

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM 20-F

- REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934  
OR  
 ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2022  
OR  
 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
OR  
 SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
Date of event requiring this shell company report \_\_\_\_\_  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission file number: 1-13546

**STMicroelectronics N.V.**

(Exact name of Registrant as specified in its charter)

**Not Applicable**

(Translation of Registrant's name into English)

**The Netherlands**

(Jurisdiction of incorporation or organization)

WTC Schiphol Airport  
Schiphol Boulevard 265  
1118 BH Schiphol  
The Netherlands

(Address of principal executive offices)

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(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)  
Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of Each Class	Trading Symbol(s)	Name of each exchange on which registered
Common shares, nominal value €1.04 per share Securities registered or to be registered pursuant to Section 12(g) of the Act.	STM	New York Stock Exchange
	None	
	(Title of Class)	
Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.	None	
	(Title of Class)	

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

**903,865,763 common shares outstanding as of December 31, 2022**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No  
Note - Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer", "accelerated filer", and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer   
Non-accelerated filer  Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act.

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

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Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP  International Financial Reporting Standards as issued by the International Accounting Standards Board  Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.  Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).  Yes  No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.  Yes  No

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## PRESENTATION OF FINANCIAL AND OTHER INFORMATION

In this annual report on Form 20-F (the “Form 20-F”), references to “we”, “us” and “Company” are to STMicroelectronics N.V. together with its consolidated subsidiaries, references to “EU” are to the European Union, references to “€” and the “Euro” are to the Euro currency of the EU, references to the “United States” and the “U.S.” are to the United States of America and references to “\$” and to “U.S. dollars” are to United States dollars. References to “mm” are to millimeters and references to “nm” are to nanometers.

We have compiled market size and our market share data in this Form 20-F using statistics and other information obtained from several third-party sources. Except as otherwise disclosed herein, all references to trade association data are references to World Semiconductor Trade Statistics (“WSTS”). Certain terms used in this Form 20-F are defined in “Certain Terms”.

We report our financial statements in U.S. dollars and prepare our Consolidated Financial Statements in accordance with generally accepted accounting principles in the United States (“U.S. GAAP”). We also report certain non-U.S. GAAP financial measures (free cash flow and net financial position), which are derived from the amounts presented in the financial statements prepared under U.S. GAAP. Furthermore, we are required by Dutch law to report our Statutory and Consolidated Financial Statements, in accordance with International Financial Reporting Standards (“IFRS”), as issued by the International Accounting Standards Board (“IASB”) and adopted by the European Union. The IFRS financial statements are reported separately and can differ materially from the statements reported in U.S. GAAP.

Various amounts and percentages used in this Form 20-F have been rounded and, accordingly, they may not total 100%.

We and our affiliates own or otherwise have rights to the trademarks and trade names, including those mentioned in this Form 20-F, used in conjunction with the marketing and sale of our products.

## CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements contained in this Form 20-F that are not historical facts, particularly in “Item 3. Key Information — Risk Factors”, “Item 4. Information on the Company” and “Item 5. Operating and Financial Review and Prospects” and “— Business Outlook” are statements of future expectations and other forward-looking statements (within the meaning of Section 27A of the Securities Act of 1933 or Section 21E of the Securities Exchange Act of 1934, each as amended) that are based on management’s current views and assumptions, and are conditioned upon and also involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those anticipated by such statements due to, among other factors:

- changes in global trade policies, including the adoption and expansion of tariffs and trade barriers, that could affect the macro-economic environment and adversely impact the demand for our products;
- uncertain macro-economic and industry trends (such as inflation and fluctuations in supply chains), which may impact production capacity and 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;
- changes in economic, social, public health, 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, geopolitical and military conflicts (including the ongoing conflict between Russia and Ukraine), social unrest, labor actions, or terrorist activities;
- unanticipated events or circumstances, which may impact our ability to execute our plans and/or meet the objectives of our R&D and manufacturing programs, which benefit from public funding;
- 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 and/or our required volume to fulfill capacity reserved with suppliers or third-party manufacturing providers;
- availability and costs of equipment, raw materials, utilities, third-party manufacturing services and technology, or other supplies required by our operations (including increasing costs resulting from inflation);
- the functionalities and performance of our IT systems, which are subject to cybersecurity threats and which support our critical operational activities including manufacturing, finance and sales, and any breaches of our IT systems or those of our customers, suppliers, partners and providers of third-party licensed technology;
- theft, loss, or misuse of personal data about our employees, customers, or other third parties, and breaches of data privacy legislation;
- 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;
- changes in our overall tax position as a result of changes in tax rules, new or revised legislation, the outcome of tax audits or changes in international tax treaties which may impact our results of operations as well as our ability to accurately estimate tax credits, benefits, deductions and provisions and to realize deferred tax assets;
- 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 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, the effects of climate change, health risks and epidemics or pandemics such as the COVID-19 pandemic in locations where we, our customers or our suppliers operate;
- increased regulation and initiatives in our industry, including those concerning climate change and sustainability matters and our goal to become carbon neutral by 2027;
- potential loss of key employees and potential inability to recruit and retain qualified employees as a result of epidemics or pandemics such as the COVID-19 pandemic, remote-working arrangements and the corresponding limitation on social and professional interaction;
- the duration and the severity of the global outbreak of COVID-19 may continue to negatively impact the global economy in a significant manner for an extended period of time, and also could materially adversely affect our business and operating results;
- industry changes resulting from vertical and horizontal consolidation among our suppliers, competitors, and customers; and
- the ability to successfully ramp up new programs that could be impacted by factors beyond our control, including the availability of critical third-party components and performance of subcontractors in line with our expectations.

Such forward-looking statements are subject to various risks and uncertainties, which may cause actual results and performance of our business to differ materially and adversely from the forward-looking statements. Certain forward-looking statements can be identified by the use of forward-looking terminology, such as “believes”, “expects”, “may”, “are expected to”, “should”, “would be”, “seeks” or “anticipates” or similar expressions or the negative thereof or other variations thereof or comparable terminology, or by discussions of strategy, plans or intentions. Some of these risk factors are set forth and are discussed in more detail in “Item 3. Key Information — Risk Factors”. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in this Form 20-F as anticipated, believed or expected. We do not intend, and do not assume any obligation, to update any industry information or forward-looking statements set forth in this Form 20-F to reflect subsequent events or circumstances.

Unfavorable changes in the above or other factors listed under “Item 3. Key Information — Risk Factors” from time to time in our Securities and Exchange Commission (“SEC”) filings, could have a material adverse effect on our business and/or financial condition.

**PART I**

**Item 1. Identity of Directors, Senior Management and Advisers**

Not applicable.

**Item 2. Offer Statistics and Expected Timetable**

Not applicable.

**Item 3. Key Information**

**Selected Financial Data**

The table below sets forth our selected consolidated financial data for each of the years in the five-year period ended December 31, 2022. Such data have been derived from our audited Consolidated Financial Statements. Audited Consolidated Financial Statements for each of the years in the three-year period ended December 31, 2022, including the Notes thereto (collectively, the “Consolidated Financial Statements”), are included elsewhere in this Form 20-F, while data for prior periods have been derived from our audited Consolidated Financial Statements used in such periods.

The following information should be read in conjunction with “Item 5. Operating and Financial Review and Prospects” and the audited Consolidated Financial Statements and the related Notes thereto included in “Item 18. Financial Statements” in this Form 20-F.

	Year Ended December 31,				
	2022	2021	2020	2019	2018
	(In millions except per share and ratio data)				
<b>Consolidated Statements of Income Data:</b>					
Net sales	\$ 16,083	\$ 12,729	\$ 10,181	\$ 9,529	\$ 9,612
Other revenues	45	32	38	27	52
Net revenues	16,128	12,761	10,219	9,556	9,664
Cost of sales	(8,493)	(7,435)	(6,430)	(5,860)	(5,803)
Gross profit	7,635	5,326	3,789	3,696	3,861
Operating expenses:					
Selling, general and administrative	(1,454)	(1,323)	(1,109)	(1,093)	(1,095)
Research and development	(1,901)	(1,723)	(1,548)	(1,498)	(1,398)
Other income and expenses, net	159	141	202	103	53
Impairment, restructuring charges and other related closure costs	—	(2)	(11)	(5)	(21)
Operating income	4,439	2,419	1,323	1,203	1,400
Interest income (expense), net(1)	58	(29)	(20)	1	(7)
Other components of pension benefit costs	(11)	(10)	(12)	(16)	(11)
Income on equity-method investments	—	—	2	1	8
Loss on financial instruments, net	—	(43)	(26)	—	(1)
Income before income taxes and noncontrolling interest(1)	4,486	2,337	1,267	1,189	1,389
Income tax expense	(520)	(331)	(159)	(156)	(96)
Net income(1)	3,966	2,006	1,108	1,033	1,293
Net income attributable to noncontrolling interest	(6)	(6)	(2)	(1)	(6)
Net income attributable to parent company(1)	3,960	2,000	1,106	1,032	1,287
Earnings per share (basic) attributable to parent company stockholders	4.37	2.21	1.24	1.15	1.43
Earnings per share (diluted) attributable to parent company stockholders(1)	4.19	2.16	1.20	1.14	1.41
Number of shares used in calculating earnings per share (basic)	905.6	904.3	894.6	894.3	899.4
Number of shares used in calculating earnings per share (diluted)(1)	946.2	924.8	919.7	903.6	911.0
<b>Consolidated Balance Sheets Data (end of period):</b>					
Cash and cash equivalents	3,258	3,225	3,006	2,597	2,266
Restricted cash	—	—	—	10	—
Short-term deposits	581	291	581	4	—
Marketable securities	679	—	133	133	330
<b>Total assets</b>	<b>19,982</b>	<b>15,540</b>	<b>14,454</b>	<b>11,868</b>	<b>10,867</b>
Net assets(1)	12,758	9,273	8,506	7,111	6,424
Short-term debt	175	143	795	173	146
Long-term debt(1)	2,542	2,396	1,826	1,899	1,764
<b>Total parent company stockholders' equity</b>	<b>12,693</b>	<b>9,209</b>	<b>8,448</b>	<b>7,043</b>	<b>6,359</b>
Common stock and Additional Paid-in Capital(1)	3,788	3,690	4,219	4,149	4,000
<b>Other Data:</b>					
Dividend per share	0.240	0.240	0.168	0.240	0.240
Capital expenditures, net of proceeds from sales	(3,524)	(1,828)	(1,279)	(1,174)	(1,262)
Net cash from operating activities	5,202	3,060	2,093	1,869	1,845
Depreciation and amortization	1,216	1,045	923	854	791
Debt-to-equity ratio(2)	0.21	0.28	0.31	0.29	0.30

(1) On January 1, 2022, we adopted the new U.S. GAAP guidance applicable to 2020 Senior Unsecured Convertible Bonds. Prior year comparative periods have not been restated.

(2) Debt-to-equity ratio is the ratio between our total financial debt (short-term debt and long-term debt) and our total parent company stockholder's equity.

## RISK FACTORS

### Risks Related to the Semiconductor Industry which Impact Us

*We, and the semiconductor industry as a whole, may be impacted by changes in, or uncertainty about, global, regional and local economic, political, legal, regulatory and social environments as well as climate change.*

Changes in, and uncertainty about, economic, political, legal, regulatory and social conditions pose a risk as consumers and businesses may postpone spending in response to factors such as curtailment of trade and other business restrictions, financial market volatility, interest rate fluctuations, shifts in inflationary and deflationary expectations, lower capital and productivity growth, unemployment, negative news, declines in income or asset values and/or other factors. Such global, regional and local conditions could have a material adverse effect on customer and end-market demand for our products, thus materially adversely affecting our business and financial condition.

The ongoing geopolitical conflict between Russia and Ukraine has resulted in the U.S. and certain other countries imposing sanctions on Russia. Any further consequences of this conflict could include a risk of further sanctions, embargoes, regional instability, geopolitical shifts and adverse effects on macro-economic conditions, currency exchange rates and financial markets. This could lead to further disruption to international commerce and the global economy, and could have a negative effect on our ability to sell to, ship products to, collect payments from, and support customers in certain regions based on trade restrictions, embargoes, logistics restrictions and export control law restrictions. We may also experience a shortage of certain semiconductor components and delays in shipments due to supply chain disruptions caused by geopolitical conflicts such as the ongoing conflict between Russia and Ukraine.

The institution of trade tariffs globally, as well as the threat thereof, could negatively impact economic conditions, which could have negative repercussions for our business. In particular, trade protection and national security policies of the U.S. and Chinese governments, including tariffs, trade restrictions, export restrictions and the placing of companies on restricted entity lists, have and may continue to limit or prevent us from transacting business with certain of our Chinese customers or suppliers; limit, prevent or discourage certain of our Chinese customers or suppliers from transacting business with us; or make it more expensive to do so. If disputes were to arise under any of our agreements with other parties conducting business in China, the resolution of such dispute may be subject to the exercise of discretion by the Chinese government, or agencies of the Chinese government, which may have a material adverse effect on our business. In addition, we could face increased competition as a result of China's programs to promote a domestic semiconductor industry and supply chains (including the *Made in China 2025* campaign).

