# STMicroelectronics 4Q & FY 2017 Financial Results

January 25, 2018





# 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 •

### **Agenda**

- Welcome
- 2017 Product & Application Review
- 4Q & FY17 Business & Financial performance
- Technology & Manufacturing
- Closing Remarks and Questions & Answers



### **Speakers**



Carlo Bozotti
President & CEO

### Supported by



Jean-Marc Chery
Designated President & CEO



Carlo Ferro
Chief Financial Officer



Georges Penalver Chief Strategy Officer



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Carlo Bozotti President & CEO



# life.augmented

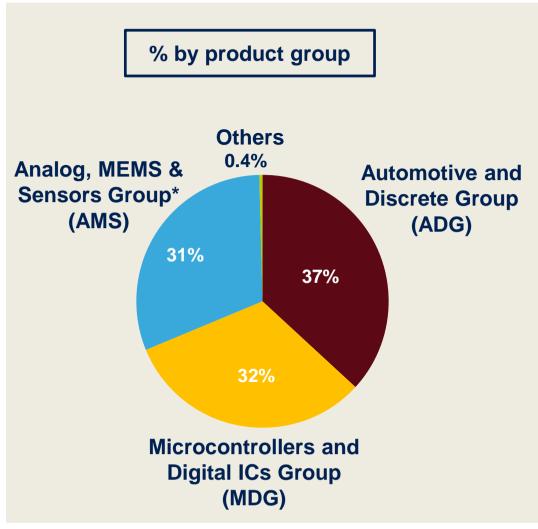
### ST stands for life.augmented

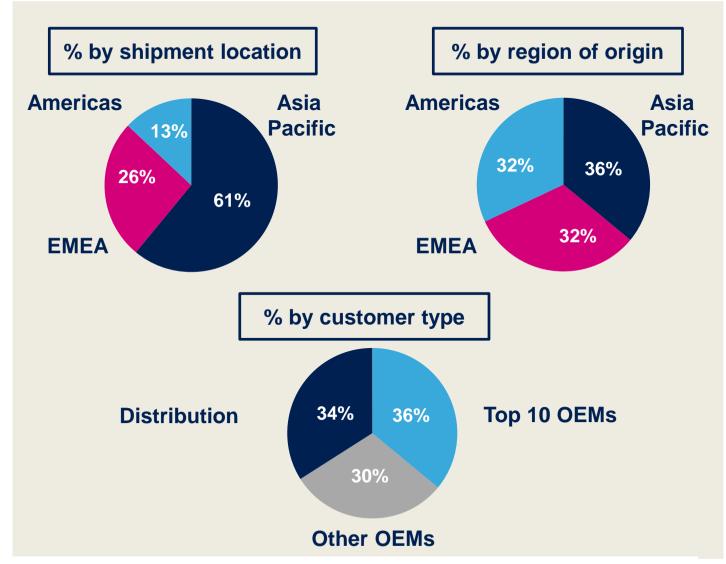
Everywhere microelectronics make a positive contribution to people's lives, ST is there



- A global semiconductor leader with an application strategic focus
- 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

### FY17 Revenues 6







\*Commencing in the fourth quarter of 2017, the Company transferred the Imaging Product Division, previously reported in Others, into the Analog and MEMS Group (AMG) to create the new organization Analog, MEMS and Sensors Group (AMS). The Company has reclassified prior-period revenues.



### **Agenda**

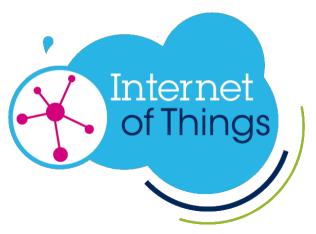
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Georges Penalver Chief Strategy Officer







Smart Things



Smart Home & City



**Smart Industry** 















# Serving More Than 100,000 Customers

#### **Top 10 Customers\*** 2017

**Apple** 

Bosch

Cisco

Conti

HP

Huawei

Nintendo

Samsung

Seagate

Western Digital

\*In alphabetical order



Unified worldwide account management tailored to each account to provide global coverage and service

Standard process, reporting & follow-up in Sales & Marketing worldwide Differentiated approach by type of customer









