

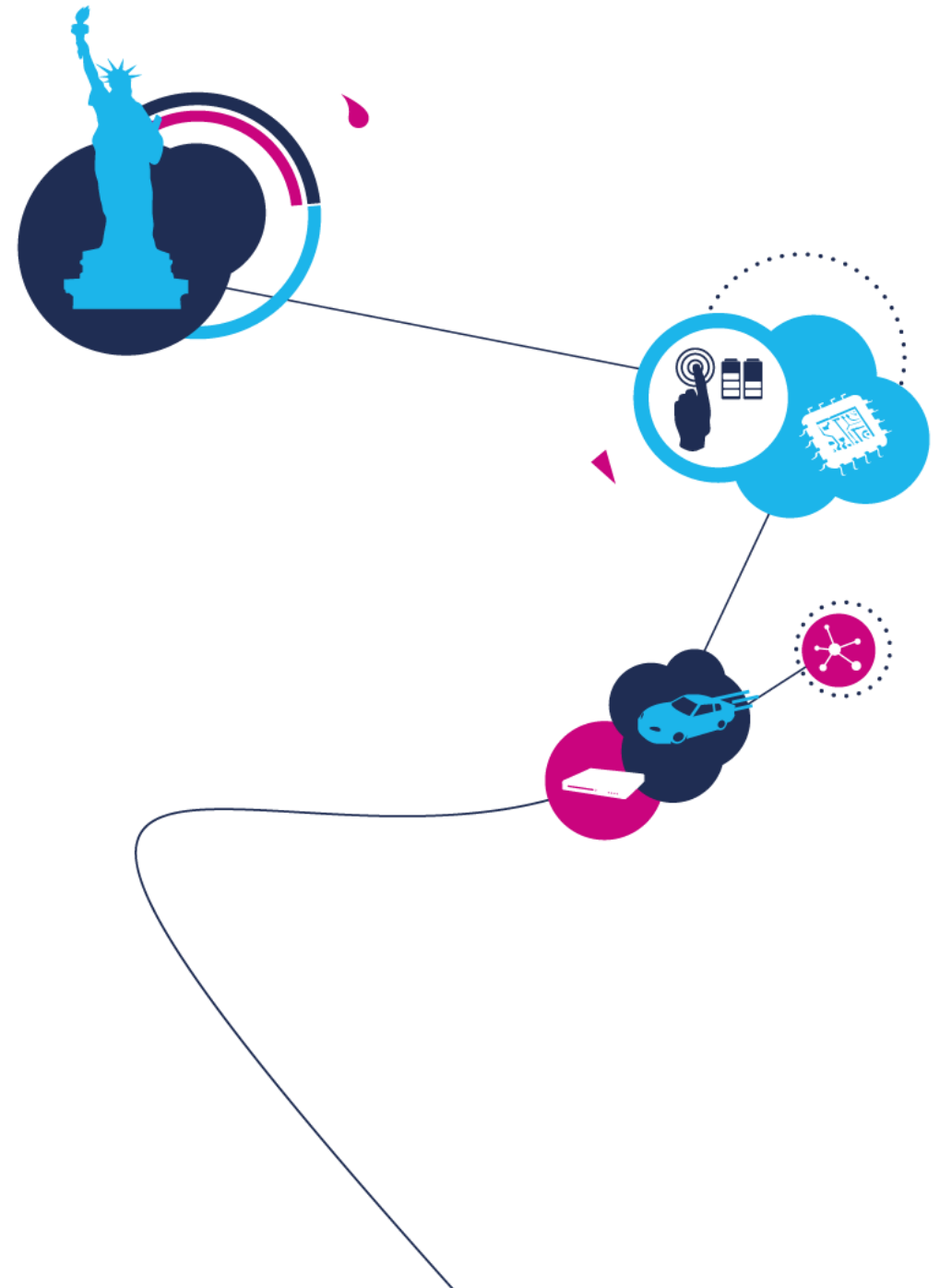
Automotive Product Group (APG)

Marco Monti

Executive Vice President,
General Manager, Automotive Product Group

Kevin Gagnon

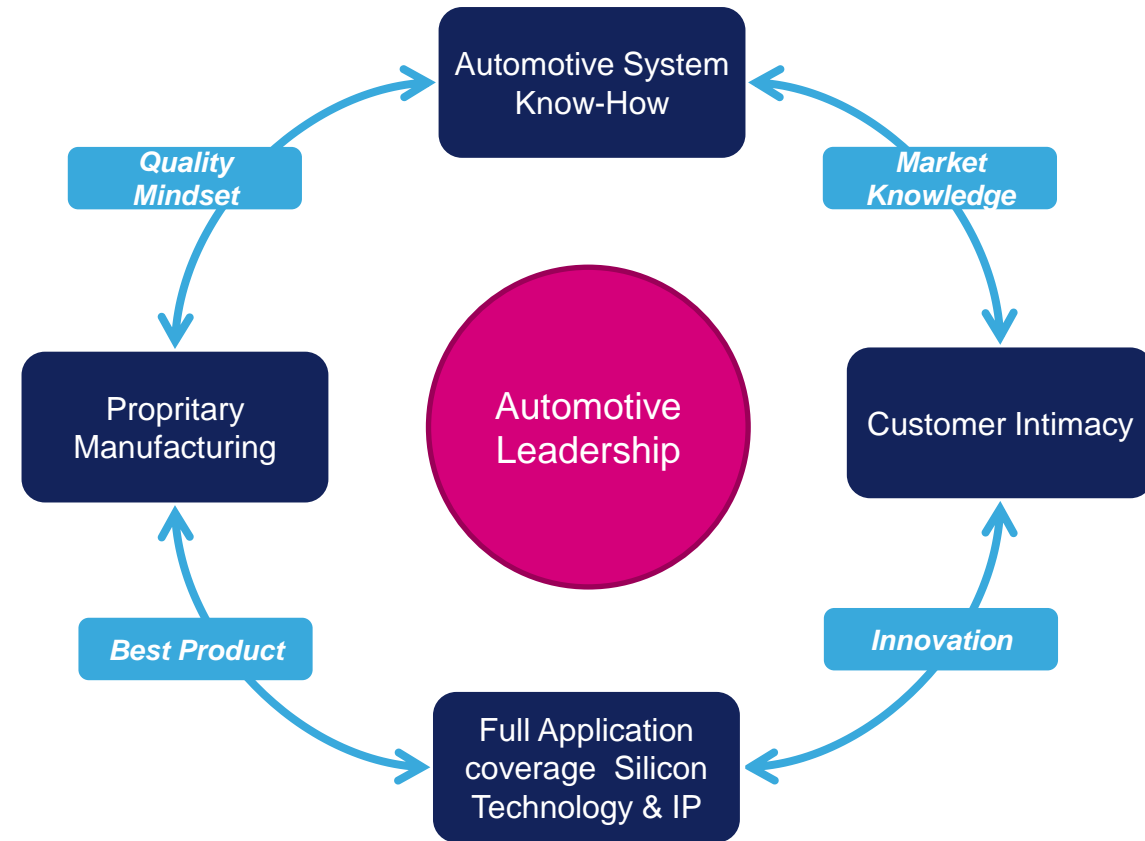
Vice President, Region Americas
Central Sales Territory & APG Marketing



