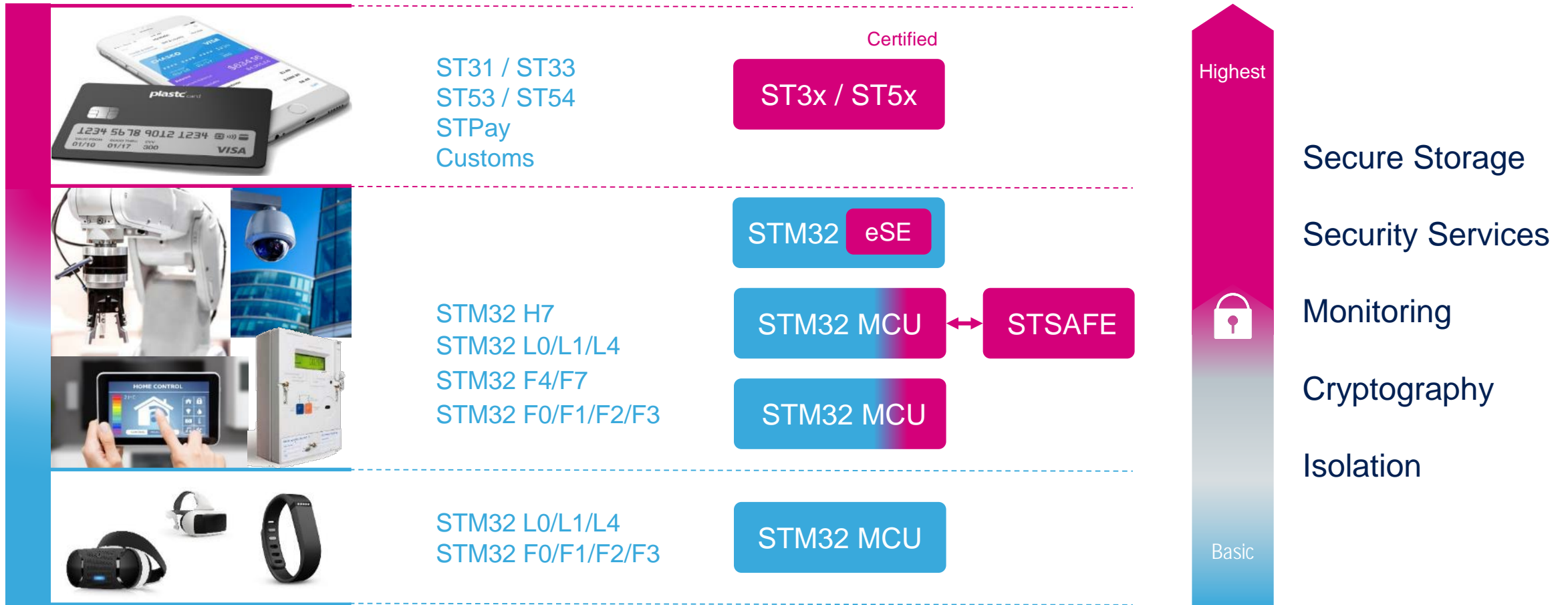
To authenticate device

To ensure platform integrity

ST Solution

A Scalable Security Offer

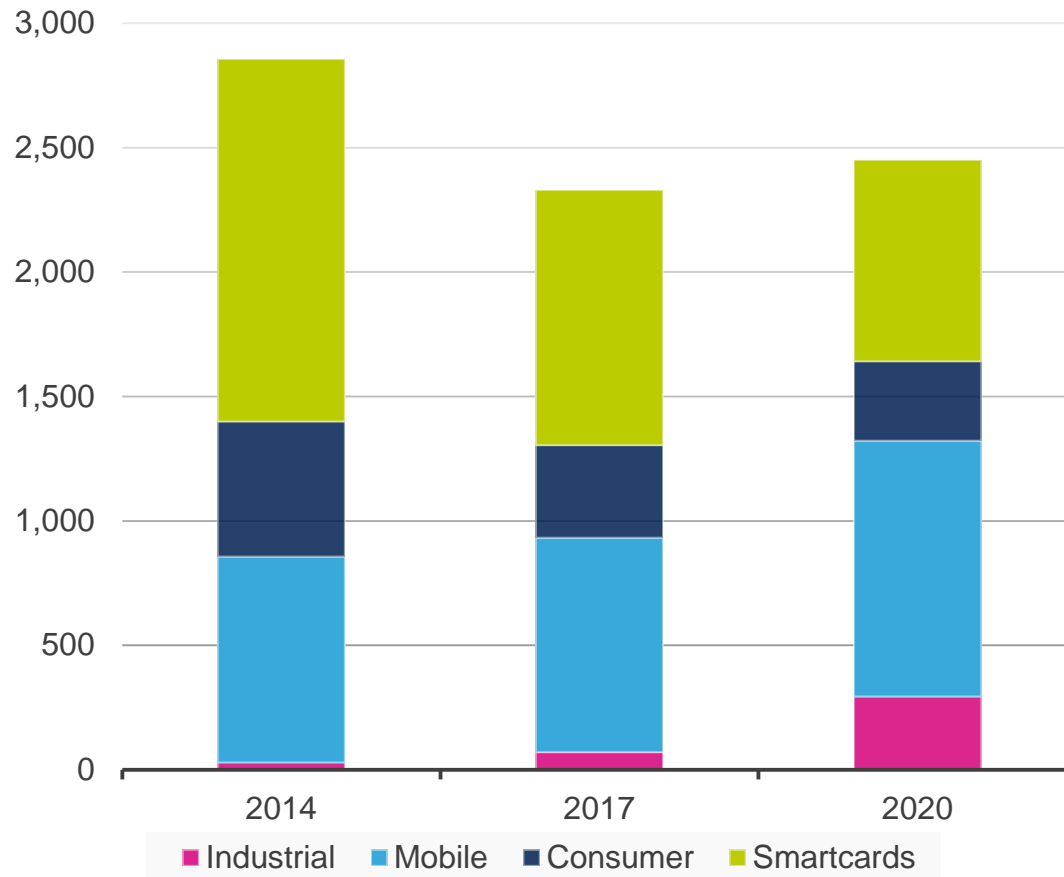
44



Secure MCU TAM

45

Secure MCU TAM (\$M)



Market Dynamics CAGR 2017-20: **+2%**

Industrial

- Authentication Secure Element
- Machine to Machine eSIM
- IoT deployment

CAGR 2017-20: +60%

Mobile Security

- Secure Element & NFC ctr.
- embedded SIM
- Secure Wearable

CAGR 2017-20: +6%

Consumer

- Brand Protection
- Trusted Platform Module

CAGR 2017-20: -5%

Smartcards

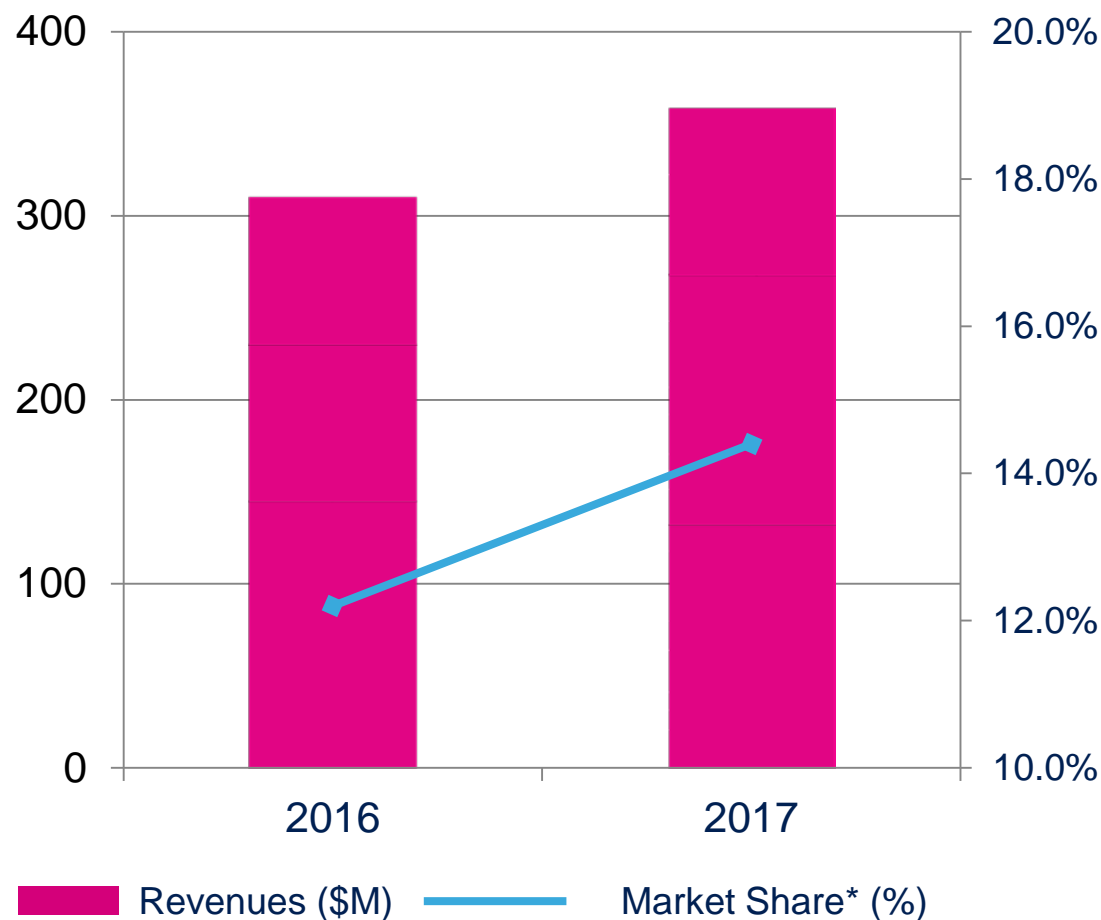
- SIM classic
- Banking & ID
- Pay TV & Transportation

