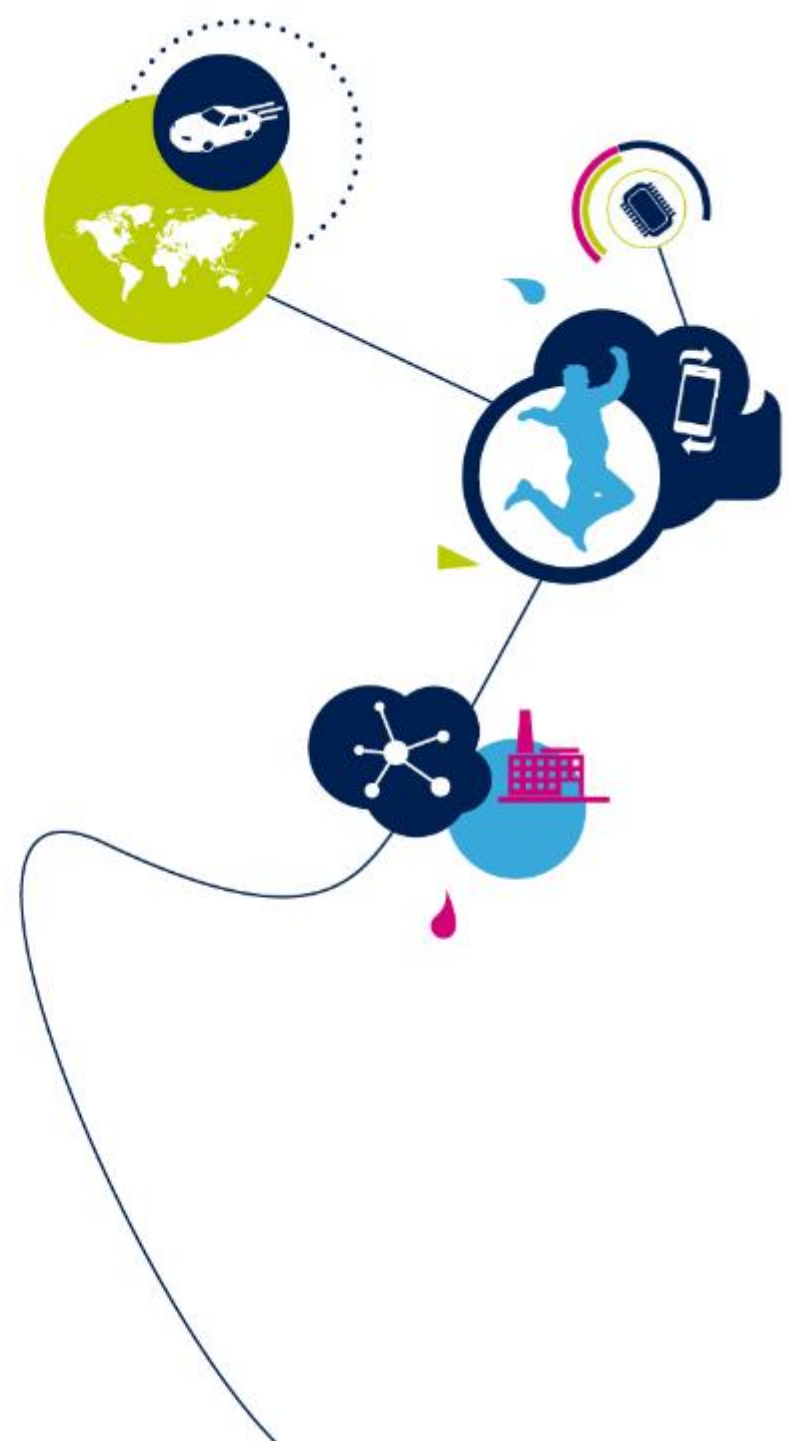


Bob Krysiak

Executive Vice President
President, Americas Region
Global Mass Market and Online Marketing Programs



Forward Looking Statements

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 laws, 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; and*
- 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.*

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.

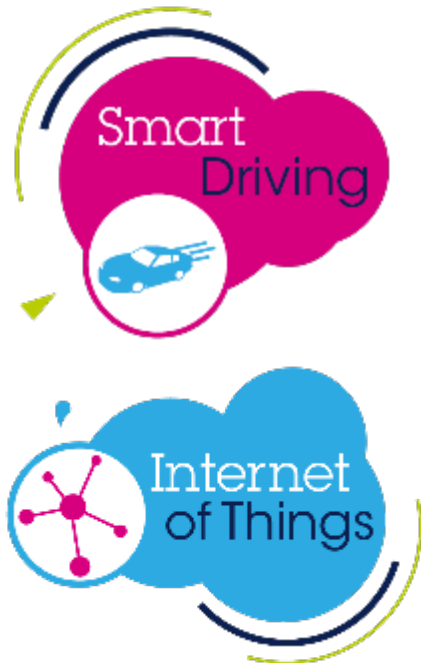
Some of these risk factors are set forth and are discussed in more detail in "Item 3. Key Information — Risk Factors" included in our Annual Report on Form 20-F for the year ended December 31, 2016, as filed with the SEC on March 3, 2017. Should one or more of these risks or uncertainties materialize, 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



life.augmented

ST stands for life.augmented

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

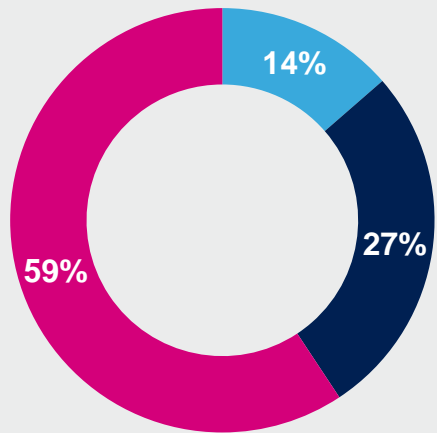


- A global semiconductor leader with an application strategic focus
- 2016 revenues of **\$7.0B**
- Listed: NYSE, Euronext Paris and Borsa Italiana, Milan
- Approximately **43,500** employees worldwide
- Approximately **7,500** people working in R&D
- Portfolio of over **9,400** patent families
- **11** manufacturing (front and back-end) sites
- Over **80** sales & marketing offices

A Global and Well-balanced Business...

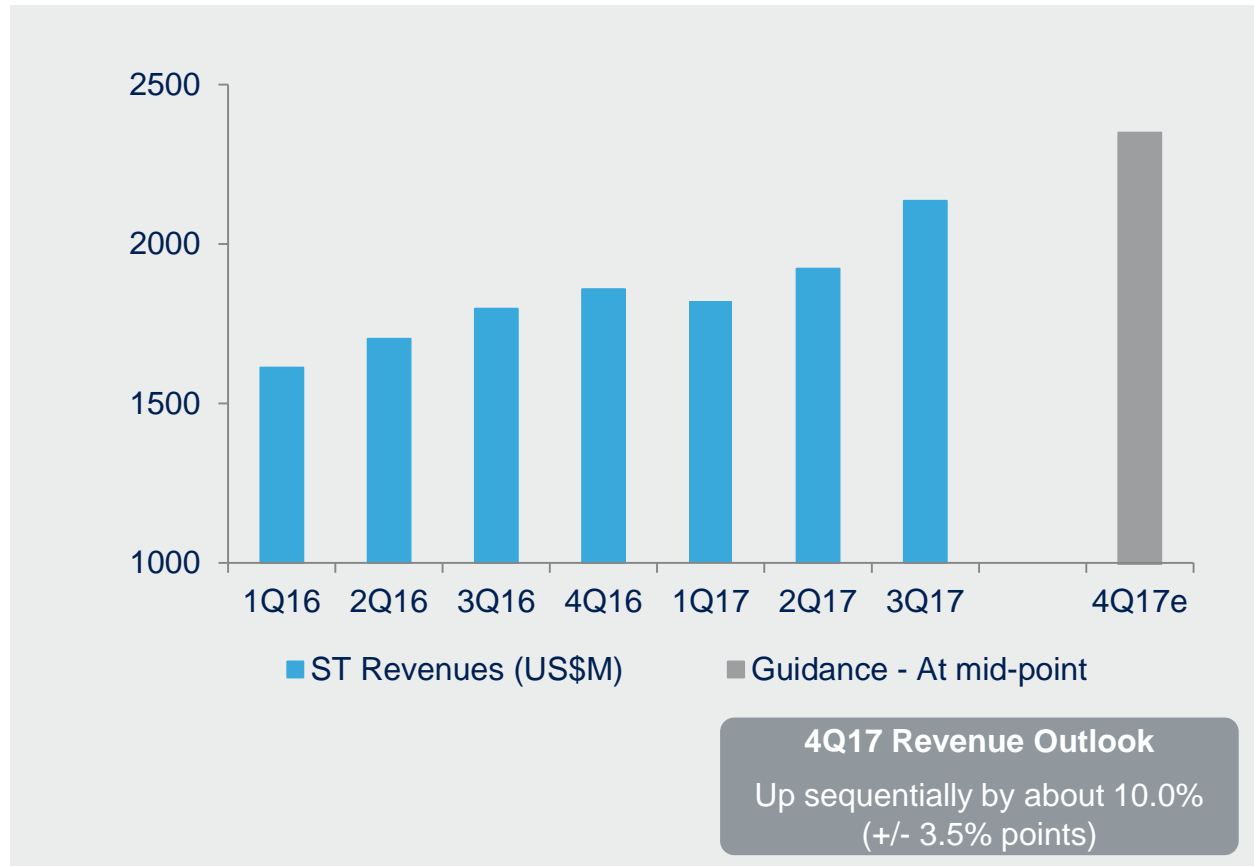
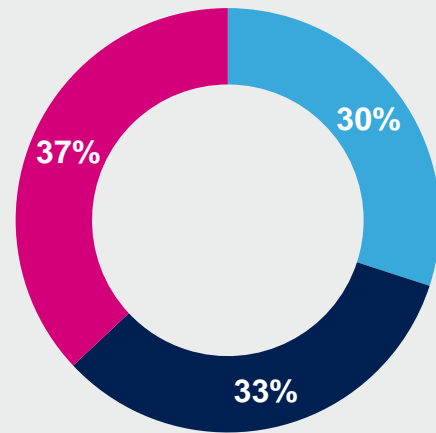
First Nine Months 2017 Revenues = \$5.88B

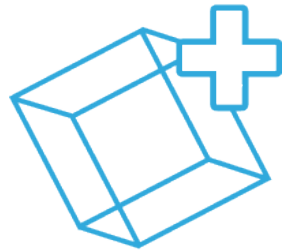
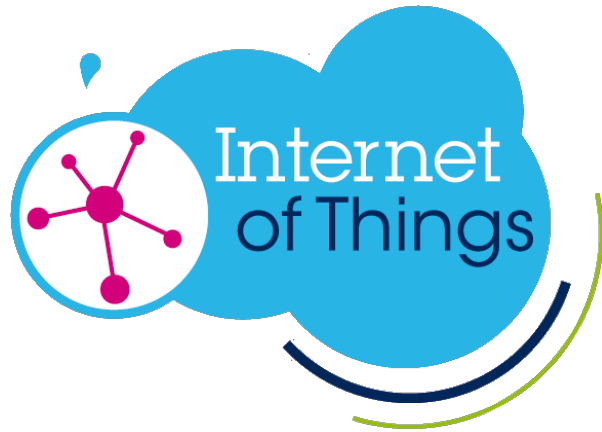
9M 2017 revenues by location of shipment (%)



Americas Asia Pacific EMEA

9M 2017 revenues by region of origin (%)