ST in Automotive Today

2

- 30+ years leadership in Automotive
- Well balanced geographical sales
- Strong intimacy with leading Car Makers and Major Tier-1
- Wide application coverage thanks to a state of the art technology portfolio
- Proprietary and independent manufacturing mastering quality and Automotive requirements
- Industrial / Digital Convergence IP reuse with a full Automotive grade quality to support innovation



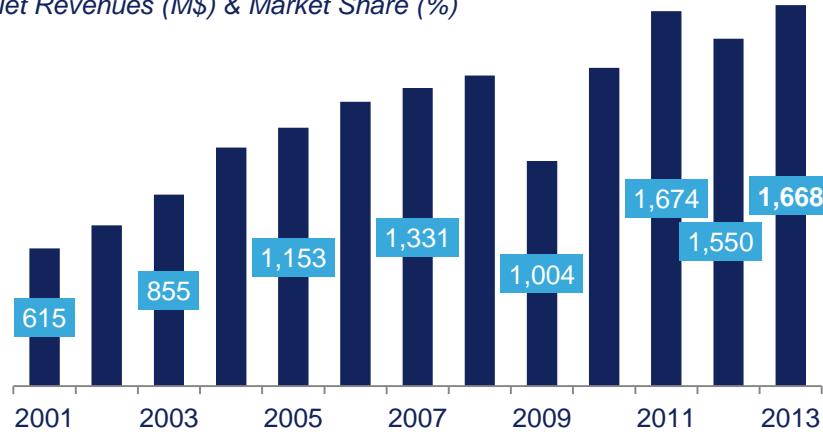
Automotive: Positioning

Wide Application Coverage



Solid Continuous Growth

Net Revenues (M\$) & Market Share (%)



Market Leadership

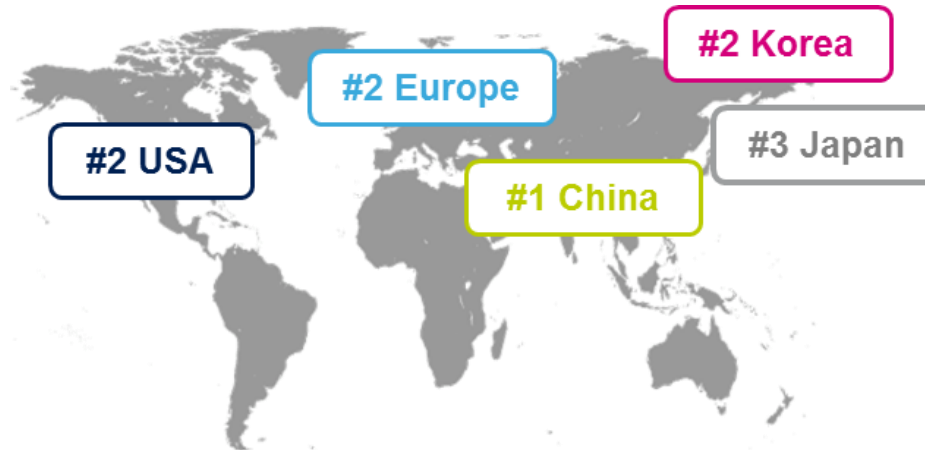
Automotive Electronics

#	Application	Mktg Share
1	Engine Control	~32%
1	Charging	~22%
1	Braking	~19%
2	Airbag	~14%
1	Active Safety	~35%
1	Door Zone	~80%
1	Lighting	~45%
3	Motor Control	~20%