Trade policy changes could trigger retaliatory actions by affected countries, which could have a negative impact on our ability to do business in affected countries or lead to reduced purchases of our products by foreign customers, leading to increased costs of components contained in our products, increased manufacturing costs of our products, currency exchange rate volatility, and higher prices for our products in foreign markets. Further, protectionist measures, laws or governmental policies may encourage our customers to relocate their manufacturing capacity or supply chain to their own respective countries or other countries, or require their respective contractors, subcontractors and relevant agents to do so, which could impair our ability to sustain our current level of productivity and manufacturing efficiency.

We, and the semiconductor industry as a whole, face greater risks due to the international nature of the semiconductor business, including in the countries where we, our customers or our suppliers operate, such as:

- instability of foreign governments, including the threat of war, military conflict, civil unrest, regime changes, mass migration and terrorist attacks;
- natural events such as severe weather, earthquakes and tsunamis, or the effects of climate change;
- epidemics or pandemics such as disease outbreaks or more recently COVID-19 and other health related issues;
- changes in, or uncertainty about, laws, regulations (including executive orders) and policies affecting trade and investment, including following Brexit and including through the imposition of trade and travel restrictions, government sanctions, local practices which favor local companies and constraints on investment;



- complex and varying government regulations and legal standards, particularly with respect to export control regulations and restrictions, customs and tax requirements, data privacy, IP and anti-corruption; and
- differing practices of regulatory, tax, judicial and administrative bodies, including with regards to the interpretation of laws, governmental approvals, permits and licenses.

***The semiconductor industry is cyclical and downturns in the semiconductor industry can negatively affect our results of operations and financial condition.***

The semiconductor industry is cyclical and has been subject to significant downturns from time to time, as a result of global economic conditions, as well as industry-specific factors, such as built-in excess capacity, fluctuations in product supply, product obsolescence and changes in end-customer preferences. The COVID-19 pandemic has caused a significant contraction in the global economy, and there is considerable uncertainty as to its severity and duration. See “Item 3. Key Information — Risk Factors — Risks Related to the Semiconductor Industry which Impact Us — We, and the semiconductor industry as a whole, may be impacted by changes in, or uncertainty about, global, regional and local economic, political, legal, regulatory and social environments as well as climate change.”

Downturns are typically characterized by reduction in overall demand, accelerated erosion of selling prices, reduced revenues and high inventory levels, any of which could result in a significant deterioration of our results of operations. Such macro-economic trends typically relate to the semiconductor industry as a whole rather than to the individual semiconductor markets to which we sell our products. To the extent that industry downturns are concurrent with the timing of new increases in production capacity or introduction of new advanced technologies in our industry, the negative effects on our business from such industry downturns may also be more severe. We have experienced revenue volatility and market downturns in the past and expect to experience them in the future, which could have a material adverse impact on our results of operations and financial condition.

The recent increase in inflation rates in the markets in which we operate may lead us to experience higher labor costs, energy costs, water costs, transportation costs, wafer costs and other costs for raw materials from suppliers. Our suppliers may raise their prices, and in the competitive markets in which we operate, we may not be able to make corresponding price increases to preserve our gross margins and profitability due to market conditions and competitive dynamics. Additionally, any such increase in prices may not be accepted by our customers.

***The duration and the severity of the global outbreak of COVID-19 has impacted and may continue to impact the global economy and also could adversely affect our business, financial condition and results of operations.***

The COVID-19 pandemic has resulted in authorities imposing, and businesses and individuals implementing, numerous measures to try to contain the virus, including travel bans and restrictions, shelter-in-place and stay-at-home orders, quarantines and social distancing guidelines. While to date we have not seen a significant impact on our manufacturing facilities or our supply chain – the ability of our suppliers to deliver on their commitments to us, our ability to ship our products to our customers and general consumer demand for our products may be negatively impacted by the pandemic and/or government responses thereto.

Many of our products and services are considered to be essential under national and local guidelines. As such, we have generally continued to operate in each of the jurisdictions where we are present. However, certain of our facilities have not been able to operate at optimal capacity and any future restrictive measures may have negative impact on our operations, supply chain and transportation networks. In addition, our customers and suppliers have experienced, and may in the future experience, disruptions in their operations and supply chains, which can result in delayed, reduced, or cancelled orders, or collection risks, and which may adversely affect our results of operations and financial condition.

The COVID-19 pandemic has adversely affected and may continue to adversely affect the economies and financial markets of many countries, and may result in a further prolonged period of regional, national, and global economic slowdown. In response to the COVID-19 pandemic, governments across the world have and are expected to spend significant amounts to fund disease control measures, support healthcare infrastructure, support businesses and revive their economies. Governments could look to re-direct resources and implement

austerity measures in the future to balance public finances, which could result in reduced economic activity. Any further economic downturn could reduce overall demand for our products, accelerate the erosion of selling prices, lead to reduced revenues and higher inventory levels, any of which could result in a significant deterioration of our results of operations and financial condition.

The COVID-19 pandemic has caused us to modify our business practices, including with respect to work-from home policies, employee travel, the cancellation of physical participation in meetings, events, and conferences, and social distancing measures. Although these changes have not led to a significant impact on our business or results of operations, we could be negatively affected in the future if government policies further restrict the ability of our employees to perform their functions or if our employees contract or are exposed to COVID-19. In addition, work-from-home and other measures introduce additional operational risks, including cybersecurity risks. There is no certainty that such measures will be sufficient to mitigate the risks posed by the virus, and illness and workforce disruptions could lead to unavailability of key personnel and harm our ability to perform critical functions.

The COVID-19 pandemic has led to increased disruption and volatility in capital markets and credit markets. Unanticipated consequences of this pandemic and resulting economic uncertainty could adversely affect our liquidity and capital resources in the future.

The degree to which the COVID-19 pandemic impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including, but not limited to, the duration and severity of the pandemic, the actions taken to contain the virus or treat its impact, other actions taken by governments, businesses, and individuals in response to the virus and resulting economic disruption, and how quickly and to what extent normal economic and operating conditions can resume. We are unable to predict the extent of the impact of the pandemic on our customers, suppliers, vendors, and other partners, and their financial conditions, but a material effect on these parties could also materially adversely affect us.

Given the continued and substantial economic uncertainty and volatility created by the COVID-19 pandemic, it is difficult to predict the nature and extent of impacts on demand for our products. For example, the increased demand for certain of our products that benefited as a result of work- and learn-from-home dynamics may not continue as the pandemic progresses or subsides. Similarly, even as the pandemic progresses or subsides, products for which sales have declined or where costs have increased could continue to experience lower sales or higher costs.

The impact of the COVID-19 pandemic can also exacerbate other risks discussed herein, which could in turn have a material adverse effect on us. Developments related to COVID-19 have been unpredictable, and additional impacts and risks may arise that we are not aware of or able to respond to appropriately.

***We may not be able to match our production capacity to demand.***

As a result of the cyclical and volatility of the semiconductor industry, it is difficult to predict future developments in the markets we serve, and, in turn, to estimate requirements for production capacity. If our markets, start-up or ramp-ups in manufacturing operations are not efficiently executed, major customers or certain product designs or technologies do not perform as well as we have anticipated, or if demand is impacted by factors outside of our or our customers' control, such as the COVID-19 pandemic, we risk unused capacity charges, write-offs of inventories and losses on products, and we could be required to undertake restructuring and transformation measures that may involve significant charges to our earnings. Furthermore, during certain periods, we have also experienced increased demand in certain market segments and product technologies, which has led to a shortage of capacity, an increase in the lead times of our delivery to customers and, in certain instances, being required to enter into agreements with our suppliers with onerous terms, such as take-or-pay arrangements.

The global supply of semiconductor industry fabrication capacity is currently not sufficient to meet the demand for semiconductor products. Any shortage of our capacity and the capacity of our sub-contractors may lead to us being unable to service some of our customers, which may result in adverse effects on our customer relationships and in liability claims. Further, as a result of this supply imbalance, the industry in general has experienced a high level of profitability and gross margins, which may not be sustainable over the long-term.

***Competition in the semiconductor industry is intense, and we may not be able to compete successfully if our product design technologies, process technologies and products do not meet market requirements. Furthermore, the competitive environment of the industry has resulted, and is expected to continue to result, in vertical and horizontal consolidation among our suppliers, competitors and customers, which may lead to erosion of our market share, impact our ability to compete and require us to restructure our operations.***

We compete in different product lines to various degrees on certain characteristics, for example, price, technical performance, product features, product design, product availability, process technology, manufacturing capabilities and sales and technical support. Given the intense competition in the semiconductor industry, if our products do not meet market requirements based on any of these characteristics, our business, financial condition and results of operations could be materially adversely affected. Our competitors may have a stronger presence in key markets and geographic regions, greater name recognition, larger customer bases, greater government support and greater financial, research and development, sales and marketing, manufacturing, distribution, technical and other resources than we do. These competitors may be able to adapt more quickly to changes in the business environment, to new or emerging technologies and to changes in customer requirements.

The semiconductor industry is intensely competitive and characterized by the high costs associated with developing marketable products and manufacturing technologies as well as high levels of investment in production capabilities. As a result, the semiconductor industry has experienced, and is expected to continue to experience, significant vertical and horizontal consolidation among our suppliers, competitors and customers. Consolidation in the semiconductor industry could erode our market share, negatively impact our ability to compete and require us to increase our R&D effort, engage in mergers and acquisitions and/or restructure our operations.

## **Risks Related to Our Operations**

***Our high fixed costs could adversely impact our results.***

Our operations are characterized by high fixed or other costs which are difficult to reduce, including costs related to manufacturing, particularly as we operate our own manufacturing facilities, and the employment of our highly skilled workforce. When demand for our products decreases, competition increases or we fail to forecast demand accurately, we may be driven to reduce prices and we may not always be able to decrease our total costs in line with resulting revenue declines. As a result, the costs associated with our operations may not be fully absorbed, leading to unused capacity charges, higher average unit costs and lower gross margins, adversely impacting our results.

***Our capital needs are high compared to those competitors who do not manufacture their own products and we may need additional funding in the coming years to finance our investments, to purchase other companies or technologies developed by third parties or to refinance our maturing indebtedness.***

As a result of our choice to maintain control of a large portion of our manufacturing technologies and capabilities, we may require significant capital expenditure to maintain or upgrade our facilities if our facilities become inadequate in terms of capacity, flexibility and location. We monitor our capital expenditures taking into consideration factors such as trends in the semiconductor market, customer requirements and capacity utilization. These capital expenditures may increase in the future if we decide to upgrade or expand the capacity of our manufacturing facilities, purchase or build new facilities or increase investments supporting key strategic initiatives. For instance, we may be unable to successfully maintain and operate large infrastructure projects. Such increased capital expenditures associated with large infrastructure projects and strategic initiatives might not achieve profitability or we may be unable to utilize infrastructure projects to full capacity. There can also be no assurance that future market demand and products required by our customers will meet our expectations. We also may need to invest in other companies, in IP and/or in technology developed either by us or by third parties to maintain or improve our position in the market or to reinforce our existing business. Failure to invest appropriately and in a timely manner or to successfully integrate any recent or future business acquisitions may prevent us from achieving the anticipated benefits and could have a material adverse effect on our business and results of operations.

The foregoing may require us to secure additional financing, including through the issuance of debt, equity or both. The timing and the size of any new share or bond offering would depend upon market conditions as well as a variety of other factors. In addition, the capital markets may from time to time offer terms of financing that are particularly favorable. We cannot exclude that we may access the capital markets opportunistically to take advantage of market conditions. Any such transaction or any announcement concerning such a transaction could materially impact the market price of our common shares. If we are unable to access capital on acceptable terms, this may adversely affect our business and results of operations.

***Our operating results depend on our ability to obtain quality supplies on commercially reasonable terms. As we depend on a limited number of suppliers for materials, equipment and technology, we may experience supply disruptions if suppliers interrupt supply, increase prices or experience material adverse changes in their financial condition.***

Our ability to meet our customers' demand to manufacture our products depends upon obtaining adequate supplies of quality materials on a timely basis and on commercially reasonable terms. Certain materials are available from a limited number of suppliers or only from a limited number of suppliers in a particular region. We purchase certain materials whose prices on the world markets have fluctuated significantly in the past and may fluctuate significantly in the future. Although supplies for most of the materials we currently use are adequate, shortages could occur in various essential materials due to interruption of supply or increased demand in the industry. For instance, epidemics or pandemics such as the COVID-19 pandemic could cause disruptions from the temporary closure of suppliers' facilities or delays and reduced export or shipment of various materials. Geopolitical conflicts such as the ongoing conflict between Russia and Ukraine could also disrupt supply chains and cause shortages of certain semiconductor components and corresponding delays in shipments. Any such shortage may impact different geographical markets disproportionately, leading to shortages or unavailability of supplies in specific areas and higher transportation costs. In addition, the costs of certain materials may increase due to recent inflationary rates and market pressures and we may not be able to pass on such cost increases to our customers.

