



STMicroelectronics N.V. Semi Annual Report 2017

# **Contents**

1.	CORF	PORATE OVERVIEW	
	1.1.	HISTORY AND DEVELOPMENT OF STMICROELECTRONICS	3
	1.2.	Strategy & objectives	3
	1.3.	ORGANIZATIONAL STRUCTURE	3
	1.4.	PRODUCTS AND ACTIVITIES	4
	1.5.	SALES, MARKETING AND DISTRIBUTION	
	1.6.	RESEARCH & DEVELOPMENT	
	1.7.	Sustainability	
2.		ORT OF THE MANAGING BOARD	
	2.1.	BUSINESS OVERVIEW	
	2.2.	SEGMENT INFORMATION	
	2.3.	LIQUIDITY AND FINANCIAL POSITION	
	2.4.	BUSINESS AND FINANCIAL OUTLOOK	
	2.5.	OTHER DEVELOPMENTS IN THE FIRST HALF OF 2017	
	2.6.	RELATED PARTY TRANSACTIONS	
	2.7.	FINANCIAL RISK MANAGEMENT	
	2.8.	BUSINESS RISK INFORMATION	
_	2.9.	AUDITOR'S INVOLVEMENT	
3.		RIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS ("SEMI ANNUAL FINANCIAL STATEMENTS")	
	3.1.	CONSOLIDATED INCOME STATEMENT.	
	3.2.	CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME	
	3.3.	CONSOLIDATED STATEMENT OF FINANCIAL POSITION	
	3.4. 3.5.	CONSOLIDATED STATEMENT OF CHANGES IN EQUITY	
		CONSOLIDATED STATEMENT OF CASH FLOWS.	
	3.6. <i>3.6.1</i>	NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS	
	3.6.2		
	3.6.3		
	3.6.4		
	3.6.5		
	3.6.6		
	3.6.7		
	3.6.8		
	3.6.9		
	3.6.1		
	3.6.1		
	3.6.1	·	
	3.6.1	$\cdot$	
	3.6.1	,	
	3.6.1		
	3.6.1	• •	
	3.6.1		
	3.6.1	, ,	
	3.6.1		
4.	SOLE	MEMBER OF THE MANAGING BOARD'S STATEMENT	
5.		JT STMICROELECTRONICS	



# 1. Corporate overview

# 1.1. History and development of STMicroelectronics

STMicroelectronics N.V. ("STMicroelectronics", "ST" or "the Company") was formed and incorporated in 1987 as a result of the combination of the semiconductor business of SGS Microelettronica (then owned by Società Finanziaria Telefonica (S.T.E.T.), an Italian corporation) and the non-military business of Thomson Semiconducteurs (then owned by the former Thomson-CSF, now Thales, a French corporation). We completed our initial public offering in December 1994 with simultaneous listings on the Bourse de Paris (now known as "Euronext Paris") and the New York Stock Exchange ("NYSE"). In 1998, we also listed our shares on the Borsa Italiana S.p.A. ("Borsa Italiana").

We operated as SGS-Thomson Microelectronics N.V. until May 1998, when we changed our name to STMicroelectronics N.V. We are organized under the laws of The Netherlands, with our corporate legal seat in Amsterdam, The Netherlands, and our head offices at WTC Schiphol Airport, Schiphol Boulevard 265, 1118 BH Schiphol, The Netherlands. Our telephone number there is +31-20-654-3210. Our headquarters and operational offices are managed through our wholly owned subsidiary, STMicroelectronics International N.V., and are located at 39 Chemin du Champ des Filles, 1228 Plan-Les-Ouates, Geneva, Switzerland. Our main telephone number there is +41-22-929-2929. Our agent for service of process in the United States related to our registration under the U.S. Securities Exchange Act of 1934, as amended, is Corporation Service Company (CSC), 80 State Street, Albany, New York, 12207. Our operations are also conducted through our various subsidiaries, which are organized and operated according to the laws of their country of incorporation, and consolidated by STMicroelectronics N.V.

# 1.2. Strategy & objectives

We are a global leader in the semiconductor market, serving a broad range of customers across different areas. Our strategy takes into account the evolution of the markets we serve and the environment and opportunities we see for the years to come. We focus on developing industry-leading products and solutions for the application areas which are expected to experience solid growth rates driven by long-term trends affecting peoples' lives. These trends include population ageing and concentration in cities, ubiquitous connectivity, and the need for more energy efficiency across all applications.

Our products are used in a wide variety of applications, which can be broadly grouped into three areas: automotive systems, industrial systems and consumer connected devices. We enable smarter driving by making vehicles safer, more environmentally friendly and more connected. We help make smarter homes, cities, workplaces and factories in which things can be done more efficiently and flexibly, in a more sustainable manner, safer and with a better experience for the people at the center. We enable creators of smart connected consumer devices to develop and take to market their devices quickly and efficiently. In doing this we ensure that ST is found everywhere microelectronics make a positive and innovative contribution to people's lives. By getting more from technology to get more from life, ST stands for life.augmented.

# 1.3. Organizational structure

We are organized in a matrix structure with geographic regions interacting with product lines, both supported by shared technology and manufacturing operations and by central functions, designed to enable us to be closer to our customers and to facilitate communication among the R&D, production, marketing and sales organizations.

While STMicroelectronics N.V. is the parent company, we also conduct our operations through service and manufacturing activities from our subsidiaries. We provide certain administrative, human resources, legal, treasury, strategy, sourcing, marketing and other overhead services to our consolidated subsidiaries pursuant to service agreements for which we recover the cost.



### 1.4. Products and activities

We are a global independent semiconductor company that designs, develops, manufactures and markets a broad range of products, including discrete and standard commodity components, application-specific integrated circuits ("ASICs"), full custom devices and semi-custom devices and application-specific standard products ("ASSPs") for analog, digital and mixed-signal applications. In addition, we participate in the manufacturing value chain of smartcard products, which include the production and sale of both silicon chips and smartcards.

Our diverse product portfolio is built upon a unique, strong foundation of proprietary and differentiated leading-edge technologies. We use all of the prevalent function-oriented process technologies, including complementary metal-on silicon oxide semiconductors ("CMOS"), bipolar and non-volatile memory technologies. In addition, by combining basic processes, we have developed advanced systems-oriented technologies that enable us to produce differentiated and application-specific products, including our pioneering fully depleted silicon-on-insulator ("FD-SOI") technology offering superior performance and power efficiency compared to bulk CMOS, bipolar CMOS technologies ("Bi-CMOS") and radio frequency silicon-on-insulator ("RF-SOI") for mixed-signal and high-frequency applications, and diffused metal-on silicon oxide semiconductor ("DMOS") technology and bipolar, CMOS and DMOS ("BCD") technologies for intelligent power applications, Silicon Carbide ("SiC") for high-efficiency systems, micro-electro-mechanical systems ("MEMS"), embedded memory technologies and differentiated Imaging Technologies. This broad technology portfolio, a cornerstone of our strategy, enables us to meet the increasing demand for System-on-Chip ("SoC") and System-in-Package ("SiP") solutions. Complementing this depth and diversity of process and design technology is our IP portfolio which we also use to enter into broad patent cross-licensing agreements with other major semiconductor companies.

Our operating segments are as follows:

- Automotive and Discrete Group (ADG), comprised of all dedicated automotive ICs (both digital and analog), and discrete and power transistor products;
- Analog and MEMS Group (AMG), comprised of low-power high-end analog ICs (both custom and general purpose) for all markets, smart power products for Industrial, Computer and Consumer markets, Touch Screen Controllers, Low Power Connectivity solutions (both wireline and wireless) for IoT, power conversion products, metering solutions for Smart Grid and all MEMS products, either sensors or actuators;
- Microcontrollers and Digital ICs Group (MDG), comprised of general purpose and secure microcontrollers, EEPROM memories, and digital ASICs as well as restructured businesses such as set-top box ICs or former ST-Ericsson products.

"Others" includes all the financial values related to the Imaging Product Division (including the sensors and modules from our Time of Flight technology), Subsystems and other products, as well as items not allocated to the segments such as impairment, restructuring charges and other related closure costs, unused capacity charges, strategic or special research and development programs and other minor unallocated expenses such as: certain corporate-level operating expenses, patent claims and litigation, and other costs that are not allocated to the segments.

# 1.5. Sales, Marketing and Distribution

Our sales and marketing is organized by a combination of country/area coverage and key accounts coverage with the primary objective being to accelerate sales growth and gain market share, particularly with regards to: strengthening the effectiveness of the development of our global accounts; boosting demand creation through an enhanced focus on geographical coverage; and establishing regional sales and marketing teams that are fully aligned with our product lines.

We have three regional sales organizations: EMEA; Americas; and Asia Pacific. Our regional sales organizations have a similar structure to enhance coordination in go-to-market activities and are strongly focused on revenue growth. The sales and marketing activities performed by our regional sales organizations are supported by product marketing that is carried out by each product group, which also includes product development functions. This matrix system reinforces our sales and marketing activities and our broader strategic objectives. An important component of our regional sales and marketing efforts is to expand our customer base, which we seek to do by adding sales representatives, regional competence centers and new generations of electronic tools for customer support.



# 1.6. Research & Development

Since our creation, we have maintained a solid commitment to R&D. Almost one-fifth of our employees work in R&D for product design/development and technology. Our innovation in semiconductor technology as well as in hardware and software contribute to our making successful products that create value for us and our customers. Our complete design platforms, including a large selection of IPs and silicon-proven models and design rules, enable the fast development of products designed to meet customer expectations in terms of reliability, quality, competitiveness in price and time-to-market. We contribute to making our customers' products more efficient, more appealing, more reliable and safer.

We draw on a rich pool of chip fabrication technologies, including advanced FD-SOI, CMOS, specialized imaging, embedded non-volatile memories, mixed-signal, analog and MEMS and power processes. We combine front-end manufacturing and technology R&D under the same organization to ensure a smooth flow of information between the R&D and manufacturing organizations. We leverage significant synergies and shared activities between our product groups to cross-fertilize them. Technology R&D expenses are allocated to the relevant product groups on the basis of the estimated efforts.

We have advanced R&D centers which offer us a significant advantage in quickly and cost effectively introducing products. Furthermore, we have established a strong culture of partnership and through the years have created a network of strategic collaborations with key customers, suppliers, competitors, and leading universities and research institutes around the world.

# 1.7. Sustainability

STMicroelectronics was one of the first global industrial companies to recognize the importance of environmental responsibility. Our initial efforts began in the early 1990s and in 2017 we published our 20th Sustainability Report. Today, sustainability at STMicroelectronics is about creating value and minimizing risks for our customers, investors, employees and partners through the effective management of our economic, environmental and social impacts to ensure long-term business success. Our approach to sustainability is expressed at a high level in our Code of Conduct and Company policies and, in a more operational way, in our Sustainability strategy. Our Sustainability strategy was refreshed and enhanced in 2014 to ensure the Company remains focused on the most material topics for our business and stakeholders. In 2015 we deployed this new strategy across all of our sites with initiatives and programs related to people, business, environment and our operations.

STMicroelectronics is included in some of the main Sustainability indices (FTSE4Good, Euronext Vigeo, ECPI).

Further information on ST's Sustainability efforts can be found at: http://www.st.com/web/en/about st/company reports st.html



# 2. Report of the Managing Board

# 2.1. Business overview

The total available market is defined as the "TAM", while the serviceable available market, the "SAM", is defined as the market for products produced by us (which consists of the TAM and excludes major devices such as Microprocessors ("MPUs"), Dynamic random-access memories ("DRAMs"), optoelectronics devices, Flash Memories and the Wireless Application Specific market products such as Baseband and Application Processor).