APG : \$1.7Bn Sales in 2013

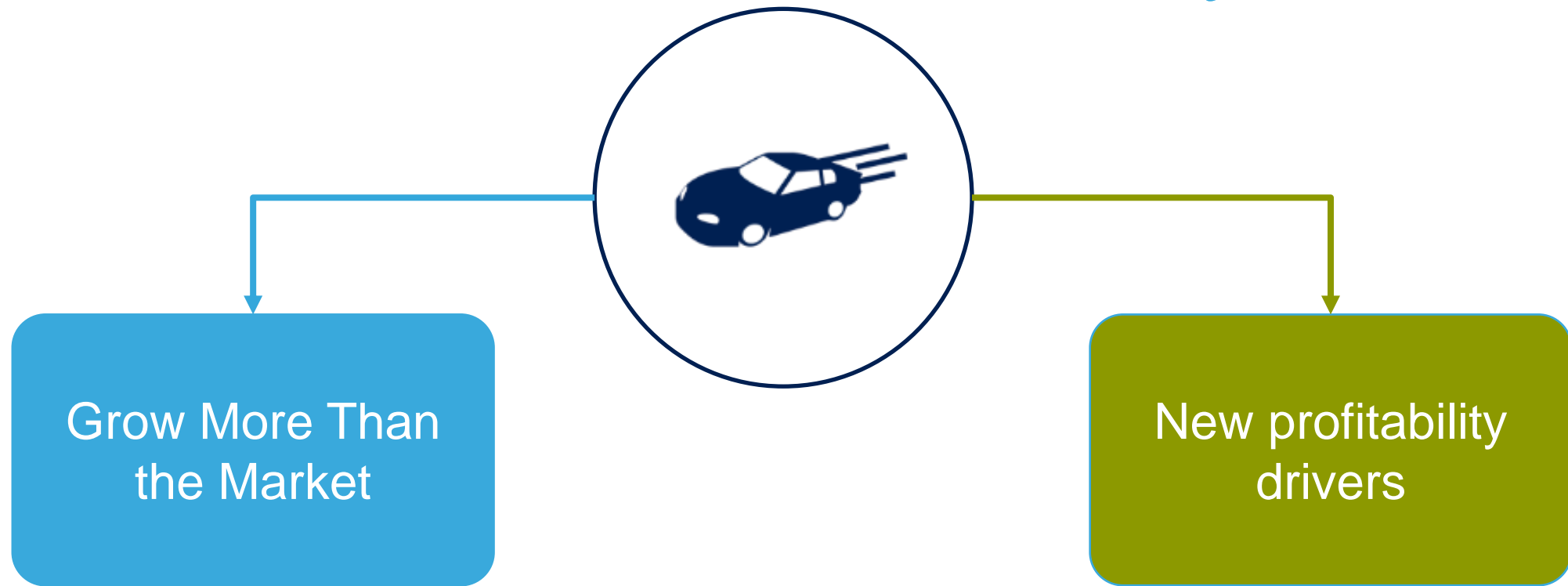
- Up 7.3% vs. 2012
- 4Q13 up 22% vs. 4Q12
- 1Q14 up 16% vs. 1Q13

Worldwide Footprint

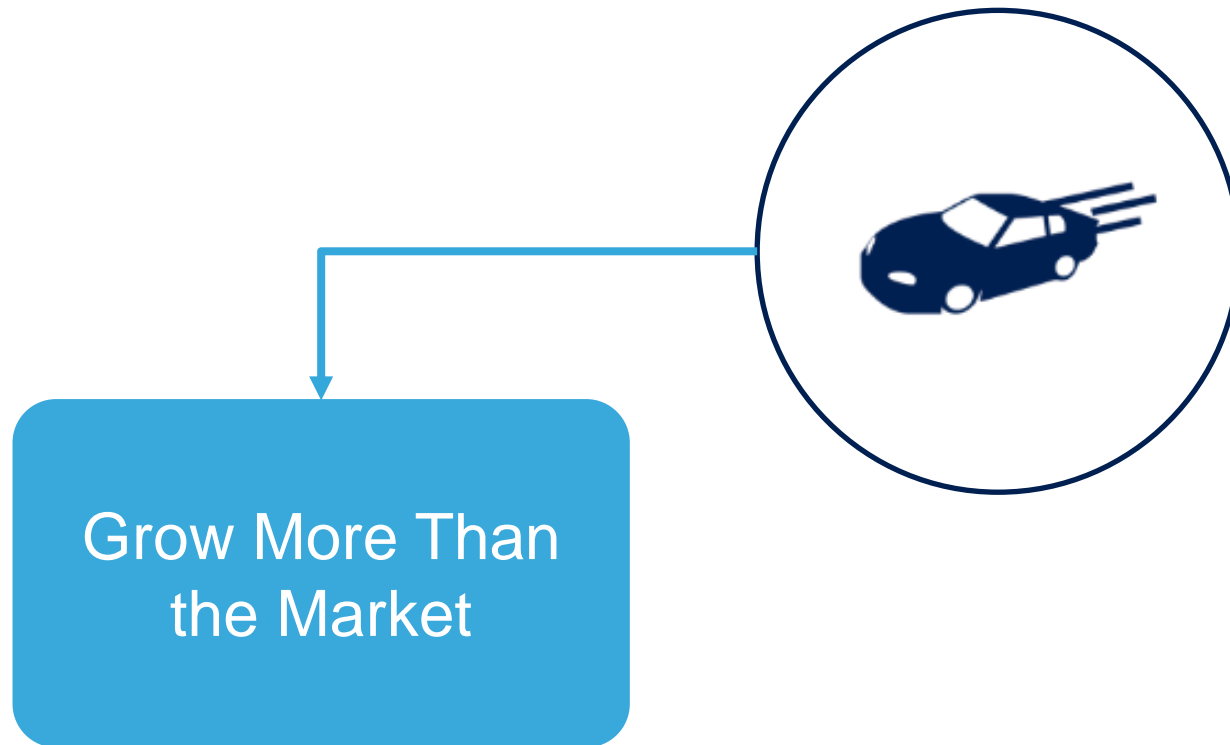


Infotainment

#	Application	Mktg Share
2	Infotainment	~13%
1	Digital Tuners	~71%
1	Audio Amplifiers	~47%
2	Positioning	~14%



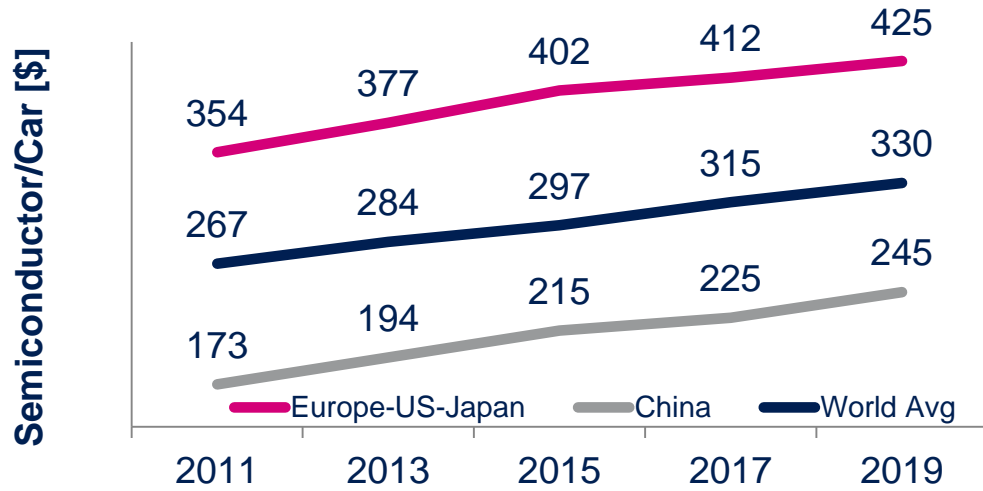
Addressing a \$23.6 billion market, APG gaining share