We also purchase semiconductor manufacturing equipment and third-party licensed technology from a limited number of suppliers and providers and, because such equipment and technology are complex, it is difficult to replace one supplier or provider with another or to substitute one piece of equipment or type of technology for another. In addition, suppliers and providers may extend lead times, limit our supply, increase prices or change contractual terms related to certain manufacturing equipment and third-party licensed technology, any of which could adversely affect our results. Furthermore, suppliers and technology providers tend to focus their investments on providing the most technologically advanced equipment, materials and technology and may not be able to address our requirements for equipment, materials or technology of older generations. Although we work closely with our suppliers and providers to avoid such shortages, there can be no assurance that we will not encounter these problems in the future.

Consolidation among our suppliers or vertical integration among our competitors may limit our ability to obtain sufficient quantities of materials, equipment and/or technology on commercially reasonable terms and engage in mergers and acquisitions. In certain instances, we may be required to enter into agreements with our suppliers with onerous terms, such as take-or-pay arrangements. If we are unable to obtain supplies of materials, equipment or technology in a timely manner or at all, or if such materials, equipment or technology prove inadequate or too costly, our results of operations could be adversely affected.

***Our financial results can be affected by fluctuations in exchange rates, principally in the value of the U.S. dollar.***

Currency exchange rate fluctuations affect our results of operations because our reporting currency is the U.S. dollar, in which we receive the major portion of our revenues, while, more importantly, we incur a limited portion of our revenue and a significantly higher portion of our costs in currencies other than the U.S. dollar. A significant variation of the value of the U.S. dollar against the principal currencies that have a material impact on us (primarily the Euro, but also certain other currencies of countries where we have operations, such as the Singapore dollar) could result in a favorable impact, net of hedging, on our net income in the case of an appreciation of the U.S. dollar, or a negative impact, net of hedging, on our net income if the U.S. dollar depreciates relative to these currencies, in particular with respect to the Euro.

In order to reduce the exposure of our financial results to the fluctuations in exchange rates, our principal strategy has been to balance as much as possible the proportion of sales to our customers denominated in U.S. dollars with the amount of purchases from our suppliers denominated in U.S. dollars and to reduce the weight of

the other costs, including depreciation, denominated in Euros and in other currencies. In order to further reduce our exposure to U.S. dollar exchange rate fluctuations, we have hedged certain line items on our consolidated statements of income, in particular with respect to a portion of the cost of sales, the majority of the R&D expenses and certain SG&A expenses located in the Euro zone. We also hedge certain manufacturing costs, included within the cost of sales, denominated in Singapore dollars. There can be no assurance that our hedging transactions will prevent us from incurring higher Euro-denominated manufacturing costs and/or operating expenses when translated into our U.S. dollar-based accounts. See “Item 5. Operating and Financial Review and Prospects — Impact of Changes in Exchange Rates” and “Item 11. Quantitative and Qualitative Disclosures About Market Risk”.

***Our operating results may vary significantly from quarter to quarter and annually and may also differ significantly from our expectations or guidance.***

Our operating results are affected by a wide variety of factors that could materially and adversely affect revenues and profitability or lead to significant variability of our operating results from one period to the next. These factors include changes in demand from our key customers, capital requirements, inventory management, availability of funding, competition, new product developments, start of adoption of our new products by customers, technological changes, manufacturing or supplier issues and effective tax rates. In addition, in periods of industry overcapacity or when our key customers encounter difficulties in their end-markets or product ramps, orders are more exposed to cancellations, reductions, price renegotiation or postponements, which in turn reduce our ability to forecast the next quarter or full year production levels, revenues and margins. As a result, we may not meet our financial targets, which could in turn have an impact on our reputation or brand. For these reasons and others that we may not yet have identified, our revenues and operating results may differ materially from our expectations or guidance as visibility is reduced. See “Item 4. Information on the Company — Backlog”.

***If our external silicon foundries or back-end subcontractors fail to perform, this could adversely affect our business prospects, financial condition and results of operations.***

We currently use external silicon foundries and back-end subcontractors for a portion of our manufacturing activities. Our external silicon foundries or back-end subcontractors are currently unable to satisfy our demand as a result of an increase in demand across our industry and disruptions due to the COVID-19 pandemic, and we expect such limitation in capacity to continue through 2023. This limitation on our ability to satisfy our demand may extend beyond 2023, and our external silicon foundries and back-end subcontractors may experience further inability to satisfy our demand as a result of competing orders, disruptions due to the COVID-19 pandemic or otherwise or may experience manufacturing difficulties, delays or reduced yields. Any limitation on the ability of our external silicon foundries and back-end subcontractors to satisfy our demand may cause our results of operations and ability to satisfy the demand of our customers to suffer. Likewise, if we are unable to meet our commitments to silicon foundries and back-end subcontractors, our results of operations could suffer. Prices for these services also vary depending on capacity utilization rates at our external silicon foundries and back-end subcontractors, quantities demanded and product and process technology. Such outsourcing costs can vary materially and, in cases of industry shortages, they can increase significantly, negatively impacting our business prospects, financial condition and results of operations.

***Our manufacturing processes are highly complex, costly and potentially vulnerable to impurities, disruptions or inefficient implementation of production changes or interruptions that can significantly increase our costs and delay product shipments to our customers.***

Our manufacturing processes are highly complex, require advanced and increasingly costly equipment and are continuously modified or maintained in an effort to improve yields and product performance and lower the cost of production.

Furthermore, impurities or other difficulties in the manufacturing process can lower yields, interrupt production or result in scrap. As system complexity and production changes have increased and sub-micron technology has become more advanced, manufacturing tolerances have been reduced and requirements for precision have become even more demanding. We have from time to time experienced bottlenecks and production difficulties that have caused delivery delays and quality control problems. There can be no assurance that we will not experience bottlenecks or production, transition or other difficulties in the future.

In addition, we are exposed to risks related to interruptions of our manufacturing processes. If any of our property or equipment is damaged or otherwise rendered unusable or inoperable due to accident, cyberattack or otherwise this could result in interruptions which could have a material adverse effect on our business, financial condition and results of operations.

***We may experience quality problems from time to time that can result in decreased sales and operating margin and product liability or warranty claims.***

We sell complex products that may not in each case comply with specifications or customer requirements, or may contain design or manufacturing defects, that could cause personal injury, property damage or security risks that could be exploited by unauthorized third parties hacking, corrupting or otherwise obtaining access to our products, including the software loaded thereon by us, our suppliers or our customers. Although our general practice is to contractually limit our liability to the repair, replacement or refund of defective products, we occasionally agree to contractual terms with key customers in which we provide extended warranties and accordingly we may face product liability, warranty, delivery failure, and/or other claims relating to our products that could result in significant expenses relating to compensation payments, product recalls or other actions related to such extended warranties and/or to maintain good customer relationships, which could result in decreased sales and operating margin and other material adverse effects on our business. Costs or payments we may make in connection with warranty and other claims or product recalls may adversely affect our results of operations. There can be no assurance that we will be successful in maintaining our relationships with customers with whom we incur quality problems. Furthermore, if litigation occurs we could incur significant costs and liabilities to defend ourselves against such claims. The industry has experienced a rise in premiums and deductibles with regards to insurance policies. These may continue to increase and insurance coverage may also correspondingly decrease. If litigation occurs and damages are awarded against us, there can be no assurance that our insurance policies will be available or adequate to protect us against such claims.

***Disruptions in our relationships with any one of our key customers or distributors, and/or material changes in their strategy or financial condition or business prospects, could adversely affect our results of operations.***

A substantial portion of our sales is derived from a limited number of customers and distributors. There can be no assurance that our customers or distributors will continue to book the same level of sales with us that they have in the past, will continue to succeed in the markets they serve and will not purchase competing products over our products. Many of our key customers and distributors operate in cyclical businesses that are also highly competitive, and their own market positions may vary considerably. In recent years, some of our customers have vertically integrated their businesses. Such vertical integrations may impact our business. Our relationships with the newly formed entities could be either reinforced or jeopardized by the integration. If we are unable to maintain or increase our market share with our key customers or distributors, or if they were to increase product returns or fail to meet payment obligations, our results of operations could be materially adversely affected. Certain of our products are customized to our customers' specifications. If customers do not purchase products made specifically for them, we may not be able to recover a cancellation fee from our customers or resell such products to other customers. In addition, the occurrence of epidemic or pandemic outbreaks such as COVID-19 could affect our customers. While the geographic spread of epidemics or pandemics such as the COVID-19 pandemic cannot be predicted and its future developments are uncertain, if its severity increases, the adverse public health impact on our customers could negatively affect our results.

***We may experience delays in delivering our product and technology roadmaps as well as transformation initiatives.***

Our industry adapts to technological advancements and it is likely that new products, equipment, processes and service methods, including transformation initiatives related to digitalization, are in the process of being implemented. Any failure by us to manage our data governance processes could undermine our initiatives related to digitalization and any failure by us to react to changes or advances in existing technologies and processes as we develop and invest in our product, technology and transformation roadmaps could materially delay the introduction of new solutions. If we are not able to execute on these roadmaps on a timely basis or at an acceptable cost this could result in loss of competitiveness of our solutions, decreased revenue and a loss of market share.



***Our computer systems, including hardware, software, information and cloud-based initiatives, are subject to attempted security breaches and other cybersecurity threats, which, if successful, could adversely impact our business.***

We have, from time to time, detected and experienced attempts by others to gain unauthorized access to our computer systems and networks. The reliability and security of our information technology infrastructure and software, and our ability to expand and continually update technologies, including to transition to cloud-based technologies, in response to our changing needs is critical to our business. In the current environment, there are numerous and evolving risks to cybersecurity, including criminal hackers, state-sponsored intrusions, terrorism, industrial espionage, employee malfeasance, vandalism and human or technological error. Computer hackers and others routinely attempt to breach the security of technology products, services, and systems, and those of our customers, suppliers, partners and providers of third-party licensed technology, and some of those attempts may be successful. Such breaches could result in, for example, unauthorized access to, disclosure, modification, misuse, loss, or destruction of our, our customer, or other third-party data or systems, theft of our trade secrets and other sensitive or confidential data, including personal information and IP, system disruptions, and denial of service.

The attempts to breach our systems, including our cloud-based systems, and to gain unauthorized access to our information technology systems are becoming increasingly more sophisticated. These attempts may include covertly introducing malware into our computers, including those in our manufacturing operations, and impersonating unauthorized users, among others. For instance, employees and former employees, in particular former employees who become employees of our competitors or customers, may misappropriate, use, publish or provide to our competitors or customers our IP and/or proprietary or confidential business information. Also, third parties may attempt to register domain names similar to our brands or website, which could cause confusion and divert online customers away from our products. In the event of such breaches, we, our customers or other third parties could be exposed to potential liability, litigation, and regulatory action, as well as the loss of existing or potential customers, damage to our reputation, and other financial loss and such breaches could also result in losing existing or potential customers in connection with any actual or perceived security vulnerabilities in our systems. In addition, the cost and operational consequences of responding to breaches and implementing remediation measures could be significant. As these threats continue to develop and grow, we have been adapting and strengthening our security measures.

As a result of the social distancing measures and regulations enforced by governments in connection with the COVID-19 pandemic, and the resulting work-from-home policies that we have undertaken, there has been additional reliance placed on our IT systems and resources. The resulting reliance on these resources, and the added need to communicate by electronic means, could increase our risk of cybersecurity incidents.

Geopolitical instability, such as the ongoing conflict between Russia and Ukraine, have been associated with an increase in cybersecurity incidents. This may result in a higher likelihood that we may experience direct or collateral consequences from cybersecurity conflicts between nation-states or other politically motivated actors targeting critical technology infrastructure.

U.S. and foreign regulators have increased their focus on cybersecurity vulnerabilities and risks, and customers and service providers are increasingly demanding more rigorous contractual certification and audit provisions regarding cybersecurity and data governance. This may result in an increase of our overall compliance burden due to increasingly onerous obligations and leading to significant expense. There may also be shorter deadlines in which to notify the authorities of data breaches and ever-increasing fines and penalties for businesses that fail to respond swiftly and appropriately to cyberattacks. Any failure to comply could also result in proceedings against us by regulatory authorities or other third parties.

We continue to increase the resources we allocate to implementing, maintaining and/or updating security systems to protect data and infrastructure and to raising security awareness among those having access to our systems. However, these security measures cannot provide absolute security and there can be no assurance that our employee training, operational, and other technical security measures or other controls will detect, prevent or remediate security or data breaches in a timely manner or otherwise prevent unauthorized access to, damage to, or interruption of our systems and operations.

We regularly evaluate our IT systems and business continuity plan to make enhancements and periodically implement new or upgraded systems, including the transition and migration of our data systems to cloud-based platforms and critical system migration. Any delay in the implementation of, or disruption in the transition to different systems could adversely affect our ability to record and report financial and management information on a timely and accurate basis and could impact our operations and financial position. In addition, a

miscalculation of the level of investment needed to ensure our technology solutions are current and up-to-date as technology advances and evolves could result in disruptions in our business should the software, hardware or maintenance of such items become out-of-date or obsolete and the costs of upgrading our cybersecurity systems and remediating damages could be substantial.