Smart Things



Smart Home & City

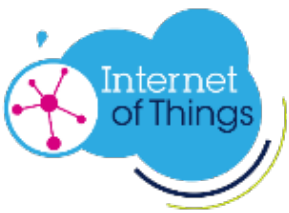


Smart Industry



Smart Driving





Building Blocks

Processing

Security

Sensing & Actuating

Connectivity

Conditioning & Protection

Motor Control

Power & Energy Management

New STM32L4 ultra-low-power MCUs advanced audio and energy efficiency



- 256 to 512KB Flash
- Up to 160KB RAM



STM32F413 MCU The new King of STM32F4 Access lines



- Up to 1.5MB Flash / 330KB SRAM
- 3x DACs / 3x CANs / 10x UARTs
- 125°C qualified



On-chip USB High-Speed PHY expands STM32F7 MCU ecosystem



STM8S general-purpose MCU Now available in 8-pin package



Best-in-class infotainment processor for all classes of vehicles



Boost your contactless-payment designs with all-in-one ST53G module



STM32M IoT secure solution with STSAFE™ and ProvenCore-M™



STM32H7 MCUs boost protection for smart connected devices



HW and SW for complete drop-in solution for IoT security



Advanced secure microprocessors protect connected cars



Versatile 3-axis accelerometer for IoT and wearable devices



New FlightSense™ ranging sensor multi-zone, multi-target detection



Smart motion sensors for always-on activity tracking



Tiny low-dropout regulator ultra-low noise and high-precision sensing



10-bar water-resistant MEMS pressure sensor



Bluetooth® low energy System-on-Chip for smartphone-controlled applications



STM32 hardware tools boost LoRa® technology



Turnkey PLC chipset for smart-energy infrastructure



SPWF04 Wi-Fi module



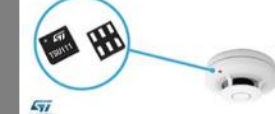
Sub-1GHz transceiver connects Smart Things to the Cloud



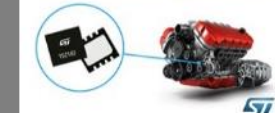
TSX low-power comparators better performance and robustness



Tiny nano-power op amp Enables longer battery life



3 MHz chopper op amp for high-accuracy signal conditioning



USB Type-C™ and PD controllers save space and enhance operation safety



Industry-best clamping voltage ESD protection in O2O1



Super-Junction MOSFET-based 600V intelligent power modules



Tiny 2.6A brushed DC motor driver for portable, battery-powered devices



Intelligent motion control for Smart Industry



MOSFET-based SLLIMM™-nano modules



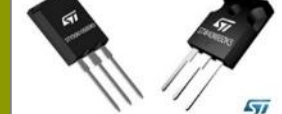
Next-gen automotive door-zone controllers boost reliability and power efficiency



1200V SiC diodes Industrial and automotive-grade



MDmesh™ DK5 VHV MOSFETs with fast recovery diode



Configurable interleaved PFC controller unlocks digital-power advantages



Digital DC-DC multiphase controllers for energy-efficient power delivery



Automotive Power MOSFETs in PowerFLAT™ 5x6 dual-side cooling



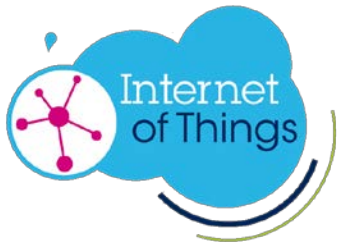
Focus Areas Remain Highest Growth Areas

in our SAM



Automotive

Smart Industry

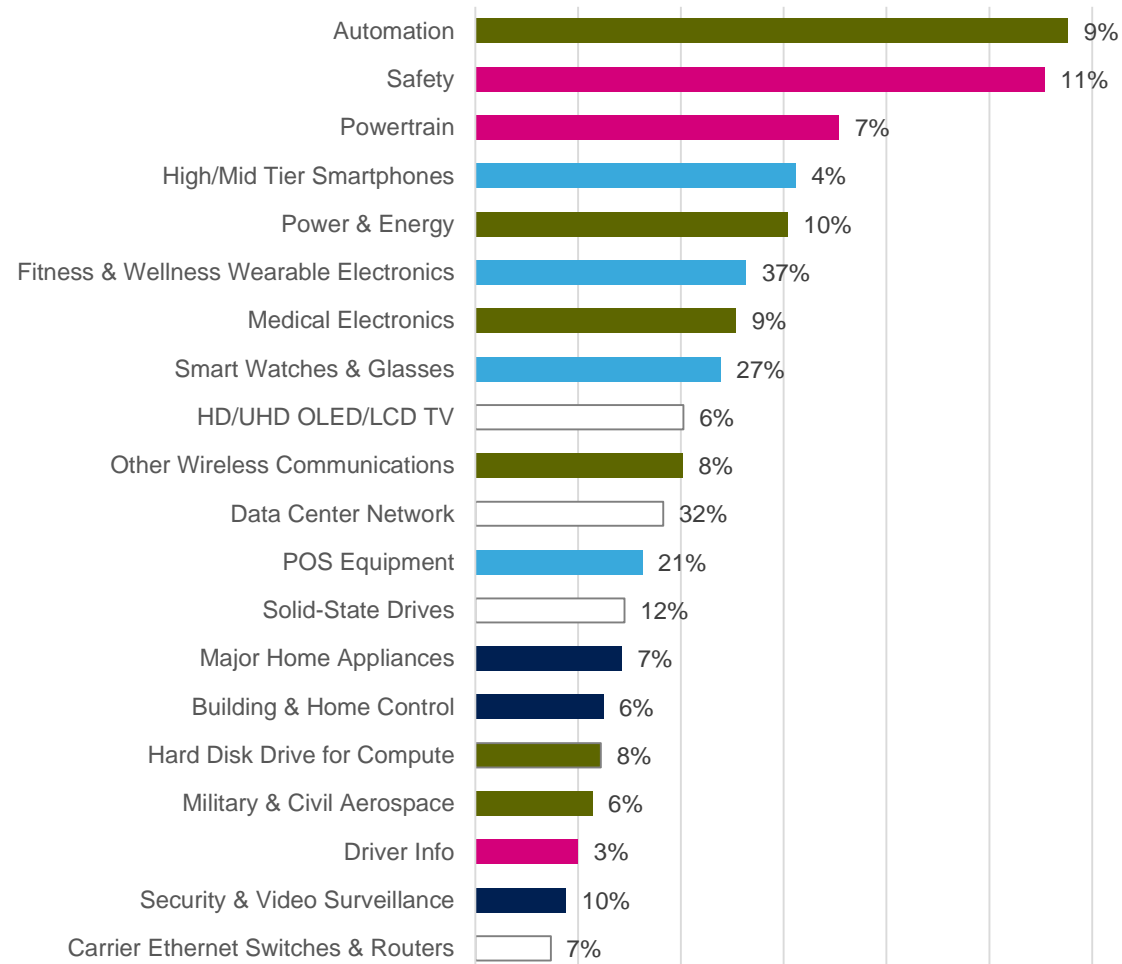


Smart Home & City

Smart Things

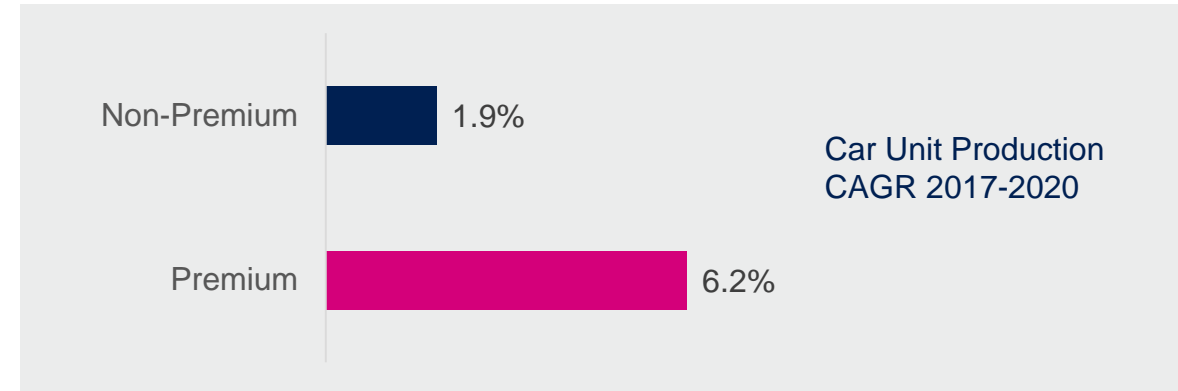
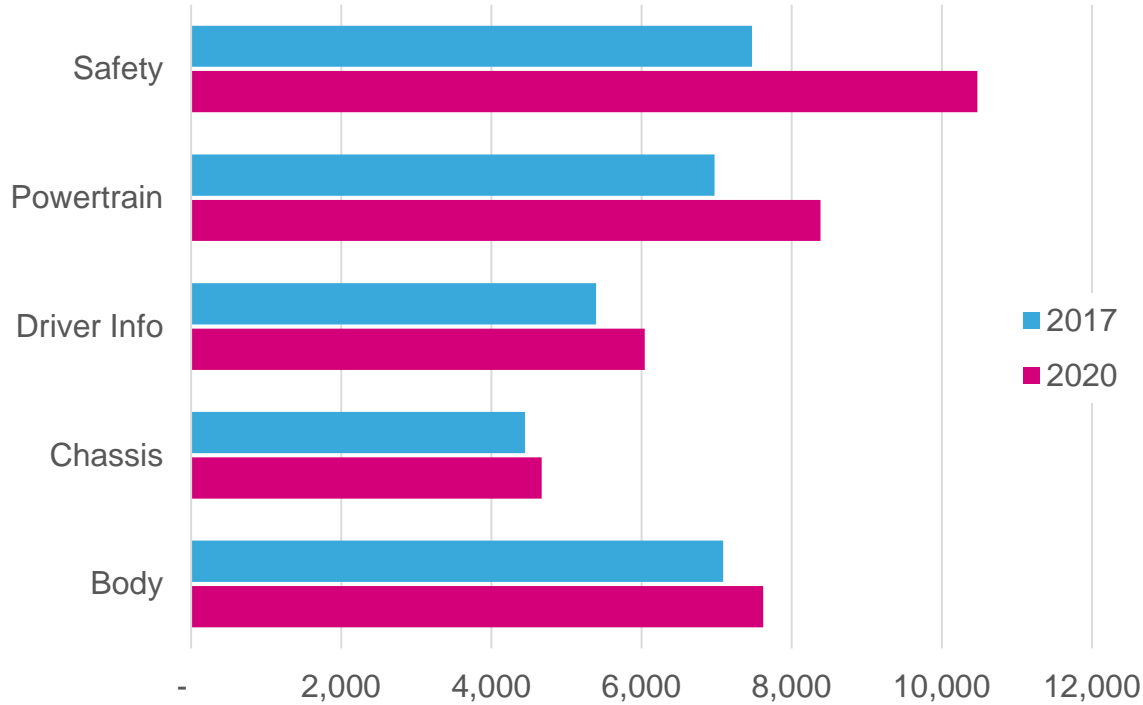


2017-2020 ST SAM Growth
Top 20 Applications



Source: IHS Markit, 3Q17, Strategy Analytics

ST SAM \$M



ST provides up ~1000 semiconductor components in the new Audi A8, depending on the options and car version



Safer



Greener



More Connected



Key Trends

- Safer driving, towards Zero accident
- Government and consumer push for cleaner, more efficient transportation
- Consumer demand for always-on connectivity, personal content available anywhere, any time

Industry Dynamics

- Shift in mobility models and car ownership (Mobility-as-a-Service)
- New players with new approaches
- Increasing importance of Emerging markets
- Predictive maintenance
- Creating value out of (big) data

Key Applications

- Active Safety
- Passive Safety
- Electric & Hybrid Vehicle Electrification
- Infotainment
- Telematics
- Powertrain
- Direct Injection Engine
- Automatic Gearbox
- Braking
- Steering