CAGR 2017-20: -8%

Targeting Global Secure MCU Leadership

46

Secure MCU Revenues & Market Share*



2017

- > 15% revenue growth in a declining market
- ~15% WW market share
- > 1 Billion Secure MCUs shipped
- Strong contribution to the emerging Industrial market (M2M ...)
- > 250 Million units shipped for Mobile Security

**Estimated Secure MCU share % vs SAM*

Source WSTS, 2018



Secure Microcontrollers

Increasing Pervasion in Industrial Applications

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IoT Nodes
(sensors, lighting, alarm,
devices connectivity)



Utilities



Factory Automation



Networking Equipment &
Servers



Smart Home & Building
Gateways



Robotics & Motor Control



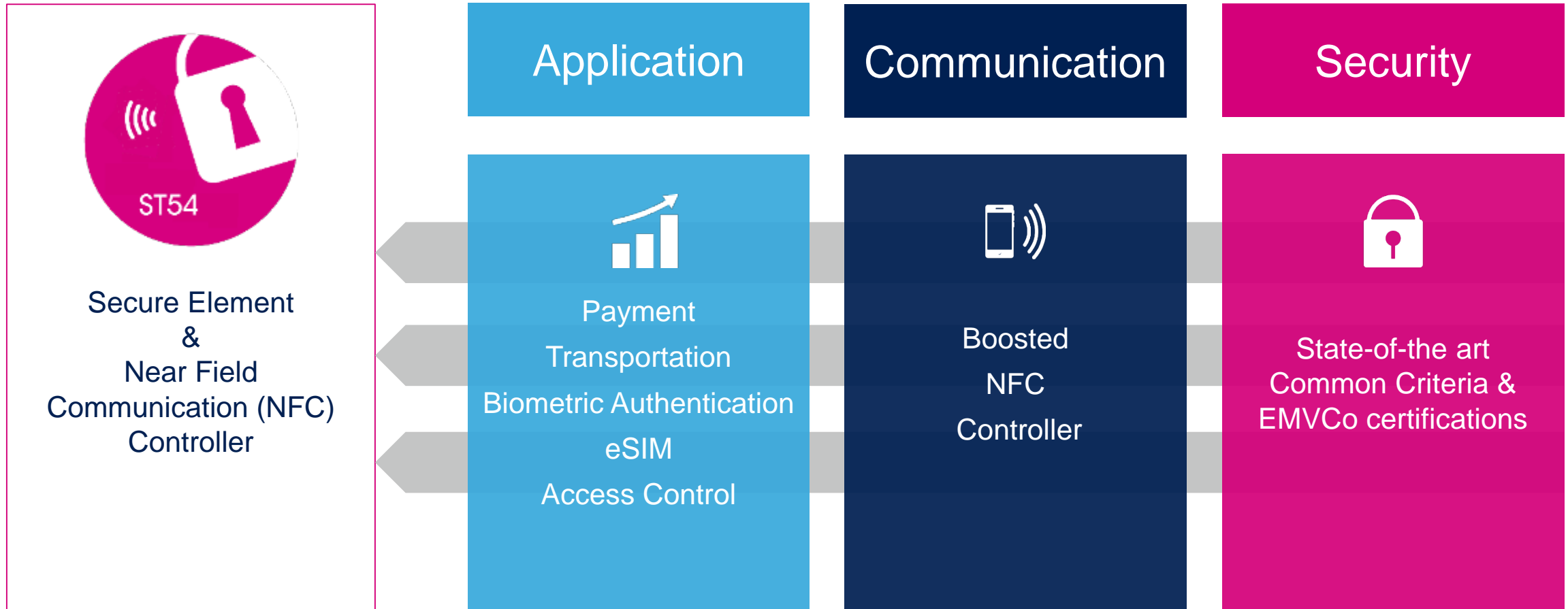
Secure Locks



Asset Tracking



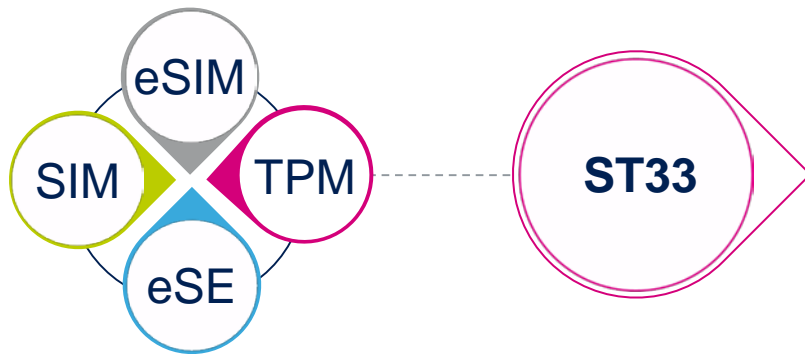
State-of-the-art Secure Solution for Mobile Transactions



Mobile Security Convergence

ST Innovation Driving Integration

49



ST33

ST33J2M0 SE (40 nm)

- 2 MB Flash
- Enhanced Performance
- EMVCo, CC EAL5+



ST21NFC

ST21NFCD Controller (80 nm)

- Boosted for tiny & metal cover antenna
- Reduced BOM
- Low Power mode
- Card emulation, Reader & P2P

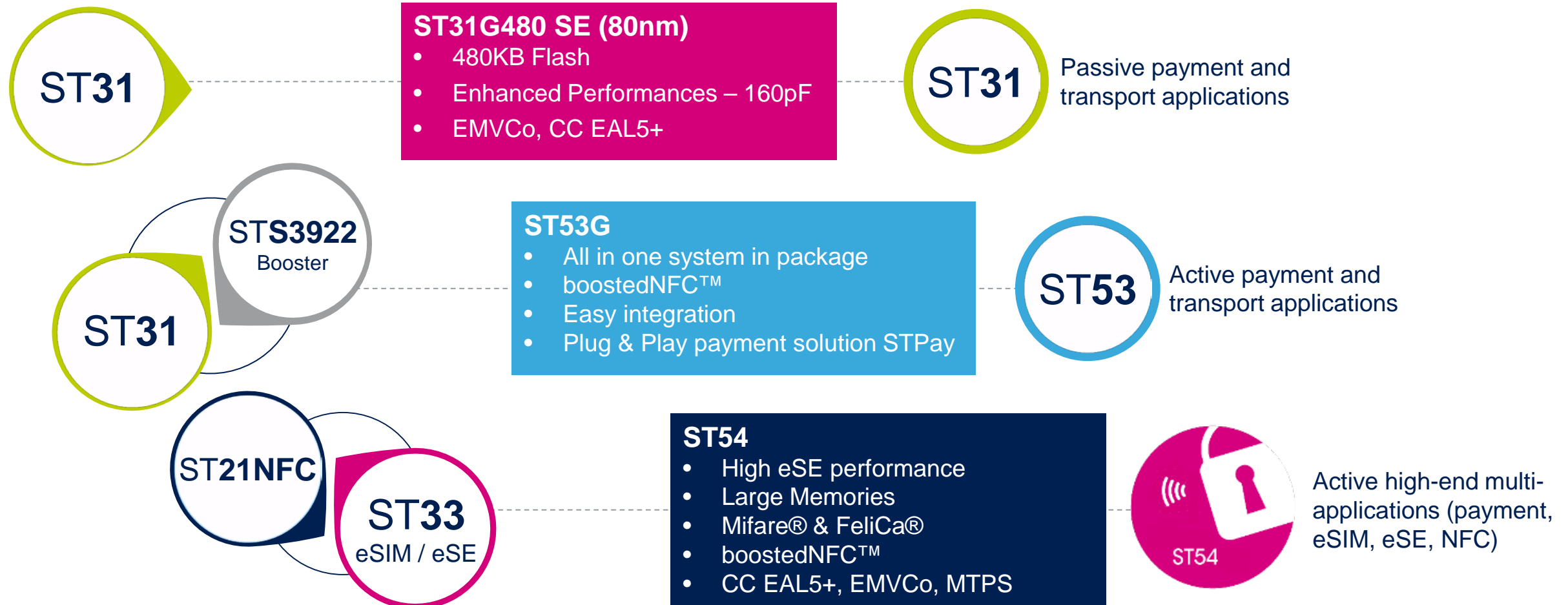


- High eSE performance
- Large Memories
- Mifare® & FeliCa®
- boostedNFC™
- CC EAL5+, EMVCo, MTPS