# Building Blocks 10

### **Processing**

### Security

### Sensing & Actuating

### Connectivity

### Conditioning & Protection

### Motor Control

### Power & Energy Management











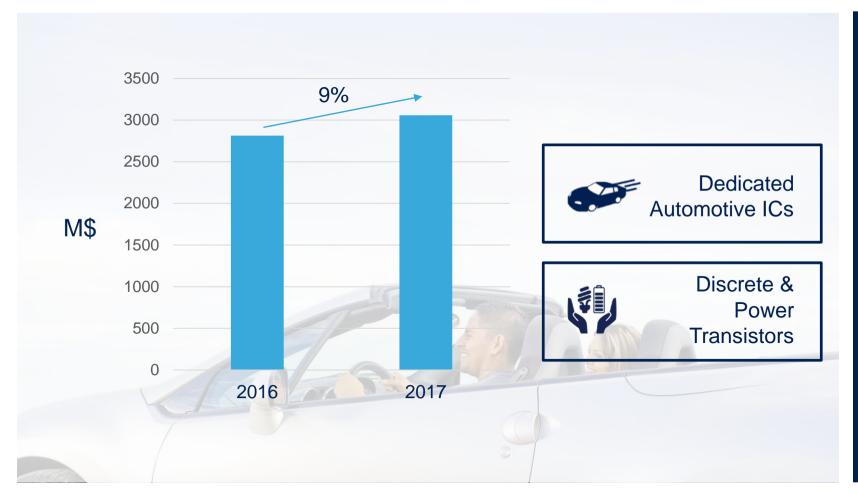








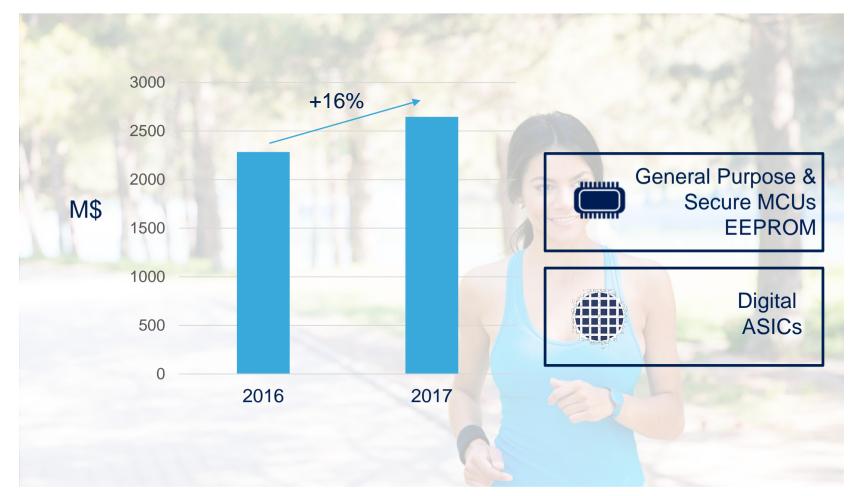
# Automotive & Discrete Group (ADG)







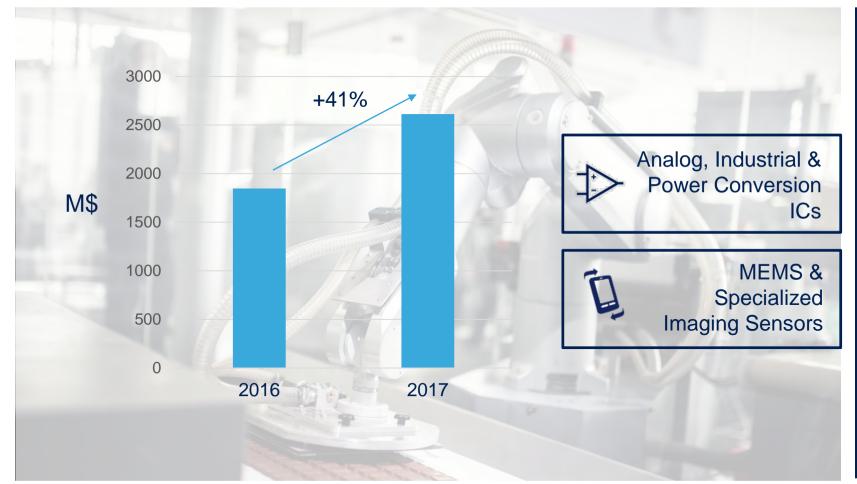
# Microcontrollers & Digital ICs Group (MDG) 12







# Analog, MEMS & Sensors Group (AMS) 13







\*Commencing in the fourth quarter of 2017, the Company transferred the Imaging Product Division, previously reported in Others, into the Analog and MEMS Group (AMG) to create the new organization Analog, MEMS and Sensors Group (AMS). The Company has reclassified prior-period revenues.





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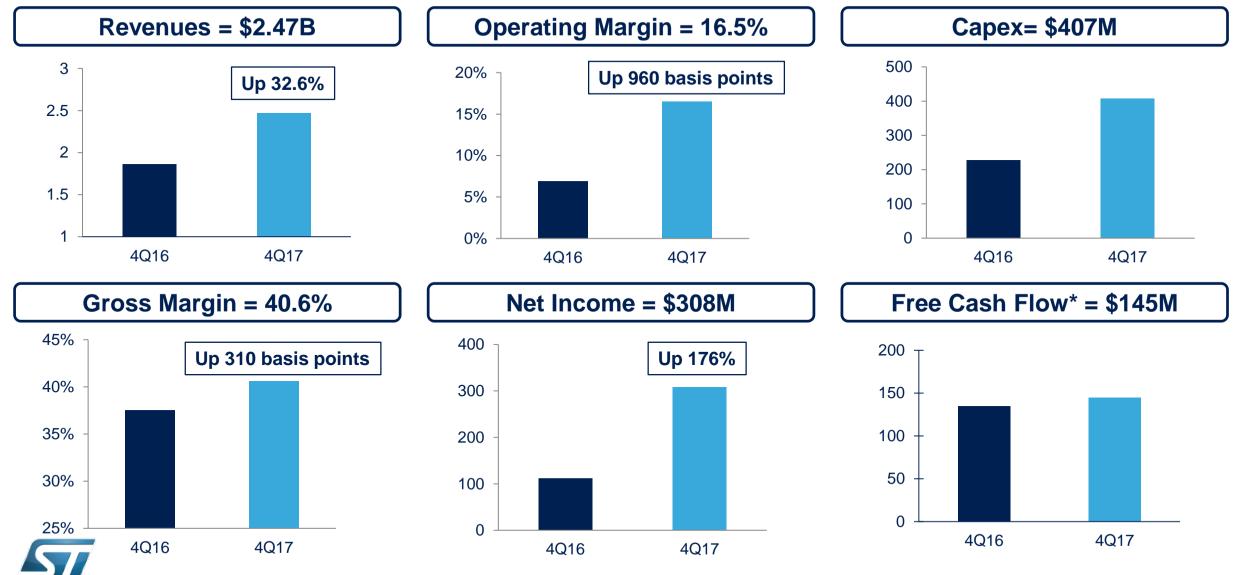
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Carlo Ferro Chief Financial Officer