Infotainment Systems

10

Complete system offer for Radio and Navigation



Infotainment Processors



ACCORDO: Infotainment & Instruments cluster processors

#1 in Audio Processor System solutions



Audio Amplifiers

Exclusive offer from intelligent audio amplifier to full digital

#1 supplier for Audio Amplifiers



HDBase-T

ST and Valens cooperating for the deployment of HDBase-T in Infotainment

High Speed in-car connectivity



Tuners

ELITE for best price competitiveness;
STAR for first class performance

Leaders in Satellite, Digital and Terrestrial Tuners



GNSS

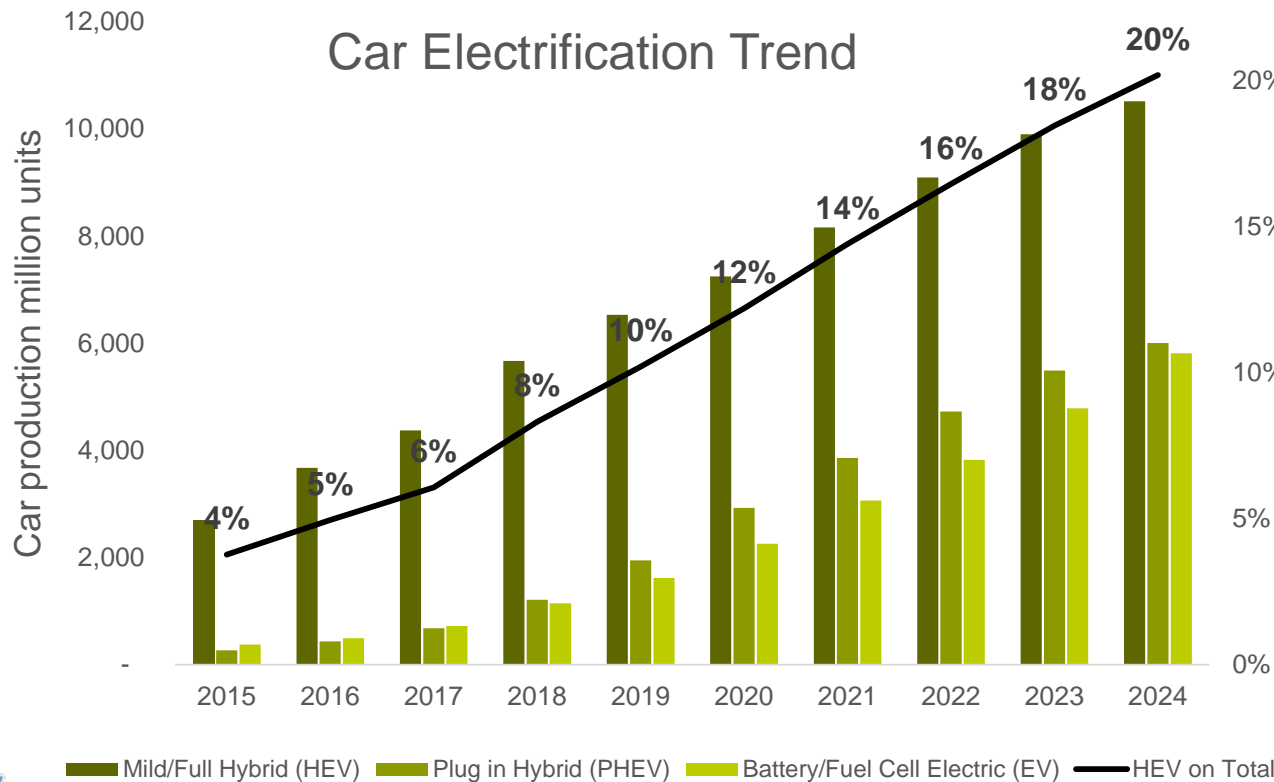
TESEO: The most innovative and solid automotive offer for GNSS applications





Technology Leadership in Navigation & Telematics

Automotive Application Focus

Electric & Hybrid Vehicle Electrification

Opportunities for Power Devices (IGBT, SiC), Smart Power Devices (BCD, VIPower) and Battery Management (MCUs)



ICE  Internal Combustion Engine	<ul style="list-style-type: none"> + Range - Use of fossil fuels, emissions
HEV  Full Hybrid-EV ICE + Electric	<ul style="list-style-type: none"> + Extended Range, Lower emissions - Use of fossil fuels, solution complexity
PHEV  Plug-in HEV ICE + Electric	<ul style="list-style-type: none"> + Greater "Electric" range than HEV, ICE as backup only, lower emissions - Use of fossil fuels, solution complexity
BEV  Battery EV Electric only	<ul style="list-style-type: none"> + Zero Emissions, Lower maintenance - Range

Key Products

SiC MOSFETs

- New 650V /1200V product family tailored for motor control
- Shipping in volume since Q3 2017



SiC DIODEs & ULTRAFast Rectifiers

- Fast, Efficient, High temperature
- Chargers and DC-DC converters



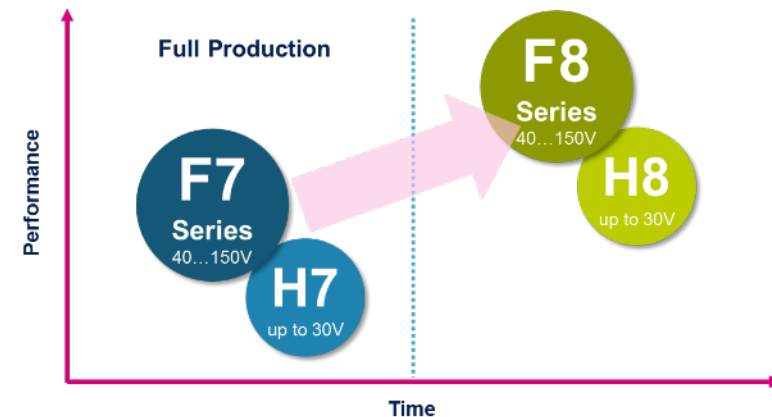
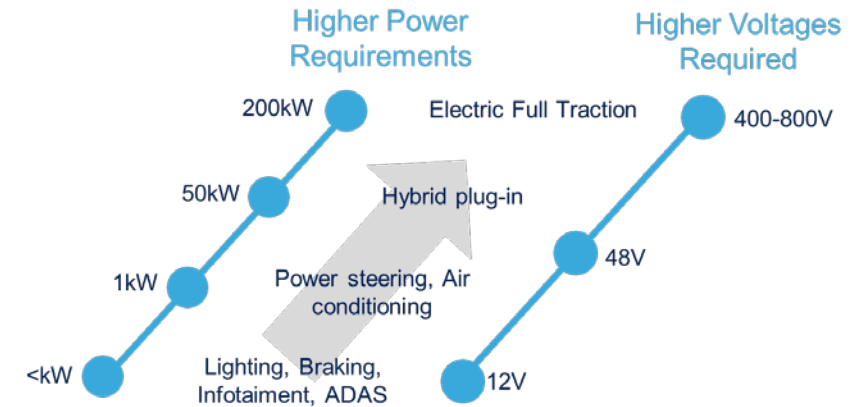
TRIACS, Thyristors

- Largest product portfolio in the industry
- Ideal for on-board chargers

LV MOSFETs

- Extending STripFET F7/H7 LV MOSFET roadmap with 22 new part Numbers in 2017
- Introducing STripFET F8/H8 for enhanced switching performance

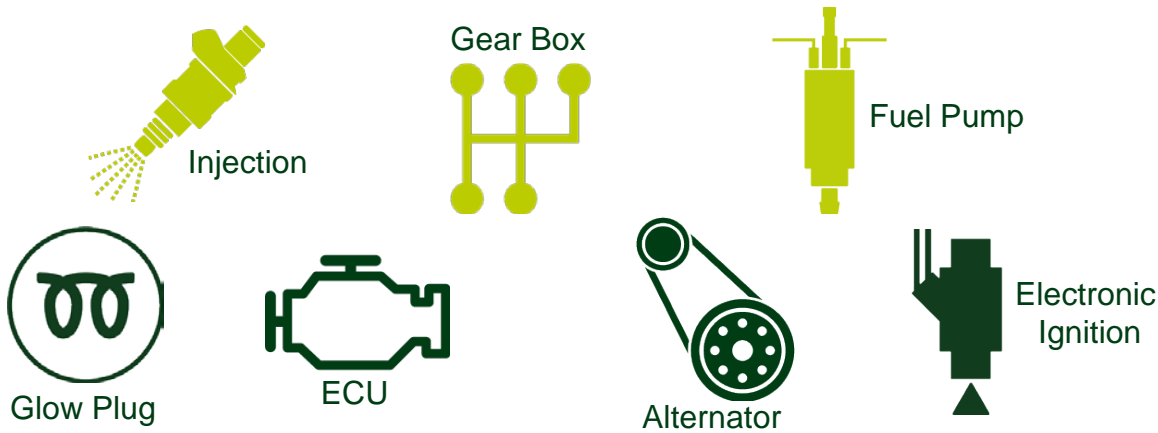
Key Technologies



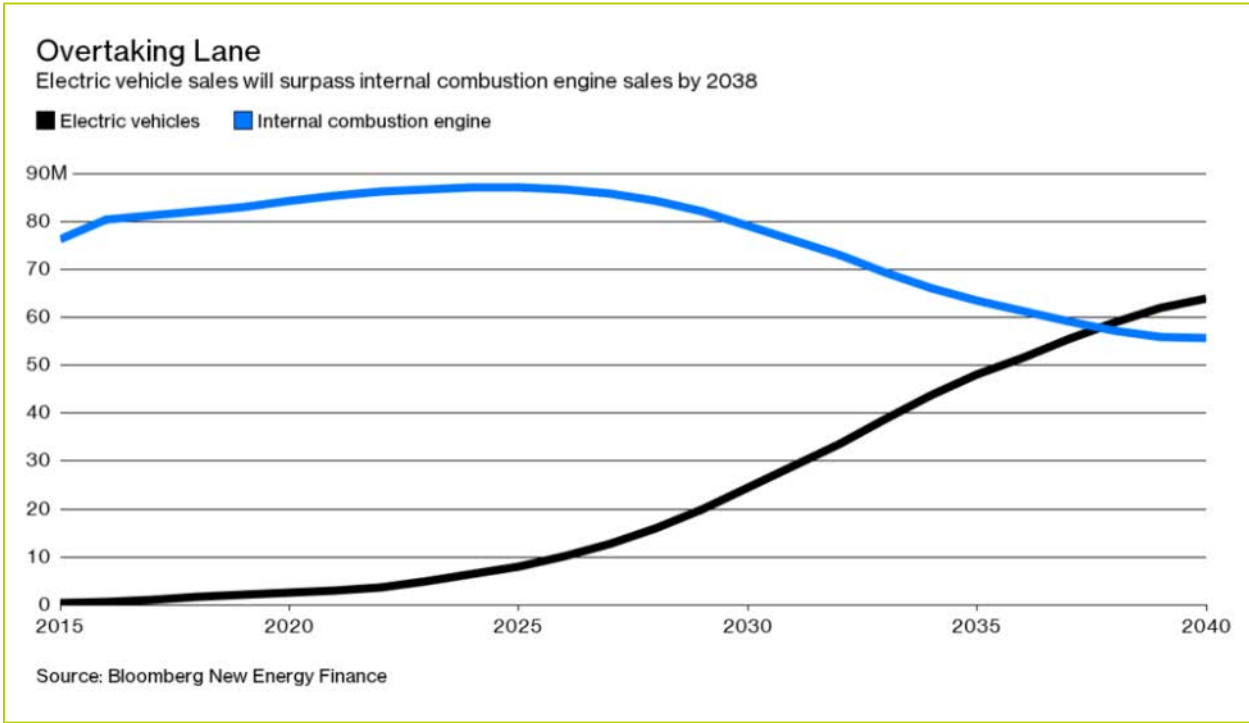
The Transition to Electric Will Take Time