Based on the industry data published by World Semiconductor Trade Statistics (WSTS), semiconductor industry revenues increased in the first half of 2017 on a year-over-year basis by approximately 21% for the TAM and 15% for the SAM to reach approximately \$190 billion and \$84 billion, respectively.

Our effective average exchange rate for the first half of 2017 was \$1.09 for €1.00 compared to \$1.11 for €1.00 for the first half of 2016.

Our first half 2017 revenues amounted to \$3,744 million, a 12.9% increase on a year-over-year basis. This year-over-year increase is mainly due to an approximate 30% increase in volume, partially offset by a 17% decrease in average selling prices, mainly due to a less favorable product mix. Excluding businesses undergoing a phase-out (mobile legacy products and set-top box), our revenues increased by 14.1%. AMG revenues were up 24.1% mainly supported by higher volumes of 21% and to a lesser extent, to higher average selling prices of 3%, due to product mix improvements. MDG revenues increased 10.7% compared to the prior period on strong growth in general purpose microcontrollers, partially offset by lower revenues for products undergoing phase-out. MDG experienced an increase of 17% in volumes partially offset by a decrease in average selling prices of 6%. ADG revenues increased 5.1%, driven by higher power discrete sales, resulting in higher volumes, partially offset by the evolution of the product mix. Imaging Product Division revenues increased significantly in the first half of 2017 compared to the prior period.

Our first half 2017 gross margin reached 35.4% of revenues, representing an increase of 500 basis points compared to the prior year period, mainly due to improved manufacturing efficiencies, a more favorable product mix and lower level of unused capacity charges, partially offset by decreasing selling prices. Unused capacity charges amounted to \$2 million in the first half of 2017 compared to \$18 million in the year-ago period.

Combined selling, general and administrative (SG&A) and research and development (R&D) expenses decreased to \$1,010 million for the first half of 2017, compared to \$1,049 million in the prior year period, positively impacted by favorable currency effects, net of hedging, and the benefit of our restructuring plans, partially offset by salary and variable incentive increases.

In the first half of 2017, our combined other income and expenses amounted to an income of \$61 million, substantially flat compared to the prior year period. Lower income from R&D funding experienced in the first half of 2017 compared to the prior year period was mostly offset by the increase of gains on forward contracts and other currency derivatives incurred over the same period.

Operating profit in the first half of 2017 improved significantly by \$353 million to \$375 million compared to \$22 million in prior year.

Finance costs amounted to \$150 million in the first half of 2017, increasing from \$23 million in the prior year period. The year-over-year significant increase is mostly related to the Senior Bonds fair value adjustment that generated a cost of \$131 million in the first half of 2017. A significant portion of this impact is compensated by the favorable purchase price of the treasury shares to be distributed following the net share settlement decision for Tranche A bondholders (not reflected in the income statement).



In the first half of 2017, our free cash flow (a non GAAP measure) amounted to \$113 million, a \$34 million increase compared to the first half of 2016.

# 2.2. Segment information

The Group operates in two business areas: Semiconductors and Subsystems.

In the Semiconductors business area, the Group designs, develops, manufactures and markets a broad range of products, including discrete and standard commodity components, application-specific integrated circuits ("ASICs"), full custom devices and semi-custom devices and application-specific standard products ("ASSPs") for analog, digital, and mixed-signal applications. In addition, the Group further participates in the manufacturing value chain of Smartcard products, which includes the production and sale of both silicon chips and Smartcards.

Our reportable segments are as follows:

- Automotive and Discrete Group (ADG), comprised of all dedicated automotive ICs (both digital and analog), and discrete and power transistor products.
- Analog and MEMS Group (AMG), comprised of low-power high-end analog ICs (both custom and general purpose)
  for all markets, smart power products for Industrial, Computer and Consumer markets, Touch Screen Controllers,
  Low Power Connectivity solutions (both wireline and wireless) for IoT, power conversion products, metering
  solutions for Smart Grid and all MEMS products, either sensors or actuators.
- Microcontrollers and Digital ICs Group (MDG), comprised of general purpose and secure microcontrollers, EEPROM memories, and digital ASICs as well as restructured businesses such as Set-Top-box ICs or former ST-Ericsson products.

"Others" includes all the financial values related to the Imaging Product Division (including the sensors and modules from our Time of Flight technology), Subsystems and other products, as well as items not allocated to the segments such as impairment, restructuring charges and other related closure costs, unused capacity charges, strategic or special research and development programs and other minor unallocated expenses such as: certain corporate-level operating expenses, patent claims and litigation, and other costs that are not allocated to the segments.

In the Subsystems business area, the Group designs, develops, manufactures and markets subsystems and modules for the telecommunications, automotive and industrial markets including mobile phone accessories, battery chargers, ISDN power supplies and in-vehicle equipment for electronic toll payment. Based on its immateriality to its business as a whole, the Subsystems business area does not meet the requirements for an operating segment as defined in the IFRS guidance.

Please refer to note 3.6.5 of the Semi Annual Financial Statements for further information.

# 2.3. Liquidity and financial position

We maintain a significant cash position and a low debt-to-equity ratio, which provide us with adequate financial flexibility. As in the past, our cash management policy is to finance our investment needs mainly with net cash generated from operating activities.

During the first half of 2017, our net cash increased by \$25 million, due to the net cash from operating activities exceeding the net cash used in investing activities and financing activities.

The evolution of our cash flow for the comparable periods is set forth below:

	(unaud	dited)
In millions of USD	July 1, 2017	July 2, 2016
Net cash from operating activities	791	464
Net cash used in investing activities	(679)	(386)
Net cash used in financing activities	(104)	(167)
Effect of change in exchange rates	17	-
Net cash increase (decrease)	25	(89)

### Net cash from operating activities

The net cash from operating activities for the first half of 2017 was \$791 million, increasing significantly compared to the prior year period mainly due to higher net income and more favorable changes in net working capital. Net cash from operating activities is the sum of (i) the net income (loss) adjusted for non-cash items and (ii) changes in net working capital.

# Net cash used in investing activities

Investing activities used \$679 million of net cash in the first half of 2017, mainly due to payments for tangible assets, net of proceeds, for a total of \$526 million, as well as investment in intangible assets for \$153 million of which the largest part is related to the capitalization of development costs. Investing activities used \$386 million of net cash in the first half of 2016, mainly due to payments for tangible assets, net of proceeds, for a total of \$236 million, as well as investment in intangible assets for \$150 million of which the largest part is related to the capitalization of development costs.

# Net cash used in financing activities

Net cash used in financing activities was \$104 million in the first half of 2017, compared to \$167 million in the first half of 2016 and consisted mainly of \$101 million of dividends paid to shareholders.

# Free cash flow (non GAAP measure)

Our free cash flow was positive \$113 million for the first half of 2017, compared to positive \$79 million for the first half of 2016.

Free Cash Flow, a non GAAP measure, is defined as (i) net cash from operating activities plus (ii) net cash used in investing activities, excluding payment for purchases (and proceeds from the sale) of marketable securities, and net cash variation for joint ventures deconsolidation, which are considered as temporary financial investments. The result of this definition is ultimately net cash from operating activities plus payment for purchase and proceeds from sale of tangible, intangible and financial assets and proceeds received in the sale of businesses and cash paid for business acquisitions. 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 operations. Free Cash Flow is not a GAAP measure and does not represent total cash flow since it does not include the cash flows generated by or used in financing activities. Free Cash



Flow reconciles with the total cash flow and the net cash increase (decrease) by including the payment for purchases (and proceeds from the sale) of marketable securities and net cash variation from joint ventures deconsolidation, the net cash from (used in) financing activities and the effect of changes in exchange rates. In addition, our definition of Free Cash Flow may differ from definitions used by other companies.

# Financial position

As at July 1, 2017, our total financial resources amounted to \$1,989 million and were comprised of:

- \$1,654 million of cash and cash equivalents,
- \$335 million invested in U.S. Government Treasury Bonds with an average rating of Aaa/AA+/AAA from Moody's, S&P and Fitch, respectively, reported at fair value.

As at July 1, 2017, the aggregate amount of our interest bearing loans and borrowings, including the current portion, was \$1,497 million, which included:

- \$511 million in European Investment Bank loans (the "EIB Loans"),
- \$969 million in the Senior Bonds,
- \$17 million in other long-term loans and loans from other funding programs.

The EIB Loans are comprised of two long-term amortizing credit facilities as part of our R&D funding programs. The first, signed in 2010, is a €350 million multi-currency loan to support our industrial and R&D programs. It was drawn mainly in U.S. dollars for an amount of \$321 million and only partially in Euros for an amount of €100 million, of which \$217 million remained outstanding as of July 1, 2017. The second, signed in 2013, is a €350 million multi-currency loan which also supports our R&D programs. It was drawn in U.S. dollars for an amount of \$471 million, of which \$294 million is outstanding as of July 1, 2017. At July 1, 2017, the amounts available under our back-up and uncommitted credit facilities were unutilized.

The Senior Bonds were issued on July 3, 2014, for a principal amount of \$1,000 million (Tranche A for \$600 million and Tranche B for \$400 million), due 2019 and 2021, respectively, for net proceeds of approximately \$994 million. Tranche A bonds were issued as zero-coupon bonds while Tranche B bonds bear a 1% per annum nominal interest, payable semiannually. The conversion price at issuance was approximately \$12 on each tranche. On October 3, 2016, the conversion price was adjusted up to 1.24% on each tranche, pursuant dividend adjustment symmetric provision, which corresponds to 16,491 and 16,366 equivalent shares per each \$200,000 bond par value for Tranche A and Tranche B, respectively. The Senior Bonds are convertible by the bondholders if certain conditions are satisfied or are callable by the issuer upon certain conditions, in both cases on a full-cash, full-shares or net-share settlement basis at issuer's decision. Upon initial recognition, the proceeds were allocated between debt and embedded components by determining the fair value of the embedded non-equity derivative instruments using an income approach. In the second guarter of 2017, we released an optional redemption notice to inform bondholders of our intention to early redeem the Tranche A bonds in July 2017. As a consequence, bondholders have exercised their conversion rights for \$598 million nominal value on the total of \$600 million of the Tranche A. As we have elected to net share settle the bonds, each conversion will follow the process defined in the original terms and conditions of the convertible bonds, which will determine the actual number of shares to be transferred upon each conversion. As a result we will deliver \$598 million in cash and about 13 million shares from outstanding treasury shares (estimated number of shares as of August 23, 2017) and will complete the redemption by the end of August 2017. No conversions were effectively completed as of the end of the first half of 2017. The conversion will consequently be reported in the second half of 2017, when the consideration is transferred to the bondholders. As at July 1, 2017, the holders of Tranche B bonds have full conversion rights and the conversion option was in the money.

Our current ratings with the three major rating agencies that report on us on a solicited basis, are as follows: S&P: "BBB-" with stable outlook; Fitch: "BBB-" with positive outlook and on June 13, 2017, Moody's affirmed our senior unsecured rating of "Ba1" and revised the outlook from stable to positive.



# 2.4. Business and financial outlook

Looking at 2017 overall and based on current visibility, we expect our revenues to be at the high-end of the range that we gave at our Capital Markets Day held on May 11, 2017 (about 14% year-over-year revenue growth, plus or minus 1.5 percentage points).