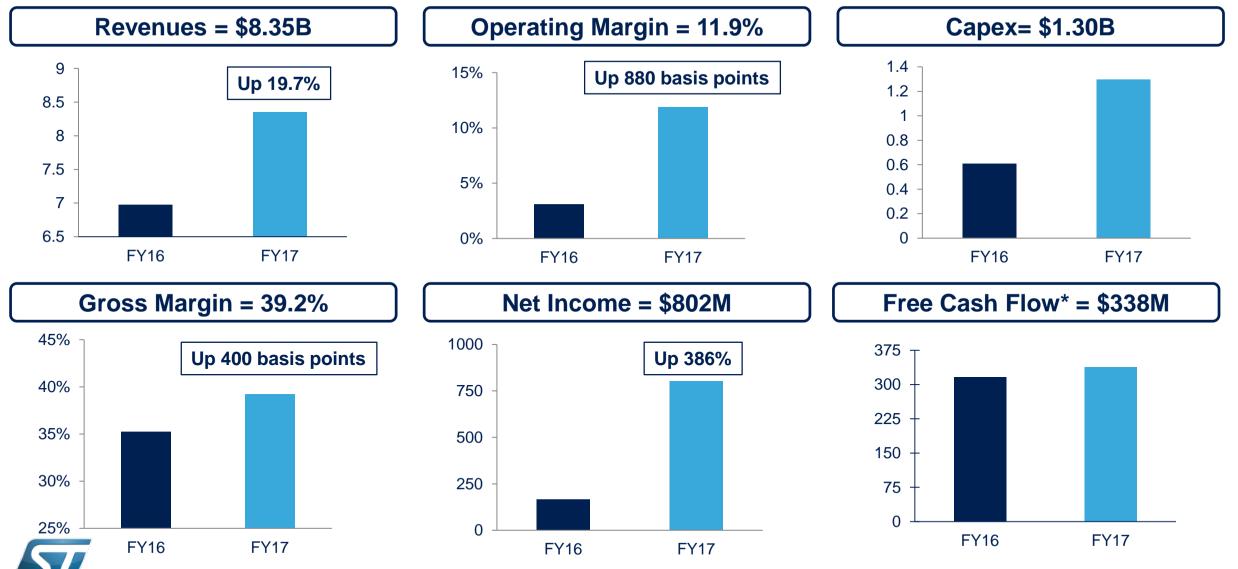


# 4Q17 Financial Highlights



\*Non-U.S. GAAP measure. See Appendix for additional information explaining why the Company believes these measures are important.

# FY17 Financial Highlights

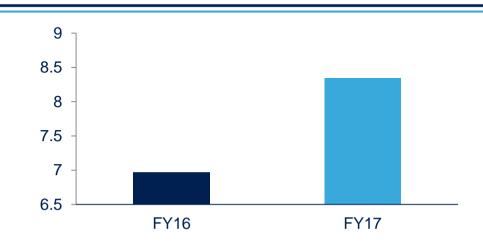


\*Non-U.S. GAAP measure. See Appendix for additional information explaining why the Company believes these measures are important.