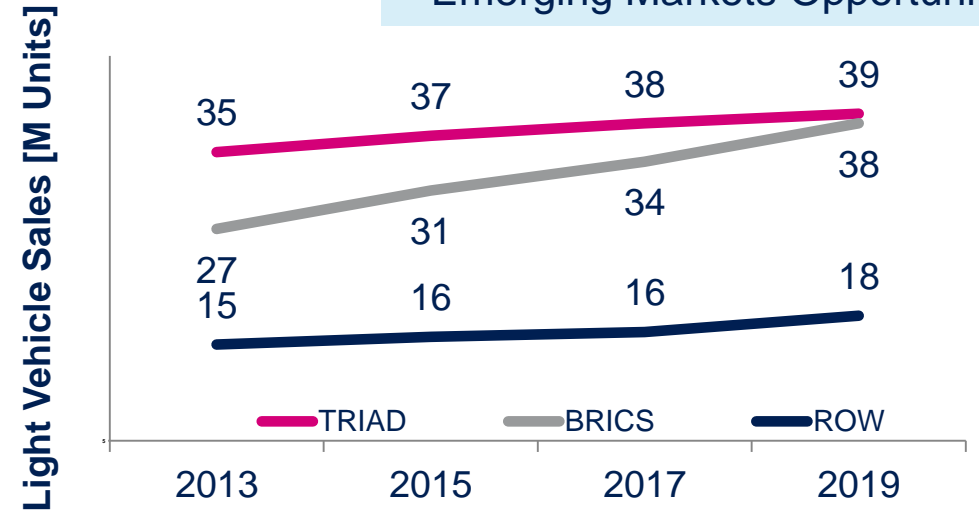
Addressing a \$23.6 billion market, APG gaining share

APG Market Growth Opportunities

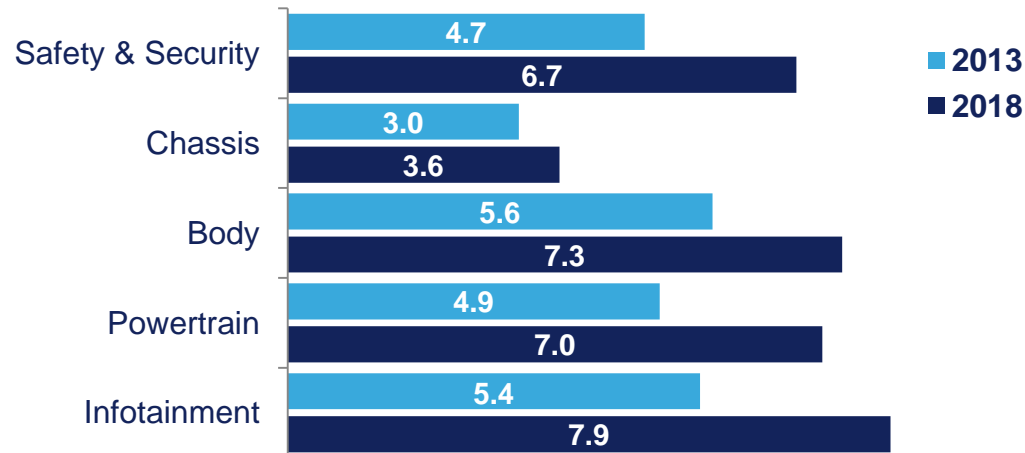
Pervasiveness per Vehicle



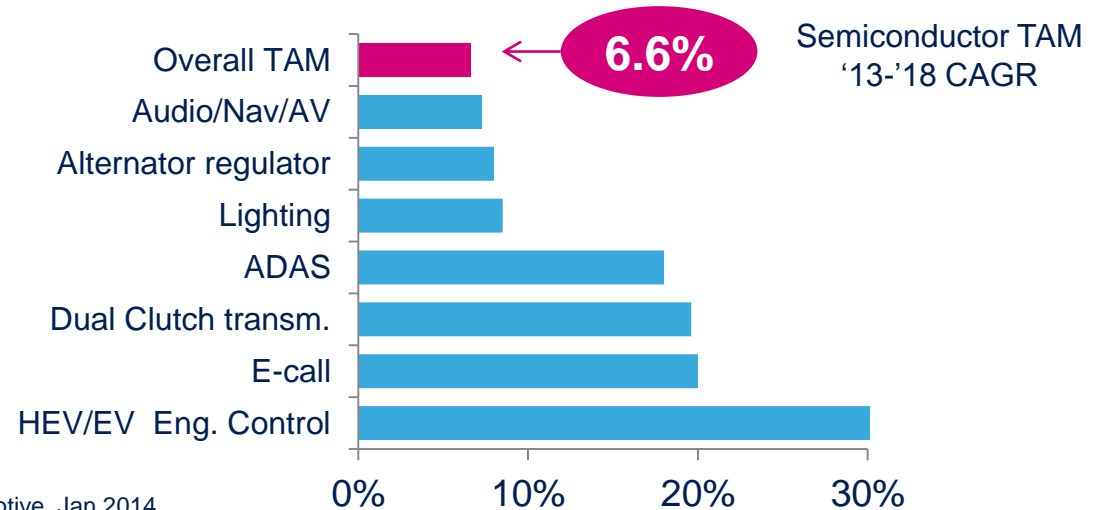
Emerging Markets Opportunity



All Segments Growing (US\$B)



Emerging Applications



Pervasiveness per Vehicle: Key Opportunities

7

Powertrain

Direct Injection Engine

~+40% Si content vs. traditional solutions

- CO2 emission reduction, fuel saving and high-power output
- New Product Offer available now to meet EURO-6 requirements (95 CO2 grams)



Automatic Gearbox

- Unique Fully Integrated Market Solution for High-Precision Automatic Transmission, available in 2014