Our policy is to modulate our capital spending according to the evolution of the semiconductor market. Based on increased demand and ongoing strategic initiatives, including new specialized products, we are accelerating our capital spending, aligned to the substantial revenue opportunities we see this year, particularly in the second half. Based upon a combination of new products and higher customer demand, we now anticipate capital investment in 2017 above our initial plan (\$1.0 billion to \$1.1 billion) to a range of about \$1.25 billion to \$1.3 billion. This investment will support both 2017 revenues and our future growth programs. Specifically, the Company is investing in 300 mm front-end manufacturing and in back-end assembly and test to support new products. In particular, we anticipate a newly won program to ramp with substantial revenues in the second half of 2017. We see 2017 as a special period, with unique new product opportunities which require internal manufacturing due to technology specialization. We expect however, over the cycle, to remain at our strategic capital spending model with capex at or below 10% of sales. The most important of our 2017 capital expenditure projects are expected to be for our front end facilities: (i) in our 300 mm fab in Crolles, France expanding within existing infrastructure capacity to support the production ramp up of a new program from the second half of 2017 onward; (ii) mix evolution, and a few selected programs of capacity growth and infrastructure preparation, mainly in the area of mixed signal and discrete processes, including the Silicon Carbide (SiC) technology; (iii) qualification and ramp-up of technologies in 200 mm in Singapore, Agrate, Italy, as well as the expansion of facilities and the increase of capacity in our 200 mm fabs in Catania, Italy and Singapore. To accelerate increased capacity in 200 mm in Singapore, on July 26, 2017, we entered into an agreement with Micron Technologies to acquire, in several steps over time, and subject to meeting certain local Singapore requirements, the building facilities and tools of the former Numonyx fab. The most important 2017 capital investment for our back-end facilities are expected to be: (i) capacity growth on certain package families, to sustain market demand and secure ramp up of specialty products for strategic customers; (ii) modernization and rationalization of package lines targeting cost savings benefits; and (iii) specific investments in the areas of factory automation, quality, environment and energy savings. Additionally, we invest on overall capacity adjustment in final testing and wafers probing (EWS) to meet increased demand and a changed product mix as well as we invest in quality, safety, maintenance, productivity and cost savings in both 150 mm, 200 mm front-end fabs and back end plants.

We will continue to monitor our level of capital spending by taking into consideration factors such as trends in the semiconductor industry and capacity utilization. We expect to need significant financial resources in the coming years for capital expenditures and for our investments in manufacturing and R&D. We plan to fund our capital requirements from cash provided by operating activities, available funds and support from third parties, and may have recourse to borrowings under available credit lines and, to the extent necessary or attractive based on market conditions prevailing at the time, the issuance of debt, convertible bonds or additional equity securities. A substantial deterioration of our economic results, and consequently of our profitability, could generate a deterioration of the cash generated by our operating activities. Therefore, there can be no assurance that, in future periods, we will generate the same level of cash as in prior years to fund our capital expenditure plans for expanding/upgrading our production facilities, our working capital requirements, our R&D and manufacturing costs.

In support of our R&D activities, we signed the Nano2017 program with the French government, which was approved by the European Union in the second quarter of 2014 and, in our role as Coordinator and Project Leader of Nano2017, we have been allocated an overall funding budget of about €400 million for the period 2013-2017, subject to the conclusion of agreements every year with the public authorities and linked to the achievement of technical parameters and objectives. Based on the activity of each sponsored project, from the beginning of the program to the end of the second quarter of 2017, we have recognized grants for a cumulated amount of €383 million. The Nano2017 contract contains certain covenants which, in the event they are not fulfilled, may affect our ability to access such funding. Additionally, a portion of Nano2017 program is subject to a payback clause ("financial return"), depending on the future cumulated sales for certain products within the scope of the funded program on the period from 2018 to 2023. The financial return corresponds to



the payment in 2024 of the original funded amount (€37 million) multiplied by a rate from 0% to 250%, depending on the cumulative amount of future sales. Based on current visibility, we estimate the return rate to reach 108%.

As a result of our exit from the ST-Ericsson joint venture, our exposure is limited to covering 50% of ST-Ericsson's needs to complete the wind-down, which are estimated to be negligible, based on our current visibility of the ST-Ericsson liquidation balance.

We believe that we have the financial resources needed to meet our currently projected business requirements for the next twelve months, including capital expenditures for our manufacturing activities, working capital requirements, approved dividend payments and the repayment of our debts in line with their maturity dates.

# 2.5. Other developments in the First Half of 2017

On April 27, we announced the appointment of Jean-Marc Chery as Deputy CEO, effective July 1, 2017 upon shareholder approval of the reappointment of Carlo Bozotti as the sole member of the Managing Board and President and CEO of ST at our June 20, 2017 Annual General Meeting of Shareholders. In his new role, Chery holds overall responsibility for technology and Manufacturing as well as for Sales and Marketing and continues to report to Carlo Bozotti. Also effective July 1, we have begun operating under a new organization and the executive team is now composed of:

- Jean-Marc Chery, Deputy CEO
- Orio Bellezza, President, Global Technology and Manufacturing
- Marco Cassis, President, Global Sales and Marketing
- Claude Dardanne, President, Microcontrollers and Digital ICs Group
- Carlo Ferro, Chief Financial Officer and President, Finance, Legal, Infrastructure and Services
- Marco Monti, President, Automotive and Discrete Group
- Georges Penalver, Chief Strategy Officer and President, Strategy, Communication, Human Resources and Quality
- Benedetto Vigna, President, Analog, MEMS and Sensors Group.

On May 24, we announced the publication of our 2017 Sustainability Report. The report contains details and highlights of our sustainability strategy and our 2016 performance, in alignment with the United Nations Global Compact Ten Principles and Sustainable Development Goals.

On June 20, we announced that all the resolutions were approved at our Annual General Meeting of Shareholders (AGM). The main resolutions approved by the shareholders were:

- The adoption of the Company's Statutory Annual Accounts for the year ended December 31, 2016, prepared in accordance with International Financial Reporting Standards (IFRS) and filed with the Netherlands Authority for the Financial Markets (AFM) on April 27, 2017;
- The distribution of a cash dividend of \$0.24 per outstanding share of the Company's common stock, to be distributed in quarterly installments of \$0.06 in each of the second, third and fourth quarters of 2017 and first quarter of 2018 to shareholders of record in the month of each quarterly payment;
- The appointment of Mr. Frederic Sanchez as a new member of the Supervisory Board, for a three-year term expiring at the 2020 Annual General Meeting of Shareholders, in replacement of Mr. Didier Lombard whose mandate expired as of the 2017 AGM;
- The reappointment, for a three-year term expiring at the 2020 Annual General Meeting of Shareholders, of the following members of the Supervisory Board: Ms. Heleen Kersten and Messrs. Jean-Georges Malcor, Alessandro Rivera and Maurizio Tamagnini;
- The reappointment of Mr. Carlo Bozotti as the sole member of the Managing Board for a one-year term;
- The approval of a new four-year Unvested Stock Award Plan for Management and Key Employees;
- The approval of the stock-based portion of the compensation of the President and CEO;
- The authorization to the Managing Board, for eighteen months following the AGM, to repurchase shares, subject to the approval of the Supervisory Board; and
- The delegation to the Supervisory Board of the authority to issue new common and preference shares, to grant rights to subscribe for such shares and to limit and/or exclude existing shareholders' pre-emptive rights on common shares for a period of eighteen months.

Following the conclusion of our Annual General Meeting, the members of the Supervisory Board appointed Mr. Nicolas Dufourcq as the Chairman and Mr. Maurizio Tamagnini as the Vice-Chairman of the Supervisory Board, respectively.

On June 22, 2017, we announced the pricing of a \$1.5 billion offering of senior unsecured bonds convertible into new or existing ordinary shares of ST. The New Convertible Bonds were issued in two tranches, one of \$750 million with a maturity of 5 years and one of \$750 million with a maturity of 7 years. The offering proceeds, net of costs (including costs in respect of the share buy-back program), will be used for general corporate purposes, including the early redemption of the



outstanding \$600 million Zero Coupon Convertible Bonds due 2019 and the future redemption of the outstanding \$400 million 1.00% Convertible Bonds due 2021. We also announced the launch of a share buy-back program of up to 19 million shares for an amount up to \$297 million intended to meet obligations arising from debt financial instruments that are exchangeable into equity instruments and to meet obligations arising from share award programs and the early redemption of the 2019 Convertible Bonds.

On August 7, 2017, we announced the completion of our share buy-back program with the repurchase of approximately 18.6 million shares of our common stock for an amount of \$297 million.

# 2.6. Related party transactions

Please refer to note 3.6.17 of the Semi Annual Financial Statements.

# 2.7. Financial Risk Management

STMicroelectronics and its subsidiaries (together "the Group") are exposed to changes in financial market conditions in the normal course of business due to its operations in different foreign currencies and its on-going investing and financing activities. The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Group's financial performance. The Group uses derivative financial instruments to hedge certain risk exposures. See note 3.6.9.4 of the Semi Annual Financial Statements for further information.

Risk management is carried out by a central treasury department (Corporate Treasury). Additionally, a Treasury Committee, chaired by the CFO, steers treasury activities and ensures compliance with corporate policies. Treasury activities are thus regulated by the Group's policies, which define procedures, objectives and controls. The policies focus on the management of financial risk in terms of exposure to market risk, credit risk and liquidity risk. Treasury controls are subject to internal audits. Most treasury activities are centralized, with any local treasury activities subject to oversight from Corporate Treasury. Corporate Treasury identifies, evaluates and hedges financial risks in close cooperation with the Group's operating units. It provides written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk, price risk, credit risk, use of derivative financial instruments, and investments of excess liquidity. The majority of cash and cash equivalents is held in U.S. dollars and Euros and is placed with financial institutions rated at least a single "A" long term rating from two of the major rating agencies, meaning at least A3 from Moody's Investors Service ("Moody's") and A- from Standard & Poor's ("S&P") or Fitch ("Fitch") Ratings, or better. These ratings are closely and continuously monitored in order to manage exposure to the counterparty's risk. Hedging transactions are performed only to hedge exposures deriving from operating, investing and financing activities conducted in the normal course of business.

The Semi Annual Financial Statements do not include all financial risk management information and disclosures required in the annual financial statements; they should be read in conjunction with the group's annual financial statements as at December 31, 2016. There have been no changes in the risk management department or in any risk management policies since year end.

### Foreign exchange risk

The Group conducts its business on a global basis in various major international currencies. As a result, the Group is exposed to adverse movements in foreign currency exchange rates, primarily with respect to the Euro. Foreign exchange risk mainly arises from future commercial transactions and recognized assets and liabilities at the Group's subsidiaries and future commercial transactions.



#### Cash flow and fair value interest rate risk

The Group's interest rate risk arises from long-term borrowings. Borrowings issued at variable rates expose the Group to cash flow interest rate risk. Borrowings issued at fixed rates expose the Group to fair value interest rate risk.

### Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily for trade receivables) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

### Liquidity risk

Prudent liquidity risk management includes maintaining sufficient cash and cash equivalents and marketable securities, the availability of funding from committed credit facilities and the ability to close out market positions. The Group's objective is to maintain a significant cash position and a low debt to equity ratio, which ensure adequate financial flexibility. Liquidity management policy is to finance the Group's investments with net cash provided from operating activities. Compared to year end, there was no material change in the contractual undiscounted cash out flows for financial liabilities.

# 2.8. Business risk information

STMicroelectronics' risk appetite depends on the nature of risks. STMicroelectronics determines, on a regular basis, the amount of risk it is willing to eliminate, mitigate, pursue or retain, depending on associated expected rewards, opportunities and cost of risk optimization.

Below is a list of the main risks factors related to the semiconductor industry and specifically related to our operations, which may affect the result and performance of STMicroelectronics and the ability of management to predict the future:

- 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 United Kingdom ("U.K.") from the European Union which 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 the 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 Information Technology ("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.