# ST Revenues: Synchronized Growth

#### **FY17 Revenues = \$8.35B**

#### **4Q17 Revenues = \$2.47B**



#### FY17 revenues up 19.7% v-o-v

· Strong growth across all product groups and geographies



#### 4Q17 up 32.6% v-o-v

• Double-digit growth across all product groups

#### 4Q17 up 15.5% sequentially

- 200 basis points above high-end of guidance
- Better than seasonal

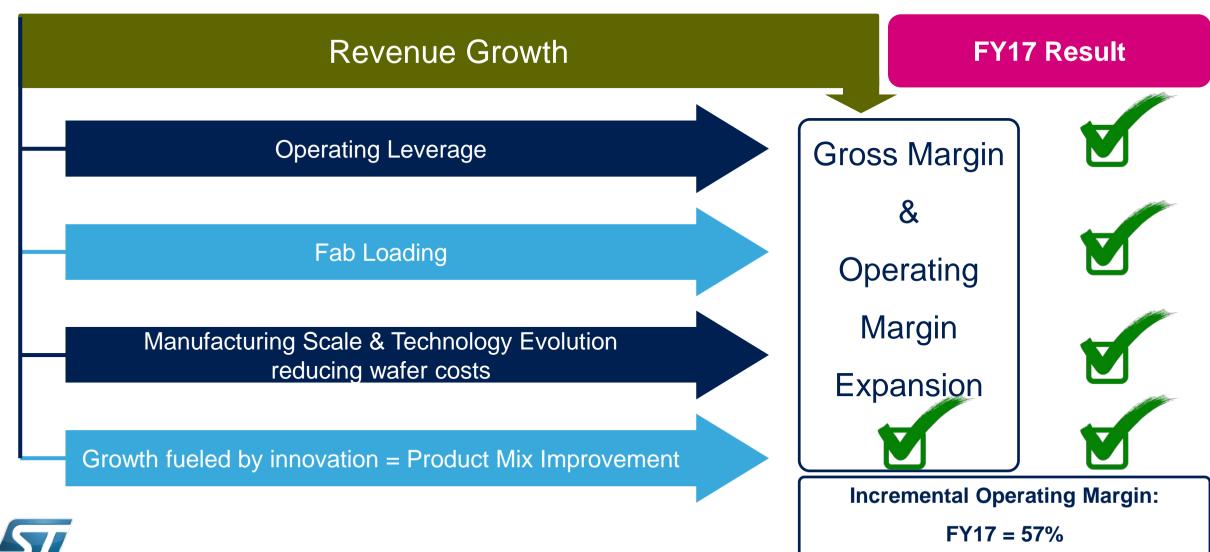




Down sequentially by about 10.0% (+/- 3.5 %) representing y-o-y growth of about 22% at mid-point Better than seasonal trend for Smart Driving and IoT applications Unfavorable dynamics for smartphone applications

# Revenue Growth to Improve Operating Margin

### **Four Drivers**

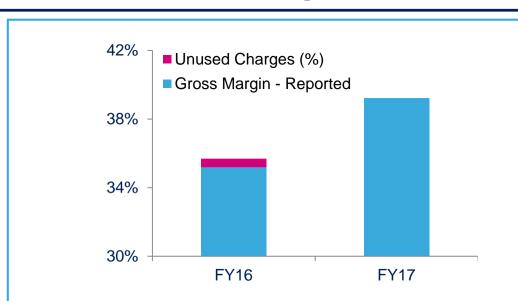




4Q17 = 46%

# Gross Margin Improvement 19

#### **FY17 Gross Margin = 39.2%**



#### **FY17 Gross Margin up 400 basis points**

Benefiting from manufacturing efficiencies, better product mix and improved fab loading partially offset by normal price pressure

### **4Q17 Gross Margin = 40.6%**



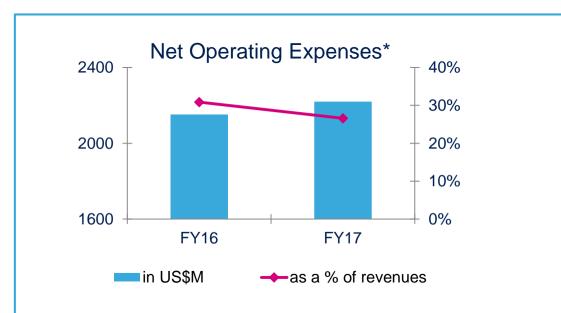
#### **4Q17 Gross Margin better than mid-point of guidance**

- Up 110 basis points sequentially; up 310 basis points y-o-y
- Mainly driven by improved product mix and manufacturing efficiencies partially offset by normal price pressure and negative currency effect, net of hedging