Wearable Convergence

50

from Discrete to Integrated Payment, NFC, eSE, eSIM Solutions



Takeaways

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Industrial Applications driving MCU growth



ST Portfolio Evolution

Enhanced Performance

More Communication

Stronger Security



Broad & expanding ecosystem
for application development





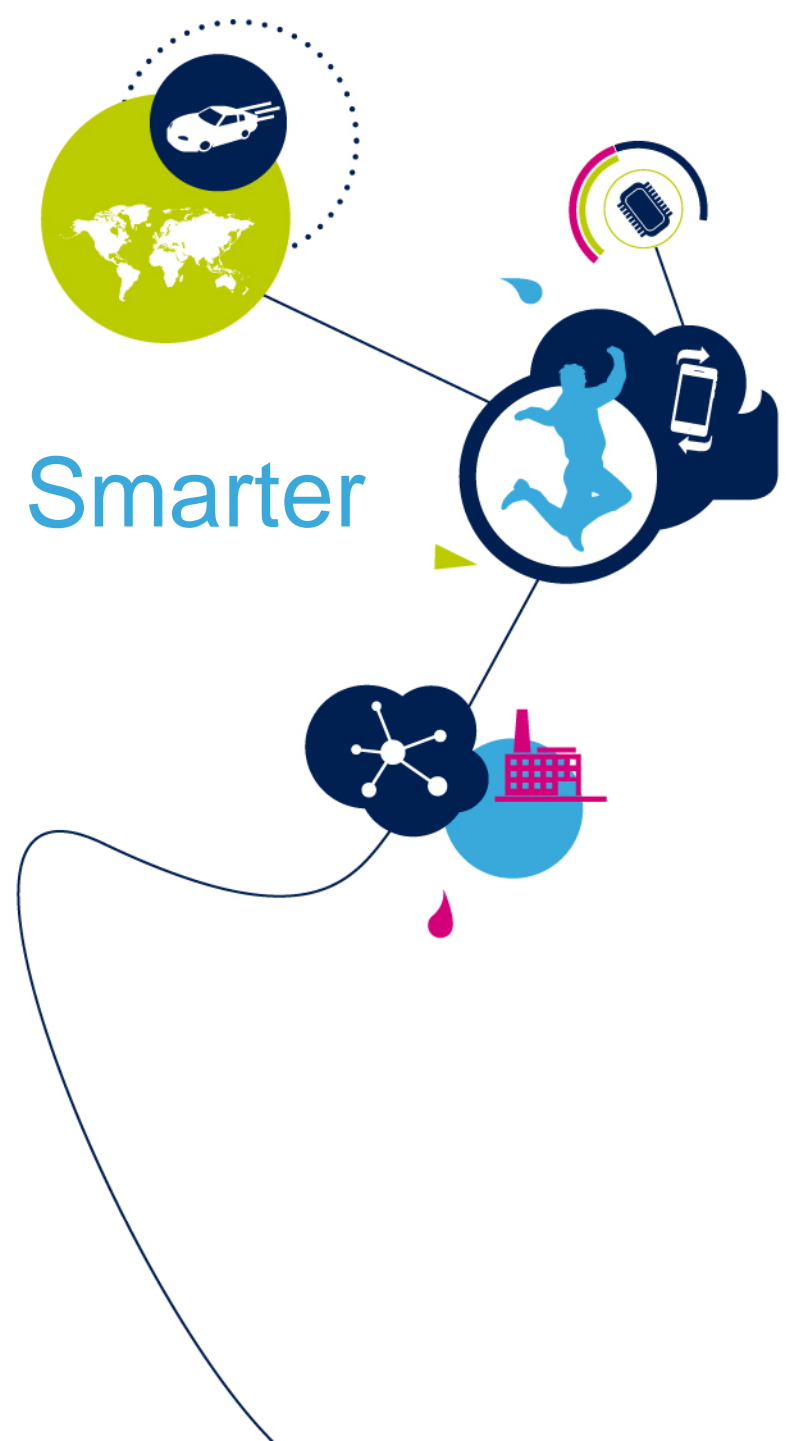
Making Industrial & IoT Applications Smarter

Analog, MEMS & Sensors

Benedetto Vigna

President

Analog, MEMS & Sensors Group



Analog, MEMS & Sensors Group (AMS)

From Sensing to Power

53

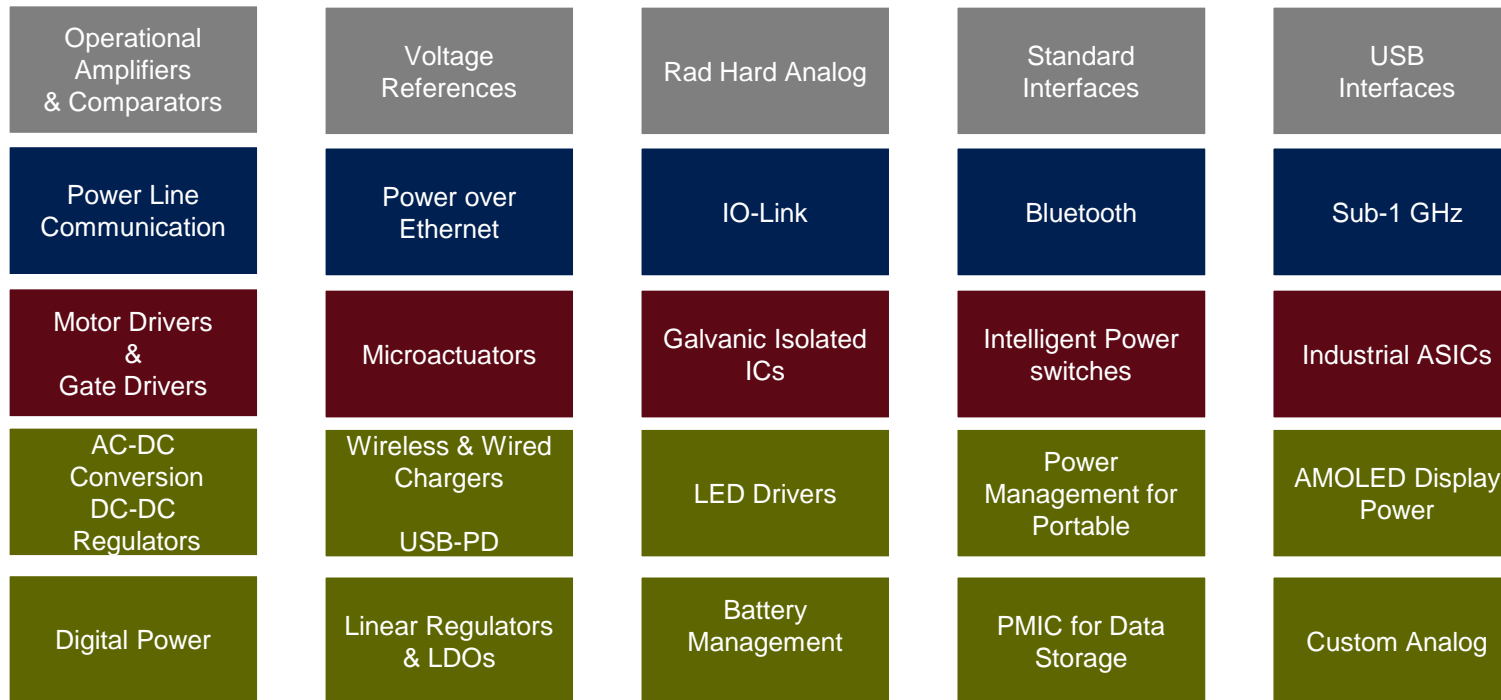


Analog, MEMS & Sensors Group (AMS)