# 2.9. Auditor's involvement

The Interim Condensed Consolidated Financial Statements and interim Report of the Managing Board have not been audited or reviewed by an external auditor.

This report of the Managing Board is dated August 23, 2017.



# 3. Interim Condensed Consolidated Financial Statements ("Semi Annual Financial Statements")

The Semi Annual Financial Statements of the Group for the six months ended July 1, 2017, as presented by the Managing Board, have not been audited nor reviewed by an external auditor.

# 3.1. Consolidated income statement

		(unaudited)		
		Six-month p	eriod ended	
In millions of USD, except per share amounts	Notes	July 1, 2017	July 2, 2016	
Sales		3,728	3,303	
Other revenues		16	13	
Total revenues	3.6.5	3,744	3,316	
Cost of sales	3.6.14	(2,420)	(2,307)	
Gross profit	,	1,324	1,009	
Selling, general and administrative	3.6.14	(482)	(469)	
Research and development	3.6.14	(528)	(580)	
Other income	3.6.15	64	66	
Other expenses	3.6.15	(3)	(4)	
Operating profit (loss)	·	375	22	
Finance income		11	9	
Finance costs		(150)	(23)	
Share of profit (loss) of associates and jointly controlled entities		(2)	9	
Profit (loss) before income tax		234	17	
Income tax benefit (expense)		(21)	(5)	
Net profit (loss)		213	12	
Attributable to:				
The equity holders of the parent		209	9	
Non-controlling interests		4	3	
Net profit (loss)		213	12	
Earnings per share attributable to the equity holders of the parent				
Earnings per share (Basic)	3.6.16	0.24	0.01	
Earnings per share (Diluted)	3.6.16	0.24	0.01	

# 3.2. Consolidated statement of comprehensive income

	(unaudited)			
	Six-month p	eriod ended		
In millions of USD	July 1, 2017	July 2, 2016		
Net result	213	12		
Other comprehensive income (loss), net of tax:				
Items that will not be reclassified to profit or loss				
Re-measurements of employee benefit obligations	-	-		
Income tax effect	-	-		
Re-measurements of employee benefit obligations, net of tax		-		
Total items that will not be reclassified to profit or loss	-	-		
Items that may be subsequently reclassified to profit or loss				
Exchange differences on translation of foreign operations	135	35		
Cash flow hedges	62	23		
Income tax effect	-	-		
Net movement on cash flow hedges	62	23		
Gain (loss) on available-for-sale financial assets	-	11		
Income tax effect	-	(2)		
Net gain (loss) on available-for-sale financial assets	-	9		
Total items that may be reclassified subsequently to profit or loss	197	67		
Other comprehensive income (loss), net of tax	197	67		
Total comprehensive income (loss), net of tax	410	79		
Attributable to:				
The equity holders of the parent	406	76		
Non-controlling interests	4	3		
Total comprehensive income (loss), net of tax	410	79		

# 3.3. Consolidated statement of financial position

In millions of USD	Notes	July 1, 2017 (unaudited)	December 31, 2016
Assets	Notes	(unauditeu)	2010
Non-current assets			
Property, plant and equipment	3.6.7	2,736	2,292
Goodwill	3.6.8	102	98
Intangible assets	3.6.7	1,147	1,111
Investments in associates and jointly controlled entities	3.6.6	45	45
Other non-current financial assets	3.6.9.1	41	41
Deferred tax assets	3.0.3.1	727	681
Other non-current assets		387	414
Total non-current assets	•		
Current assets		5,185	4,682
Inventories	3.6.10	1 262	1 172
Trade accounts receivable	3.0.10	1,262	1,173 939
Other current financial assets	2601	1,012	
Other receivable and assets	3.6.9.1	385	337
	3.6.11	393	309
Cash and cash equivalents	3.0.11	1,654	1,629
Total current assets	-	4,706	4,387
Total assets		9,891	9,069
Equity			
Equity attributable to the equity holders of the parent		5,417	5,205
Non-controlling interests	_	65	61
Total equity	3.6.12	5,482	5,266
Non-current liabilities			
Interest-bearing loans and borrowings	3.6.9.3	780	1,337
Other non-current financial liabilities	3.6.9.2	160	170
Employee benefits		449	411
Deferred tax liabilities		7	10
Non-current provisions		277	244
Other non-current liabilities	_	62	40
Total non-current liabilities	_	1,735	2,212
Current liabilities			
Interest-bearing loans and borrowings – current portion	3.6.9.3	717	117
Trade accounts payable		837	620
Other payables and accrued liabilities		436	273
Employee benefits – current portion		495	447
Current provisions		44	47
Other current financial liabilities	3.6.9.2	113	45
Income tax payable		32	42
Total current liabilities		2,674	1,591
Total equity and liabilities		9,891	9,069



# 3.4. Consolidated statement of changes in equity

For the six-month period ended July 1, 2017

In millions of USD	Ordinary shares	Capital surplus	Treasury shares	Other reserves	Retained earnings	Equity attributable to the equity holders of the parent	Non- controlling interests	Total equity
As at January 1, 2017	1,157	2,037	(242)	931	1,322	5,205	61	5,266
Net result	-	-	-	-	209	209	4	213
Other comprehensive income, net of tax	-	-	-	197	-	197	-	197
Total comprehensive income	-	-	-	197	209	406	4	410
Employee share award scheme, net of tax	-	-	41	19	(41)	19	-	19
Dividends	-	-	-	-	(213)	(213)	-	(213)
As at July 1, 2017 (unaudited)	1,157	2,037	(201)	1,147	1,277	5,417	65	5,482

For the six-month period ended July 2, 2016

In millions of USD	Ordinary shares	Capital surplus	Treasury shares	Other reserves	Retained earnings	Equity attributable to the equity holders of the parent	Non- controlling interests	Total equity
As at January 1, 2016	1,157	2,037	(289)	970	1,460	5,335	61	5,396
Net result	-	-	-	-	9	9	3	12
Other comprehensive income, net of tax	-	-	-	67	-	67	-	67
Total comprehensive income	-	-	-	67	9	76	3	79
Employee share award scheme, net of tax	-	-	46	19	(46)	19	-	19
Dividends	-	-	-	-	(212)	(212)	-	(212)
As at July 2, 2016 (unaudited)	1,157	2,037	(243)	1,056	1,211	5,218	64	5,282

# 3.5. Consolidated statement of cash flows

		(unac	(unaudited)		
		Six-month p	eriod ended		
In millions of USD	Note	July 1, 2017	July 2, 2016		
Cash flows from operating activities					
Net result		213	12		
Items to reconcile net result and cash flows from operating activities:					
Depreciation and amortization		386	437		
Interests and amortization of issuance costs on convertible bonds		11	11		
Senior convertible bonds and related conversion options adjustments		131	5		
Share-based compensation		19	18		
Other non-cash items		(90)	(63)		
Deferred income tax		(5)	(15)		
Share of (profit) loss of associates, impairments or reversal of impairments		2	(9)		
on investments in associates					
Impairment, restructuring and other related closure costs		7	41		
Changes in net working capital:					
Movement of trade receivables, net		(70)	(57)		
Movement of inventories, net		(48)	(2)		
Movement of trade payables		76	15		
Movement of other assets and liabilities, net		188	105		
Interests paid		(7)	(6)		
Income tax paid		(22)	(28)		
Net cash from operating activities		791	464		
Cash flows from investing activities					
Payments for purchases of tangible assets		(527)	(238)		
Proceeds from sale of tangible assets		1	2		
Payments for purchase of intangible assets		(153)	(150)		
Net cash used in investing activities		(679)	(386)		
Cash flows from financing activities					
Repayment of interest-bearing loans and borrowings		(3)	(21)		
Dividends paid to equity holders of the parent Company		(101)	(145)		
Other financing activities		-	(1)		
Net cash used in financing activities		(104)	(167)		
Effect of changes in exchange rates		17	-		
Net cash increase (decrease)		25	(89)		
Cash and cash equivalents at the beginning of the period		1,629	1,771		
Cash and cash equivalents at the end of the period	3.6.11	1,654	1,682		

# 3.6. Notes to the consolidated financial statements

### 3.6.1. Corporate information

STMicroelectronics N.V. is organized under the laws of the Netherlands with its corporate legal seat in Amsterdam, the Netherlands, and head offices at WTC Schiphol Airport, Schiphol Boulevard 265, 1118 BH Schiphol, the Netherlands. Headquarters and operational offices are managed through STMicroelectronics International N.V., a wholly owned subsidiary of STMicroelectronics N.V., and are located at 39, Chemin du Champ des Filles, 1228 Plan-Les-Ouates, Geneva, Switzerland.

STMicroelectronics and its subsidiaries (together "the Group") are a global independent semiconductor group that designs, develops, manufactures and markets a broad range of products, including discrete and standard commodity components, application-specific integrated circuits ("ASICs"), full custom devices and semi-custom devices and application-specific standard products ("ASSPs") for analog, digital and mixed-signal applications. In addition, the Group participates in the manufacturing value chain of smartcard products, which includes the production and sale of both silicon chips and smartcards.

The Group's products are used in a wide variety of applications, which can be broadly grouped into three areas: automotive systems, industrial systems and consumer connected devices. The Group enables smarter driving by making vehicles safer, more environmentally friendly and more connected. The Group helps make smarter homes, cities, workplaces and factories in which things can be done more efficiently and flexibly, in a more sustainable manner, safer and with a better experience for the people at the center. The Group enables creators of smart connected consumer devices to develop and take to market their devices quickly and efficiently. In doing this, the Group's ensures that ST is found everywhere microelectronics make a positive and innovative contribution to people's lives. By getting more from technology to get more from life, ST stands for life.augmented.

STMicroelectronics is a publicly traded company, listed on the New York Stock Exchange, on Euronext Paris and on the Borsa Italiana (Italian Stock Exchange).

These unaudited Semi Annual Financial Statements were approved by the Supervisory Board on August 23, 2017.

# 3.6.2. Basis of preparation

These unaudited Semi Annual Financial Statements for the six-month period ended July 1, 2017 have been prepared in accordance with IAS 34, "Interim Financial Reporting", as adopted in the European Union.

The unaudited Semi Annual Financial Statements do not include all the information and disclosures required in the annual financial statements. They should be read in conjunction with the annual financial statements for the year ended December 31, 2016, prepared in accordance with IFRS, as adopted in the European Union, filed with the AFM (Autoriteit Financiële Markten) on April 27, 2017 and adopted by our Annual General Meeting of Shareholders on June 20, 2017.

# 3.6.3. Significant accounting policies

The accounting policies adopted in the preparation of the Semi Annual Financial Statements are consistent with those followed in the preparation of the Group's annual financial statements for the year ended December 31, 2016.



Standards, amendments to standards and interpretations issued but not yet effective

**IFRS 9 Financial Instruments:** The IASB completed in 2014 its comprehensive work on the replacement of IAS 39, which included three phases: classification and measurement of financial assets and financial liabilities, with the issuance of the original IFRS 9; impairment of financial assets; and hedge accounting, with the issuance of the corresponding amendments to IFRS 9. The final standard was endorsed by the European Union in 2016, with January 1, 2018 as the effective date. The adoption of IFRS 9 will have an effect on the classification and measurement of the Group's financial assets, together with the assessment of their impairment but will probably have no impact on classification and measurements of financial liabilities. The new approach to hedge accounting will also have an effect on the way hedged transactions and derivatives designated as hedging instruments are reported. The Group is currently in the process of completing its assessment of the effect the comprehensive version of IFRS 9 will have on its financial position and performance.