Charging

- New Flexible Voltage Alternator Regulator with Embedded 8-bit microcontroller

Safety

Airbag increased number of channels for more safety

- Complete Product Offer for Low & Hi-End, in production with latest 160nm Technology
- New Product extending coverage up to 28 loops



Braking

- New Integrated solution in 110nm Technology
- In production with Electric Parking Brake brand new integrated solutions

Steering

- New complete Offer available for cars and trucks



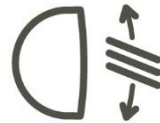
Pervasiveness per Vehicle: Key Opportunities

Body

Market leadership in Lighting & Door Zone

A new complete product family able to reduce wiring weight thus reducing CO2 emissions now available for:

- Xenon Discharge lamp
- Interior and Exterior Bulb & LED's
- Door Zone highly integrated solutions



High efficiency motor drivers

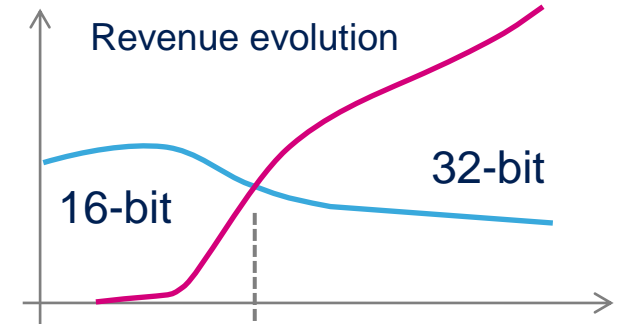
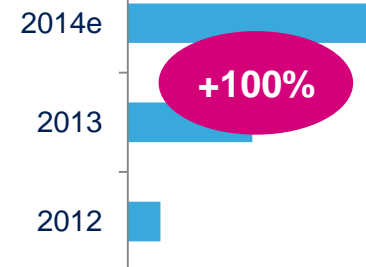
- Product offer enrichment: 4 new products coming in 2014. New portfolio in M07 innovative process.



32-bit microcontroller for Automotive

- From New Comer to Reference Supplier for Main Tier-1, worldwide
- 55nm Embedded Flash ramp-up production, 28nm under development
- Dedicated solutions for Power Train, Safety, Body
- Mass production on more than 100 part numbers

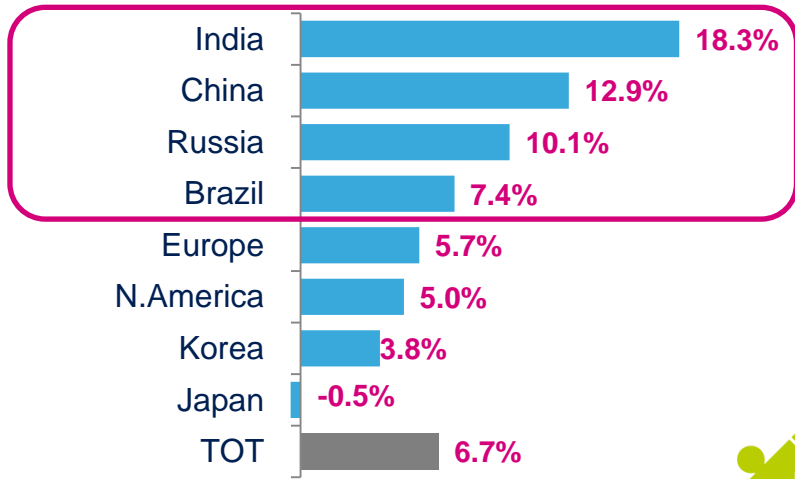
32-bit Sales Growth



Emerging Market: Key Opportunities

The highest growing market

Vehicle market growth CAGR 13-18



State of the art, cost-optimized standard products, tailored to Mass Market and BRICs

- Low-cost 4-cycle Engine control compliant to the China-6 emission regulation
- 4 to 8 channel fully integrated Airbag IC
- Flexible Alternator regulator for emerging market
- Dedicated system oriented family of 32-bit micro
- New family of smart actuators (switches) for Body applications

Specific products for China



System Solutions

Plug 'n Play full system solutions

- 4-cycle Engine Control
- 1/2-cycle Motorcycle Engine Control
- Entry level ABS
- Entry level Stability Control
- Low to mid-end Airbag
- Entry level Body Control Module
- Digital Tuners
- Entry level Infotainment

Dedicated team to offer system solutions to mid/small size customers

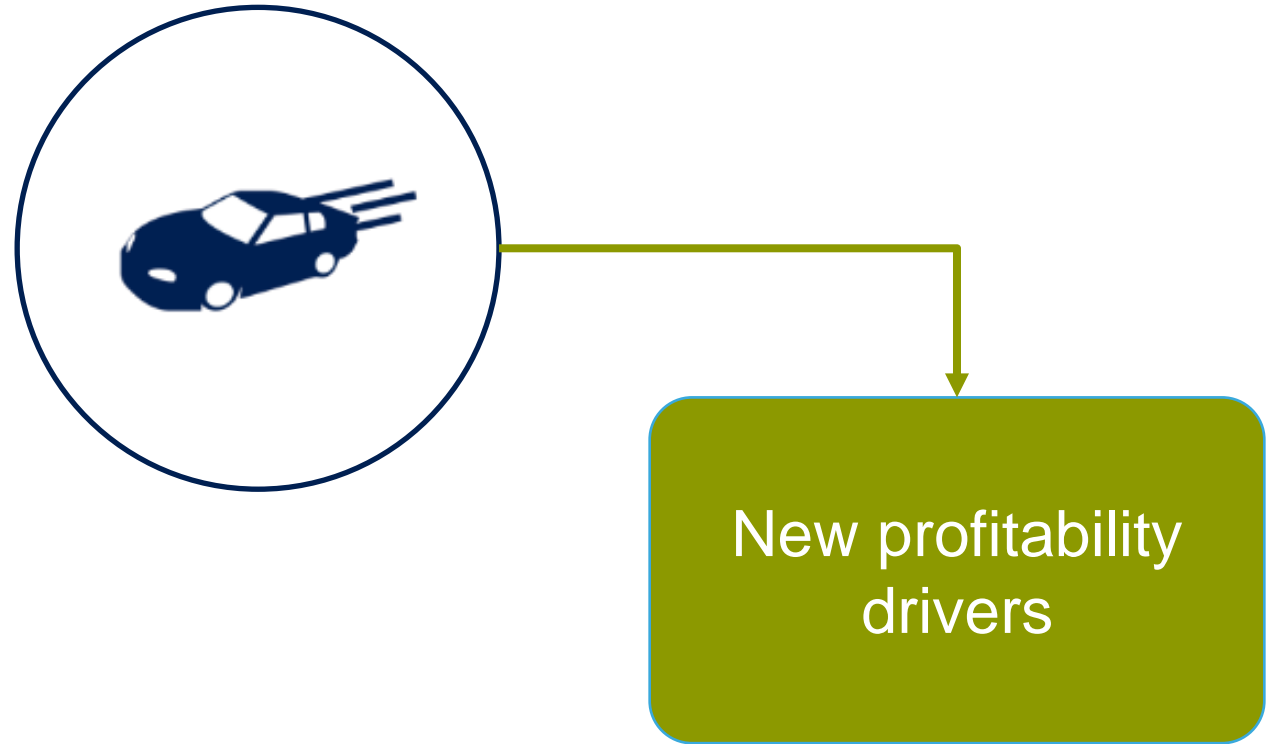
- Application and software support
- New Tools and Reference Designs