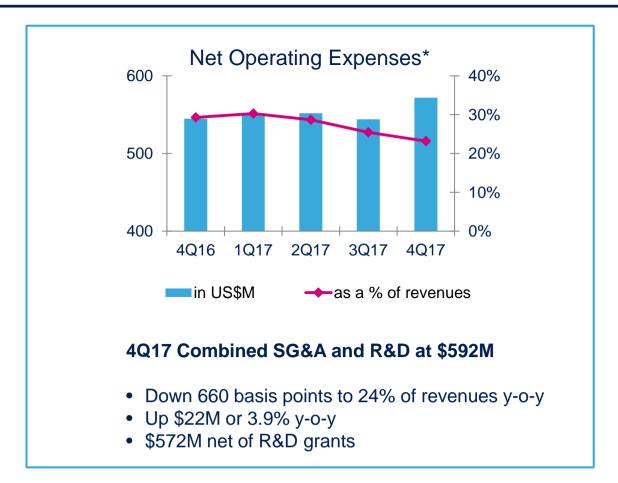
# Operating Expenses Discipline

#### FY17 Average Net Operating Expenses\* Per Quarter: \$555M



#### FY17 Combined SG&A and R&D at \$2.29B

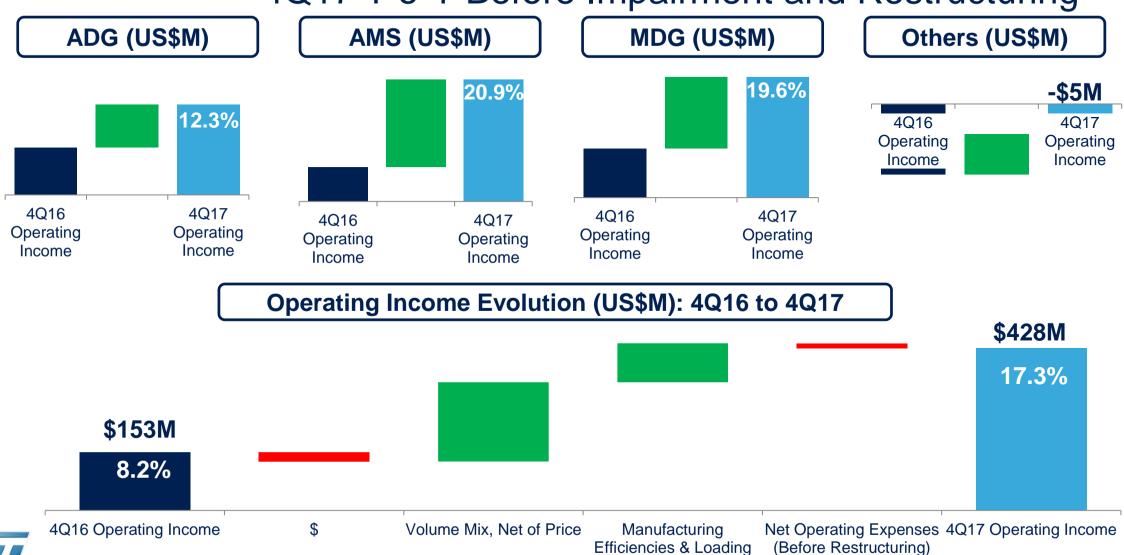
- Down 490 basis points to 27.4% of revenues y-o-y
- Up \$38M or 1.7% y-o-y
- \$2.22B net of R&D grants





### Operating Income Improvement

4Q17 Y-o-Y Before Impairment and Restructuring\*





\*Non-U.S. GAAP measure. See Appendix for additional information explaining why the Company believes these measures are important.

### **Product Group Results**

### Before Impairment and Restructuring\*

#### **Automotive & Discrete**

Revenues = \$3,059M Operating Margin FY17 = 9.5% Operating Margin Q417 = 12.3%



Analog, MEMS & Sensors

Revenues = \$2,613M Operating Margin FY17 = 14.0% Operating Margin Q417 = 20.9%



**Microcontrollers & Digital ICs** 

Revenues = \$2,646M Operating Margin FY17 = 15.2% Operating Margin Q417 = 19.6%



Commencing in the fourth quarter of 2017, the Company transferred the Imaging Product Division, previously reported in Others, into the Analog and MEMS Group (AMG) to create the new organization Analog, MEMS and Sensors Group (AMS). The Company has reclassified prior-period revenues.

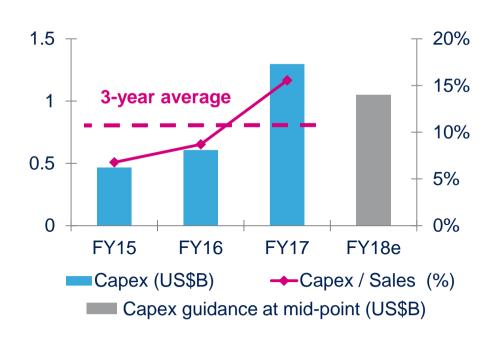
MDG includes set-top box business under phase-out.