54



Sensing

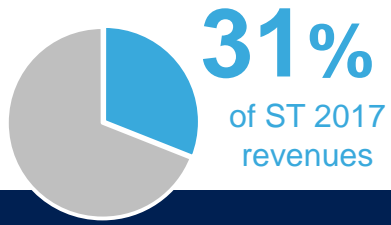


Conditioning

Connectivity

Actuation

Power

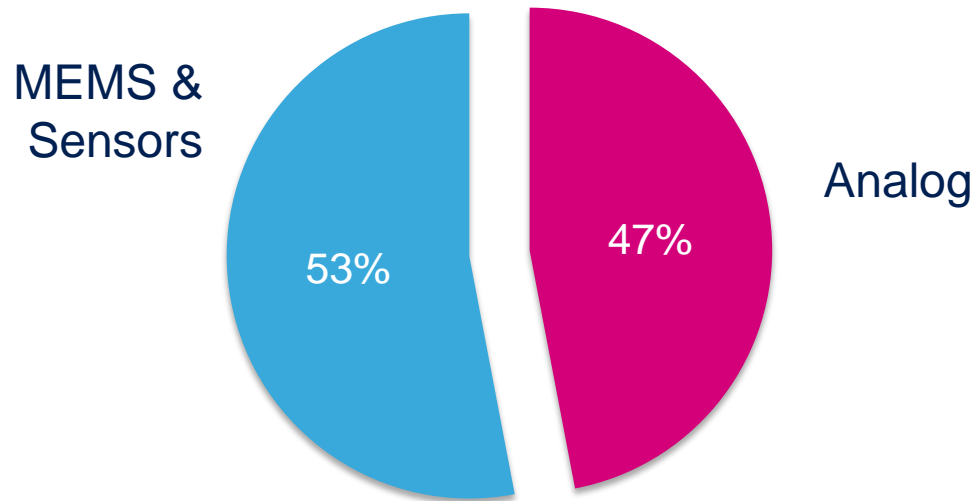


AMS Results 2017

55

Revenues \$2,613 M
YoY growth +41%

2017 Revenue by Product Area

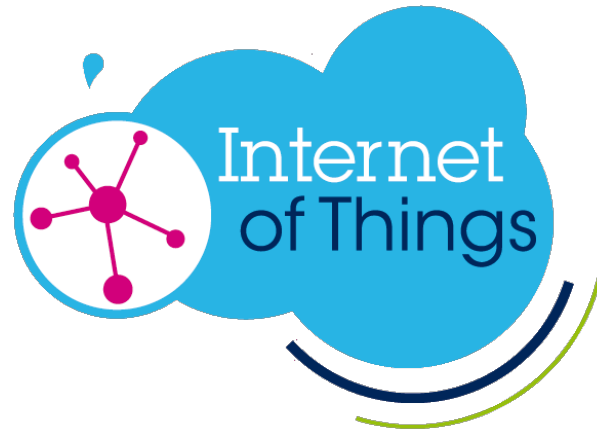


2017

- > 20% MEMS business growth
- > 20% balanced growth with OEMs and distribution in Analog
- Triple-digit growth in Imaging

More than
5,200
available products

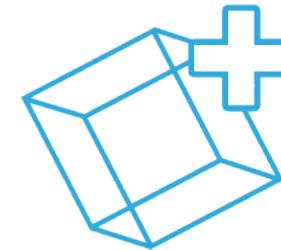
Serving more than
65,000
Customers



Smart Industry



Smart Home & City



Smart Things



Smart Driving





Smart Industry

Smart Industry Focus

57

Key Trends

- Next levels of automation with distributed control
- Safer working environments & new man-machine interaction models
- Higher energy efficiency for industrial machinery
- Capture & exploitation of manufacturing data
- Artificial Intelligence & machine learning

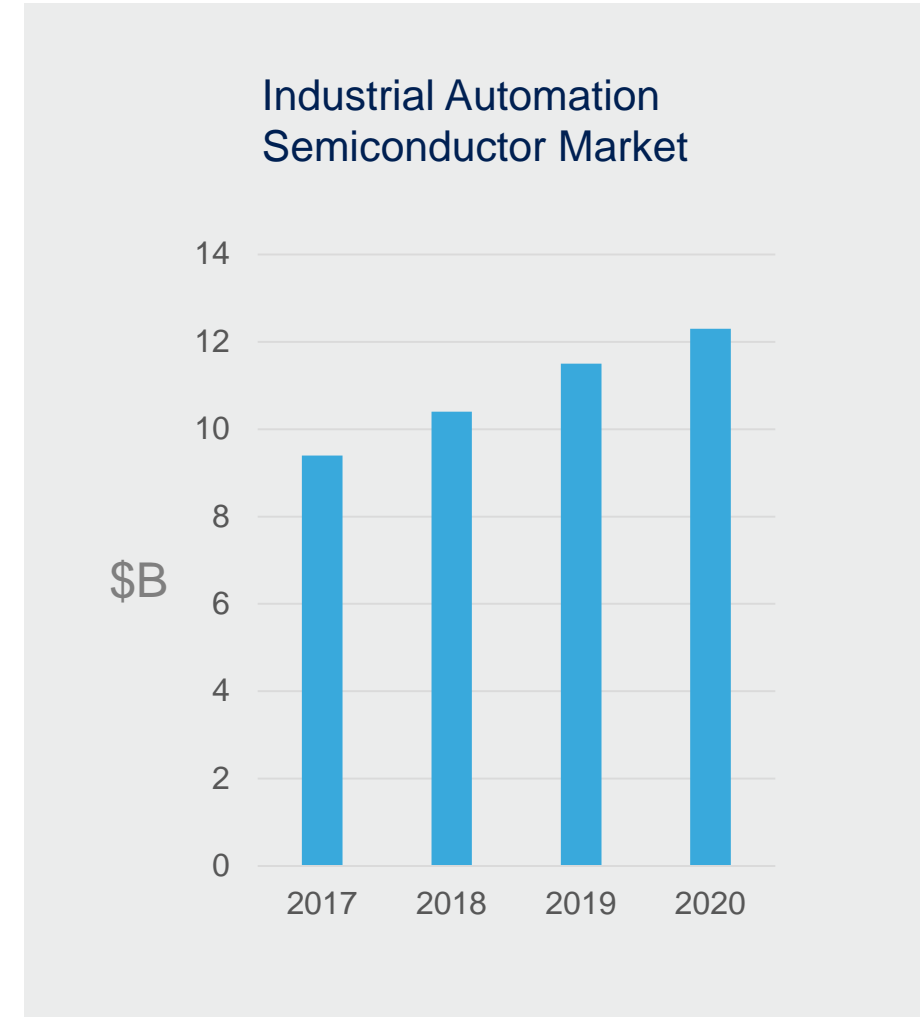
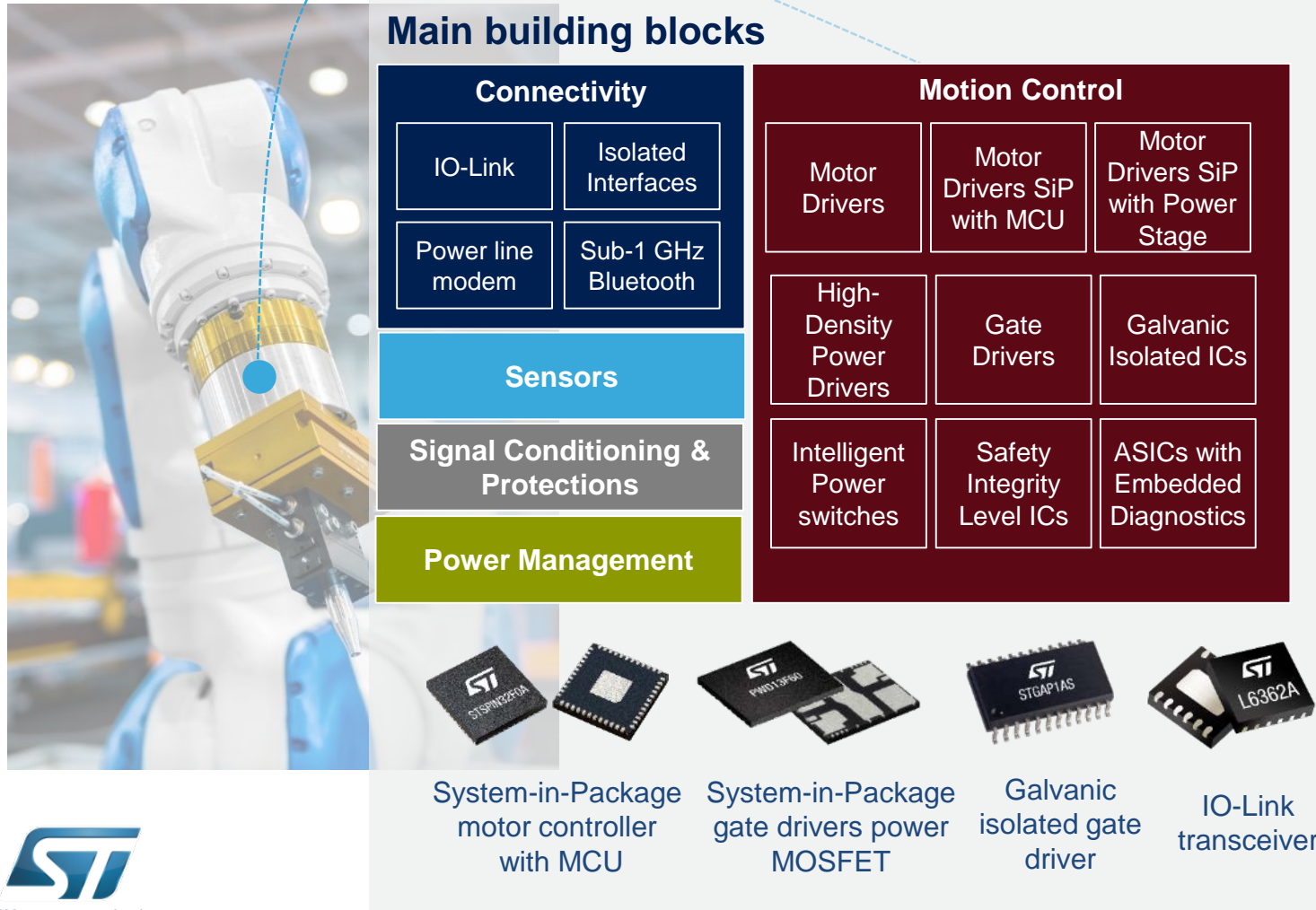
More Intelligent
& Aware