Specific organization to support mid/small customers

Production grade SW library

- Positioning
- Infotainment
- Protocol management





Addressing a \$23.6 billion market, APG gaining share

Key Profitability Drivers: Smart Power

Smart Power market

CAGR 2013-18: +5.6% (>\$5.0B in 2013*)

Technology

Continuous Innovation:
110nm in BCD and 180nm in VIPower
tailored to automotive applications

Intimacy Product /Technology R&Ds
to optimize cost and performance

Functions integration into single chips
Miniaturization in packaging technologies

Leadership and IP

System knowledge and IP for full
application integration with reduction of the
system cost

**Market leader in dedicated high margin
ASIC**

High precision analog

Innovation

HEV and EV Battery Management with
silicon Insulated technology

Gasoline Direct Injection to comply to
Euro 6 for CO₂ reduction and fuel saving

Automatic and Dual Clutch Transmission

Electrical motors for X by wire support
(Power Steering, Stability Control, Pumps)

LEDs drivers for a new efficient
concept of car lighting

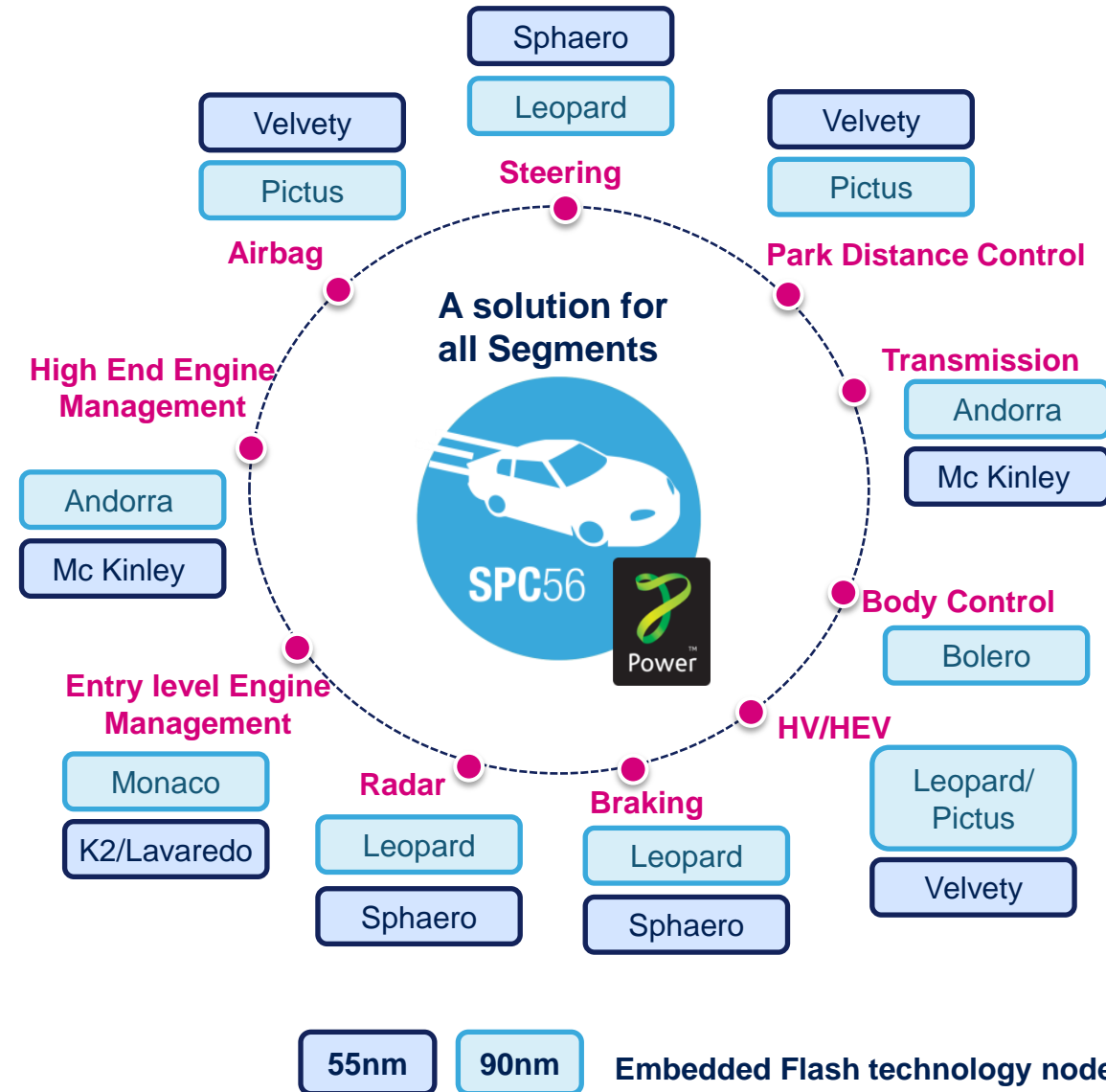


Key Profitability Drivers: 32-bit MCUs

32-bit MCUs market

CAGR 2013-18: +8.9% (>\$3.5B in 2013*)