We may also be adversely affected by security breaches related to our equipment providers and providers of IT services or third-party licensed technology. As a global enterprise, we could also be impacted by existing and proposed laws and regulations, as well as government policies and practices related to cybersecurity, data privacy and data protection. Additionally, cyberattacks or other catastrophic events resulting in disruptions to or failures in power, information technology, communication systems or other critical infrastructure could result in interruptions or delays to us, our customers, or other third-party operations or services, financial loss, potential liability, damage to our reputation and could also affect our relationships with our customers, suppliers and partners.

***We may be subject to theft, loss, or misuse of personal data about our employees, customers, or other third parties, which could increase our expenses, damage our reputation, or result in legal or regulatory proceedings.***

The theft, loss, or misuse of personal data processed by us could result in significantly increased security costs or costs related to defending legal claims.

Further, with increasing digitalization, data privacy-related legislations are rapidly evolving around the globe which may have a negative impact on our business if interpreted or implemented in a manner that is inconsistent from country to country and inconsistent with the current policies and practices of our customers or business partners. We may also have to change the manner in which we contract with our business partners, store and transfer information and otherwise conduct our business, which could increase our costs and reduce our revenues.

***Our business is dependent in large part on continued growth in the industries and segments into which our products are sold and on our ability to retain existing customers and attract new ones. A market decline in any of these industries, our inability to retain and attract customers, or customer demand for our products which differs from our projections, could have a material adverse effect on our results of operations.***

The demand for our products depends significantly on the demand for our customers' end products. Growth of demand in the industries and segments into which our products are sold fluctuates significantly and is driven by a variety of factors, including consumer spending, consumer preferences, the development and acceptance of new technologies and prevailing economic conditions. Changes in our customers' markets and in our customers' respective shares in such markets could result in slower growth and a decline in demand for our products. In addition, if projected industry growth rates do not materialize as forecasted, our spending on process and product development ahead of market acceptance could have a material adverse effect on our business, financial condition and results of operations.

Our business is dependent upon our ability to retain existing customers. In 2022 our largest customer, Apple, accounted for 16.8% of our total revenues. While we do not believe to be dependent on any one customer or group of customers, the loss of key customers or important sockets at key customers could have an adverse effect on our results of operations and financial condition.

Our existing customers' product strategy may change from time to time and/or product specifications may change on short-time product life cycles and we have no certainty that our business, financial position and results of operations will not be affected. Our business is also dependent upon our ability to attract new customers. There can be no assurance that we will be successful in attracting and retaining new customers, or in adequately projecting customer demand for our products. Our failure to do so could materially adversely affect our business, financial condition and results of operations.

***Market dynamics have driven, and continue to drive us, to a strategic repositioning.***

In recent years, we have undertaken several initiatives to reposition our business. Our strategies to improve our results of operations and financial condition have led us, and may in the future lead us, to acquire businesses that we believe to be complementary to our own, or to divest ourselves of or wind down activities that we believe do not serve our longer term business plans. Our potential acquisition strategies depend in part on our ability to identify suitable acquisition targets, finance their acquisition, obtain approval by our



shareholders and obtain required regulatory and other approvals. Our potential divestiture strategies depend in part on our ability to compete and to identify the activities in which we should no longer engage, obtain the relevant approvals pursuant to our governance process and then determine and execute appropriate methods to divest of them.

We are constantly monitoring our product portfolio and cannot exclude that additional steps in this repositioning process may be required. Furthermore, we cannot assure that any strategic repositioning of our business, including executed and possible future acquisitions or dispositions, will be successful and will not result in impairment, restructuring charges and other related closure costs.

Acquisitions and divestitures involve a number of risks that could adversely affect our operating results and financial condition, including the inability for us to successfully integrate businesses or teams that we acquire with our culture and strategies on a timely basis or at all, and the potential requirement for us to record charges related to the goodwill or other long-term assets associated with the acquired businesses. There can be no assurance that we will be able to achieve the full scope of the benefits we expect from a particular acquisition, divestiture or investment. Our business, financial condition and results of operations may suffer if we fail to coordinate our resources effectively to manage both our existing businesses and any acquired businesses. In addition, the financing of future acquisitions or divestitures may negatively impact our financial position, including our ability to pay a dividend and/or repurchase our shares, and credit rating and we could be required to raise additional funding.

Other risks associated with acquisitions include the assumption of potential liabilities, disclosed or undisclosed, associated with the business acquired, which liabilities may exceed the amount of indemnification available from the seller, potential inaccuracies in the financials of the business acquired, and our ability to retain customers of an acquired entity, its business or industrialize an acquired process or technology. Identified risks associated with divestitures include loss of activities and technologies that may have complemented our remaining businesses or operations and loss of important services provided by key employees that are assigned to divested activities.

***We depend on collaboration with other semiconductor industry companies, research organizations, universities, customers and suppliers to further our R&D efforts, and our business and prospects could be materially adversely affected by the failure or termination of such alliances.***

Our success depends on our ability to introduce innovative new products and technologies to the marketplace on a timely basis. In light of the high levels of investment required for R&D activities, we depend in certain instances on collaborations with other semiconductor industry companies, research organizations, universities, customers and suppliers to develop or access new technologies.

Such collaboration provides us with a number of important benefits, including the sharing of costs, reductions in our own capital requirements, acquisitions of technical know-how and access to additional production capacities. However, there can be no assurance that our collaboration efforts will be successful and allow us to develop and access new technologies in due time, in a cost-effective manner and/or to meet customer demands. If a particular collaboration terminates before our intended goals are accomplished we may incur additional unforeseen costs, and our business and prospects could be adversely affected. Furthermore, if we are unable to develop or otherwise access new technologies, whether independently or in collaboration with another industry participant, we may fail to keep pace with the rapid technology advances in the semiconductor industry, our participation in the overall semiconductor industry may decrease and we may also lose market share.

***We depend on patents to protect our rights to our technology and may face claims of infringing the IP rights of others.***

We depend on patents and other IP rights to protect our products and our manufacturing processes against misappropriation by others. The process of seeking patent protection can be long and expensive, and there can be no assurance that that we will receive patents from currently pending or future applications. Even if patents are issued, they may not be of sufficient scope or strength to provide meaningful protection or any commercial advantage. In addition, effective IP protection may be unavailable or limited in some countries. Our ability to enforce one or more of our patents could be adversely affected by changes in patent laws, laws in certain foreign jurisdictions that may not effectively protect our IP rights or by ineffective enforcement of laws in such jurisdictions. Competitors may also develop technologies that are protected by patents and other IP and therefore either be unavailable to us or be made available to us subject to adverse terms and conditions. We have in the past used our patent portfolio to negotiate broad patent cross-licenses with many of our competitors

enabling us to design, manufacture and sell semiconductor products, without concern of infringing patents held by such competitors. We may not in the future be able to obtain such licenses or other rights to protect necessary IP on favorable terms for the conduct of our business, and such failure may adversely impact our results of operations. Such cross-license agreements expire from time to time and there is no assurance that we can or we will extend them.

We have from time to time received, and may in the future receive, communications alleging possible infringement of third-party patents and other IP rights. Some of those claims are made by so-called non-practicing entities against which we are unable to assert our own patent portfolio to lever licensing terms and conditions. Competitors with whom we do not have patent cross-license agreements may also develop technologies that are protected by patents and other IP rights and which may be unavailable to us or only made available on unfavorable terms and conditions. We may therefore become involved in costly litigation brought against us regarding patents and other IP rights. See Note 26 to our Consolidated Financial Statements. IP litigation may also involve our customers who in turn may seek indemnification from us should we not prevail and/or who may decide to curtail their orders for those of our products over which claims have been asserted. Such lawsuits may therefore have a material adverse effect on our business. We may be forced to stop producing substantially all or some of our products or to license the underlying technology upon economically unfavorable terms and conditions or we may be required to pay damages for the prior use of third-party IP and/or face an injunction.

The outcome of IP litigation is inherently uncertain and may divert the efforts and attention of our management and other specialized technical personnel. Such litigation can result in significant costs and, if not resolved in our favor, could materially and adversely affect our business, financial condition and results of operations.

***We operate in many jurisdictions with highly complex and varied tax regimes. Changes in tax rules, new or revised legislation or the outcome of tax assessments and audits could cause a material adverse effect on our results.***

We operate in many jurisdictions with highly complex and varied tax regimes. Changes in tax rules, new or revised legislation or the outcome of tax assessments and audits could have a material adverse effect on our results.

In 2021, the Organization for Economic Cooperation and Development (OECD) and the G20 Inclusive Framework on base erosion and profit shifting (BEPS) agreed to a two-pillar solution to address the tax challenges arising from the digitalization of the economy. Pillar I is a set of proposals to revisit tax allocation rules in a changed economy. The intention is that a portion of a multinationals' residual profit is taxed in the jurisdiction where revenue is sourced.

Pillar II enforces a global minimum corporate income tax at an effective rate of 15% for large multinationals. On December 15, 2022, the Council of the European Union formally adopted the directive implementing the minimum taxation at EU level ("Pillar II Directive"). EU Member States will now have to transpose the Pillar II Directive into their national laws before December 31, 2023 and they will have to apply the Pillar II measures in respect of the fiscal years beginning on or after December 31, 2023. As of December 31, 2022, none of the 137 Inclusive Framework member states has passed the model rules as part of their national laws. The tax impact of the Pillar I and II rules is currently being analyzed to determine the potential effect on our results and to ensure compliance when the legislation is effective. Sufficient information is not currently available to estimate the quantitative impact on the Company's tax position as per December 31, 2022.

Our tax rate is variable and depends on changes in the level of operating results within various local jurisdictions and on changes in the applicable taxation rates of these jurisdictions, as well as changes in estimated tax provisions due to new events. We currently receive certain tax benefits or benefit from net operating losses cumulated in prior years in some countries, and these benefits may not be available in the future due to changes in the local jurisdictions or credits on net operating losses being no longer available due to either full utilization or expiration of the statute of limitations in such jurisdictions. As a result, our effective tax rate could increase and/or our benefits from carrying forward net operating losses could affect our deferred tax assets in certain countries in the coming years. In addition, the acquisition or divestiture of businesses in certain jurisdictions could materially affect our effective tax rate.

We evaluate our deferred tax asset position and the need for a valuation allowance on a regular basis. The ultimate realization of deferred tax assets is dependent upon, among other things, our ability to generate future taxable income that is sufficient to utilize in certain jurisdictions loss carry-forwards or tax credits before their expiration or our ability to implement prudent and feasible tax optimization strategies. The recorded amount of total deferred tax assets could be reduced, which could have a material adverse effect on our results of operations and financial position, if our estimates of projected future taxable income and benefits from available tax strategies are reduced as a result of a change in business condition or in management's plans or due to other factors, such as changes in tax laws and regulations.

We are subject to the possibility of loss contingencies arising out of tax claims, assessment of uncertain tax positions and provisions for specifically identified income tax exposures. We are also subject to tax audits in certain jurisdictions. There can be no assurance that we will be successful in resolving potential tax claims that result from these audits, which could result in material adjustments in our tax positions. We record provisions on the basis of the best current understanding; however, we could be required to record additional provisions in future periods for amounts that cannot currently be assessed. Our failure to do so and/or the need to increase our provisions for such claims could have a material adverse effect on our results of operations and our financial position.

Our operating results can also vary significantly due to impairment of goodwill and other intangible assets incurred in the course of acquisitions and equity investments, as well as to impairment of tangible assets due to changes in the business environment.

Our operating results can vary significantly due to impairment of goodwill, other intangible assets and equity investments booked pursuant to acquisitions and the timeframe required to foster and realize synergies thereof, joint venture agreements and the purchase of technologies and licenses from third parties, as well as to impairment of tangible assets due to changes in the business environment. Because the market for our products is characterized by rapidly changing technologies, significant changes in the semiconductor industry, and the potential failure of our business initiatives, our future cash flows may not support the value of goodwill, tangible assets and other intangibles registered in our consolidated balance sheets. See "Item 5. Operating and Financial Review and Prospects— Critical Accounting Policies Using Significant Estimates — Impairment of goodwill", "— Intangible assets subject to amortization" and "Item 4. Information on the Company — Property, Plants and Equipment".

***We receive public funding, and a reduction in the amount available to us or demands for repayment could increase our costs and impact our results of operations.***

We have in the past obtained public funding, primarily to support our proprietary R&D for technology investments and investments in cooperative R&D ventures, and expect to obtain public funding in the future, mainly from French, Italian and EU governmental entities. The public funding we receive is subject to periodic review by the relevant authorities and there can be no assurance that we will continue to benefit from such programs at current levels or that sufficient alternative funding will be available if we lose such support. If any of the public funding programs we participate in are curtailed or discontinued and we do not reduce the relevant R&D costs, this could have a material adverse effect on our business. Furthermore, to receive public funding, we enter into agreements which require compliance with extensive regulatory requirements and set forth certain conditions relating to the funded programs. If we fail to meet the regulatory requirements or applicable conditions, we may, under certain circumstances, be required to refund previously received amounts, which could have a material adverse effect on our results of operations. If there are changes in the public funding we receive this could increase the net costs for us to continue investing in R&D at current levels and could result in a material adverse effect on our results of operations.