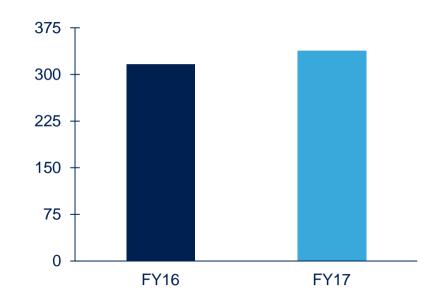


### Free Cash Flow 23

#### **FY17 Capex = \$1.30B**

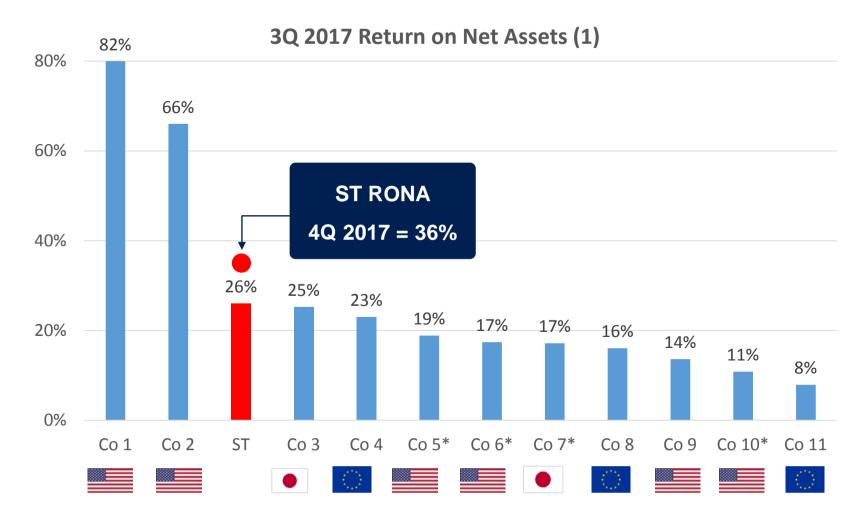
#### FY17 Free Cash Flow\* = \$338M







# Turning Capital into Profits 24





- (1) RONA: Annualised 3Q17 Operating Profit pre-exceptionals / Average Net Assets (Assets Cash/ST Investments Non-financial Liabilities) for 3Q17 and 2Q17, Peers: ADI, AMS, AVGO, IFX, MCHP, MXIM, NXP, ON, RSAS, ROHM, TI.
- Indicates companies that closed acquisitions in 2016 and 2017

# **Enhanced Liquidity**

# \$1.5B Convertible Bond Offering at 0% in July 2017

- Dual-tranche offering (Tranche A and Tranche B for \$750M each) due 2022 and 2024
- ST can satisfy the conversion rights either in cash or shares or a combination of the two, at its selection

# About \$1.2B of financial flexibility with available undrawn committed credit facilities

- \$580M committed credit facilities
- €500M new medium-term credit facility signed with the EIB related to ST's R&D and Capex investments in Europe

# Simultaneous launch of a \$297M share buy-back program

- 18.6M shares for \$297M
- Launched and completed in 3Q17 at an average share price of \$15.99

### Redemption of the \$1.0B 2019 and 2021 Convertible Bond issued in 2014

- ST elected to net share settle the bonds
- ST delivered \$1.0B in cash and 26.8 million shares from treasury shares

Overall cash cost of debt reduced significantly to 0.44%



# Financial Flexibility

End of period (US\$M)	December 31 2017		
Total Liquidity	2,190	2,621	1,964
Total Financial Debt	(1,701)	(2,175)	(1,451)
Net Financial Position*	489	446	513

Cash dividends of \$0.06 per share per quarter \$214M of dividends distributed in 2017

All rating agencies which report on ST on a solicited basis (Moody's, S&P and Fitch) are aligned in rating ST's credit profile within investment grade.





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Jean-Marc Chery
Designated President & CEO

Agenda •



# ST Differentiated Technologies

Smart Power: BCD (Bipolar - CMOS - Power DMOS)

FD-SOI CMOS
FinFET through Foundry

Analog & RF CMOS

eNVM CMOS

**Specialized Imaging Sensors** 

MEMS

For Sensors & Microactuators

Discrete, Passive Integration, Power MOSFET, IGBT, Silicon Carbide, Gallium Nitride

Vertical Intelligent Power

Packaging technologies

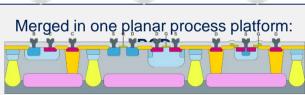
Leadframe – Laminate – Sensor module – Wafer level





More than 30 Billion BCD devices sold

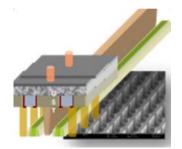
### Focus for 2018





Increased Digital processing capability

BCD10 Enabling SoC Smart Power Solutions



#### **Advanced BCD**

BCD9s (110nm) 1.8V / 8V-60V (with ePCM option)

BCD10 (90nm) 1.2V / 8V-60V (with ePCM option)