- Proprietary 28nm Embedded Flash process in design with unique internal 12" 40nm and below capability
- Major progress to become reference player in fastest growing supplier in the 32-bit segment addressing key customer and mass market
- 100 part numbers available to cover all the specific Automotive applications
- Functional Safety (ISO26262 ASILD certification) & Security

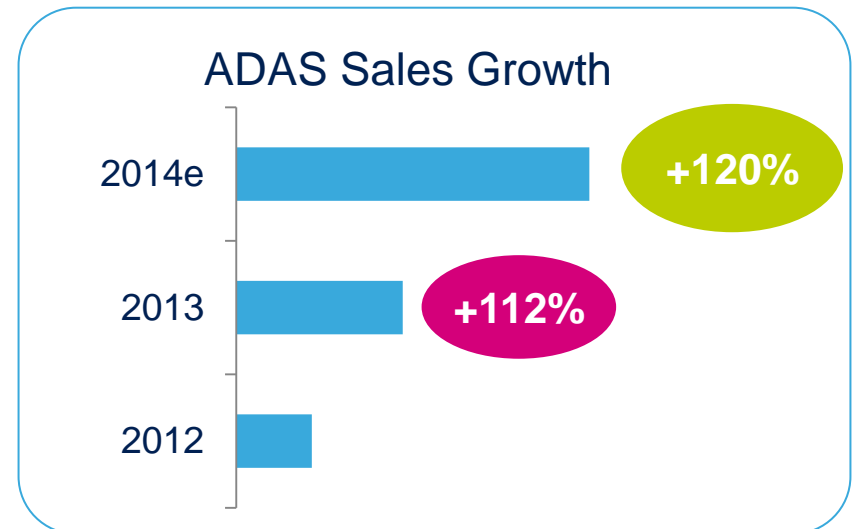
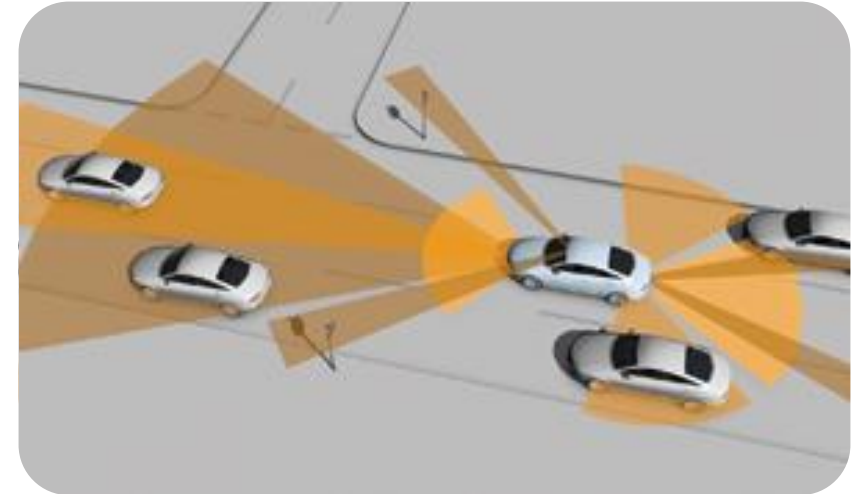


Key Profitability Drivers: Active Safety

Active safety market

CAGR 2013-18: +18% (>\$0.6B in 2013*)

- Market leader in Vision based solutions with presence in more than 23 car brands** resulting in more than 70% market share*
 - APG business is confirmed growing at triple digit rate with a dominant presence in the premium brands
 - 4th generation under development exploiting full Autonomous Driving in cooperation with Mobileye
- Leading edge RF SiGe BiCMOS technology perfectly fitting Short Range and Long Range Radar Automotive Systems
 - Market leader on 24 GHz Radars
 - First 77 GHz single chip RX-TX available in 2014



Key Profitability Drivers: Infotainment

Infotainment market

CAGR 2013-18: +7.3% (>\$4.4B in 2013*)

Audio

- Long time leader in Audio Power Amplifiers with >45% Market Share*
- More than 10 new products in production in last two years including 6 new digital audio amplifiers
- New Audio Processor ready for market for Asian Car Radios

Positioning and Telematics

- More than 15 years presence in automotive with leading-edge, proprietary solutions for positioning and telematics
- First on the market with a Multi-constellation autonomous receiver covering GPS/USA, GALILEO/EE, GLONASS/Russia, BEIDOU/China single chip solution (Teseo III)





Tuners

- More than 20 years presence in Tuners for Automotive applications
- Consolidated leadership in Satellite Receivers thanks to long lasting partnership with SiriusXM (now at 7th generation)
- Advanced multi standard software defined radio ready for production

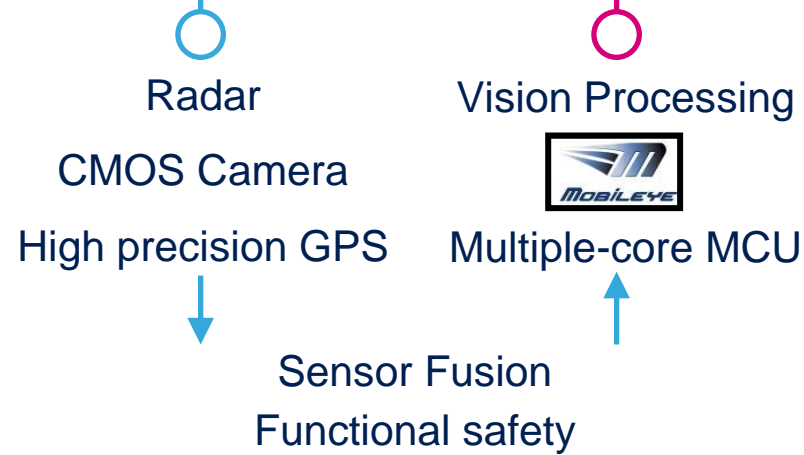


Innovation: A Few Examples

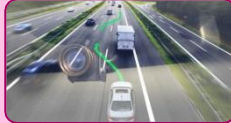



From Active Safety

- 3.9%  **Blind Spot Detection**
- 5.2%  **Lane Departure Warning**
-  **Obstacle Detection**
- 4.4%  **Emergency Braking**