IFRS 15 Revenue from contracts with customers: The new standard on revenue recognition, updated in 2016 with finalized amendments addressing implementation issues, sets forth a single revenue accounting model, which calls to more professional judgment and includes expanded disclosures. According to the new guidance, revenue recognition depicts the transfer of promised goods and services to customers in an amount that reflects the consideration to which the entity expects to be entitled for these goods and services. Revenue is recognized when (or as) control of the goods and services is transferred to the customer. Even if IFRS 15 is not a five-step model, the following steps can be identified in order to apply the new revenue accounting model: (i) identification of the contracts with customers; (ii) identification of the purchase obligations in the contract; (iii) determination of the transaction price; (iv) allocation of the transaction price to purchase obligations and; (v) revenue recognition for each purchase obligation. IFRS 15, including the amendment on effective date but excluding clarifications issued in 2016, was ratified by the European Union in 2016, with January 1, 2018 as the effective date. The areas on which IFRS 15 may create significant changes are: (i) changes in the timing of revenue recognition; (ii) inclusion of variable consideration in the transaction price; (iii) allocation of the transaction price based on standalone selling prices. The Group will adopt IFRS 15 when effective. The Group is currently in the process of assessing the anticipated impact of the amended standard on existing revenue streams, contracts, transactions and business practices. Based on procedures performed to date, the Group generally anticipates substantially similar performance conditions under the amended guidance, as such no material impact on the Group revenue recognition practice is expected. The guidance provides entities with alternative methods of adoption. The Group is in the process of determining the method of adoption, which depends in part upon the completion of the evaluation of remaining revenue arrangements.

**IFRS 16 Leases:** The new standard on lease accounting no longer distinguishes, for the lessee, between a finance lease and an operating lease. It sets forth a single lease accounting model for virtually all lease contracts. The lessee recognizes a lease liability reflecting future lease payments and a "right of use" asset, as economically, a lease contract is equal to acquiring the right to use an asset with the purchase price paid in installments. Lessees recognize interest expense on the lease liability and a depreciation charge on the "right of use" asset. The standard includes optional exemptions, as for short-term leases (twelve months or less). If one of the exemptions is elected, the lease contract is accounted for in a way that is similar to current operating lease accounting. Lessor accounting is similar to current practice. However, significant new disclosures are required. IFRS 16 has not been ratified by the European Union yet. The Group will adopt IFRS 16 when effective and is currently assessing its impact on existing contracts, transactions and business practices, almost exclusively as a lessee.

**IFRIC Interpretation 22** – Foreign Currency Transactions and Advance Consideration: The new interpretation clarifies the accounting for transactions that include the receipt or payment of advance consideration in a foreign currency, by stating that the date of the transaction, for the purpose of determining the exchange rate, is the date of the initial recognition of the non-monetary prepayment asset or deferred income liability. Moreover, if there are multiple payments or receipts in advance, a date of transaction is established for each payment or receipt. IFRIC 22 has not been ratified by the European Union yet. The Group will adopt IFRIC 22 when effective. No impact is expected on the Group's financial position or performance from the adoption of IFRIC 22.



**IFRIC Interpretation 23** – Uncertainty over Income Tax Treatments: The new interpretation addresses the assessment of the supportability of an uncertain tax position based on the merits of the position assuming that the tax authority will have full knowledge of the entity's position. If an entity concludes that it is probable that the taxing authorities will accept an uncertain tax position that has been taken or is expected to be taken on a tax return, it should determine its accounting for income taxes consistent with that tax treatment. If an entity concludes it is not probable that the treatment will be accepted, it should reflect the effect of the uncertainty in its income tax accounting in the period in which that determination is made. The entity should measure the impact of the uncertainty using the method that best predicts the resolution of the uncertainty; either the most likely amount method or the expected value method. IFRIC 23 has not been ratified by the European Union yet. The Group will adopt IFRIC 23 when effective and is currently assessing its impact on existing tax positions.

The following new standard and amendments are not expected to have a material impact on the accounting policies, financial position or performance of the Group:

- IFRS 17: Insurance Contracts
- Amendments to IFRS 2: Classification and Measurement of Share-based Payment Transactions
- Amendments to IFRS 4: Applying IFRS 9 Financial Instruments with IFRS 4 Insurance contracts
- Amendments to IAS 40: Transfers of Investment Property
- Amendments to IAS 12: Recognition of Deferred Tax Assets for Unrealized Losses
- Amendments to IAS 7: Disclosure Initiative
- Amendments to IFRS 10 and IAS 28: Sale or Contribution of Assets between an Investor and its Associate and Joint Venture
- Improvements to IFRS (2014-2016 cycle)

#### 3.6.4. Estimates

The preparation of the Semi Annual Financial Statements requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amount of assets and liabilities, income and expenses. Actual results may differ from these estimates.

In preparing these Semi Annual Financial Statements, the significant judgments made by management in applying the Group's accounting policies and the key sources of estimation uncertainty were the same as those that applied to the consolidated Financial Statements for the year ended December 31, 2016.

# 3.6.5. Operating segment information

The Group operates in two business areas: Semiconductors and Subsystems.

In the Semiconductors business area, the Group designs, develops, manufactures and markets a broad range of products, including discrete and standard commodity components, application-specific integrated circuits ("ASICs"), full custom devices and semi-custom devices and application-specific standard products ("ASSPs") for analog, digital, and mixed-signal applications. In addition, the Group further participates in the manufacturing value chain of Smartcard products, which includes the production and sale of both silicon chips and Smartcards.

The Group's operating segments are as follows:

- Automotive and Discrete Group (ADG), comprised of all dedicated automotive ICs (both digital and analog), and discrete and power transistor products.
- Analog and MEMS Group (AMG), comprised of low-power high-end analog ICs (both custom and general purpose) for all markets, smart power products for Industrial, Computer and Consumer markets, Touch Screen



- Controllers, Low Power Connectivity solutions (both wireline and wireless) for IoT, power conversion products, metering solutions for Smart Grid and all MEMS products, either sensors or actuators.
- Microcontrollers and Digital ICs Group (MDG), comprised of general purpose and secure microcontrollers, EEPROM memories, and digital ASICs as well as restructured businesses such as Set-Top-box ICs or former ST-Ericsson products.

"Others" includes all the financial values related to the Imaging Product Division (including the sensors and modules from our Time of Flight technology), Subsystems and other products, as well as items not allocated to the segments such as impairment, restructuring charges and other related closure costs, unused capacity charges, strategic or special research and development programs and other minor unallocated expenses such as: certain corporate-level operating expenses, patent claims and litigation, and other costs that are not allocated to the segments.

In the Subsystems business area, the Group designs, develops, manufactures and markets subsystems and modules for the telecommunications, automotive and industrial markets including mobile phone accessories, battery chargers, ISDN power supplies and in-vehicle equipment for electronic toll payment. Based on its immateriality to its business as a whole, the Subsystems business area does not meet the requirements for an operating segment as defined in the IFRS guidance.

For the computation of the segments' internal financial measurements, the Group uses certain internal rules of allocation for the costs not directly chargeable to the segments, including cost of sales, selling, general and administrative ("SG&A") expenses and a part of research and development ("R&D") expenses. In compliance with the Group's internal policies, certain cost items are not charged to the segments, including impairment, restructuring charges and other related closure costs, unused capacity charges, phase-out and start-up costs of certain manufacturing facilities, certain one-time corporate items, strategic and special R&D programs or other corporate-sponsored initiatives, including certain corporate-level operating expenses and certain other miscellaneous charges. In addition, depreciation and amortization expense is part of the manufacturing costs allocated to the segments and is neither identified as part of the inventory variation nor as part of the unused capacity charges; therefore, it cannot be isolated in the costs of goods sold. Finally, R&D grants are allocated to the segments proportionally to the incurred R&D expenses on the sponsored projects.

Wafer costs are transferred to the segments profit and loss based on actual cost. From time to time, on specific technologies, wafer costs are allocated to segments based on market price.



The following tables present the Group's consolidated net revenues by reportable segment and by location of shipment:

	(unau	(unaudited)		
	Six-month p	eriod ended		
In millions of USD	July 1, 2017	July 2, 2016		
Net revenues by reportable segment:				
Automotive and Discrete Group (ADG)	1,463	1,392		
Analog and MEMS Group (AMG)	925	745		
Microcontrollers and Digital ICs Group (MDG)	1,204	1,089		
Others	152	90		
Total consolidated net revenues	3,744	3,316		
	(unau	(unaudited)		
	Six-month p	eriod ended		
In millions of USD	July 1, 2017	July 2, 2016		
Net Revenues by Location of Shipment: 1				
EMEA	1,022	949		
Americas	511	516		
Asia Pacific <sup>2</sup>	2,211	1,851		
Total	3,744	3,316		

<sup>&</sup>lt;sup>2</sup> Since 2016, the Group has three regional sales organizations: EMEA; Americas; and Asia Pacific. Asia Pacific was created from the merger of the Japan & Korea and Greater China-South Asia regional sales organizations.



<sup>&</sup>lt;sup>1</sup> Net revenues by location of shipment are classified by location of customer invoiced or reclassified by shipment destination in line with customer demand. For example, products ordered by U.S.-based companies to be invoiced to Asia Pacific affiliates are classified as Asia Pacific revenues. Furthermore, the comparison among the different periods may be affected by shifts in shipment from one location to another, as requested by our customers.

Net operating profit (loss) by reportable segment and reconciliation to operating profit (loss) are as follows:

	(unau	dited)
	Six-month p	eriod ended
In millions of USD	July 1, 2017	July 2, 2016
Automotive and Discrete Group (ADG)	103	100
Analog and MEMS Group (AMG)	115	3
Microcontrollers and Digital ICs Group (MDG)	131	5
Sub-total operating profit (loss) of reportable segments	349	108
Impairment, restructuring charges and other related closure costs	(11)	(40)
Manufacturing results	3	(21)
Operating results of other businesses	(22)	(49)
Strategic and other research and development programs and other non-allocated provisions <sup>3</sup>	(12)	(3)
IFRS/US GAAP Adjustments:		
Net impact of capitalized development costs	45	26
Derivative instruments not designated as hedge instruments under IFRS	35	6
IFRIC 21 adjustment on levies	(6)	(7)
IAS 19R adjustment on defined benefit plans	2	2
Asset acquisition tax incentives	(5)	-
Other non-allocated expenses and IFRS adjustments impact	(3)	-
Sub-total Operating loss Others and US GAAP to IFRS adjustments impact on operating profit (loss)	26	(86)
Total operating profit (loss)	375	22

# 3.6.6. Investments in associates and jointly controlled entities

Investments in associates and jointly controlled entities as at July 1, 2017 and December 31, 2016 were as follows:

	`	(unaudited) July 1, 2017 December 31, 2016		
In millions of USD	Carrying amount	% of interests	Carrying amount	% of interests
ST-Ericsson SA, in liquidation	45	50.0%	45	50.0%
Total	45		45	



STMicroelectronics • Semi Annual Report 2017

<sup>&</sup>lt;sup>3</sup> Includes unallocated income and expenses such as certain corporate-level operating expenses and other costs/income that are not allocated to the operating segments.

# ST-Ericsson SA, in liquidation

On February 3, 2009, the Group announced the closing of a transaction to combine the businesses of Ericsson Mobile Platforms and ST-NXP Wireless into a new venture, named ST-Ericsson. As part of the transaction, the Company received an interest in ST-Ericsson Holding AG in which the Company owned 50% plus a controlling share. In 2010, ST-Ericsson Holding AG was merged in ST-Ericsson SA. The Group used to consolidate ST-Ericsson SA.