Internal Combustion Engines Opportunities

ST provides silicon solutions for a broad range of Engine Management Systems, from motorbikes to multi-cylinder Gasoline Direct Injection and common-rail diesel engines as well as transmission control and actuation

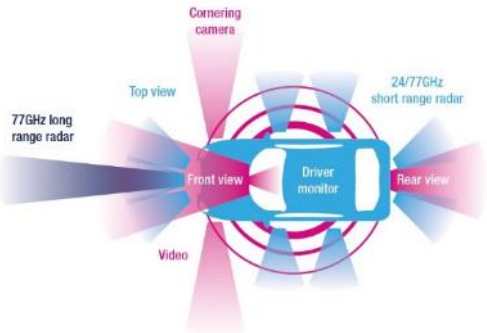


- Opportunities for
- Automotive MCUs
 - Standard Low-side, High-side and Bridge Smart Power Devices for driving solenoids, DC motors and stepper motors
 - Dedicated ICs for actuator driving, charging and power management
 - Power MOSFETs and IGBTs

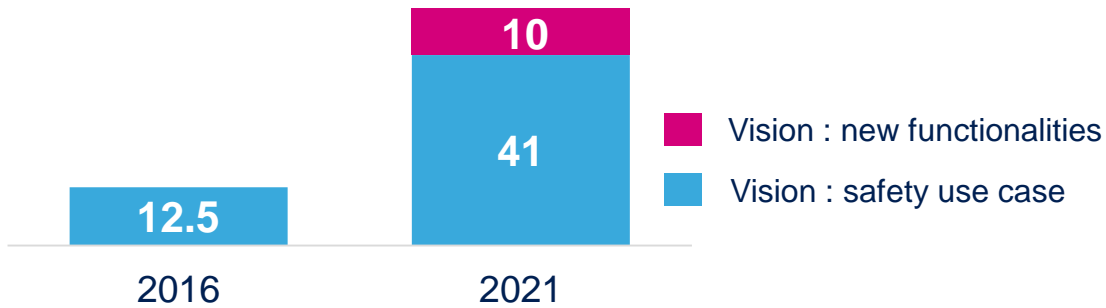


ADAS Vision Processors & Radar Sensors

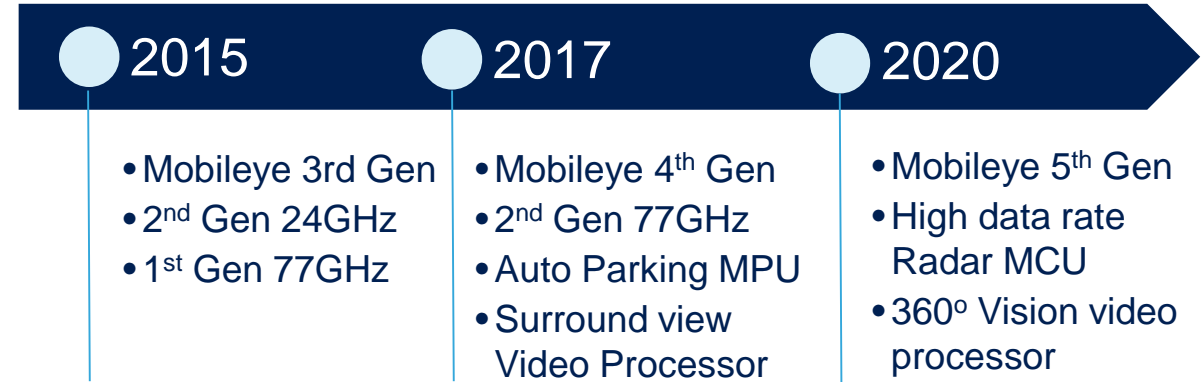
Non-safety Use Cases Expanding Demand



Number of cars equipped with vision based ADAS (Million Units)



Key ST Products



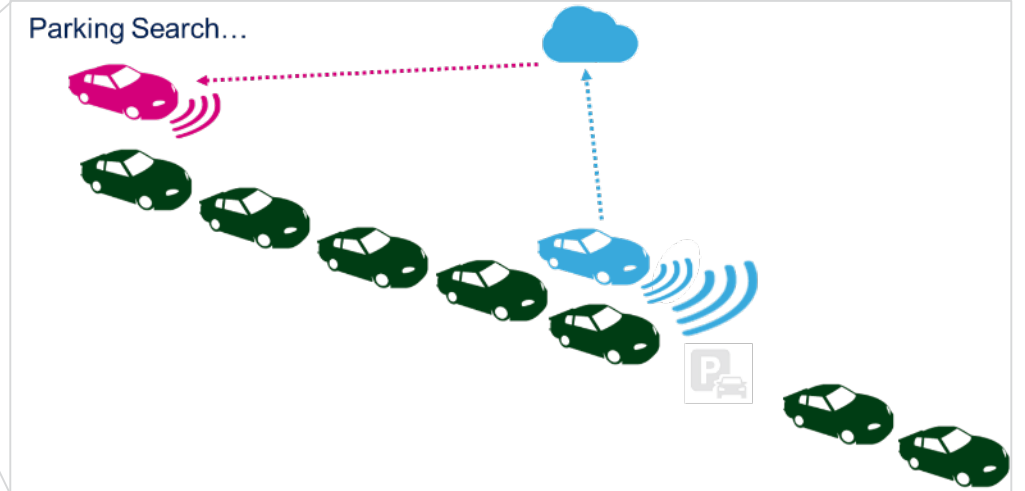
Application examples

Road Condition Reporting

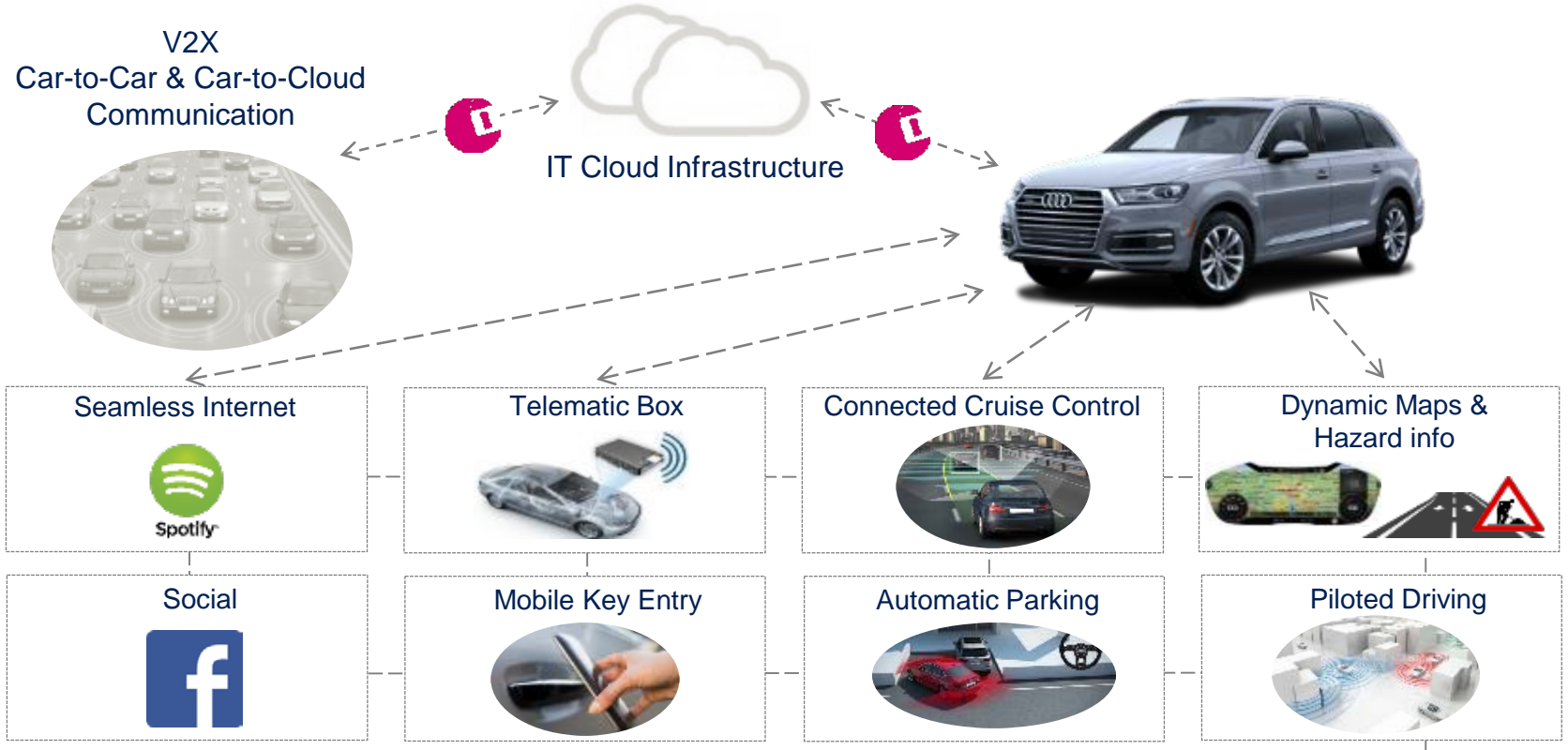
Available Parking Identification

Localized Hazard Information

Queue Management



The Evolution: Vehicles to Everything



- ### V2X Enabling Elements
- Sub-meter GNSS positioning
 - Level 3+ vision based ADAS
 - Vision processor
 - RF (24/77 GHz) redundancy
 - Sensor fusion
 - Wi-Fi communication
 - Secured
 - Automotive grade
 - Cellular connectivity and Smart Phone integration processor

Additional \$730M Market Opportunity by 2021 (*) on top of traditional ADAS

(*) 2021 market for V2X and extended adoption rate of vision based system to enable new services (ST internal data).

Smart Automotive Camera Solutions

Transforming Driver Assistance

16



Sensing & Viewing Camera
Front-Facing View
Rear & Surround View
eMirror



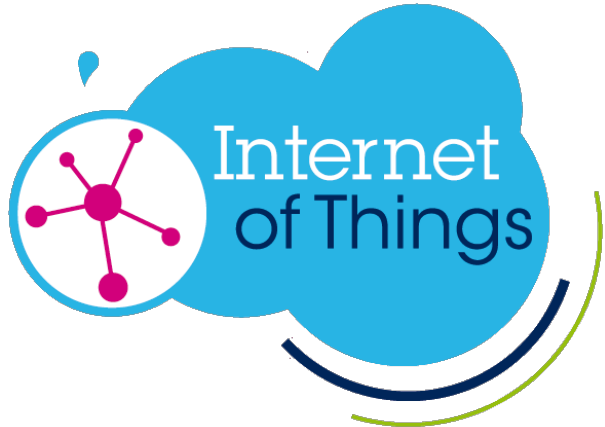
In-Cabin Optical Sense
Driver Monitor
Gesture Control
Occupancy Detection



LiDAR
Autonomous Driving
through Sensor Fusion

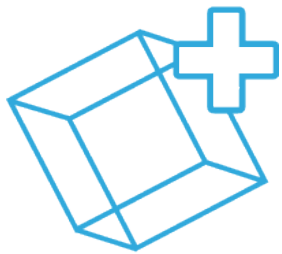


- Leading high-performance HDR & Flicker Free solution
- Leveraging IP, know-how and supply chain expertise from high-volume consumer
- Supply security through In-house manufacturing
- Proprietary silicon technologies



Internet of Things

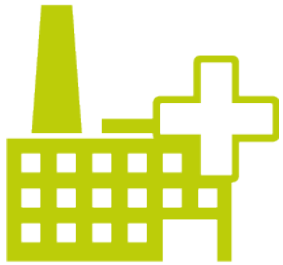
The logo features a blue cloud-like shape containing a network diagram with a central pink node and four connected nodes. The text "Internet of Things" is written in white inside the cloud. Below the cloud are two curved lines, one blue and one green.