2013: Semi-autonomous driving is a standard option in \$30K cars

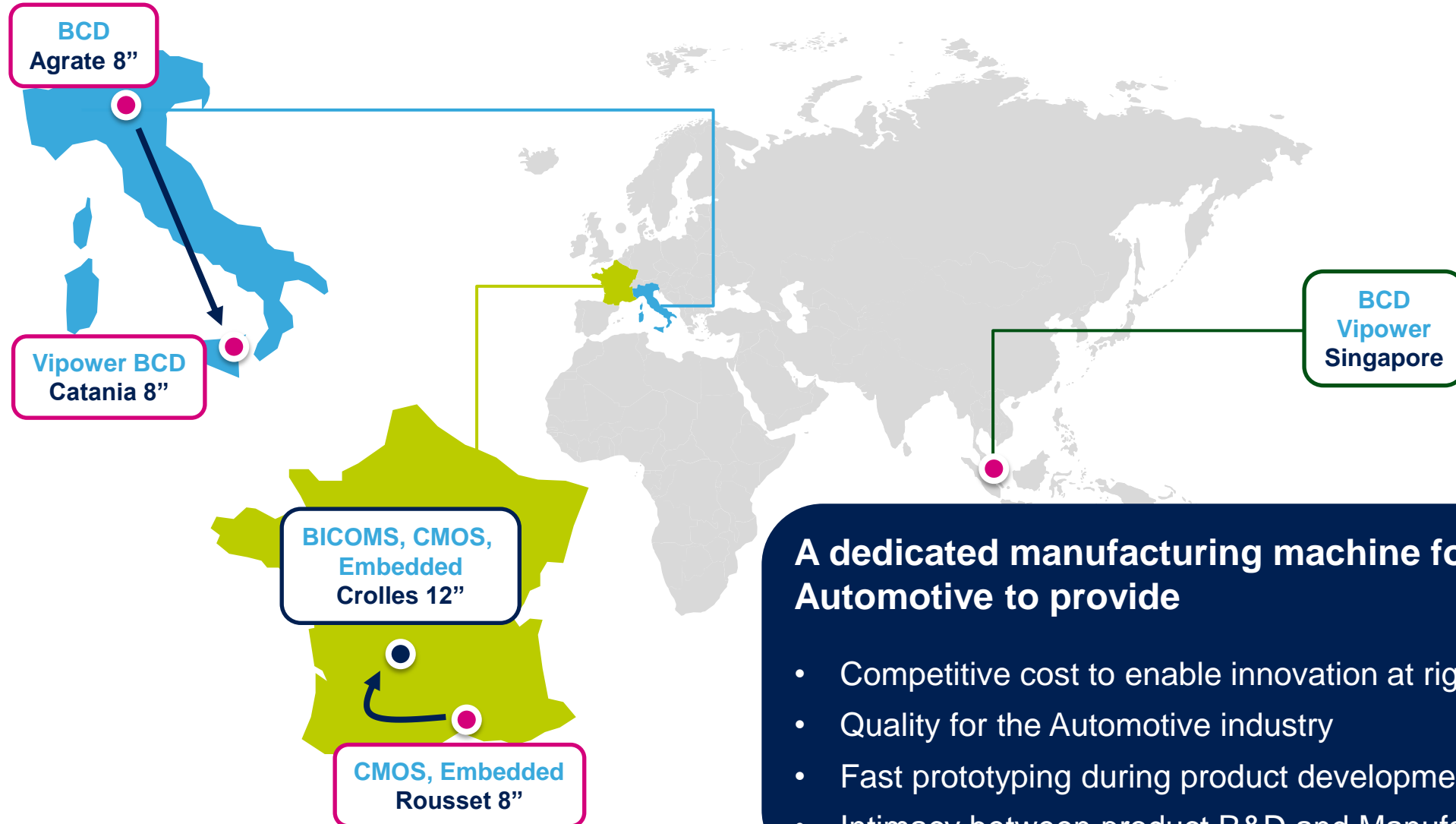


To Autonomous Car

- Auto Steering** 
- Self-adaptive speed control** 
- Traffic Light Detection** 
- Adaptive Braking** 

2020: Full-autonomous driving will become a standard equipment

Manufacturing and Supply Chain Machine Dedicated to Automotive



A dedicated manufacturing machine for Automotive to provide

- Competitive cost to enable innovation at right price
- Quality for the Automotive industry
- Fast prototyping during product development
- Intimacy between product R&D and Manufacturing

APG Main Growth Drivers & Expectations

- Growth above market
 - Reinforce the Smart Power / Intelligent Power leadership
 - Gain market share in 32-bit microcontrollers with the Power Architecture
 - Maintain the leadership in Body, Audio and Infotainment expanding the penetration in the emerging markets
 - Further expand customer base thanks to a system approach and dedicated support structure
- New drivers for profitability
 - New 110nm BCD & 180nm Vipower technology generations
 - 28nm e-FLASH to support our microcontroller growth
 - Enter in new high growing infotainment segments leveraging company IP's
 - Lead Active Safety with strong innovation contents

The APG Value Proposition

**A strong
Automotive
commitment**

- Long term leadership in Automotive
- Wide Automotive coverage thanks to our system competence & products IP's
- State of the arts technology portfolio addressing Automotive applications
- Proprietary Manufacturing machine committed to Automotive
- Solid market growth and intimacy with key customers at WW level

- Smart Power
- 32-bit Microcontrollers dedicated to Automotive
- Infotainment and Advanced Safety

**A wide
application
coverage in
Automotive**