A change in the landscape in public funding may also affect our business. For example, there are currently proposals within Europe to enact a European Chips Act, and similar proposals in other regions, which may provide public funding towards manufacturing activities of semiconductors. It is yet to be seen whether this would impact the amount of public funding currently available to us for our R&D investments and ventures, but any reduction in said funding could result in a material adverse effect on our results of operations. Further, this may result in new or existing competitors benefitting from such funding and could also have an impact on the competitive landscape in our industry.

***Some of our production processes and materials are environmentally sensitive, which could expose us to liability and increase our costs due to environmental, health and safety laws and regulations or because of damage to the environment.***

We are subject to environmental, health and safety laws and regulations that govern various aspects, including the use, storage, discharge and disposal of chemicals, gases and other hazardous substances used in our operations. Compliance with such laws and regulations could adversely affect our manufacturing costs or product sales by requiring us to acquire costly equipment, materials or greenhouse gas allowances, or to incur other significant expenses in adapting our manufacturing processes or waste and emission disposal processes. Furthermore, environmental claims or our failure to comply with present or future regulations could result in the assessment of damages or imposition of fines against us, suspension of production or a cessation of operations. Failure by us to control the use of, or adequately restrict the discharge of, chemicals or hazardous substances could subject us to future liabilities.

***Climate change and related sustainability regulations and initiatives, including our commitment to become carbon neutral by 2027, could place additional burden on us and our operations.***

As climate change issues become more pronounced, we may correspondingly face increased regulation and also expectations from our stakeholders to take actions beyond existing regulatory requirements to minimize our impact on the environment and mitigate climate change related effects. The semiconductor manufacturing process has historically contributed to direct greenhouse gas emissions by utilizing perfluorocarbons, which may lead to new or increased regulation of such compounds. In order to address such regulation, we may be required to adapt our production processes or purchase additional equipment or carbon offsets, leading to increased costs. As of the end of 2022, we are on track towards our goal to become carbon neutral by 2027, which includes two specific targets: compliance with the 1.5°C scenario defined at the Paris COP21 by 2025, implying a 50% reduction of direct and indirect greenhouse gas emissions compared to 2018, and the sourcing of 100% renewable energy by 2027 (as further explained below in “Item 4. – Environmental, Health and Safety Matters”).

To meet these additional requirements, we will need to continue to deploy additional equipment, introduce process changes, utilize alternative suppliers and materials, and take other similar actions, some or all of which may require us to incur additional costs which could result in a material adverse effect on our results of operations and our financial condition. In addition, if we fail to meet these expectations, or foster additional sustainability initiatives, we may experience reputational risk which could impact our ability to attract and retain customers, employees, and investors.

Further, our sites, as well as those of our partners along the supply chain, may be exposed to changing and/or increasing physical risks resulting from climate change that are either chronic (induced by longer-term shifts in climate patterns, such as sea level rise or constraints in the availability of water, changing temperature, wind or precipitation patterns) or acute (event-drive such as cyclones, hurricanes or heat waves). In the context of the transition to a lower-carbon economy, we will likely be exposed to further policy, legal, technology, and market transition risks. We have already seen further policy developments in this area in the form of Regulation (EU) 2020/852 of the European Parliament and of the Council of June 18, 2020 on the establishment of a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 (the “EU Taxonomy Regulation”), which entered into force on July 12, 2020. As a result of the EU Taxonomy Regulation, we must disclose information on how and to what extent our activities are associated with economic activities that qualify as environmentally sustainable. See “Item 4. Information on the Company – Environmental, Health and Safety Matters”.

Directive (EU) 2022/2464 of the European Parliament and of the Council of December 14, 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (the “CSRD”), which entered into force on January 5, 2023 will strengthen the rules regarding social and environmental information that will be required to be reported. The CSRD seeks to provide investors and other stakeholders with access to the information they need to assess investment risks arising from climate change and other sustainability topics. The CSRD further makes it mandatory for us to have an audit of the sustainability information that we report on. If our disclosure metrics relating to climate change and other sustainability topics are lower than those of our peers in the industry, this may lead to reputational risk which may lead to onward financial repercussions such as a decrease in share price or difficulty in raising capital.

***Loss of key employees and the inability to continuously recruit and retain qualified employees could hurt our competitive position.***

Our success depends to a significant extent upon our key executives and R&D, engineering, marketing, sales, manufacturing, support and other personnel. Our success also depends upon our ability to continue to identify, attract, retain and motivate highly trained and skilled engineering, technical and professional personnel in a competitive recruitment environment, as well our ability to ensure the smooth succession and continuity of business with newly hired and promoted personnel. For instance, in highly specialized areas, it may become more difficult to retain employees. As a result of the COVID-19 pandemic, work-from-home arrangements and a limitation on social and professional interaction has expanded the competition in employee recruitment and retention.

Our employee hiring and retention also depend on our ability to build and maintain a diverse and inclusive workplace culture and be viewed as an employer of choice. We intend to continue to devote significant resources to recruit, train and retain qualified employees, however, we may not be able to attract, obtain and retain these employees, which may affect our growth in future years and the loss of the services of any of these key personnel without adequate replacement or the inability to attract new qualified personnel could have a material adverse effect on us.

***The interests of our controlling shareholder, which is in turn indirectly controlled by the French and Italian governments, may conflict with other investors' interests. In addition, our controlling shareholder may sell our existing common shares or issue financial instruments exchangeable into our common shares at any time.***

We understand that as of December 31, 2022, STMicroelectronics Holding N.V. ("ST Holding"), owned 250,704,754 shares, or approximately 27.5%, of our issued common shares. ST Holding may therefore be in a position to effectively control the outcome of decisions submitted to the vote at our shareholders' meetings, including but not limited to the appointment of the members of our Managing and Supervisory Boards.

We have been informed that ST Holding's shareholders, each of which is ultimately controlled by the French or Italian government, are party to a shareholders agreement (the "STH Shareholders Agreement"), which governs relations between them. We are not a party to the STH Shareholders Agreement. See "Item 7. Major Shareholders and Related Party Transactions — Major Shareholders". The STH Shareholders Agreement includes provisions requiring the unanimous approval by the shareholders of ST Holding before ST Holding can vote its shares in our share capital, which may give rise to a conflict of interest between our interests and investors' interests, on the one hand, and the (political) interests of ST Holding's shareholders, on the other hand. Our ability to issue new shares or other securities giving access to our shares may be limited by ST Holding's desire to maintain its shareholding at a certain level and our ability to buy back shares may be limited by ST Holding due to a Dutch law requiring one or more shareholders acquiring 30% or more of our voting rights to launch a tender offer for our outstanding shares.

The STH Shareholders Agreement also permits our respective French and Italian indirect shareholders to direct ST Holding to dispose of its stake in us at any time, thereby reducing the current level of their respective indirect interests in our common shares. Sales of our common shares or the issuance of financial instruments exchangeable into our common shares or any announcements concerning a potential sale by ST Holding could materially impact the market price of our common shares depending on the timing and size of such sale, market conditions as well as a variety of other factors.

***Our shareholder structure and our preference shares may deter a change of control.***

We have an option agreement in place with an independent foundation, whereby the foundation can acquire preference shares in the event of actions which the board of the independent foundation 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. In addition, our shareholders have authorized us to issue additional capital within the limits of the authorization by our Annual General Meeting of Shareholders ("AGM"), subject to the requirements of our Articles of Association, without the need to seek a specific shareholder resolution for each capital increase. Accordingly, an issue of preference shares or new shares may make it more difficult for a shareholder to obtain control over our general meeting of shareholders. These anti-takeover provisions could substantially impede the ability of our shareholders to benefit from a change in control and, as a result, may materially adversely affect

the market price of our ordinary shares and our investors' ability to realize any potential change of control premium. See "Item 7. Major Shareholders and Related Party Transactions — Major Shareholders — Preference Shares".

***Any decision to reduce or discontinue paying cash dividends to our shareholders could adversely impact the market price of our common shares.***

On an annual basis, our Supervisory Board, upon the proposal of the Managing Board, may propose the distribution of a cash dividend to the general meeting of shareholders. See "Item 8. Dividend Policy". Any reduction or discontinuance by us of the payment of cash dividends at historical levels could cause the market price of our common shares to decline.

***We are required to prepare financial statements under IFRS and we also prepare Consolidated Financial Statements under U.S. GAAP, and such dual reporting may impair the clarity of our financial reporting.***

We use U.S. GAAP as our primary set of reporting standards. Applying U.S. GAAP in our financial reporting is designed to ensure the comparability of our results to those of our competitors, as well as the continuity of our reporting, thereby providing our stakeholders and potential investors with a clear understanding of our financial performance. As we are incorporated in The Netherlands and our shares are listed in Europe on Euronext Paris and on the Borsa Italiana, we are subject to EU regulations requiring us to also report our results of operations and financial statements using IFRS.

As a result of the obligation to report our financial statements under IFRS, we prepare our results of operations using both U.S. GAAP and IFRS, which are currently not consistent. Such dual reporting can materially increase the complexity of our financial communications. Our financial position and results of operations reported in accordance with IFRS will differ from our financial position and results of operations reported in accordance with U.S. GAAP, which could give rise to confusion in the marketplace.

***There are inherent limitations on the effectiveness of our controls.***

There can be no assurance that a system of internal control over financial reporting, including one determined to be effective, will prevent or detect all misstatements. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance regarding financial statement preparation and presentation. Projections of the results of any evaluation of the effectiveness of internal control over financial reporting into future periods are subject to inherent risk. The relevant controls may become inadequate due to changes in circumstances or the degree of compliance with the underlying policies or procedures may deteriorate.

***Because we are subject to the corporate law of The Netherlands, U.S. investors might have more difficulty protecting their interests in a court of law or otherwise than if we were a U.S. company.***

Our corporate affairs are governed by our Articles of Association and by the laws governing corporations incorporated in The Netherlands. The rights of our investors and the responsibilities of members of our Managing and Supervisory Boards under Dutch law are not as clearly established as under the rules of some U.S. jurisdictions. Therefore, U.S. investors may have more difficulty in protecting their interests in the face of actions by our management, members of our Managing and Supervisory Boards or our controlling shareholders than U.S. investors would have if we were incorporated in the United States.

Our executive offices and a substantial portion of our assets are located outside the United States. In addition, ST Holding and most members of our Managing and Supervisory Boards are residents of jurisdictions other than the United States. As a result, it may be difficult or impossible for shareholders to effect service within the United States upon us, ST Holding, or members of our Managing or Supervisory Boards. It may also be difficult or impossible for shareholders to enforce outside the United States judgments obtained against such persons in U.S. courts, or to enforce in U.S. courts judgments obtained against such persons in courts in jurisdictions outside the United States. This could be true in any legal action, including actions predicated upon the civil liability provisions of U.S. securities laws. In addition, it may be difficult or impossible for shareholders to enforce, in original actions brought in courts in jurisdictions located outside the United States, rights predicated upon U.S. securities laws.



We have been advised by Dutch counsel that the United States and The Netherlands do not currently have a treaty providing for reciprocal recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters. With respect to choice of court agreements in civil or commercial matters, it is noted that the Hague Convention on Choice of Court Agreements entered into force in The Netherlands, but has not entered into force in the United States. As a consequence, a final judgment for the payment of money rendered by any federal or state court in the United States based on civil liability, whether or not predicated solely upon the federal securities laws of the United States, will not be enforceable in The Netherlands. However, if the party in whose favor such final judgment is rendered brings a new suit in a competent court in The Netherlands, such party may submit to The Netherlands court the final judgment that has been rendered in the United States. If The Netherlands court finds that the jurisdiction of the federal or state court in the United States has been based on grounds that are internationally acceptable and that proper legal procedures that are in accordance with the Dutch standards of proper administration of justice including sufficient safeguards (*behoorlijke rechtspleging*) have been observed, the court in The Netherlands would, under current practice, in principle give binding effect to the final judgment that has been rendered in the United States unless such judgment contradicts The Netherlands' public policy and provided that the judgment by the foreign court is not incompatible with a decision rendered between the same parties by a Dutch court, or with a previous decision rendered between the same parties by a foreign court in a dispute that concerns the same subject and is based on the same cause, provided that the previous decision qualifies for acknowledgment in The Netherlands. Even if such a foreign judgment is given binding effect, a claim based thereon may, however, still be rejected if the foreign judgment is not or no longer formally enforceable.

#### **Item 4. Information on the Company**

##### ***History and Development of the Company***

STMicroelectronics N.V. 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.

##### **Business Overview**

We are a global semiconductor company that designs, develops, manufactures and markets a broad range of products used in a wide variety of applications for the four end-markets we address: automotive, industrial, personal electronics and communications equipment, computers and peripherals. For the automotive and industrial markets we address a wide customer base, particularly in industrial, with a broad and deep product portfolio. In personal electronics and communications equipment, computers and peripherals we have a selective approach both in terms of the customers we serve, as well as in the technologies and products we offer, while leveraging our broad portfolio to address high-volume applications.