Smart Things



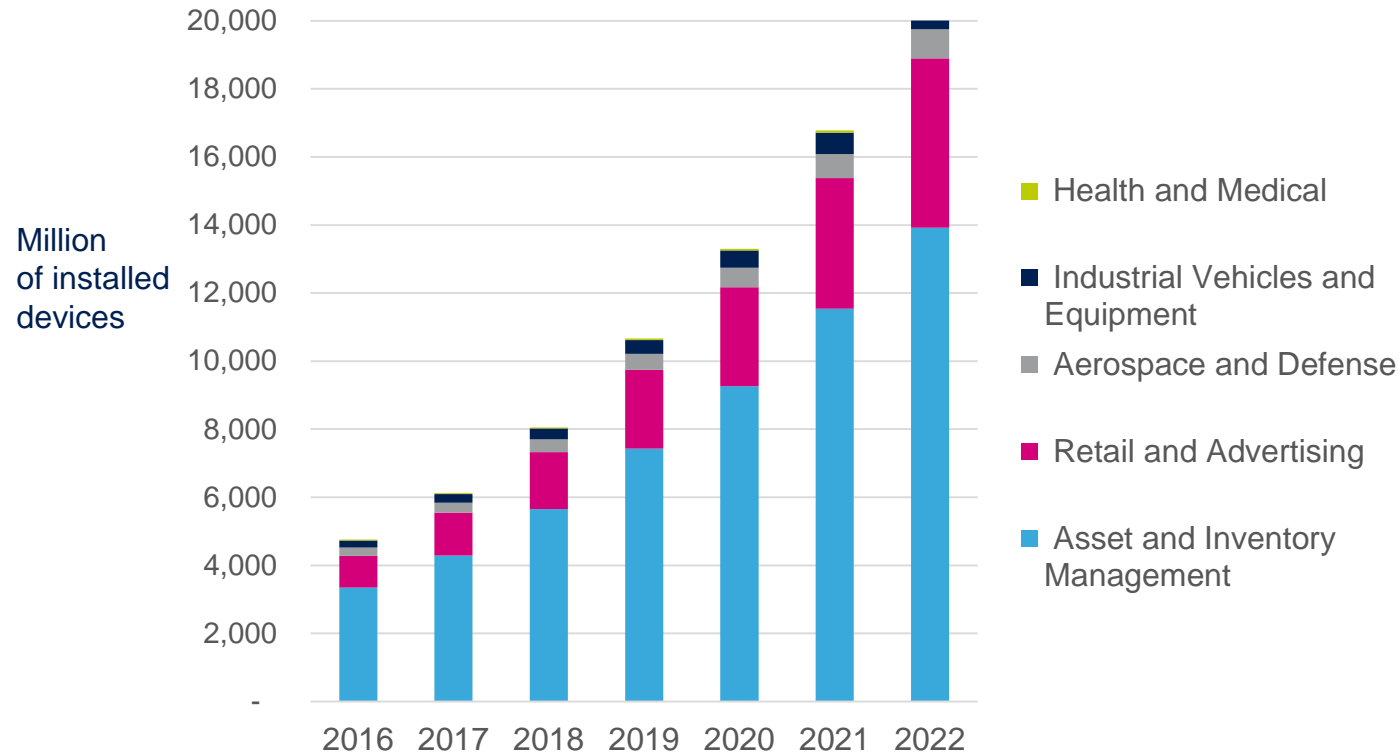
Smart Home & City



Smart Industry



Internet connectable Industrial devices



Focus Growth Areas

ST SAM (\$Bn)	2017	2020	Growth
Motor Drive for Automation	3.3	4.1	7.9%
Medical	4.3	5.2	6.4%
Military & Civil Aerospace	3.2	3.6	4.0%
Office/Commercial Lighting	2.1	2.6	6.9%



Smart Industry

Smart Industry Focus

19

More Intelligent
& Aware

More
Connected

More
Efficient

Safer

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

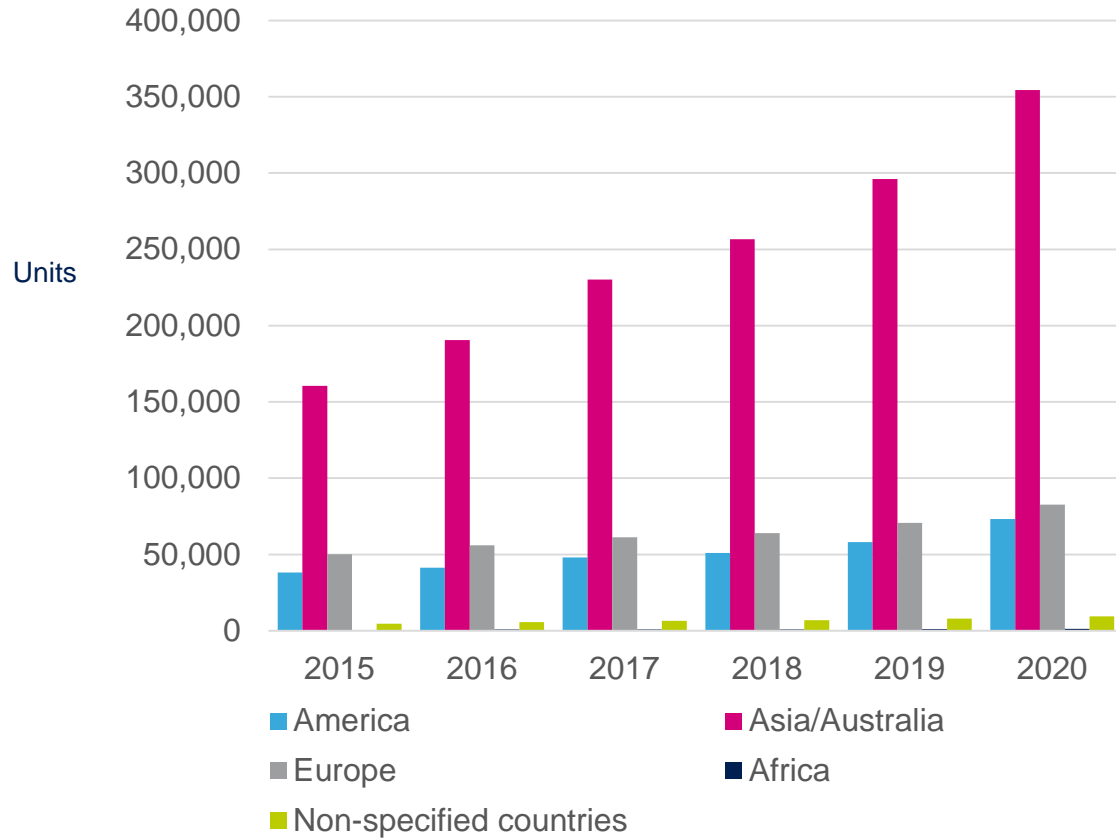
Industry Dynamics

- Smart Industry initiatives (Industry 4.0, IIoT, ...)
- Integrated distributed manufacturing
- Flexible, reconfigurable factories
- Optimization of factory infrastructure life cycle
- Cloud-based condition monitoring & predictive maintenance

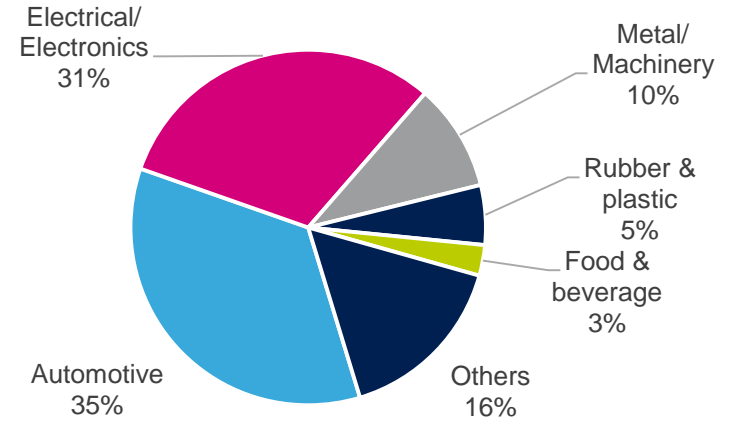
Key Applications

- Smart manufacturing
- Factory automation
- Functional safety and security
- Condition monitoring and predictive maintenance
- Smart motion/motor control
- 3D printing
- Power & energy management
- Industrial robots
- Industrial lighting
- Sensors for industrial, medical, aerospace & defense