More
Efficient

More Connected

Safer

	2017-2020 ST SAM Growth (CAGR)
Motor drive for automation	7.9%
Medical	6.4%
Office/commercial lighting	6.9%



Embedded Galvanic Isolation

Focus Technology Area for Product Portfolio Expansion

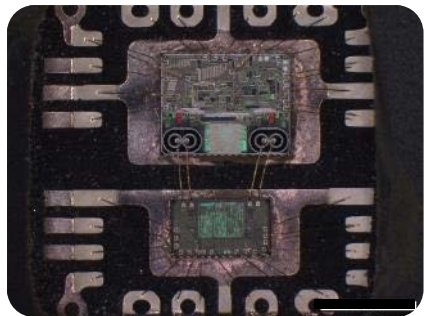
59

System-in-Package solutions

System simplification removing opto-coupling

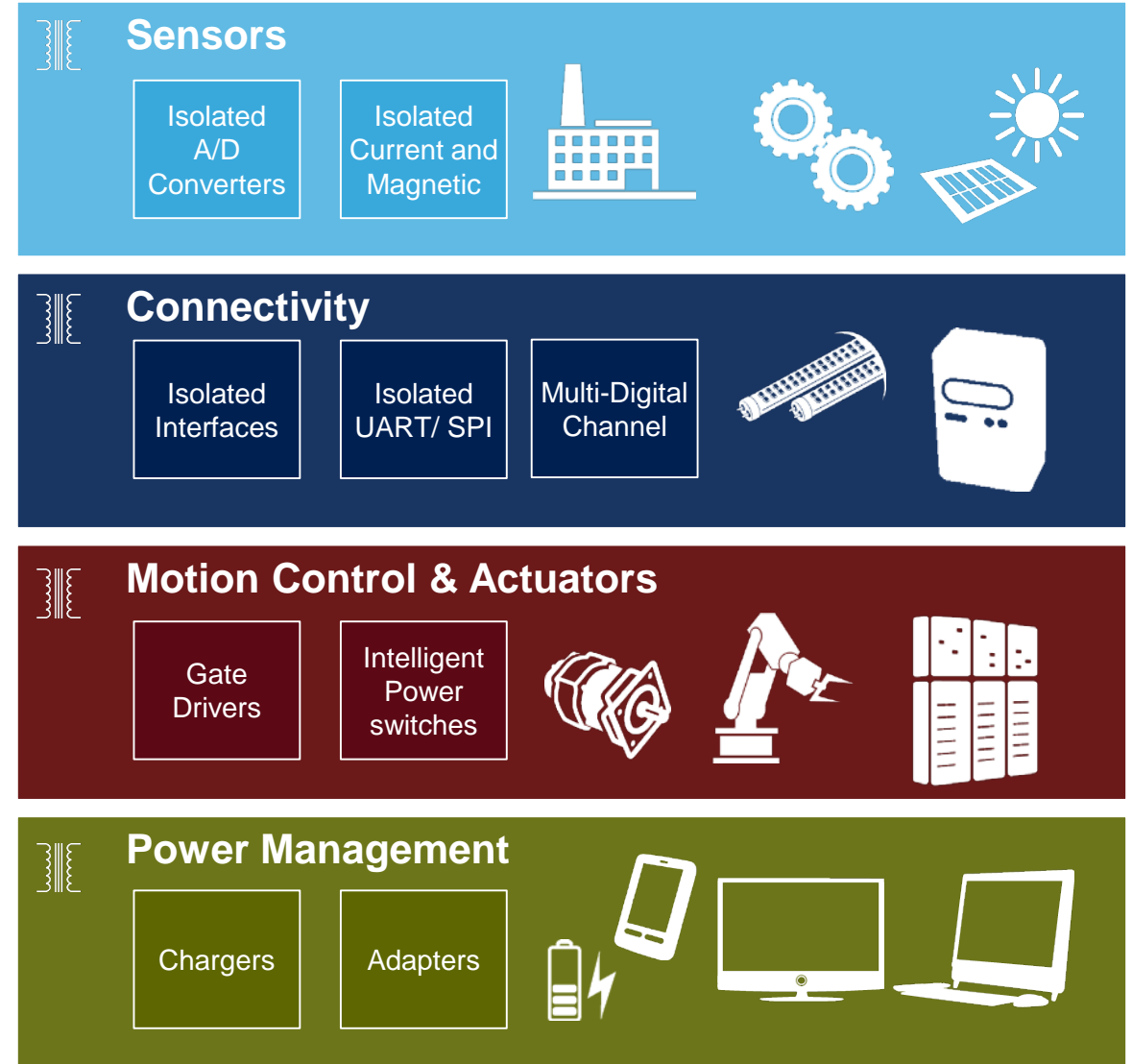
- increasing system reliability
- reducing form factor & cost