Our diverse product portfolio includes discrete and general purpose 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. It benefits from 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 fully depleted silicon-on-insulator (“FD-SOI”) technology offering superior performance and power efficiency compared to bulk CMOS, bipolar CMOS (“Bi-CMOS”) and radio frequency silicon-on-insulator (“RF-SOI”) for mixed-signal and high-frequency applications, as well as a combination of Bipolar, CMOS and DMOS (“BCD”), vertically integrated power (“VIPower”), and intelligent integrated gallium-nitride (STI<sup>2</sup>GaN) technologies for smart power applications, Power MOSFET, silicon carbide (“SiC”) and gallium-nitride (“GaN”) for high-efficiency systems, Micro-Electro-Mechanical Systems (“MEMS”) technologies for sensors and actuators, embedded memory technologies for our microcontrollers and differentiated optical sensing technologies for our optical sensing solutions. For our 2022 Results of Operations, see “Item 5. Operating and Financial Review and Prospects — Results of Operations — Segment Information”.

## Strategy

At ST, we are over 50,000 creators and makers of semiconductor technologies mastering the semiconductor supply chain with state-of-the-art manufacturing facilities. As an integrated device manufacturer, we work with more than 200,000 customers and thousands of partners to design and build products, solutions, and ecosystems that address their challenges and opportunities, and the need to support a more sustainable world. Our technologies enable smarter mobility, more efficient power and energy management, and the wide-scale deployment of the Internet of Things (“IoT”) and connectivity. We are committed to achieving our goal to become carbon neutral by 2027.

Our strategy focuses on long-term value creation for the Company and its affiliated enterprises and takes into account the short-, medium- and longer-term evolution of the markets we serve and the environment and opportunities we see. It stems from key long-term enablers: Smart Mobility, where we provide innovative solutions to help our customers make driving safer, greener and more connected for everyone; Power & Energy: our technology and solutions enable customers to increase energy efficiency everywhere and support the use of renewable energy sources; IoT & connectivity supporting the proliferation of smart, connected IoT devices with products, solutions and ecosystems to make development fast and easy for our customers.

We are focused on application areas which are expected to experience solid growth rates driven by broad, long-term trends in electronic systems. These trends require enablers such as autonomous systems, robotics, securely connected machines and personal devices, digitalization and electrification of automobiles and infrastructure, advanced communications equipment and networks and more power efficient systems. These enablers drive in turn the demand for the electronic components we develop and manufacture.

## Product Information

Semiconductors are electronic components that serve as the building blocks inside electronic systems and equipment. Semiconductors, generally known as “chips” combine multiple transistors on a single piece of material to form a complete electronic circuit. With our portfolio of semiconductor products, we serve customers across the spectrum of electronics applications with innovative solutions.

We have a portfolio of power products and analog products, including sensors, signal channel devices and output power stages - discrete and/or integrated - as well as complete power management blocks. Our analog products, including both general purpose and application specific, can fulfill the needs of a wide range of designs and systems.

We also have digital products that are at the heart of electronics systems, including microcontrollers and microprocessors, ASICs and optical sensing solutions. Our full set of microcontrollers and microprocessors includes one of the industry’s broadest ranges of general-purpose devices serving all market segments, microprocessors addressing the industrial market, secure microcontrollers for mobile devices, wearables, banking, identification, industrial, automotive and IoT markets and a series of embedded processing solutions for our strategic end-markets (automotive, industrial, personal electronics and communications equipment, computers and peripherals).

We are one of the leading suppliers and innovators in the domain of semiconductor devices dedicated to automotive applications. We have a portfolio spanning complex power train, audio and infotainment devices and body and convenience dedicated and standard functions as well as a broad offering of components for advanced driver assistance systems (“ADAS”), dedicated automotive microcontrollers, MEMS automotive



sensors and power drivers, including SiC and GaN devices for hybrid and electric cars. The products designed and manufactured specifically for automotive applications are complemented by a large range of “automotive grade” standard products, both tested and guaranteed to perform under stringent automotive environmental conditions.

On top of the product design R&D spending, our principal investment and resource allocation decisions in the semiconductor business area are for expenditures on technology R&D as well as capital investments in front-end and back-end manufacturing facilities, which are planned at the corporate level; therefore, our product groups share common R&D for process technology and manufacturing capacity for some of their products.

Our reportable segments are as follows:

- *Automotive and Discrete Group (ADG)*, comprised of dedicated automotive integrated circuits (“ICs”), and discrete and power transistor products.
- *Analog, MEMS and Sensors Group (AMS)*, comprised of analog, smart power, MEMS sensors and actuators, and optical sensing solutions.
- *Microcontrollers and Digital ICs Group (MDG)*, comprised of general-purpose microcontrollers and microprocessors, connected security products (e.g. embedded secured elements and NFC readers), memories (e.g. serial and page EEPROM) and RF and Communications products.

Effective July 1, 2022, the Low Power RF business unit was transferred from AMS (within the Analog sub-group) to MDG (within the Microcontrollers and Memories sub-group) with no significant impact on our segment reporting. Prior year periods have been adjusted accordingly.

Below is a description of our main categories of products.

### Automotive and Discrete Group (ADG)

#### *Dedicated Automotive ICs*

We are a top automotive semiconductor vendor supplying innovative solutions to the automotive industry worldwide. We combine an unparalleled platform of advanced technologies with an unswerving commitment to quality, and a thorough understanding of the automotive market gained through close collaboration with leading customers. Our automotive-solutions portfolio is enabling the electrification and digitalization of the car and covers all key application areas including Powertrain, Chassis, Safety and Security, including ADAS, Body Electronics, Telematics & Infotainment and Connectivity.

For Powertrain, we provide silicon solutions for the full range of engine-management systems: from motorbikes and scooters to the most advanced drive-by-wire solutions. Developments in engine management are driven by both government emission regulations and energy concerns. We continue to work closely with major automotive OEMs, as we have for decades, to reduce fuel consumption and CO<sub>2</sub> emission via advanced technologies such as Variable Valve Timing and Gasoline Direct Injection and Battery Management for hybrid and full electric cars. Due to the cooperation with certain leading car makers, our microcontrollers are currently in the electrical engines of leading hybrid and electric cars. The first automotive microcontrollers to feature multiple Arm® Cortex®-R52 cores with on-chip non-volatile memory for safe, real-time performance, our Stellar microcontrollers provide advanced connectivity and security features to support the transition to service-oriented automotive system architectures.

With regards to Chassis, we provide a broad range of solutions to increase vehicle-occupant safety, including devices for airbags, anti-lock brakes, traction control, electric power steering and active suspension systems. We are a leading supplier of chips for automotive airbags and anti-lock braking systems, which currently represent the largest portion of automotive safety electronics.

We are a leading player in ADAS that help avoid or minimize the severity of traffic accidents. We manufacture leading-edge products for vision and radar (both short range 24 GHz and long range 77 GHz) based systems that assist the driver with capabilities such as lane-departure warning, forward-collision warning, vision/radar fusion and pedestrian detection including specific modular solutions for the mass market. We produce vision based ADAS solutions fully compliant with level 2+ and level 3 autonomous systems and we are prototyping ASICs fully compliant with level 4 autonomous systems. We also produce V2X (vehicle to vehicle and vehicle to infrastructure) connectivity solution, and we are working on solutions to grant full connectivity using multiple channels such as Wi-Fi, radar and GNSS.

Today's car body electronics involve a myriad of inter-networked electronic systems, from dome and door-zone controls, HVAC (heating, ventilation, and air-conditioning) systems, and seat controls to wiper and lighting controls. The penetration of electronics in the car is increasing, as are the requirements for improved reliability and diagnostic capabilities. We address the concept of the "smart" junction box, which is an intelligent power and switching center for the vehicle that integrates functions and features from exterior and cabin lighting to wipers, with a comprehensive architecture that consists of upgradable hardware and software modules. With our proprietary VIPower silicon technology and thorough application knowledge, we have become a market leader in automotive lighting electronics, offering solutions for both exterior and interior lighting, from incandescent bulbs to LED- or HID-based systems.

Our car infotainment and telematics portfolio includes complete turnkey solutions for digital radio, navigation and telematics, and wireless connectivity in the car. We have leveraged our experience of more than 30 years, at the forefront of AM/FM radio technology to lead in digital radio. We produce all of the semiconductor components for car radios — from the tuner through the baseband to multimedia processing and playback. Our car-radio systems are optimized for harsh reception environments and minimized power consumption. Our portfolio of products for navigation also includes a family of System-on-Chip solutions capable of receiving signals from multiple satellite navigation systems to improve user position accuracy and navigation in poor satellite visibility conditions, such as in urban canyons.

#### *Discrete and Power Transistor*

Discrete and power transistors families include both power products and protection devices serving our strategic end markets (automotive, industrial, personal electronics and communications equipment, computers and peripherals).

Leading-edge power technologies for both high-voltage and low-voltage applications combined with a full package range and innovative die bonding technologies exemplify our innovation in power transistors. Our portfolio includes silicon MOSFETs ranging from 12 to 1700 V, SiC MOSFETs from 650 to 2200 V featuring the industry's highest temperature rating of 200°C, IGBTs with breakdown voltages ranging from 300 to 1700 V and a wide range of power bipolar transistors. We are expanding our offering based on wide bandgap materials with a full range of GaN-based power device solutions targeting a wide variety of applications. Our portfolio of protection devices supports all industry requirements for electrical overstress and electrostatic surge protection, lightning surge protection and automotive protection. Our protection devices have passed all certifications, meeting or exceeding international protection standards for electrical hazards on electronics boards found in the demanding automotive, industrial, personal electronics and communications equipment, computers and peripherals.

#### Analog, MEMS and Sensors Group (AMS)

##### *Analog, Smart Power, Touch Screen Controllers*

We develop a broad range of innovative power, smart power and analog ICs, to serve markets such as those relating to smart grid, cloud computing, automation, personal electronics and power conversion. These product families include Industrial ASICs and ASSPs, covering motion control, power and energy management and factory automation, General Purpose Analog Products, which includes high end analog front-end products as well as standard interfaces and Custom Analog ICs, mainly power management ICs for data storage, servers and portable power management devices. In 2022, we further deployed wireless charging solutions and enlarged our offering to cover low to high power products and across personal electronics applications from smartphones to wearables and industrial battery management enabling fast charging applications. We also expanded our presence in the automotive and industrial markets with our Galvanic Isolated Gate Drivers (also known as STGAP Family).

We also develop a comprehensive range of operational amplifiers (both low-voltage and high-voltage), comparators and current-sense amplifiers. In addition to our portfolio of mainstream operational amplifiers and comparators, we offer specific products for healthcare, industrial, and automotive applications, as well as a range of high-performance products specifically designed to meet the strict requirements of the wearable market.

In 2022, we introduced further devices in our MasterGaN® family and the new ViperGaN family, integrating a silicon driver and GaN power transistors in a single package. Our connectivity ICs range from

wireline to wireless solutions. We optimize our products for reliability of the communication channel and low power consumption. For wireline communication, we offer a complete family of transceivers compatible with different protocol standards used in the industry (PRIME, Meters and More, IEC 61334-5-1, CAN and others).

Our FingerTip family of Touch Screen Controllers provides true multi-touch capability, supporting unlimited simultaneous touches, and it is optimized for the extreme low power consumption. FingerTip also enhances multi-touch actions such as pinch-to-zoom, supports stylus operations and is compatible with both flat and curved display panel.

#### *MEMS Sensors and Actuators*

Our MEMS portfolio includes both Sensors and Actuators. We sell our MEMS products in a broad range of application fields, including mobile, gaming, computer, automotive, industrial, healthcare and IoT.

MEMS Sensors include Motion MEMS (accelerometers, gyroscopes, magnetic sensors), Environmental Sensors (pressure, humidity and temperature) and Microphones. We offer a unique sensor portfolio, from discrete to fully-integrated solutions, high performance sensor fusion to improve the accuracy of multi-axis sensor systems in order to enable highly-demanding applications, such as indoor navigation and location-based services, optical image stabilization and high-level quality products.

MEMS actuators include: (i) Thermal and Piezoelectric Actuators for 2D and 3D Printing in Consumer, Commercial and Industrial market applications; (ii) Piezoelectric Actuators for applications such as smartphone camera auto focus and MEMS loudspeakers; and (iii) Piezoelectric, Electrostatic and Electromagnetic Actuators for emerging VR/AR applications such as our MEMS ScanAR technology, ultra-low power depth cameras and LIDAR Systems for assisted Smart Driving.

#### *Optical Sensing Solutions*

We also have a broad portfolio of optical sensing solutions based on our proprietary differentiated technologies such as FlightSense, addressing various markets, and in particular the fast growing 3D sensing consumer and automotive applications such as in-cabin monitoring and occupant detection. Our optical sensing solutions are composed of both specialized components developed for dedicated customers' systems; and full optical sense and illumination system solutions targeting multiple customers.