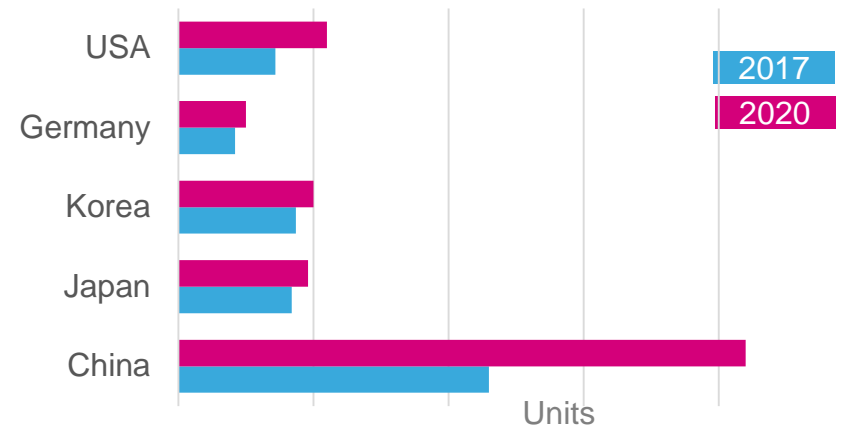
Annual Supply of Industrial Robots



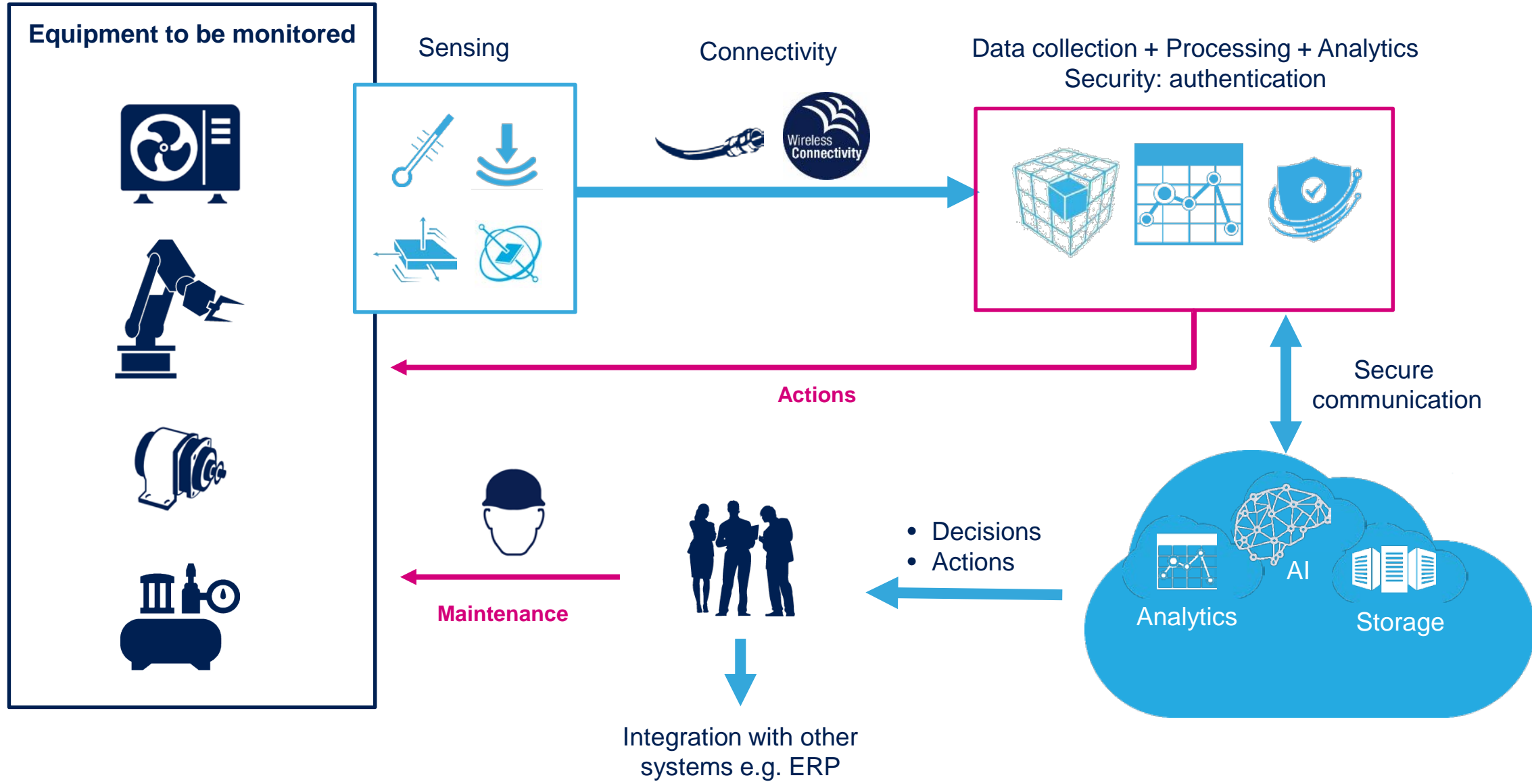
2016 Robot shipment by industry segment



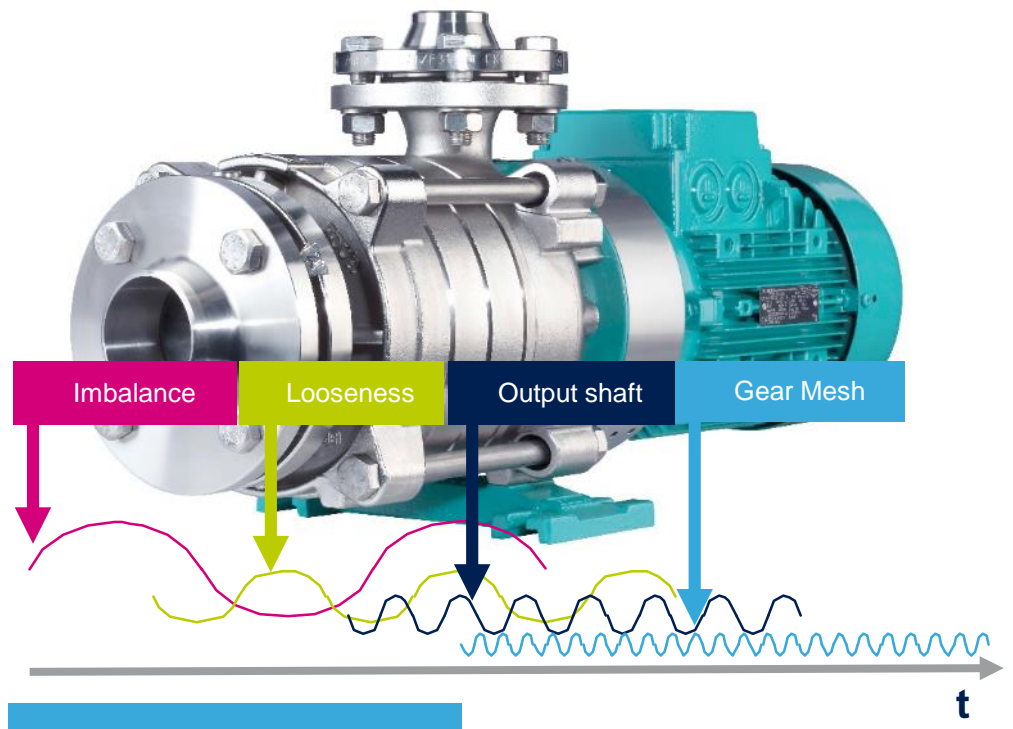
Top 5 countries represent 74% of 2020 total demand



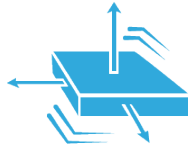


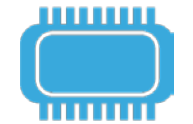


From Preventive to Predictive Maintenance

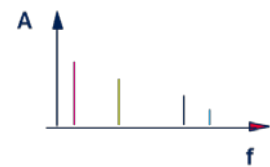


Condition Monitoring Example



- Mechanical vibration**
- Displacement
 - Speed
 - Acceleration
 - Acoustic noise
 - Angular speed
 - Torque

Functional Needs	ST Products
Vibration Capture	 <p>Motion Sensors</p>
Connectivity	 <p>Bluetooth Wi-Fi Sub-1GHz</p>  <p>IO-Link</p>
Processing	 <p>MCU</p>
Secure Connections	 <p>Secure MCU</p>
Power Management	 <p>Power ICs</p>

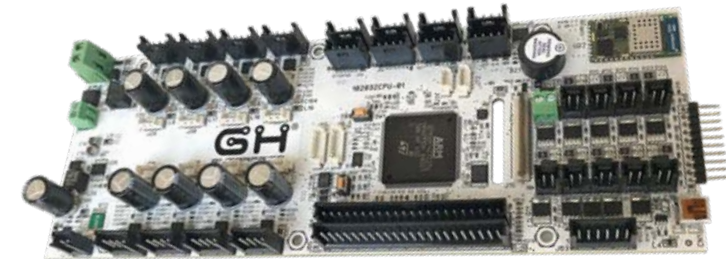


Solutions for Fused Filament Fabrication (FFF) 3D printing

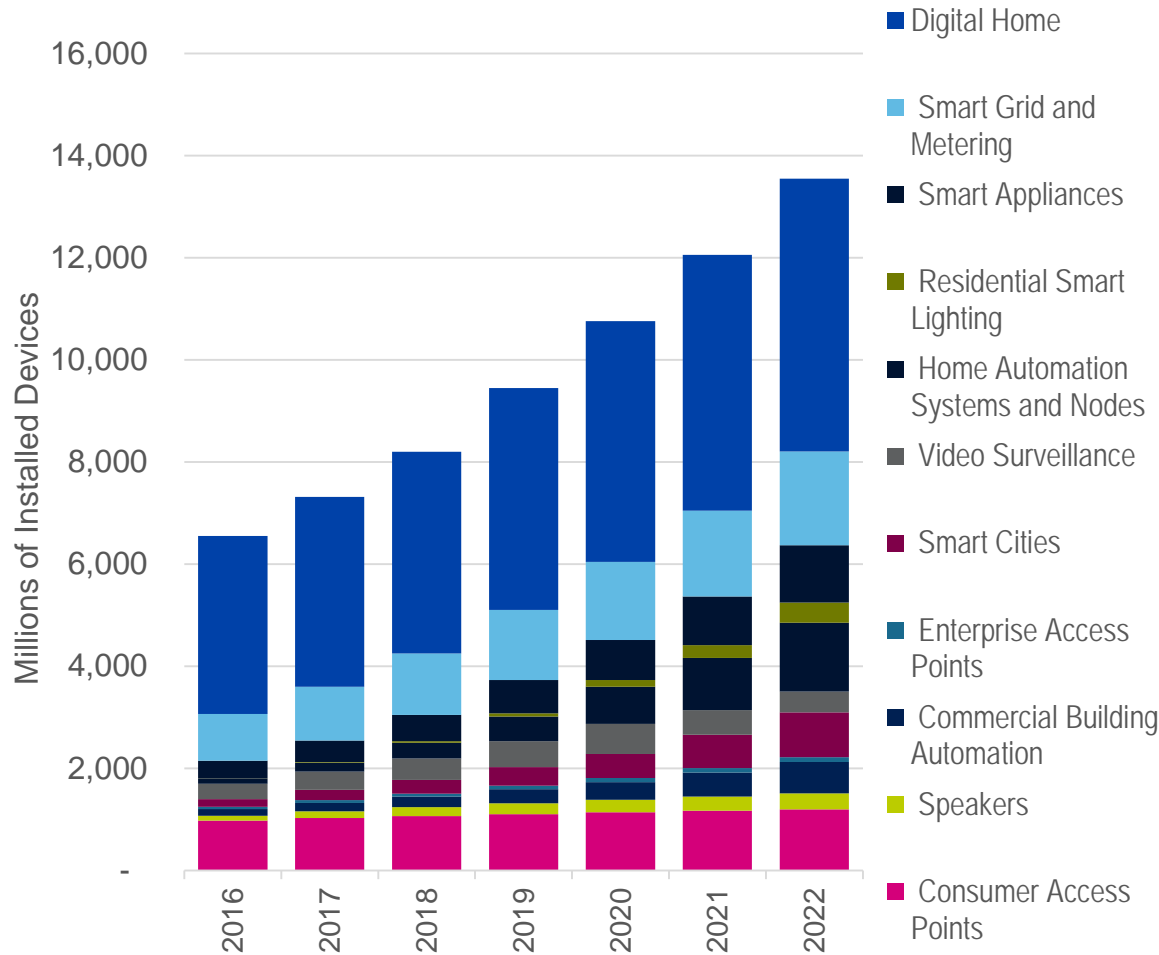
3D printing market
growing at a
CAGR > 27%
during 2016-2022
to reach
\$11 billion



Boards from ST
& Partners



Complete ST Bill-of Materials including
STSPIN Motor Drivers
& high performance STM32



Focus Growth Areas

ST SAM (\$Bn)	2017	2020	Growth
Home & Building Control	3.3	4.0	5.9%
Metering (home & buildings)	1.4	1.6	6.6%
Security & Surveillance	1.4	1.8	9.6%
Major Home appliances	2.3	4.0	6.7%



Smart Home & City

Smart Home & City Focus

25

More Intelligent
& Aware

More
Connected

More
Efficient

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

Industry Dynamics

- Smart Home devices designed for integration into home systems (Google Home, Apple HomeKit,..)
- Increasing data security awareness & requirements
- Voice control growing in user acceptance
- Increasing demand for services in support of smart home & city technology