Strategic Technology for industrial, automotive and factory automation

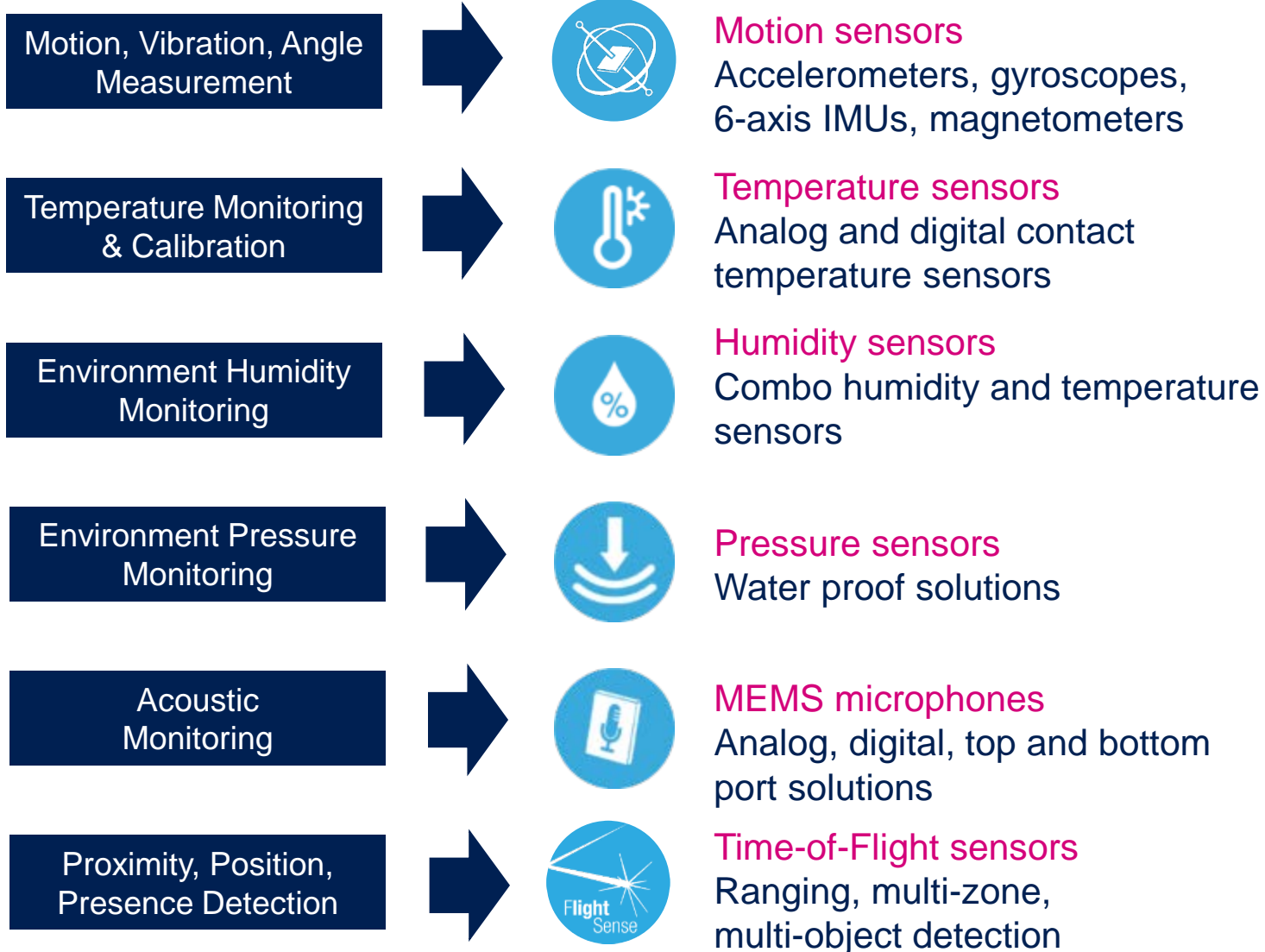


Galvanic isolated gate driver

Main Standards



ST Offering a Solid Portfolio Ready to be Connected





ISM330DLC
6x IMU - Wide Bandwidth



IIS2DH
Accelerometer - Wide Bandwidth, Ultra-low-power

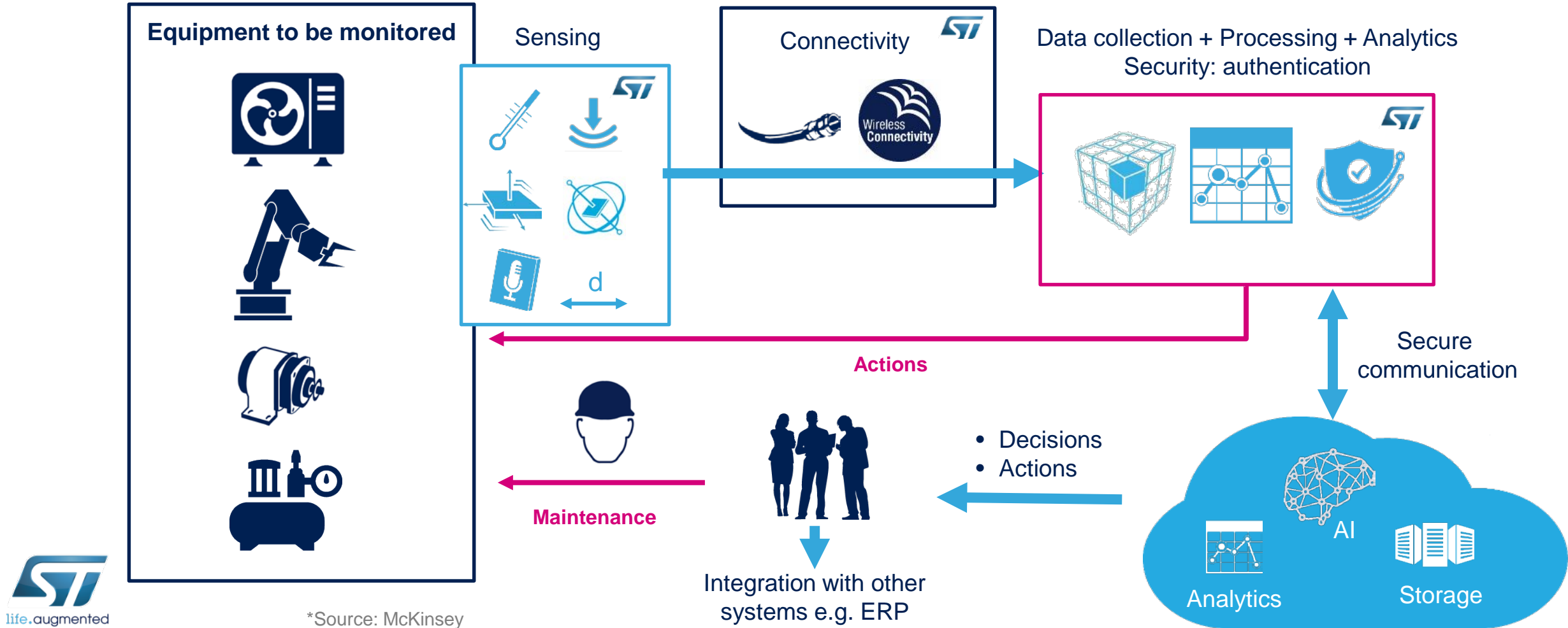


IIS2MDC
Magnetometer Low-Noise, Low Power



LONGEVITY
10 YEARS
COMMITMENT

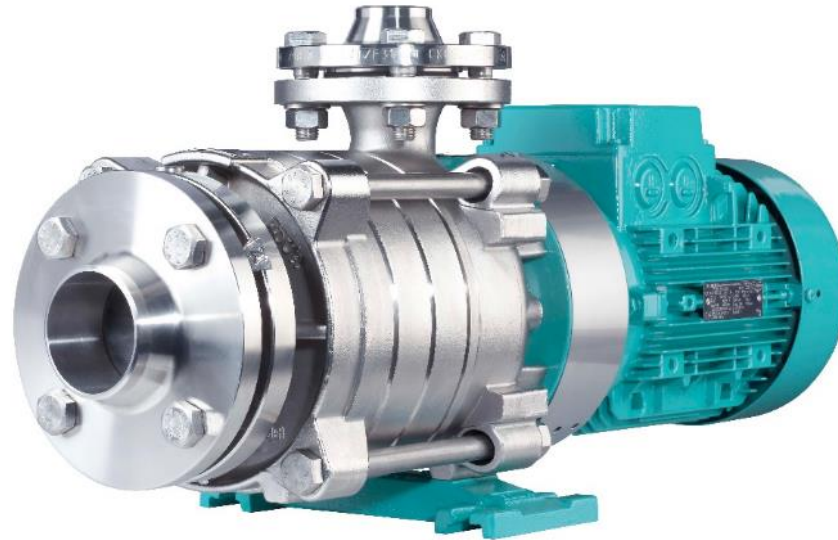
Predictive maintenance can reduce downtime by up to 50% with up to 40% cost savings on equipment & maintenance*



*Source: McKinsey

ST Solutions Enabling Condition Monitoring

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Mechanical vibration

- Displacement
- Speed
- Acceleration
- Acoustic noise
- Angular speed
- Torque

Acoustic signals

- Noise
- Ultra sound

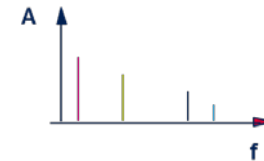
>\$7 Analog
Silicon content

Functional Needs

Vibration &
Acoustic
Capture



Connectivity



Processing



Secure
Connections



Power
Management



ST Products

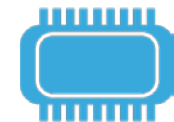


Motion
Sensors
Microphones



Bluetooth
Wi-Fi
Sub-1 GHz

IO-Link



MCU



Secure MCU



Power ICs

ST Solutions Enabling 3D Printers

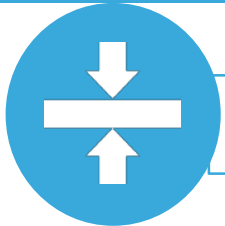
63

Complete ST Bill-of Materials for 3D printers
including STSPIN Motor Drivers
& high performance STM32