#### Microcontrollers and Digital ICs Group (MDG)

##### *Microcontrollers, Memories & Secure microcontrollers*

Our general purpose microcontroller product portfolio largely contains families of products based on 32-bit ARM®-based Cortex®-M0, -M0+, -M3, -M4, and M33 with the ARM® TrustZone®. The STM32U5, for secure & Ultra-Low-Power applications for the mass market, based on the Cortex®-M33 with the ARM® TrustZone® received level 3 Platform Security Architecture and Security Evaluation Standard for IOT Platform security certifications, taking IOT cyber-protection to the next level.

For each product family, a broad selection of features is available with respect to microcontroller performance, ultra-low-power, memory size, peripherals, and packaging. Numerous dedicated families include features such as our TouchGFX advanced 3D graphics, dedicated peripherals for industrial motor controls, security features, and low-power wireless connectivity.

Our microprocessors product line targeting the industrial market is based on 32-bit ARM®-based® Cortex®-A7 Core, complemented by an integrated Cortex®-M4 and a dedicated Linux distribution.

The STM32 family based on the ARM® Cortex®-M and -A processors are designed to offer significant degrees of freedom to microcontroller and microprocessors users. The product range combines very high performance, real-time capabilities, digital signal processing, and low-power, low-voltage operation, while maintaining full integration and ease of development. We offer an unparalleled range of STM32 devices, accompanied by a vast choice of tools and software including support for Industrial Safety Standard IEC 61508 SIL2/3, Human Machine Interface. Our dedicated Cube-AI toolbox for Artificial Intelligence includes Machine learning and neural networks. This comprehensive portfolio makes our STM32 an ideal choice for enabling ever smarter objects for an increasingly broad range of applications.

In 2022, we continued to strengthen our STM32 microcontroller ecosystem with various releases and updates of STM32cube, STM32Cube.AI, NanoEdge AI Studio, CubeMX and TouchGFX. Together with Microsoft, we developed a highly secure Azure IoT cloud reference implementation embedding the STM32U5, Microsoft Azure RTOS and the STSAFE-A110 secure element. Together with Amazon Web Services, we also developed a new secure AWS FreeRTOS-qualified reference implementation embedding the STM32U5 and the STSAFE-A110 secure element.

We offer leading products for secure applications in traditional smartcard applications and embedded security applications. Throughout our 20+ year presence in the smartcard security industry, we have supplied the market's most advanced technologies and solutions, with a continuous focus on innovation and the highest levels of security certification. Our expertise in security is key to our leadership in the mobile communications, banking, digital identity, IoT security, pay-TV and transport fields. We are the leading supplier for the Embedded SIM market and we are scaling-up in secure mobile transactions using Near Field Communication ("NFC") for mobile phones, trusted computing, brand protection and security for IoT devices. Our secure microcontroller product portfolio offers compliance with the latest security standards up to Common Criteria EAL6+, ICAO, and TCG1.2. Our secure microcontrollers cover a complete range of interfaces for both contact and contactless communication, including ISO 7816, ISO 14443 Type A & B, NFC, USB, SPI and I<sup>2</sup>C.

In 2022 our STPayBio biometric payment solution was named CES Innovation Honoree in the Cybersecurity & Personal Privacy category and the STPay-Topaz-Bio biometric payment card platform completed the EMVCo certification.

Our secure-microcontroller platforms rely on a highly secure architecture combined with leading-edge CPUs, such as ARM®'s SC300 and SC000, and our proprietary advanced embedded non-volatile memory technologies such as 40 nm embedded Flash and 80 nm embedded EEPROM technologies.

Our wide range of small density serial non-volatile memories has among the highest industry performance. The serial EEPROM family ranges from 1 Kbit to 32 Mbits and offers the most common serial interfaces to facilitate adoption: I<sup>2</sup>C, SPI and Microwire. Our wide range of products are also automotive compliant. Very small package options are available for applications where space is critical, such as in camera modules for consumer and mobile devices.

In 2022 we introduced the 32Mbit M95P32, the market's first serial page EEPROM for ultra-low power applications, manufactured using our patented e-STM 40 nm non-volatile memory.

We offer RF memory and transceiver products that are key for logistic and retail applications and are based on the industry standard for short range High-Frequency RFID ISO 14443 and 15693. The products are compatible with all NFC technology standards, as defined by the NFC Forum, where ST plays a key role, including the latest NFC type 5. We offer one of the most comprehensive portfolios, which includes NFC/RFID readers, Dynamic NFC/RFID tags, also known as Dual Interface NFC/RFID tags, and Standalone NFC/RFID tags. We also offer RFID Readers operating in the UHF bands for longer range logistics operation.

We offer RF, digital and mixed-signal ASICs, which are based on our proprietary FD-SOI, RF-SOI, and SiGe technologies, as well as foundry-based FinFET technologies, for 4G-5G and Satellite wireless communications RF Front-End Modules, and wired communications infrastructure and Satellite terminals.

We also use our proprietary FD-SOI, RF-SOI, and SiGe technologies to provide RF and mmWave components, based on our know-how in analog and digital beamforming design techniques, to address Massive MIMO Antenna Architectures.

Our unique combination of differentiated Silicon technologies and design expertise is particularly pertinent to address the markets for satellite constellations and user terminals, 5G infrastructure RF Front-End, and transceivers for very-short-range ultra-low-power 60 GHz multi-Gigabit/second links.

## **Alliances with Customers and Industry Partnerships**

We believe that customer alliances and industry partnerships are critical to our success in the semiconductor market. Customer alliances provide us with valuable systems and application know-how and access to markets for key products, while enabling our customers to gain access to our technologies and manufacturing infrastructure. We are actively working to expand the number of our customer alliances, targeting key global OEMs as well as emerging, innovative customers and partners around the globe.

From time to time we collaborate with other semiconductor industry companies, research organizations, universities, and suppliers to further our R&D efforts. Such collaboration provides us with a number of important benefits, including the sharing of costs, reductions in our own capital requirements, acquisitions of technical know-how and access to additional production capacities.

## **Customers and Applications**

We design, develop, manufacture and market thousands of products which we sell to over 200,000 customers. We emphasize a broad and balanced product portfolio, in the applications and regional markets we serve. Our major customers include Apple, Bosch, Continental, HP, Huawei, Mobileye, Samsung, SpaceX, Tesla and Vitesco. In addition, our broad portfolio including dedicated Automotive ICs; Discrete and Power Transistors; Analog, Industrial and Power Conversion ICs; General Purpose Microcontrollers and Microprocessors, Connected Security products and EEPROMs; MEMS and Optical Sensing solutions; and ASICs based on ST proprietary technologies helps foster closer, strategic relationships with customers. This broad product breadth provides opportunities to enable application solutions and to supply such customers' requirements for all their product and technology needs. We also sell our products through our distribution channel.

## **Sales, Marketing and Distribution**

Our sales and marketing is organized by a combination of regional and key account coverage with the primary objective of accelerating sales growth and gaining market share. Emphasis is placed on strengthening the development of our global and major local accounts; boosting demand creation through an enhanced focus on geographical and key account coverage with strong technical and application expertise, supported in the mass market by our distribution channel and local initiatives; and establishing regional sales and marketing teams that are fully aligned with our strategic end-markets: automotive, industrial, personal electronics and communications equipment, computers and peripherals.

We have four regional sales organizations reporting to a global head of Sales & Marketing: Americas, APeC (Asia Pacific excluding China), China and EMEA. Our regional sales organizations have a similar structure to enhance global coordination and go-to-market activities. The sales and marketing teams are strongly focused on profitable revenue growth and business performance as well as on fostering demand creation, expanding the customer base, maximizing market share, developing new product-roadmaps and providing the best technical and application support in the field for our customers. The sales and marketing activities are supported by sales engineers, system marketing, product marketing, application labs, field application engineers and quality engineers.

We engage distributors and sales representatives to distribute and promote our products around the world. Typically, distributors handle a wide variety of products, including those that compete with ours. Our distributors have a dual role, in that they assist in fulfilling the demand of our customers by servicing their orders, while also supporting the creation of product demand and business development. Most of our sales to distributors are made under specific agreements allowing for price protection and stock rotation for unsold merchandise. Sales representatives, on the other hand, generally do not offer products that compete directly with our products, but may carry complementary items manufactured by others. Sales representatives do not maintain a product inventory and their customers place large quantity orders directly with us and are referred to distributors for smaller orders.

At the request of certain customers, we also sell and deliver our products to electronics manufacturing services ("EMS") companies, which, on a contractual basis with our customers, incorporate our products into the application specific products they manufacture for our customers. We also sell products to original design manufacturers ("ODM"). ODMs manufacture products for our customers much like EMS companies do, but they also design applications for our customers, and in doing so themselves select the products and suppliers

that they wish to purchase from. In furtherance of our strong commitment to quality, our sales organizations include personnel dedicated to close monitoring and resolution of quality related issues. For a breakdown of net revenues by segment and geographic region for the last three fiscal years, see “Item 5. Operating and Financial Review and Prospects”.

## **Research and Development**

Since our formation, we have maintained a solid commitment to innovation because we believe that market driven R&D based on leading-edge products and technologies is critical to our success. We devote significant effort to R&D because we believe such investment can be leveraged into competitive advantages: about 17.6% of our employees work in R&D on product design/development and technology and, in 2022, we spent approximately 11.8% of our net revenues on R&D.

New developments in semiconductor technology can make end products significantly cheaper, smaller, faster, more reliable and embedded than their predecessors, with differentiated functionalities. They can enable significant value creation opportunities with their timely appearance on the market. Our innovations in semiconductor technology as well as in hardware and software contribute to the creation of successful products that generate value for us and our customers. Our complete design platforms, including a large selection of IP 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. Through our R&D efforts, we contribute to making our customers’ products more efficient, more appealing, more reliable and safer.

Our technology R&D strategy is based on the development of differentiated technologies, allowing for a unique offer in terms of new products and enabling new applications opportunities. We draw on a rich pool of chip fabrication technologies, including advanced CMOS, FD-SOI, RF-SOI, optical sensing, embedded non-volatile memories, mixed-signal, analog, MEMS, smart power, SiC and GaN processes. This is well embedded in our strong packaging technologies portfolio such as high pin count BGA, Wafer level packaging, highly integrated sensor packages and leadframe package power products. We combine both front-end and back-end manufacturing and technology R&D under the same organization to ensure a smooth flow of information between our R&D and manufacturing organizations. We leverage significant synergies and shared activities between our product groups to cross-fertilize them. We also use silicon foundries, especially for advanced CMOS beyond the 28 nm node that we do not plan to manufacture nor develop internally.

We have advanced R&D and innovation centers which offer us a significant advantage in quickly and cost effectively introducing products. Furthermore, we have established a strong culture of partnerships 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. See “Item 4. Information on the Company — Alliances with Customers and Industry Partnerships”. We also play leadership roles in numerous projects running under the European Union’s IST (Information Society Technologies) programs. We also participate in certain R&D programs established by the EU, individual countries and local authorities in Europe (primarily in France and Italy). See “Item 4. Information on the Company — Public Funding”.

The total amount of our R&D expenses in the past three fiscal years was \$1,901 million, \$1,723 million and \$1,548 million in 2022, 2021 and 2020, respectively. For more information on our R&D expenses, see “Item 5. Operating and Financial Review and Prospects — Results of Operations — Research and Development Expenses”.

## Property, Plants and Equipment

We currently operate 14 main manufacturing sites around the world. The table below sets forth certain information with respect to our current manufacturing facilities, products and technologies. Front-end manufacturing facilities are fabs and back-end facilities are assembly, packaging and final testing plants.