On September 9, 2013, the Group sold 1 ST-Ericsson SA share to Ericsson for its nominal value changing the ownership structure of ST-Ericsson SA to bring both partners to an equal ownership proportion. As a result and in combination with the new shareholder agreement, the Group lost the control of ST-Ericsson SA and as such ST-Ericsson SA was deconsolidated from the Group's financial statements as of September 1, 2013. The deconsolidation of ST-Ericsson SA did not result in a gain or loss for the Group. The fair value of the Group's retained non-controlling interest was evaluated at \$55 million. In addition, the Group and its partner signed funding commitment letters, capped at \$149 million each partner, to the residual joint wind-down operations to ensure solvency. These are not drawn as of July 1, 2017.

Before the deconsolidation of ST-Ericsson SA, certain assets and companies of the ST-Ericsson SA group of companies were transferred to both partners for their net book value which was representative of their fair value. The transactions did not result in cash exchange between the partners. ST-Ericsson SA entered into liquidation on April 15, 2014.

# 3.6.7. Property, plant and equipment and intangible assets

Changes in the net carrying amount of property, plant and equipment and intangible assets are detailed as follows:

	Property, plant and	
In millions of USD	equipment	Intangible assets
Net book value as at January 1, 2017	2,292	1,111
Additions	640	154
Disposals	-	-
Impairment / Write-Offs	-	(15)
Amortization / Depreciation expense	(282)	(104)
Foreign currency translation	86	1
Net book value as at July 1, 2017 (unaudited)	2,736	1,147

The Group has commitments to purchase property, plant and equipment after the end of the interim period in the amount of \$434 million.

The impairment and write-offs for the first half of 2017 amounted to \$15 million (first half 2016: \$36 million), recorded in cost of sales, and are mainly resulting from the write-offs of the capitalized development costs related to certain projects that were cancelled.



# 3.6.8. Goodwill

Goodwill allocated to reportable segments and changes in the carrying amount of goodwill were as follows:

	Automotive and Discrete Group	Microcontrollers and Digital ICs	Analog and MEMS Group	
In millions of USD	(ADG)	Group (MDG)	(AMG)	Total
As at January 1, 2017	-	96	2	98
Foreign currency translation	<u>-</u>	4	-	4
As at July 1, 2017 (unaudited)		100		102

# 3.6.9. Other financial assets and financial liabilities

# 3.6.9.1. Other financial assets

In millions of USD	(unaudited) July 1, 2017	December 31, 2016
Other financial assets (including derivatives)		
Other financial assets		
Available-for-sale investments – quoted debt and equity securities	346	346
Available-for-sale investments – unquoted equity securities	12	12
Other	9	9
Total other financial assets	367	367
Current	335	335
Non-current	32	32
Derivative financial instruments		
Cash flow hedges		
Foreign exchange forward contracts	20	-
Currency collars	9	-
Derivatives not designated as hedges		
Foreign exchange forward contracts	15	2
Currency collars	6	-
Embedded call option	9	9
Total derivatives financial instruments	59	11
Current	50	2
Non-current	9	9
Total other financial assets (including derivatives)	426	378
Total current	385	337
Total non-current	41	41

Movements in other financial assets (excluding derivatives) recorded in the first half of 2017 are summarized as follows:

In millions of USD	Jan 1, 2017	Change in fair value included in OCI*	Change in fair value included in income statement	Increase	Sale / Settlement	Foreign exchange result recognized in OCI*	(unaudited) July 1, 2017
Government bonds issued by the U.S. Treasury Department	335	-	-	-	-	-	335
Quoted equity instruments	11	-	-	-	-		11
Sub-total Available-for-sale investments – quoted debt and equity securities	346						346
Available-for-sale investments – unquoted equity securities	12	-	-	-	-	-	12
Other trading financial assets	9	-	-	-	-	-	9
Total other financial assets (excluding derivatives)	367						367

\*OCI: Other comprehensive income

# Available-for-sale investments - quoted debt and equity securities

As at July 1, 2017 the Group held \$335 million in U.S. Treasury bonds. The bonds have an average rating of Aaa/AA+/AAA from Moody's, S&P and Fitch, respectively, with a weighted average maturity of 2.8 years. The debt securities were reported as current assets on the consolidated balance sheet as at July 1, 2017, since they represented investments of funds available for current operations. The bonds are classified as available-for-sale and recorded at fair value as at July 1, 2017. The Group estimated the fair value of these financial assets based on publicly quoted market prices, which corresponded to a Level 1 fair value measurement hierarchy.

As at July 1, 2017, the Group also had investments in quoted equity securities for an aggregate value of \$11 million (December 31, 2016: \$11 million).

# 3.6.9.2. Other financial liabilities

In millions of USD	(unaudited) July 1, 2017	December 31, 2016
Financial liabilities		
Cash flow hedges		
Foreign exchange forward contracts	-	20
Currency collars	-	7
Derivatives not designated as hedges		
Foreign exchange forward contracts	1	13
Currency collars	-	5
Embedded conversion option	160	170
Other financial liabilities	112	-
Total other financial liabilities (including derivatives)	273	215
Total current	113	45
Total non-current	160	170

Refer to notes 3.6.9.3 and 3.6.9.5 for further explanations on other financial liabilities.



# 3.6.9.3. Interest-bearing loans and borrowings

	(unaudited)	December 31,
In millions of USD	July 1, 2017	2016
Funding program loans with European Investment Bank		
2.35% due 2020, floating interest rate at Libor + 1.199%	50	50
2.28% due 2020, floating interest rate at Libor + 1.056%	110	110
0.59% due 2020, floating interest rate at Euribor + 0.917%	57	53
1.96% due 2021, floating interest rate at Libor + 0.525%	150	150
1.99% due 2021, floating interest rate at Libor + 0.572%	144	144
Dual tranche senior unsecured convertible bonds		
Zero-coupon, due 2019 (Tranche A)	600	564
1.0% due 2021 (Tranche B)	369	365
Other Funding program loans		
0.32% (w.a.*), due 2018-2023, fixed interest rate	14	14
Other long-term loans		
1.95% (w.a.*), due 2017, fixed interest rate	-	1
0.44% (w.a.*), due 2018, fixed interest rate	1	1
0.87% (w.a.*), due 2020, fixed interest rate	2	2
Finance leases		
9.85% (w.a.*), due 2017-2019, fixed interest rate		-
Total interest-bearing loans and borrowings	1,497	1,454
Total current	717	117
Total non-current	780	1,337

<sup>\*</sup> Weighted average

During the first half of 2017, a large portion of bondholders have delivered the Conversion Notice to exercise their conversion rights on Tranche A convertible bonds issued on July 3, 2014. All of the conversions will be executed by the end of August 2017. As a result, the carrying amount of the convertible debt reflects the obligation to repay upon conversion the principal amount of the bonds based on a net-share settlement and is presented as current.

### 3.6.9.4. Hedging activities and derivatives

# Derivative instruments not designated as hedges

The Group conducts its business on a global basis in various major international currencies. As a result, the Group is exposed to adverse movements in foreign currency exchange rates, primarily with respect to the Euro. Foreign exchange risk mainly arises from future commercial transactions and recognized assets and liabilities at the Group's subsidiaries. The Group enters into currency forward contracts and currency options to reduce its exposure to changes in exchange rates and the associated risk arising from the denomination of certain assets and liabilities in foreign currencies at the Group's subsidiaries. These instruments do not qualify as hedging instruments and are marked-to-market at each period-end with the associated changes in fair value recognized in "Other income" or "Other expenses" in the consolidated income statement.

To reduce its exposure to U.S. dollar exchange rate fluctuations, the Group hedges certain Euro-denominated forecasted transactions that cover at reporting date a large part of its research and development, selling, general and administrative expenses through the use of currency forward contracts and currency options, including collars. These instruments do not qualify as hedging instruments and are marked-to-market at each period-end with the associated changes in fair value recognized in "Other income" or "Other expenses" in the consolidated income statement.



The main currencies covered are the Euro, the Singapore Dollar, the China Yuan Renminbi, the Japanese Yen, the Swiss Franc, the Malaysian Ringgit, the Indian Rupee, and the British Pound.

### Derivative instruments designated as cash flow hedges

To reduce its exposure to U.S. dollar exchange rate fluctuations, the Group hedges certain Euro-denominated forecasted transactions that cover at reporting date a portion of its front-end manufacturing costs of semi-finished goods through the use of currency forward contracts and currency options, including collars. The Group also hedges certain manufacturing transactions denominated in Singapore dollars.

The principles regulating the hedging strategy for derivatives designated as cash flow hedge is to hedge up to 70% of the total forecasted transactions of the following quarter for these manufacturing costs. In order to follow a dynamic hedge strategy, the Group may change the percentage of the designated hedged item within the limit of 100% of the forecasted transaction. The maximum length of time over which the Group could hedge its exposure to the variability of cash flows for forecasted transactions is 24 months.

These derivative instruments are designated and qualified as cash flow hedges. They are reflected at fair value in the consolidated statement of financial position. The unrealized gain or loss from the effective portion of the hedge is reported in other comprehensive income and is reclassified into earnings in the same period in which the hedged transaction affects earnings, and within the same consolidated income statement line item as the impact of the hedged transaction.

As at July 1, 2017, the Group had the following outstanding derivative instruments that were entered into to hedge Euro-denominated and Singapore-Dollar-denominated forecasted transactions:

	forecasted man	nt for hedge on ufacturing costs actions
	In millions of	In millions of
	Euros	Singapore Dollars
Forward contracts	399	130
Currency collars	381	-

As at July 2, 2016, the Group had the following outstanding derivative instruments that were entered into to hedge Euro-denominated and Singapore-Dollar-denominated forecasted transactions:

	Notional amount for hedge on forecasted manufacturing costs transactions	
	In millions of	In millions of
	Euros	Singapore Dollars
Forward contracts	304	91
Currency collars	362	-

# Cash flow and fair value interest rate risk

The Group's interest rate risk arises from long-term borrowings. Borrowings issued at variable rates expose the Group to cash flow interest rate risk. Borrowings issued at fixed rates expose the Group to fair value interest rate risk.



The Group analyzes its interest rate exposure on a dynamic basis. Various scenarios are simulated taking into consideration refinancing, renewal of existing positions, alternative financing and hedging. The Group invests primarily on a short-term basis and as such its liquidity is invested in floating interest rate instruments. As a consequence the Group is exposed to interest rate risk due to potential mismatch between the return on its short term floating interest rate investments and the portion of its long term debt issued at fixed rate.

# Offsetting financial assets and financial liabilities

The Group entered into currency collars as combinations of two options, which are reported, for accounting purposes, on a net basis. The fair value of these collars represented as at July 1, 2017 assets totaling a net amount of \$15 million (December 31, 2016: liability of \$12 million), composed of \$15 million of assets (December 31, 2016: nil) and an immaterial amount of liabilities (December 31, 2016: \$12 million). In addition, the Group entered into other derivative instruments, primarily forward contracts, which are governed by standard International Swaps and Derivatives Association ("ISDA") agreements, which are not offset in the statement of financial position, and representing total assets of \$35 million and liabilities totaling \$1 million as at July 1, 2017 (December 31, 2016: \$2 million and \$33 million, respectively).

#### 3.6.9.5. Fair values

Set out below is a comparison by class of the carrying amounts and fair value of the Group's financial instruments that are carried in the financial statements.