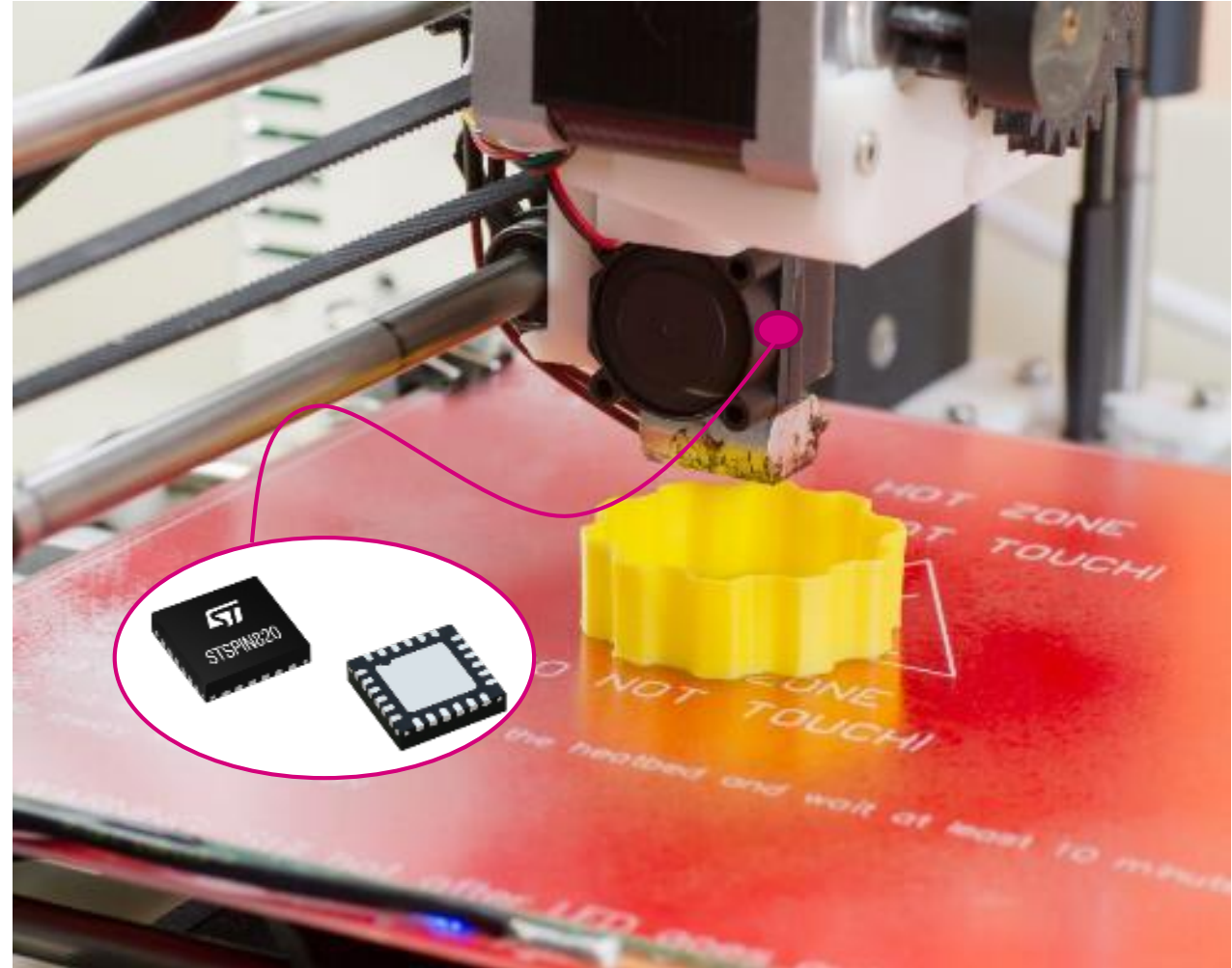
>\$20 per
printer



3D Printing heads



Thin-film Piezo-electric MEMS





Smart Home & City Focus

Key Trends

- Monitoring and control of city infrastructure
- Smart control (towards AI) of heating, air conditioning, appliances, locks and alarms
- Development of the smart grid & push for higher energy efficiency for every device
- More convenience, comfort and security through connected devices

More Intelligent
& Aware

More
Efficient

More Connected

	2017-2020 ST SAM Growth (CAGR)
Home & building control	5.9%
Metering (home & buildings)	6.6%
Security & surveillance	9.6%
Major home appliances	6.7%



Smart Home & City

ST Solutions Enabling Smart Metering

65

Main building blocks



Smart Sensing

Environmental sensors

Processing

Microcontrollers

Actuators

Relay Drivers
Motor Drivers

Connectivity

WAN/NAN
Power Line
Communication,
Radio Frequency

Power Management

Power Conversion
Metrology ICs



Multi-standard programmable
PLC solutions



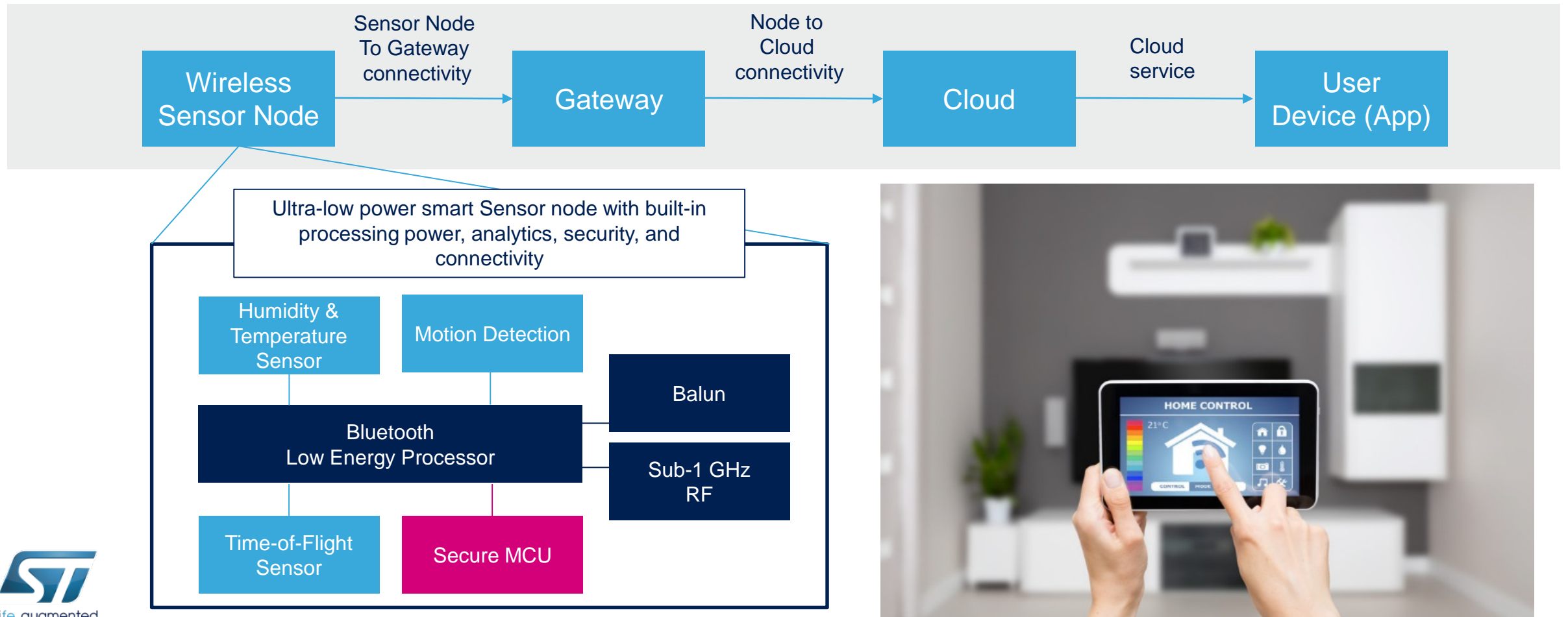
Low data rate, low power
Sub-1 GHz transceiver

- **Power Line Communication technology leadership**
- **System know-how and partnership with key players**
- **Delivering integrated, secure and flexible solutions**
- **Possibility for intelligent loads management**
- **Field-proven technology with over **100** million meters with ST inside**



ST Solutions Enabling Home & Building Automation

Wireless sensor nodes for Smart Home & Building applications
which can stream the sensor data to the cloud





Key Trends

- Virtual and Augmented reality devices
- Increasing use of Voice control
- Integration of Artificial Intelligence capabilities
- Wireless charging & USB-C
- Security requirement for every connected thing