Power & High Voltage Evolution

Galvanic Isolation



**High Voltage BCD** 

BCD OFFLINE Up to 1200V

BCD with galvanic isolation up to 6kV

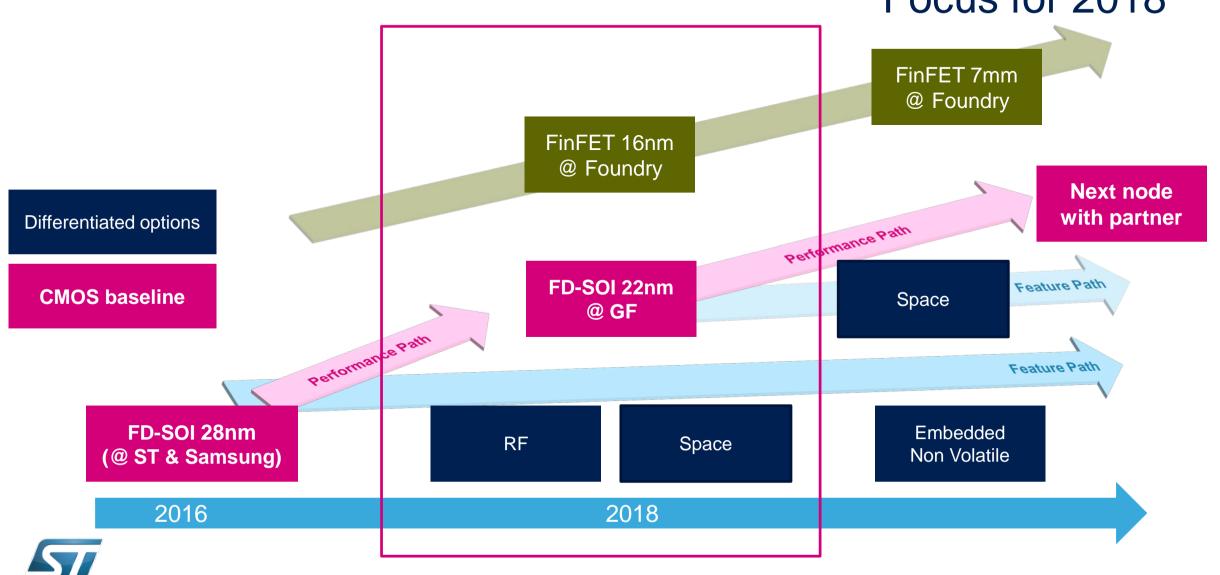




Process customization by application

### **Advanced CMOS**

Focus for 2018



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### Analog & RF CMOS 31

### Focus for 2018

#### 55nm BiCMOS

- SiGe based, Bipolar f<sub>⊤</sub> at 320GHz
- Optical Links up to 400Gbps
- High performance 5G Infrastructure **Products**

#### 55nm BiCMOS >400GHz

- High performance evolution
- Bipolar performance with  $f_T > 400GHz$
- Optical Links up to 1Tbps

#### 28nm FD-SOI + RF

- Leveraging 28nm FD-SOI platform with RF devices operating up to mmW range
- Best performance for mixed signal products covering 5G and 60GHz applications



# eNVM

### Focus for 2018

### In production

### cmos M40 eFLASH 40nm

- High performance logic for 32-bit MCUs
- High robustness
- High reliability with extended temperature

### In deployment

# eSTM40 Proprietary Memory Cell 40nm

- Identical functionality to Split Gate Cell with size as small as Split gate 28nm
- Highly competitive solution
- Based on a ultra low power CMOS 40nm platform with analog and RF features

### Next gen

# ePCM Phase Change Memory 28nm

- Leveraging on 28nm FD-SOI platform
- Above IC Phase Change Memory technology
- Compatibility with the most stringent automotive requirements



# Proprietary Technologies & Differentiated Offering

Advanced pixel & Silicon process

Optical package/module & Imaging system expertise

Time-of-Flight & Specialized Image Sensors

Proximity – Ranging Gesture – Depth map

Differentiated pixels, Visible & IR, High Dynamic Range & Flicker Free Imaging



# Imaging Focus for 2018

### 1 0003 101 20 10

#### **Time-of-Flight – Single Photon Avalanche Diode (SPAD)**

#### 40nm SPAD

- Smaller avalanche photodiode, larger array
- Multi-zone capability for spatial discrimination of scenes

#### 3D SPAD

- Optimized SPAD array for improved resolution and signal detection
- Increased signal processing capability
- Towards LIDAR integrated systems

#### **Global Shutter and Image Sensor Evolution**

#### **Global Shutter**

- Near Infrared light detection
- Strong improvement of Quantum Efficiency for improved sensitivity and energy efficiency

#### **Image Sensor**

- Visible light detection
- Back Side Illuminated and 3D stacked with CMOS bottom-layer for readout
- Flicker-free capability

### MEMS Sensors & Actuators

### Focus for 2018

#### Motion & Environmental MEMS

#### THELMA for Industrial

- Thicker MEMS Layer
- Vacuum package
- Industrial

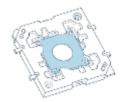
#### **Next Generation THELMA**

- Performance Improvement
- New application (magnetic, resonators)
- Consumer and Automotive

#### Pressure Sensor Technology

- Membrane mechanically decoupled
- ASIC integration with MEMS
- Size reduction
- Waterproofing

#### Piezo Actuators







#### Thin Film Piezoelectric (**PεTRA**)

- Innovative Piezoelectric materials
- Customization by application type:
  - Inkjet printing
  - Camera Autofocus
  - MEMS Speaker

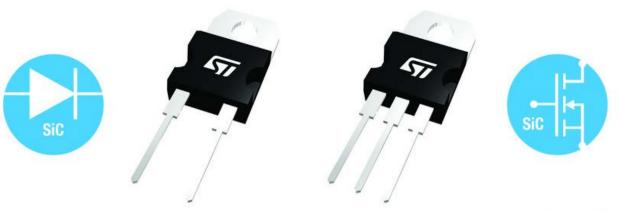


### Silicon Carbide

### Focus for 2018

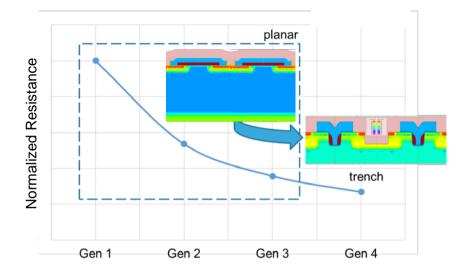






#### **SiC MOSFET Generation 3 & 4**

- Generation 3: Size reduction using 6" production line capabilities
- Generation 4: New structure moving from planar to trench