_	Carrying	amount	Fair value		
_	(unaudited)	December 31,	(unaudited)	December 31,	
In millions of USD	July 1, 2017	2016	July 1, 2017	2016	
Financial assets					
Trade receivables	1,012	939	1,012	939	
Other receivables and assets	393	309	393	309	
Available for sale financial investments	358	358	358	358	
Other financial assets	68	20	68	20	
Cash equivalents (1)	1,180	960	1,180	960	
Financial liabilities					
Interest-bearing loans and borrowings (excluding senior unsecured convertible bonds)	528	525	528	525	
Senior unsecured convertible bonds (2)	969	929	1,219	1,127	
Trade accounts payable	837	620	837	620	
Other payables and accrued liabilities	436	273	436	273	
Other current financial liabilities (derivatives)	1	45	1	45	
Other current financial liabilities	112	-	112	-	
Other non-current financial liabilities	160	170	160	170	

- (1) Cash equivalents primarily correspond to deposits at call with banks.
- (2) The carrying amount of the senior unsecured convertible bonds as reported above corresponds to the liability component only, since, at initial recognition, an amount of \$118 million was separately recognized as derivative financial instruments embedded in the issued convertible bonds.

The fair value of financial assets and liabilities are included at the price at which the instrument could be sold in an orderly transaction between market participants at the measurement date. The following methods and assumptions were used to estimate fair value:



- For trade accounts receivable, cash equivalents, trade accounts payable, other payables and accrued liabilities, the carrying amounts reflected in the consolidated financial statements are reasonable estimates of fair value due to the relatively short period of time between the origination of the instruments and their expected realization.
- Other receivables and assets approximate their carrying amounts due either to their short-term maturities or to the fact that they are recorded at their net present value.
- Available for sale financial investments:
  - The fair value quoted debt and equity securities is determined based upon quoted market prices for identical instruments.
  - The fair value of unquoted equity securities is based on the valuation of the underlying instruments on a new round of third party financing or upon liquidation.
- The fair value of interest-bearing loans and borrowings, excluding senior unsecured convertible bonds, is determined by estimating future cash flows on a borrowing-by-borrowing basis and discounting these future cash flows using the Group's incremental borrowing rates for similar types of borrowing arrangements.
- The senior unsecured convertible bonds have been trading on the open market segment on the Frankfurt Stock Exchange since issuance on July 3, 2014. The fair value of these instruments is the observable price of the bonds on that market.
- The fair value of derivatives instruments is determined based upon quoted market prices for similar instruments.
- Other current financial liabilities include \$112 million corresponding to Tranche A conversion option of the senior unsecured convertible bonds issued on July 3, 2014. The conversion option was measured based on the intrinsic value of the option as at July 1, 2017 since the major part of bondholders have delivered the Conversion Notice to exercise their conversion rights.
- Other non-current financial liabilities correspond to the bondholders' conversion option embedded in Tranche B senior unsecured convertible bonds. Other financial assets include the value of the issuer's call option, which amounted to \$9 million as at July 1, 2017 and was nil at inception. These embedded derivative instruments were measured at fair value based on an income approach using Bloomberg's option pricing model, which can be assimilated to a Black & Scholes model for pricing stock options. This model was elected as the best indication of fair value since it maximized the use of observable market-based inputs.

# Fair value hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities.
- Level 2: other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly (that is, as prices) or indirectly (that is, derived from prices).
- Level 3: techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data.



As at July 1, 2017, the Group held the following financial instruments measured at fair value:

	(unaudited)			
In millions of USD	July 1, 2017	Level 1	Level 2	Level 3
Assets measured at fair value	-	_	_	_
Financial assets at fair value through profit or loss				
Trading derivatives:				
Foreign exchange forward contracts	15	-	15	-
Currency collars	6	-	6	-
Trading securities	9	9	-	-
Embedded call option	9	-	-	9
Cash flow hedges				
Foreign exchange forward contracts	20	-	20	-
Currency collars	9	-	9	-
Available-for-sale investments – quoted equity securities				
Government bonds issued by the U.S. Treasury	335	335	-	-
Equity securities	11	11	-	-
Available-for-sale investments – unquoted equity securities	12	-	-	12
Total assets measured at fair value	426	355	50	21
Liabilities measured at fair value				
Contingent consideration on business combination	12	-	-	12
Derivatives at fair value through profit or loss				
Foreign exchange forward contracts	1	-	1	-
Embedded conversion option	160	-	-	160
Other financial liabilities	112	-	-	112
Total liabilities measured at fair value	285	-	1	284

### Financial instruments in Level 1

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance sheet date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Group is the current bid price. These instruments are included in Level 1.

#### Financial instruments in Level 2

The fair value of financial instruments that are not traded in active markets (for example over the counter derivatives) is determined by using valuation techniques. These valuation techniques maximize the use of observable market data when available and rely as little as possible on entity's specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in Level 2. If one or more of the significant inputs is not based on observable market data, the instrument is included in Level 3. Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer's quotes for similar instruments;
- The fair value of foreign exchange forward contracts when determined using forward exchange rates at the balance sheet date, with the resulting value discounted back to present value.

During the reporting period ending July 1, 2017, there was no transfer between Level 1 and Level 2 fair value measurements. There was no transfer into and out of Level 3 fair value measurements.



#### Financial instruments in Level 3

For other financial assets and liabilities measured at fair value using significant unobservable inputs (Level 3), the reconciliation between January 1, 2017 and July 1, 2017 is presented as follows:

	Fair value measurements using
In millions of USD	significant unobservable inputs (Level 3)
As at January 1, 2017	(161)
Change in fair value of the embedded conversion option	(102)
As at July 1, 2017 (unaudited)	(263)
Amount of total unrealized losses included in the 2017 income statement	(102)
attributable to assets (liabilities) still held at the reporting date	(102)

The change in fair value amounting to \$102 million was reported as "Finance costs" in the consolidated income statement for the period ended July 1, 2017.

The model used to price the derivative instruments embedded in Tranche B of senior unsecured convertible bonds issued on July 3, 2014 included the following inputs:

- The risk-free interest rate for comparable maturities;
- o The reference price for STMicroelectronics ordinary shares as traded on the New York Stock Exchange;
- The exercise price;
- The dividend expected to be paid on STMicroelectronics ordinary shares over the life of the option;
- The volatility of STMicroelectronics ordinary shares;
- The duration of the option.

Volatility should be considered an unobservable input. The figure is, therefore, an assumption based on the volatility implied by the price of the financial instrument, as negotiated at the issue stage, and market volatility for the nearest time horizon. The prices of the issuer's call option and the bondholder's conversion option are sensitive to implied volatility. For the issuer's call option, sensitivity analysis show that the value of the embedded derivative instrument remains immaterial. The table below shows a sensitivity analysis of the net carrying amount of the embedded conversion option in relation to a series of changes expressed in percentage point terms of volatility:

Change in volatility of STMicroelectronics ordinary shares	-10 p.p.	- 8 p.p.	-5 p.p.	+5 p.p.	+8 p.p.	+10 p.p.
Change in the net carrying amount of the bondholders' conversion option	(30)	(24)	(15)	15	24	30
Net carrying amount of the embedded conversion option	130	136	145	175	184	190

#### 3.6.10. Inventories

Inventories consisted of the following:

In millions of USD	(unaudited) July 1, 2017	December 31, 2016
Raw materials	9	6 81
Work-in-process	80	8 756
Finished products	35	8 336
Total	1,26	2 1,173

#### 3.6.11. Cash and cash equivalents

Cash and cash equivalents consisted of the following:

In millions of USD	(unaudited) July 1, 2017	December 31, 2016
Cash at bank and in hand	474	669
Money market deposits with banks	1,180	960
Total	1,654	1,629

#### 3.6.12. Equity

## 3.6.12.1. Outstanding shares

The authorized share capital of STMicroelectronics is EUR 1,810 million consisting of 1,200,000,000 common shares and 540,000,000 preference shares, each with a nominal value of EUR 1.04. As at July 1, 2017, the number of common shares issued was 911,110,420 shares (December 31, 2016: 911,030,420 shares).

As at July 1, 2017, the number of common shares outstanding was 887,810,197 shares (December 31, 2016: 883,410,506 shares).

## 3.6.12.2. Preference shares

The 540,000,000 preference shares, when issued, will entitle a holder to full voting rights and to a preferential right to dividends and distributions upon liquidation.

We are a party to an option agreement with Stichting Continuïteit ST (the "Stichting"), entered into on January 22, 2007, with a duration of ten years, regarding our preference shares. In October 2016, we extended for another 10-year period the existing option agreement with Stichting Continuiteït ST. Our Managing Board and our Supervisory Board, along with the board of the Stichting, have declared that they are jointly of the opinion that the Stichting is independent of us. The option agreement provides for the issuance of up to a maximum 540,000,000 preference shares. Any such shares would be issued to the Stichting upon its request and in its sole discretion and upon payment of at least 25% of the par value of the preference shares to be issued. The shares would be issuable in the event of actions which the board of the Stichting determines would be contrary to our interests, our shareholders and our other stakeholders and which in the event of a creeping acquisition or offer for our common shares are not supported by our Managing Board and Supervisory Board. The preference shares may remain outstanding for no longer than two years. No preference shares have been issued to date. The effect of the preference shares may be to deter potential acquirers from effecting an unsolicited acquisition resulting in a change of control as well as to create a level-playing field in the event actions which are considered to be hostile by



our Managing Board and our Supervisory Board, as described above, occur and which the board of the Stichting determines to be contrary to our interests and our shareholders and other stakeholders.

# 3.6.12.3. Treasury shares

The treasury shares have been designated for allocation under the Company's share based remuneration programs of non-vested shares. As of July 1, 2017, 39,619,997 of these treasury shares were transferred to employees under the Company's share based remuneration programs of which 4,319,691 in the first half of 2017.

As of July 1, 2017, the Company owned a number of treasury shares equivalent to 23,300,223 compared to 27,619,914 as of December 31, 2016.



# 3.6.12.4. Other reserves

Other reserves include the following components as at July 1, 2017 and as at July 2, 2016:

In millions of USD	Share-based compensation reserve	Available-for- sale (AFS) reserve	Cash Flow Hedge (CFH) reserve	Employee benefit plan reserve	Foreign currency translation reserve	Total other reserves
As at January 1, 2016	608	1	(21)	(138)	520	970
Share-based compensation expense for the year	19	-	-	-	-	19
Net movement recognized in the statement of comprehensive income		9	23	-	35	67
As at July 2, 2016 (unaudited)	627	10	2	(138)	555	1,056
As at January 1, 2017	647	1	(32)	(147)	462	931
Share-based compensation expense for the year	19	-	-	-	-	19
Net movement recognized in the statement of comprehensive income	_	-	62	-	135	197
As at July 1, 2017 (unaudited)	666	1	30	(147)	597	1,147

**Share-based compensation reserve:** The share-based compensation reserve is used to recognize the value of equity-settled share-based payment transactions provided to employees, including key management personnel, as part of their remuneration.

Available-for-sale (AFS) reserve: This reserve records fair value changes on available-for-sale financial assets.

**Cash Flow hedge reserve:** The cash flow hedge reserve contains the effective portion of the cash flow hedge relationship incurred as at the reporting date.

**Employee benefit plan reserve:** The employee benefit plan reserve is used to recognize the actuarial gains and losses and past service cost of post-employment pension plans.

**Foreign currency translation reserve:** The foreign currency translation reserve is used to record exchange differences arising from the translation of the financial statements of foreign subsidiaries.

#### 3.6.12.5. Dividends

In the Annual General Meeting of Shareholders held on June 20, 2017, the distribution of a cash dividend of \$0.24 per outstanding share of the Company's common stock was authorized, to be distributed in quarterly installments of \$0.06 in each of the second, third and fourth quarters of 2017 and first quarter of 2018 to shareholders of record in the month of each quarterly payment. The amount of \$42 million related to the first installment was paid during the second quarter of 2017. The remaining portion of the first installment and the \$0.18 per share cash dividend corresponding to the last three installments totaled \$171 million and is presented in the line "Other payables and accrued liabilities" in the consolidated statement of financial position as of July 1, 2017.