Smart & Aware

Energy
Efficient

Connected

Secure

	2017-2020 ST SAM Growth (CAGR)
High tier smartphones	4.8%
Fitness & wellness wearable	36.8%
Smart watches & glasses	27.3%



Smart Things

Analog, MEMS & Sensors

Powering leading consumer devices

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Sensing &
Actuating

Connectivity

Conditioning &
Protection

Power & Energy
Management



Targeted Smartphone Opportunities for Analog, MEMS & Sensors

69

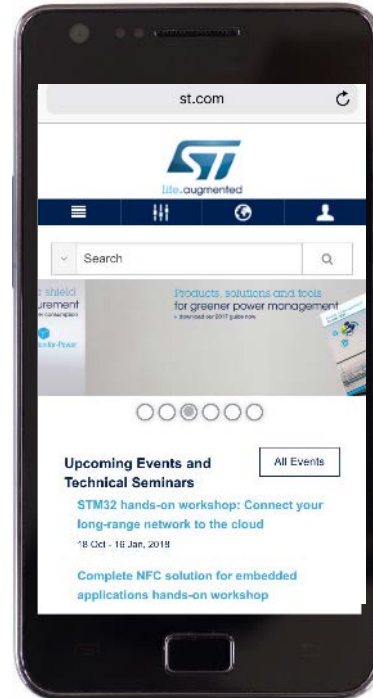
Sensors & Actuators

3,6-axis, OIS gyro, pressure, temperature



Specialized Imaging Solutions

Depth/3D sensing (ToF, SL Sensors)



Wired & Wireless Charging

Wireless charging ICs, USB-C



Display Controllers & Display Power Management

Touchscreen controller, AMOLED PMIC





ST Imaging for Depth/3D Sensing

... making light work

70

Key Trends

- 3D Depth Sensing is a large & fast growing market
- Different applications driving two major technologies (Time-of-Flight & Structured Light)
- Dynamic ecosystem as OEMs race to enter market

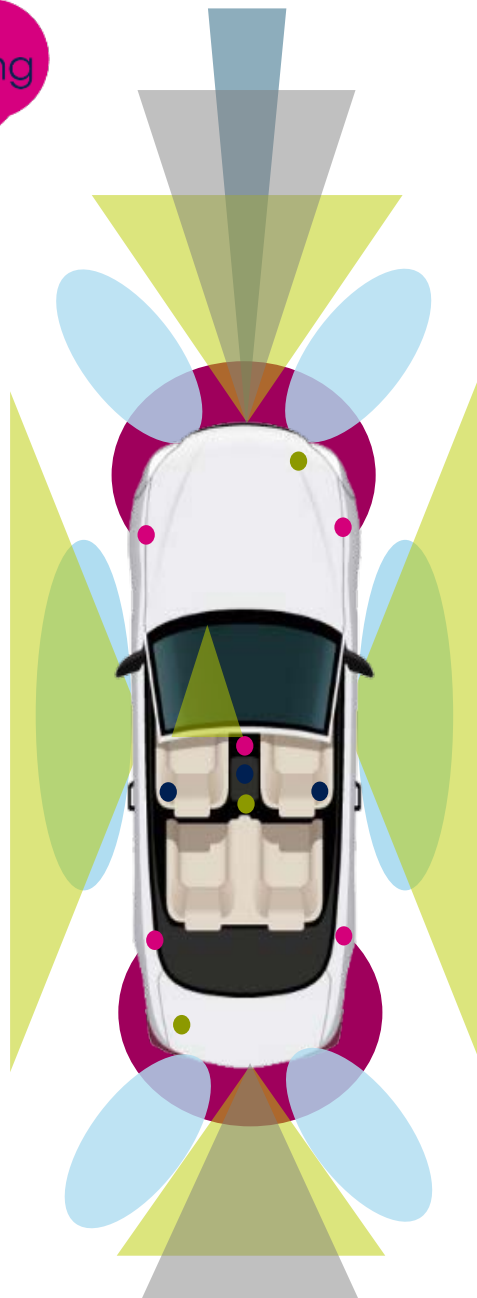
Major Enablers

- **Excellence in Depth Pixel**
 - Best-in-Class SPAD & Structured Light pixel
 - Roadmap to enable small micron pixels
- **Integration & Low Power**
 - 3D stack & small geometry process roadmap
 - Performance, within a low power budget
- **System understanding**
 - Silicon, optics, algorithm, illumination & packaging
- **Safe Illumination**
 - VCSELs, drivers and illumination modules



Our Positioning

- ST track-record with > **600 Million** cumulative components delivered to the Depth/3D Sensing market
- Worldwide leader in Time-of-Flight with all-in-one modules; 1st 40 nm SPAD production in 2018
- Recognized as a differentiated component supplier to the Structured Light market
- Continuous investment in technology, resources and capacity (Front End & Back End) to secure ST's strong position
- Partnering with class leading experts in VCSEL, Optics & Optical filters



Sensors for Smart Driving

Safety & Convenience

Hi-g accelerometers
for airbag applications

Gyroscopes
for vehicle dynamics applications

Sensing & Viewing Camera
Front, Rear & Surround View
eMirror

In-Cabin Optical Sense
Driver Monitor
Gesture Control
Occupancy Detection

LiDAR
Autonomous Driving
through Sensor Fusion

Navigation & Telematics

Medium-g accelerometer
for telematics boxes

6-axis inertial module
for navigation assistance



Smart Industry



Smart Home & City



Smart Driving



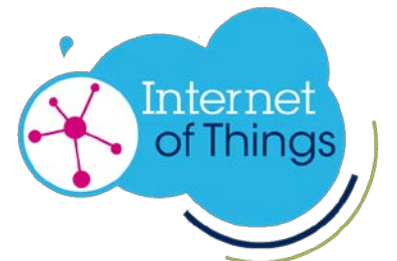
Smart Things

- Strategic focus on sensing solutions - dedicated portfolio already available today
- Continued diversification of the MEMS & Sensor portfolio to address automotive and industrial markets
- Continued expansion of the Analog portfolio with a focus on key industrial applications where our unique portfolio and system solution approach give us a competitive advantage
- Capturing important opportunities in consumer and smartphones in flagship devices and well positioned for the next wave of Smart Things

Questions & Answers



life.augmented



- **Free cash flow** is defined as net cash from operating activities minus net cash from (used in) investing activities, excluding payment for purchases (proceeds from the sale of) marketable securities and short term deposits, restricted cash net cash variation for joint venture deconsolidation. We believe free cash flow provides useful information for investors and management because it measures our capacity to generate cash from our operating and investing activities to sustain our operating activities. Free cash flow is not a U.S. GAAP measure and does not represent total cash flow since it does not include the cash flows generated by or used in financing activities. In addition, our definition of free cash flow may differ from definitions used by other companies.
- **Net financial position** resources (debt) represents the balance between our total financial resources and our total financial debt. Our total financial resources include cash and cash equivalents, marketable securities, short-term deposits and restricted cash, and our total financial debt includes short term borrowings, current portion of long-term debt and long-term debt, all as reported in our consolidated balance sheet. We believe our net financial position provides useful information for investors because it gives evidence of our global position either in terms of net indebtedness or net cash position by measuring our capital resources based on cash, cash equivalents and marketable securities and the total level of our financial indebtedness. Net financial position is not a U.S. GAAP measure.
- **Operating income before impairment and restructuring charges** excludes impairment, restructuring charges and other related closure costs. It is used by management to help enhance an understanding of ongoing operations and to communicate the impact of the excluded items.
- **Adjusted net earnings and earnings per share (EPS)** are used by our management to help enhance an understanding of ongoing operations and to communicate the impact of the excluded items like impairment, restructuring charges and other related closure costs, net of the relevant tax impact.
- **Net revenues of “Others”** includes revenues from sales of Subsystems, assembly services, and other revenue. **Operating income (loss) of “Others”** includes items such as unused capacity charges, impairment, restructuring charges and other related closure costs, phase out and start-up costs, and other unallocated expenses such as: strategic or special research and development programs, certain corporate-level operating expenses, patent claims and litigations, and other costs that are not allocated to product groups, as well as operating earnings of Subsystems and other products. “Others” includes:

(Million US\$)	Q4 2017	Q3 2017	Q2 2017	Q1 2017	FY 2017	Q4 2016	Q3 2016	Q2 2016	Q1 2016	FY 2016
Unused Capacity Charges	1	1	1	1	3	4	11	8	10	33
Impairment & Restructuring Charges	20	14	6	5	45	24	29	12	28	93