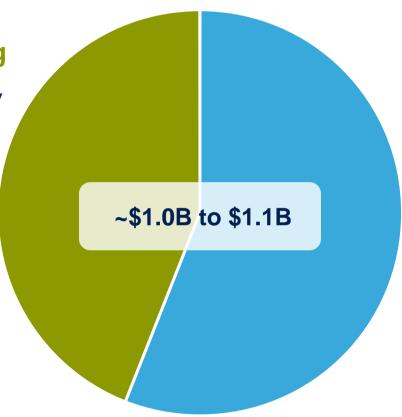




# 2018 Capital Spending

#### **Probing, Assembly & Testing**

- Continued investment in Assembly and Test for Silicon Carbide
- Assembly and Test capacity expansion to support revenue growth and new products particularly for Automotive MCU and advanced BCD
- Increasing the pace of equipment modernization



#### Front-End Manufacturing/R&D

- Further capacity expansion with increased flexibility and new technologies in Crolles 12" within the current footprint
- Continued mix evolution to advanced BCD and preparing for 12" pilot line in Agrate
- 8" advanced BCD capacity growth and
   6" SiC capacity expansion in Catania
- Continued 8" capacity expansion in Singapore for Power Discrete and BCD, widening technology capability



Investments to support ST's innovative product portfolio and prepare for future business growth



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Carlo Bozotti
President & CEO



### 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
- Improvement in operating profitability as a result of all the above

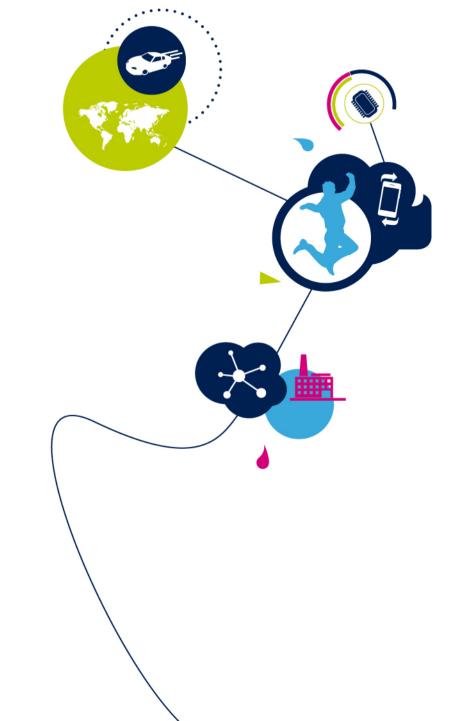


# **Questions & Answers**



# Appendix





### Financial Performance

In US\$M, except EPS	4Q16	1Q17	2Q17	3Q17	4Q17	FY16	FY17
Net Revenues	1,859	1,821	1,923	2,136	2,466	6,973	8,347
Gross Margin	37.5%	37.6%	38.3%	39.5%	40.6%	35.2%	39.2%
Operating Income (Loss) before impairment, restructuring*  Operating Margin before impairment, restructuring*	153 8.2%	134 7.4%	184 9.6%	292 13.7%	428 17.3%	307 4.4%	1,038 12.4%
Net Income – Reported	112	108	151	236	308	165	802
EPS Diluted Adjusted EPS Diluted*	0.13 0.15	0.12 0.12	0.17 0.17	0.26 0.28	0.34 0.36	0.19 0.28	0.89 0.93
Free Cash Flow* Net Financial Position*	135 513	62 518	52 524	80 446	145 489	316 513	338 489
Effective Exchange Rate €\$	1.10	1.08	1.09	1.13	1.15	1.11	1.11



\*Non-U.S. GAAP measure. See Appendix for additional information explaining why the Company believes these measures are important.

### 1Q18 Outlook 42

- "We exited 2017 with very strong revenue growth, and significant improvement in our operating profitability and net income. In 2018, our objective is to leverage our achievements to continue to drive sustainable and profitable growth thanks to our product leadership.
- "We continue to see solid demand across product groups and geographies and in the first guarter we anticipate a better than seasonal trend for Smart Driving and Internet of Things applications, and the unfavorable seasonal dynamics for smartphone applications. Based upon that, as well as our much stronger than expected revenue growth in the previous quarter, we anticipate first quarter revenues to decrease by about 10% on a sequential basis, representing year-over-year growth of about 22% at the midpoint of our guidance range. We expect the gross margin to decrease to about 39.5% at the mid-point.
- "In order to support our anticipated product portfolio mix and to fuel strong revenue growth in the second half of 2018 compared to the first half, we expect to invest this year approximately \$1.0 to \$1.1 billion."
- 1Q18 revenues is expected to decrease about 10.0% on a sequential basis, plus or minus 3.5 percentage points
- 1Q18 gross margin is expected to be about 39.5% plus or minus 2.0 percentage points



Outlook based on an assumed effective currency exchange rate of approximately \$1.18= €1.00 for 1Q18 and includes the impact of existing hedging contracts. 1Q18 will close on March 31, 2018

# Pre-Tax Items to Adjusted Earnings\* 43

#### **OPERATING RESULT** 4Q16 In US\$M 3Q17 4Q17 **U.S. GAAP Net Earnings** 112 236 308 **NET EARNINGS** Impairment & Restructuring 14 24 20 Estimated Income Tax Effect (1) (1) **Adjusted Net Earnings\*** 137 249 327



# Appendix 44

- 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