In the Annual General Meeting of Shareholders held on May 25, 2016, the distribution of a cash dividend of \$0.24 per outstanding share of the Company's common stock was authorized, to be distributed in quarterly installments of \$0.06 in each of the second, third and fourth quarters of 2016 and first quarter of 2017. The amount of \$53 million corresponding to the first installment, \$53 million corresponding to the second installment, and \$47 million corresponding to the third installment were paid as of December 31, 2016. The remaining portion of the third installment amounting to \$6 million and the fourth installment of \$53 million were paid in the first half of 2017.

The Annual General Meeting of Shareholders held on May 27, 2015 authorized the distribution of a cash dividend of \$0.40 per outstanding share of the Company's common stock, to be distributed in quarterly installments of \$0.10 in each of the second, third and fourth quarters of 2015 and first quarter of 2016. The amount of \$88 million corresponding to the first installment, \$88 million corresponding to the second installment and \$78 million corresponding to the third installment were paid during 2015. The remaining portion of \$9 million related to the third installment and the fourth installment of \$88 million were paid in the first half of 2016.



# 3.6.13. Provisions for restructuring

As at July 1, 2017, provisions for restructuring amounted to \$47 million, of which \$41 million was included in "Current provisions" in the consolidated statement of financial position. Movements during the first half of 2017 were as follows:

In millions of USD	\$600-650 million net opex plan	EPS restructuring plan	Set-top Box restructuring plan	Other restructuring initiatives	Total
As at January	7	3	37	4	51
1, 2017					
Expenses recognized during the period	-	-	13	5	18
Adjustments for unused provisions	-	-	(2)	-	(2)
Amounts paid	-	-	(18)	(5)	(23)
Currency translation effect		-	3	-	3
As at July 1, 2017 (unaudited)	7	3	33	4	47

# • Set-top Box restructuring plan

In 2016, the Group announced its decision to cease the development of new platforms and standard products for set-top-box and home gateway products. This decision implied a global workforce review that may affect approximately 1,400 employees worldwide, which includes about 430 in France through a voluntary departure plan, about 670 in Asia and about 120 in the United States of America. The Group recorded in the first half of 2017 \$11 million of restructuring charges for this plan relating to employee termination benefits, primarily for voluntary terminations in France, including a positive adjustment totaling \$2 million for unused provisions.

#### • Other restructuring initiatives

In 2017, the Group announced a restructuring plan affecting approximately 300 employees through voluntary leaves in its back-end operation in Bouskoura (Morocco). The Company recorded in the first half of 2017 \$5 million of restructuring charges for this plan.

# 3.6.14. Expenses by nature

Expenses recorded as cost of sales and research and development and selling, general and administrative are detailed as follows:

	(unaudited)	
In millions of USD	July 1, 2017	July 2, 2016
Depreciation and amortization	386	437
Employee benefit expenses	1,321	1,324
Purchase of materials and subcontracting services	1,428	1,252
Changes in inventories	(48)	(2)
Transportation	40	38
Royalties and patents	39	42
Advertising costs	7	6
Other expenses	257	259
Total cost of sales, research and development, and selling, general and administrative	3,430	3,356

Employee benefit expenses are detailed as follows:

	(unaud	dited)
In millions of USD	July 1, 2017	July 2, 2016
Wages and salaries	961	964
Payroll taxes and other social contribution charges	285	286
Share-based compensation expense	19	18
Pensions and other long-term benefits expense	56	56
Total employee benefit expenses	1,321	1,324
Of which included in:		
Cost of sales	598	571
Selling, general and administrative	329	320
Research and development	394	433

# 3.6.15. Other income / expenses

Other income consisted of the following:

	(unaudited)	
In millions of USD	July 1, 2017	July 2, 2016
Research and development funding	32	51
Net foreign exchange gain	2	4
Gain on sale of non-current assets	2	1
Foreign exchange forward contracts and other currency derivatives	28	7
Other income	-	3
Total other income	64	66



Other expenses consisted of the following:

	(unaudited)		
In millions of USD	July 1, 2017	July 2, 2016	
Start-up / Phase-out costs	-	(3)	
Patent litigation costs	(3)	(1)	
Total other expenses	(3)	(4)	

The Group receives significant public funding from governmental agencies in several jurisdictions. Public funding for research and development is recognized ratably as the related costs are incurred once the agreement with the respective governmental agency has been signed and all applicable conditions have been met.

Start-up costs represent costs incurred in the start-up and testing of the Group's new manufacturing facilities, before reaching the earlier of a minimum level of production or six months after the fabrication line's quality certification. Phase-out costs are costs incurred during the closing stage of a Group's manufacturing facility.

Patent litigation costs include legal and attorney fees and payment for claims, patent pre-litigation consultancy and legal fees.

# 3.6.16. Earnings per share

For the six-month period ended July 1, 2017 and July 2, 2016, earnings per share ("EPS") were calculated as follows:

	(unaudited)	
In millions of USD	July 1, 2017	July 2, 2016
Basic EPS		_
Net result attributable to the equity holder of the parent	209	9
Weighted average shares outstanding	884,165,669	879,187,101
Basic EPS	0.24	0.01
Diluted EPS		
Net result	209	9
Net result adjusted	209	9
Weighted average shares outstanding	884,165,669	879,187,101
Dilutive effect of stock awards	4,827,389	1,923,815
Number of shares used for diluted EPS	888,959,574	881,110,916
Diluted EPS	0.24	0.01

The convertible bonds issued on July 3, 2014 had no impact on the diluted EPS computation since they were anti-dilutive as of July 1, 2017 and July 2, 2016.

#### 3.6.17. Related-party transactions

Transactions with related parties were as follows:

	(unau	(unaudited)		
In millions of USD	July 1, 2017	July 2, 2016		
Sales and other services	-	3		
Purchases	10	1		
Accounts receivable	7	8		
Accounts payable	51	52		

For the six-month period ended July 1, 2017 and July 2, 2016, the related party transactions were primarily with companies in which management of the Group perform similar policymaking functions as well as significant shareholders of the Company, or their subsidiaries. These include, but are not limited to: Technicolor, Orange and Incard do Brazil. The related party transactions presented in the table above also include transactions between the Group and its associates and jointly controlled entities as listed in Note 3.6.6. Each of the aforementioned arrangements and transactions is negotiated without the personal involvement of the Supervisory Board members and are made in line with market practices and conditions.

# 3.6.18. Contingencies, claims and legal proceedings

The Group is subject to possible loss contingencies arising in the ordinary course of business. These include but are not limited to: warranty cost on the products of the Group, breach of contract claims, claims for unauthorized use of third-party intellectual property, tax claims beyond assessed uncertain tax positions as well as claims for environmental damages. In determining loss contingencies, the Group considers the likelihood of impairing an asset or the incurrence of a liability at the date of the financial statements as well as the ability to reasonably estimate the amount of such loss. The Group records a provision for a loss contingency when information available before the financial statements are issued or are available to be issued indicates that it is probable that an asset has been impaired or a liability has been incurred at the date of the financial statements and when the amount of loss can be reasonably estimated. The Group regularly reevaluates claims to determine whether provisions need to be readjusted based on the most current information available to the Group. Changes in these evaluations could result in an adverse material impact on the Group's results of operations, cash flows or its financial position for the period in which they occur.

The Group has received and may in the future receive communications alleging possible infringements of third party patents or other third party intellectual property rights. Furthermore, the Group from time to time enters into discussions regarding a broad patent cross license arrangement with other industry participants. There is no assurance that such discussions may be brought to a successful conclusion and result in the intended agreement. The Group may become involved in costly litigation brought against the Group regarding patents, mask works, copyrights, trademarks or trade secrets. In the event that the outcome of any litigation would be unfavorable to the Group, the Group may be required to take a license to third party patents and/or other intellectual property rights at economically unfavorable terms and conditions, and possibly pay damages for prior use and/or face an injunction, all of which individually or in the aggregate could have a material adverse effect on the Group's results of operations, cash flows, financial position and/or ability to compete.

The Group is otherwise also involved in various lawsuits, claims, investigations and proceedings incidental to its business and operations.

The Group regularly evaluates claims and legal proceedings together with their related probable losses to determine whether they need to be adjusted based on the current information available to the Group. There can be no assurance that its recorded reserves will be sufficient to cover the extent of its potential liabilities. Legal costs associated with claims are expensed as incurred. In the event of litigation which is adversely determined with respect to the Group's interests, or



in the event the Group needs to change its evaluation of a potential third-party claim, based on new evidence or communications, a material adverse effect could impact its operations or financial condition at the time it were to materialize.

As of July 1, 2017, provisions for estimated probable losses with respect to claims and legal proceedings were not considered material.

# 3.6.19. Events occurring after the reporting period

On June 22, 2017, the Company launched and priced a \$1.5 billion offering of senior unsecured bonds convertible into new or existing ordinary shares of ST. The Company simultaneously launched a share buy-back program of up to 19 million shares for an amount up to \$297 million intended to meet its obligations arising from debt financial instruments that are exchangeable into equity instruments and to meet obligations arising from employee share award programs. The Bonds were issued in two \$750 million tranches, one with a maturity of 5 years (37.5% conversion premium, negative 0.25 yield to maturity, 0% coupon) and the other 7 years (37.5% conversion premium, 0.25 yield to maturity, 0.25% coupon). Under the terms of the Bonds, the Company can satisfy the conversion rights either in cash or shares, or a combination of the two, at its selection. Proceeds from the issuance of the Bonds will be used by the Company for general corporate purposes, including the early redemption of the outstanding \$600 million convertible bond due 2019 which will be completed by the end of August and the future redemption of the outstanding \$400 million convertible bond due 2021. The issuance of the new Bonds occurred on July 3, 2017, therefore the impact to financial reporting will be effective in the second half of 2017.

During the first half of 2017, a large portion of bondholders have delivered the Conversion Notice to exercise their conversion rights on Tranche A convertible bonds issued on July 3, 2014. At July 7, 2017, Tranche A convertible bonds for which a Conversion Notice has been received totaled \$598 million principal amount. All of the conversions will be executed by the end of August 2017.

On August 7, 2017, the Company announced the completion of its share buy-back program with the repurchase of approximately 18.6 million shares of its common stock for an amount of \$297 million.



# 4. Sole Member of the Managing Board's statement

The sole member of the Managing Board hereby declares that, to the best of his knowledge, the Semi Annual Financial Statements, which have been prepared in accordance with IAS 34 Interim Financial Reporting, give a true and fair view of the assets, liabilities, financial position and profit or loss of STMicroelectronics N.V. and the undertakings included in the consolidation as a whole, and the Semi Annual Management Report of the Managing Board gives a true and fair overview of the information required pursuant to section 5:25d, subsection 8 and subsection 9 of the Dutch Financial Markets Supervision Act (Wet op het Financiael toezicht).

Date: August 23, 2017 By: /s/ Carlo Bozotti

Name: Carlo Bozotti

Title: Sole member of the Managing Board,

President and Chief Executive Officer

#### 5. About STMicroelectronics

ST is a global semiconductor leader delivering intelligent and energy-efficient products and solutions that power the electronics at the heart of everyday life. ST's products are found everywhere today, and together with our customers, we are enabling smarter driving and smarter factories, cities and homes, along with the next generation of mobile and Internet of Things devices. By getting more from technology to get more from life, ST stands for life.augmented.

In 2016, the Company's net revenues were \$6.97 billion, serving more than 100,000 customers worldwide. Further information on ST can be found at www.st.com.



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