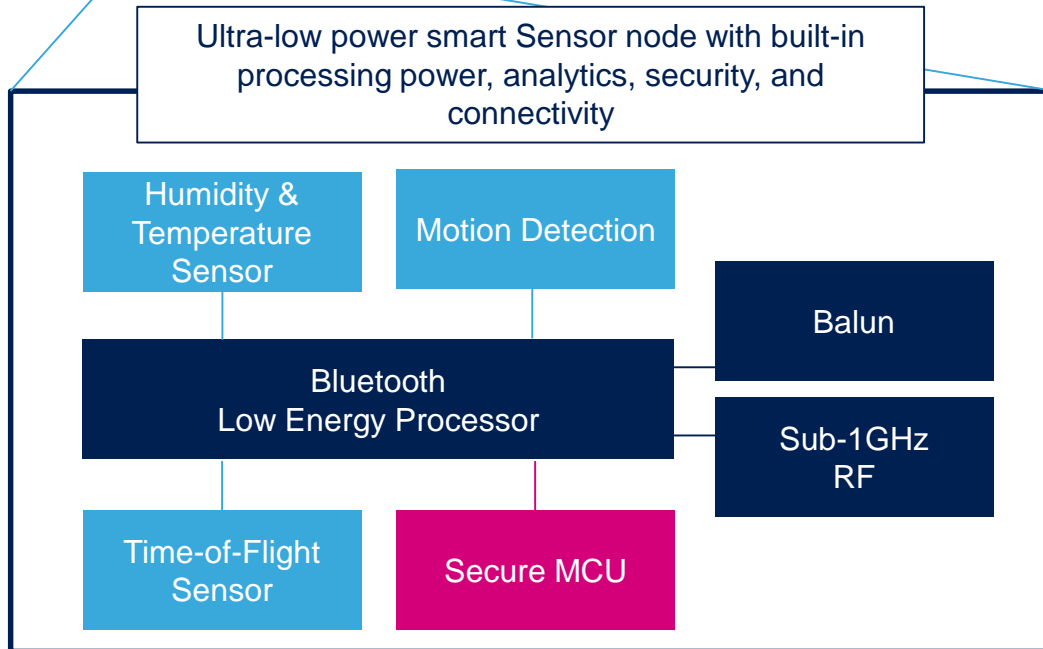
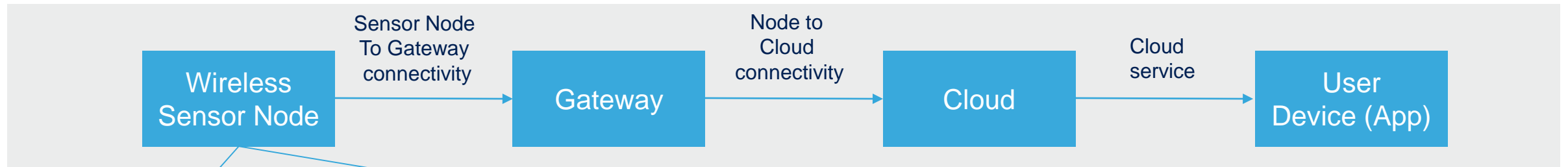
Key Applications

- Smart transportation
- Home & building automation
- Smart metering
- Security & surveillance
- Smart LED lighting
- Heating and energy control
- Energy efficient, smart appliances
- Service robots
- Smart speakers



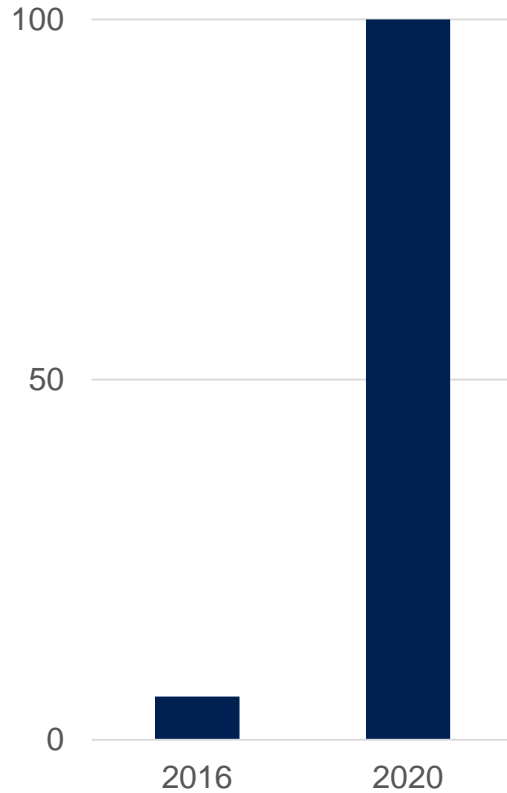
Home & Building Automation

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





Smart Home Speakers



Sources: ABI Research, Strategy Analytics

Near Field: Push-to-talk/Tap-to-talk

- Listening range: Up to 1.5 meters
- No wake word
- Number of microphones: 1



Intercom
&
Remote
Controls

Near Field Voice Initiated (always-on)

- Listening Range: Up to 1.5 meters
- Uses a “wake word”
- Number of microphones 1+
- Typically use Acoustic Echo Cancellation (AEC) and Beamforming

Home Devices
& Wearables



Far Field Voice Initiated

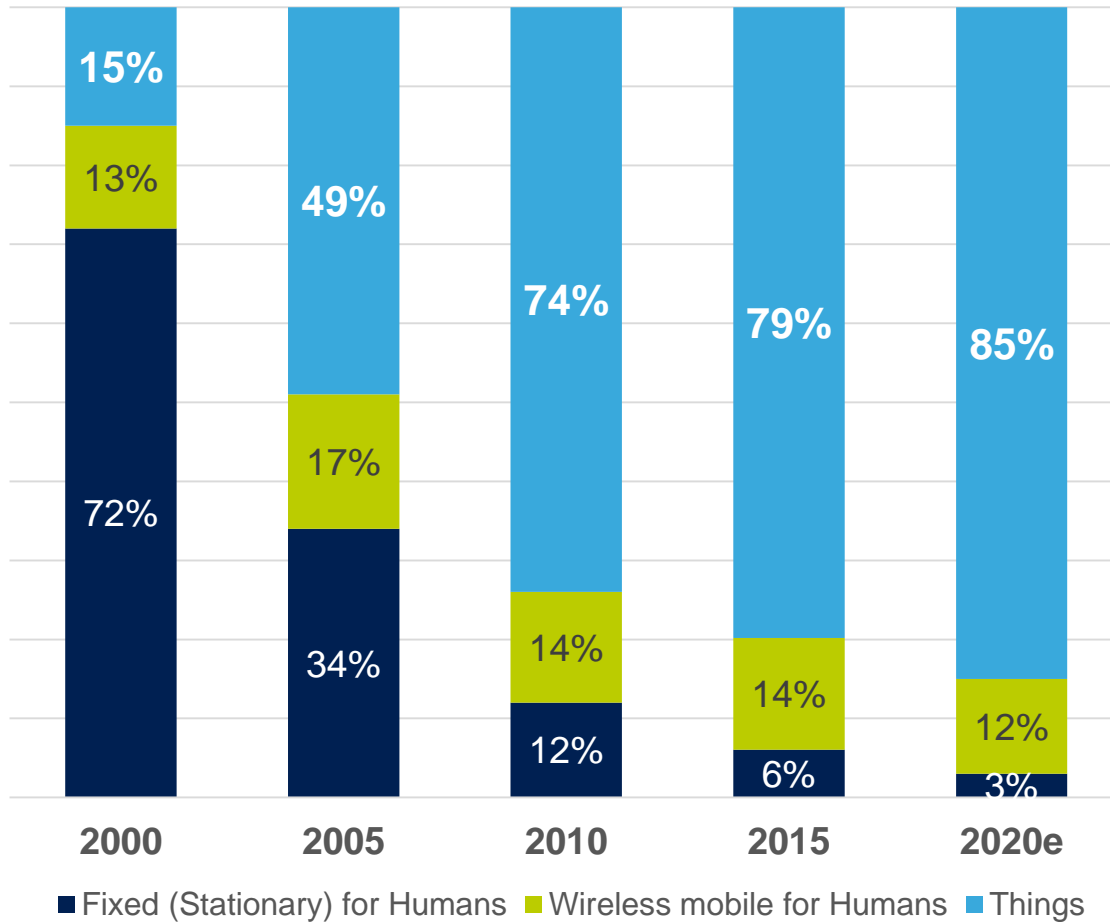
- Listening Range: Up to 6 meters
- Uses a “wake word”
- Number of Microphones: 2+
- Uses AEC, Beamforming & others

Products with Virtual
Personal Assistants Built-in





% of Internet Connections Worldwide



Focus Growth Areas

ST SAM (\$Bn)	2017	2020	Growth
High Tier smartphones	8,230	9,475	4.8%
Mid Tier smartphones	4,463	4,776	2.3%
Fitness & Wellness Wearable	0.8	2.2	36.8%
Smart Watches & Glasses	1.1	2.3	27.3%



Smart & Aware

Connected

Energy
Efficient

Secure

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

Industry Dynamics

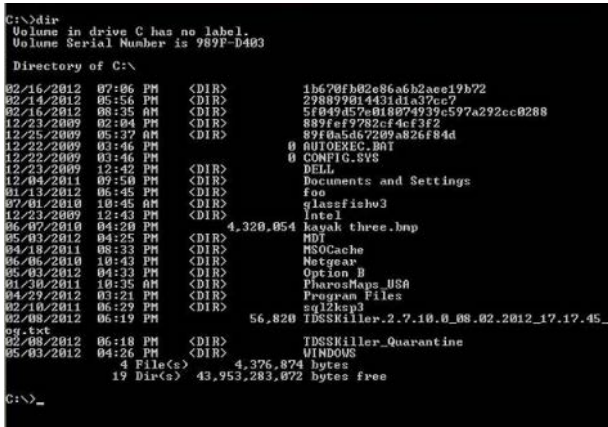
- Fragmented market with many new device categories
- Wearable remains the top established category with the smart watch leading

Key Applications

- VR/AR headsets
- Smart Watches
- Wearable devices
- Gaming devices
- Other Smart Things



Trend in Human Machine Interaction



1D

Data Processing



2D

Information Processing



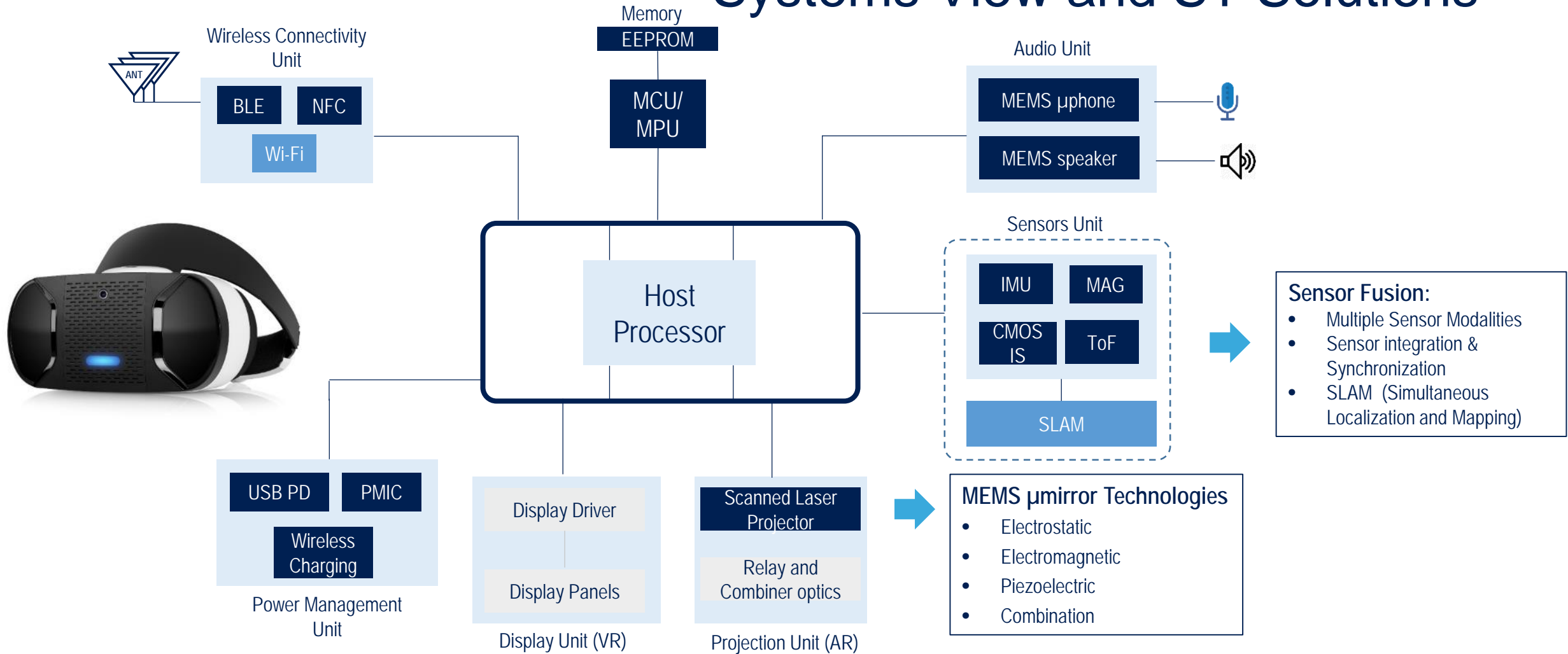
3D

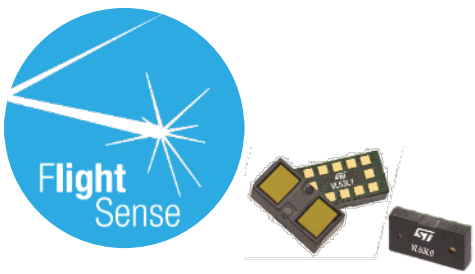
Visual & Contextual Computing



- **Virtual Reality** – Occluded view and a fully immersive experience
- **Augmented Reality** – Simple digital content is overlaid onto physical world
- **Mixed Reality** – Physical and Virtual worlds are fully merged with visually accurate depth, perspective, texture, shade etc.

Virtual/Augmented/Mixed Reality Systems View and ST Solutions





Applications with FlightSense™

... Making Light Work

Today



Camera Assist



Ranging & Proximity



Presence, User Detect

Tomorrow



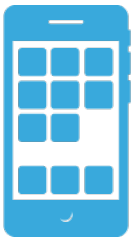
Gesture



Depth Map & AR/VR



LiDAR



Smartphones Focus

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Key Trends

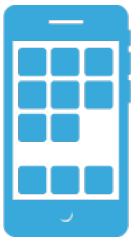
- New & improved user interfaces
- Virtual and Augmented reality
- 3D sensing capabilities coming to smartphones
- Wireless charging & USB-C

Key Applications

- Smartphones
- Tablets
- Accessories

Industry Dynamics

- Apple and Samsung traditionally leading technology innovation but Chinese players fast followers
- Continued concentration of share among top 5 players in smartphone market
- 5G still evolving



Targeted Smartphone Opportunities

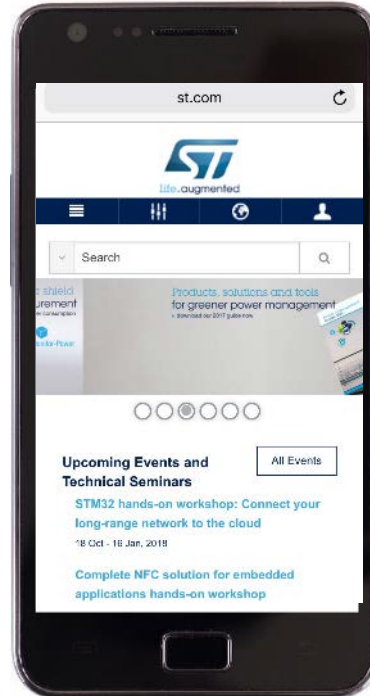
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Motion & Environmental Sensors & Actuators

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

Specialized Image Sensors & Systems

ToF Sensors, 3D sensing, ..



NFC & Secure Element

NFC receiver, Secure MCU, NFC & SE combo

Display Controllers & Display Power Management

Touchscreen controller, AMOLED PMIC

Wired & Wireless Charging

Wireless charging ICs, USB-C



Artificial Intelligence

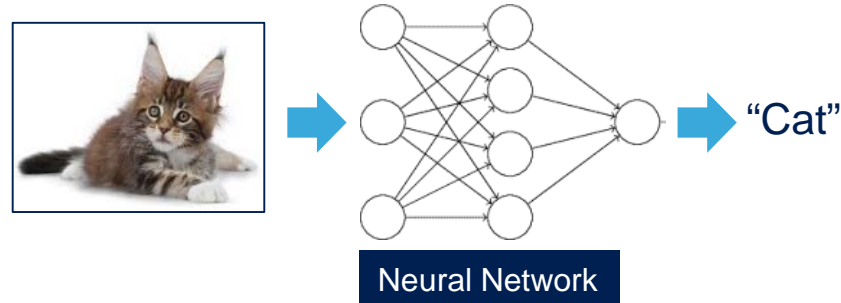
Neural Networks are Key for Node Intelligence

What is a Neural Network?

Artificial **Neural networks** are statistical models directly inspired by biological neural networks. They are capable of modeling and processing relationships between inputs and outputs in parallel.

Such models are exponentially faster and more efficient than traditional computer processing models for typical AI uses like pattern recognition.

Example: A neural network that has been trained to recognize a shape from a picture.



How to create a Neural Network

Off-the-Shelf Deep Learning Design Frameworks are available to train and create artificial Neural Networks



Pre-Trained Neural Network Representation
(Creation tool specific format)

Artificial Intelligence

Machine Learning

Deep Learning

Subset of Machine Learning algorithms based on (artificial) **Neural Networks** (DNN, CNN, etc.)



ST Solutions to Run Neural Networks

Pre-Trained Neural Network Representation (Creation tool specific format)



ST Developed tool
Neural Network Converter & Code Generator



Code that can run on an ARM Cortex-M Microcontroller



Code that can run on ST AI-Specific IC



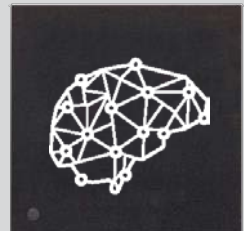
STM32 Microcontrollers

Benefits

- Available today
- Runs on any STM32

Typical use cases

- Smart Industry: preventive maintenance
- Wearable: Human activity recognition
- Consumer: Entry level IoT node



Ultra Energy Efficient DCNN Engine

Benefits

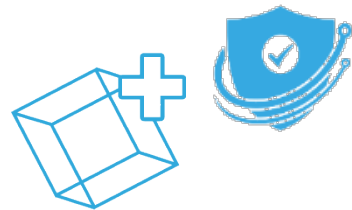
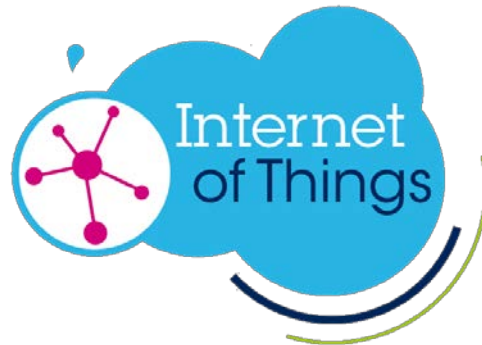
- Performance/power optimized
- Intensive data & processing applications

Typical use cases

- Smart Driving: In-vehicle driver monitoring
- Smart surveillance cameras
- Consumer : AR/VR, Drones

ST Offers Secure Solutions for all Applications

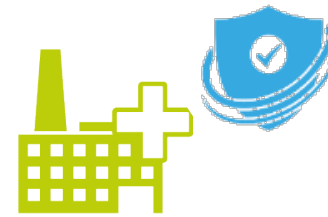
Scalable, flexible secure solutions adapted to the needs of the application



Smart Things



Smart Home & City



Smart Industry



Smart Driving



Secure Mobile Transactions

- Mobile devices & wearable
- Secure payment, transport, access control & biometry



Authentication & IP protection

- Brand protection, Trusted Platform Module (TPM), metering, accessories, LPWAN, Secure IoT



General Purpose MCU secured

- Embedding scalable security
- Monitoring, cryptography, security services. Secure storage



Automotive Security

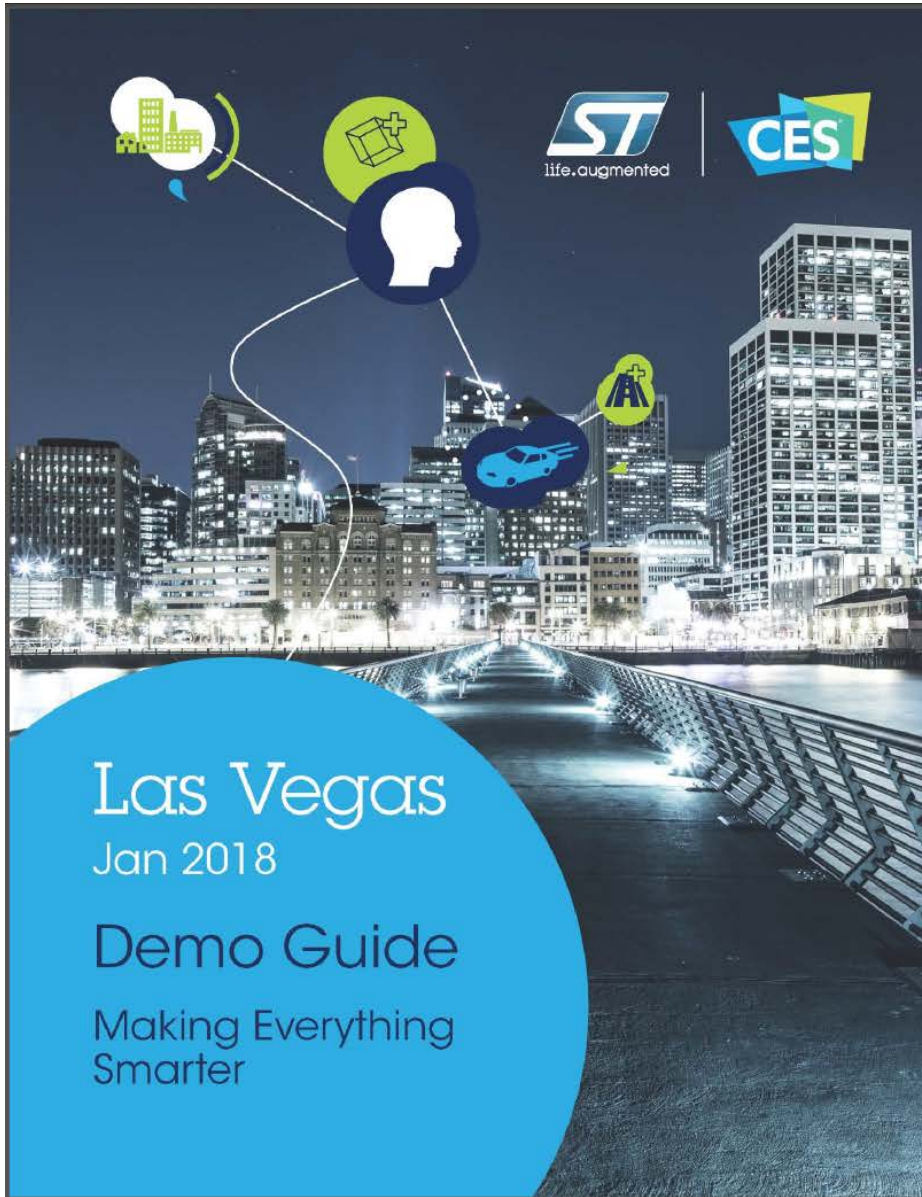
- Secure communications among peripherals
- Secure firmware upgrade, secure boot
- Secure cellular and Wi-Fi connections

Takeaways

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- It's all about Sustainable Growth!
- Our focus on Growth Markets, Internet of Things and Smart Driving is delivering tangible results
- ST has all the key ingredients: Technologies, Products and Partnerships to continue fueling our growth
- We are excited about our future, join us and see our latest products and demos





Welcome



This guide provides an overview of the technology being showcased at ST's Exclusive Private event at CES® 2018. The demonstrations are grouped by main focus area: the Internet of Things and Smart Driving.

Internet of Things

ST offers a complete portfolio of products and solutions for the IoT; making everything smarter, from homes, cities, and industry to all the "Smart Things" that populate our world and make positive contributions to our lives. Highlighted solutions include AR/VR/MR, Voice Control, Imaging, AI, and Wireless Charging.

Smart Driving

ST's solutions make driving safer, greener and more connected. Highlighted technologies include V2X, High Dynamic Range LED flicker-free camera system and driver-monitoring solutions, automotive processors and power amplifiers.

Upper floor

Lower floor



Join us for a demo tour!



life.augmented