Location	Products	Technologies
<b>Front-end facilities</b>		
Agrate, Italy(1)	Application-specific, MEMS, Smart Power and analog ICs	Fab 1: 200mm, BCD and MEMS Fab 2: 200mm, advanced BCD and Integrated GaN Power ICs Fab 3: 300mm, Analog CMOS, BCD, and embedded non-volatile memories
Ang Mo Kio, Singapore	Application-specific, analog, commodity, microcontrollers, non-volatile memories and power transistors	Fab 1: 150mm, BCD, Bi-CMOS, Bipolar, CMOS logic, EEPROM, MEMS, Microfluidics, Power metal-on silicon oxide semiconductor process technology (“MOS”) and SiC power devices Fab 2: 200mm, advanced BCD, BCD, EEPROM, embedded non-volatile memories, Power MOS and VIPpower™
Catania, Italy(2)	Application-specific, MEMS, power transistors and Smart Power and analog ICs	Fab 1: 150mm, SiC power devices and RF GaN Fab 2: 200mm, advanced BCD, Power MOS and VIPpower™
Crolles, France(3)	Application-specific, optical sensors, leading edge logic and non-volatile memories and microcontrollers	Fab 1: 200mm, Analog/RF, CMOS, Bi-CMOS and Optical Sensing Fab 2: 300mm, Analog/RF, Bi-CMOS, Bulk CMOS, embedded non-volatile memories, FD-SOI advanced CMOS and Optical Sensing
Norrköping, Sweden	Industrialization, Research and development and SiC substrate	SiC 150mm and 200mm wafers; N+ doped and Semi Insulated
Rousset, France	Application-specific and Standard and secure microcontrollers	Fab: 200mm, Analog/RF, BiCMOS EEPROM, embedded non-volatile memories and CMOS
Tours, France	ASDTM power transistors, diodes, IPADTM and Protection thyristors	Fab 1: 150mm, Power Schottky diodes and Triacs Fab 2: 200mm IPD, Power GaN and rectifiers
<b>Back-end facilities</b>		
Bouskoura, Morocco	Discrete and standard, micro modules, power and power module, RF and subsystems	Micromodules, Power, Power Automotive and SOIC
Calamba, Philippines	Application-specific and standard, MEMS	Ball and Land Grid Array, Optical Sensors Module, Micromodules and QFN
Kirkop, Malta	Application-specific, MEMS, microcontrollers	Ball and Land Grid Array, FC Ball Grid Array and QFP
Marcianise, Italy	Secure microcontrollers and smartcards	Reel-to-reel secure device provisioning and smartcards and issuance technology
Muar, Malaysia	Application-specific and standard, microcontrollers	Ball Grid Array, Power Automotive, QFP and SOIC
Rennes, France	Application specific	Rad-hard technologies
Shenzhen, China(4)	Application-specific and standard, discrete, Non-volatile memories, optical packages, power and power module	Optical Sensors, Power, Power Automotive, Power Modules and SOIC

(1) Fab 3 is currently shared in a partnership between ST and Tower Semiconductor. In February 2022, Intel Corporation announced a proposed acquisition of Tower Semiconductor.



- (2) We are currently building a new integrated Silicon Carbide (SiC) substrate manufacturing facility for the production in volume of 150mm SiC epitaxial substrates, to support the increasing demand from our customers for SiC devices across automotive and industrial applications.
- (3) We signed a Memorandum of Understanding on July 11, 2022 to create a new, jointly-operated 300mm semiconductor manufacturing facility with GlobalFoundries Inc. We are currently waiting for approval from the European Commission's DG Competition.
- (4) Jointly owned with SHIC, a subsidiary of Shenzhen Electronics Group.

At December 31, 2022, our front-end facilities had a total maximum capacity of approximately 140,000 wafer starts per week (200mm equivalent). The number of wafer starts per week varies from facility to facility and from period to period as a result of changes in product mix.

We own all of our manufacturing facilities, but certain facilities (Muar, Malaysia; Shenzhen, China; Kirkop, Malta; and Toa Payoh and Ang Mo Kio, Singapore) are built on land subject to long-term leases.

We have historically subcontracted a portion of total manufacturing volumes to external suppliers. In 2022, we subcontracted approximately 25% of the value of our total silicon production to external foundries. Our plan is to continue sourcing silicon from external foundries to give us flexibility in supporting our growth.

At December 31, 2022, we had approximately \$3,584 million in outstanding commitments for purchases of equipment and other assets for delivery in 2023. In 2022, our capital spending, net of proceeds, was \$3,524 million compared to \$1,828 million in 2021. In the 2020-2022 period the ratio of capital investment spending to net revenues was about 17%. For more information, see "Item 5. Operating and Financial Review and Prospects — Financial Outlook: Capital Investment".

### **Intellectual Property (IP)**

Our success depends in part on our ability to obtain patents, licenses and other IP rights to protect our proprietary technologies and processes. IP rights that apply to our various products include patents, copyrights, trade secrets, trademarks and mask work rights. We currently own approximately 19,500 patents and pending patent applications, corresponding to approximately 9,300 patent families (each patent family containing all patents originating from the same invention), including 597 new patent filings in 2022.

We believe that our IP represents valuable assets. We rely on various intellectual property laws, confidentiality procedures and contractual provisions to protect our IP assets and enforce our IP rights. To optimize the value of our IP assets, we have engaged in licensing our design technology and other IP, including patents, when consistent with our competitive position and our customers' interests. We have also entered into broad-scope cross-licenses and other agreements which enable us to design, manufacture and sell semiconductor products using the IP rights of third parties and/or operating within the scope of IP rights owned by third parties.

From time to time, we are involved in IP litigation and infringement claims. See Note 26 to our Consolidated Financial Statements and "Item 3. Key Information — Risk Factors". Regardless of the validity or the successful assertion of such claims, we may incur significant costs with respect to the defense thereof, which could have a material adverse effect on our results of operations, cash flow or financial condition.

### **Backlog**

Our sales are made primarily pursuant to standard purchase orders that are generally booked from one to twelve months in advance of delivery. Quantities actually purchased by customers, as well as prices, are subject to variations between booking and delivery and, in some cases, to cancellation due to changes in customer needs or industry conditions. During periods of economic slowdown and/or industry overcapacity and/or declining selling prices, customer orders are not generally made far in advance of the scheduled shipment date. Such reduced lead time can diminish management's ability to forecast production levels and revenues. When the economy rebounds, our customers may strongly increase their demands, which can result in capacity constraints due to a time lag when matching manufacturing capacity with such demand.

In addition, our sales are affected by seasonality, with the first quarter generally showing lowest revenue levels in the year, and the third or fourth quarter historically generating higher amounts of revenues partly as a result of the seasonal dynamics for smartphone applications dynamics.



We also sell certain products to key customers pursuant to frame contracts. Frame contracts are annual contracts with customers setting forth quantities and prices on specific products that may be ordered in the future. These contracts allow us to schedule production capacity in advance and allow customers to manage their inventory levels consistent with just-in-time principles while shortening the cycle times required to produce ordered products. Orders under frame contracts are also subject to a high degree of volatility, because they reflect expected market conditions which may or may not materialize. Thus, they are subject to risks of price reduction, order cancellation and modifications as to quantities actually ordered resulting in inventory build-ups.

Furthermore, developing industry trends, including customers' use of outsourcing and their deployment of new and revised supply chain models, may reduce our ability to forecast changes in customer demand and may increase our financial requirements in terms of capital expenditures and inventory levels.

We entered 2022 with a backlog higher than we had entering 2021. For 2023, we entered the year with a backlog higher than what we had entering 2022.

## **Competition**

Markets for our products are intensely competitive. We compete with major international semiconductor companies and while only a few companies compete with us in all of our product lines, we face significant competition from each of them. Smaller niche companies are also increasing their participation in the semiconductor market, and semiconductor foundry companies have expanded significantly, particularly in Asia. Competitors include manufacturers of standard semiconductors, ASICs and fully customized ICs, including both chip and board-level products, as well as customers who develop their own IC products and foundry operations. Some of our competitors are also our customers or suppliers. We compete in different product lines to various degrees on the basis of price, technical performance, product features, product system compatibility, customized design, availability, quality and sales and technical support. In particular, standard products may involve greater risk of competitive pricing, inventory imbalances and severe market fluctuations than differentiated products. Our ability to compete successfully depends on factors both within and outside our control, including successful and timely development of new products and manufacturing processes, product performance and quality, manufacturing yields and product availability, customer service, pricing, industry trends and general economic trends.

The semiconductor industry is characterized by the high costs associated with developing marketable products and manufacturing technologies as well as high levels of investment in production capabilities. As a result, the semiconductor industry has experienced, and is expected to continue to experience, significant vertical and horizontal consolidation among our suppliers, competitors and customers, which could lead to erosion of our market share, impact our capacity to compete and require us to restructure our operations. See "Item 3. Key Information — Risk Factors".

## **Organizational Structure and History**

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

The following table lists our consolidated subsidiaries and our percentage of ownership as of December 31, 2022:

Legal Seat	Name	Percentage of Ownership (direct or indirect)
Australia, Sydney	STMicroelectronics PTY Ltd	100
Austria, Vienna	STMicroelectronics Austria GmbH	100
Belgium, Diegem	Proton World International N.V.	100
Brazil, Sao Paulo	STMicroelectronics Ltda	100
Canada, Ottawa	STMicroelectronics (Canada), Inc.	100
China, Beijing	STMicroelectronics (Beijing) R&D Co. Ltd	100
China, Shanghai	STMicroelectronics (China) Investment Co. Ltd	100
China, Shenzhen	Shenzhen STS Microelectronics Co. Ltd	60
China, Shenzhen	STMicroelectronics (Shenzhen) R&D Co. Ltd	100
Czech Republic, Prague	STMicroelectronics Design and Application s.r.o.	100
Denmark, Aarhus	STMicroelectronics A/S	100
Egypt, Cairo	STMicroelectronics Egypt SSC	100
Finland, Nummela	STMicroelectronics Finland OY	100
France, Crolles	STMicroelectronics (Crolles 2) SAS	100
France, Grenoble	STMicroelectronics (Alps) SAS	100
France, Grenoble	STMicroelectronics (Grenoble 2) SAS	100
France, Le Mans	STMicroelectronics (Grand Ouest) SAS	100
France, Montrouge	STMicroelectronics S.A.	100
France, Rousset	STMicroelectronics (Rousset) SAS	100
France, Tours	STMicroelectronics (Tours) SAS	100
Germany, Aschheim-Dornach	STMicroelectronics GmbH	100
Germany, Aschheim-Dornach	STMicroelectronics Application GmbH	100
Hong Kong, Kowloon	STMicroelectronics Ltd	100
India, New Delhi	ST-Ericsson India Pvt Ltd	100
India, Noida	STMicroelectronics Pvt Ltd	100
Israel, Netanya	STMicroelectronics Limited	100
Italy, Agrate Brianza	STMicroelectronics S.r.l.	100
Italy, Naples	STMicroelectronics Services S.r.l.	100
Japan, Tokyo	STMicroelectronics KK	100
Malaysia, Kuala Lumpur	STMicroelectronics Marketing SDN BHD	100
Malaysia, Muar	STMicroelectronics SDN BHD	100
Malta, Kirkop	STMicroelectronics (Malta) Ltd	100
Mexico, Guadalajara	STMicroelectronics Marketing, S. de R.L. de C.V.	100
Morocco, Casablanca	STMicroelectronics (MAROC) SAS, a associé unique	100
The Netherlands, Amsterdam	STMicroelectronics Finance B.V.	100
The Netherlands, Amsterdam	STMicroelectronics Finance II N.V.	100
The Netherlands, Amsterdam	STMicroelectronics International N.V.	100
Philippines, Calamba	STMicroelectronics, Inc.	100
Philippines, Calamba	Mountain Drive Property, Inc.	40
Singapore, Ang Mo Kio	STMicroelectronics Asia Pacific Pte Ltd	100
Singapore, Ang Mo Kio	STMicroelectronics Pte Ltd	100
Slovenia, Ljubljana	STMicroelectronics d.o.o.	100
Spain, Barcelona	STMicroelectronics Iberia S.A.	100
Sweden, Jönköping	STMicroelectronics Software AB	100
Sweden, Kista	STMicroelectronics A.B.	100
Sweden, Norrköping	STMicroelectronics Silicon Carbide A.B.	100
Switzerland, Geneva	STMicroelectronics S.A.	100
Switzerland, Geneva	STMicroelectronics RE S.A.	100
Taiwan, Taipei City	Exagan Taiwan Ltd.	80
Thailand, Bangkok	STMicroelectronics (Thailand) Ltd	100
United Kingdom, Bristol	STMicroelectronics (Research & Development) Limited	100
United Kingdom, Marlow	STMicroelectronics Limited	100
United States, Coppel	STMicroelectronics Inc.	100
United States, Coppel	STMicroelectronics (North America) Holding, Inc.	100

## Public Funding

We receive public funding mainly from French, Italian and EU governmental entities. Such funding is generally provided to encourage R&D activities, industrialization and local economic development. Public

funding in France, Italy and Europe is generally available to all companies having R&D operations in Europe, regardless of their ownership structure or country of incorporation. The conditions for the receipt of government funding may include eligibility restrictions, approval by EU authorities, annual budget appropriations, compliance with EU regulations, royalties or contingent return provisions as well as specifications regarding objectives and results. The approval process for such funding may last up to several years. Certain specific contracts require compliance with extensive regulatory requirements and set forth certain conditions relating to the funded programs. There could be penalties if these objectives are not fulfilled. Other contracts contain penalties for late deliveries or for breach of contract, which may result in repayment obligations. Our funding programs are classified under three general categories: funding for Research and Development (R&D), Innovation activities (RDI), funding for First Industrial Deployment activities (FID) and capital investment for pilot lines. We also benefit from tax credits for R&D activities in several countries which are generally available to all companies. See “Item 5. Operating and Financial Review and Prospects — Results of Operations” and the Notes to our Consolidated Financial Statements.

The main programs in which we are involved include: (i) Important Project of Common European Interest (IPCEI) which combines Research, Development and Innovation activities (RDI) as well as First Industrials Deployment activities (FID); (ii) Key Digital Technologies Initiative (KDT), formerly Electronic Components and Systems for European Leadership (ECSEL), which combines all electronics related R&D activities and is operated by joint undertakings formed by the European Union, certain member states and industry; (iii) EU R&D projects within Horizon Europe (the European Union's research and innovation framework); and (iv) national or regional programs for R&D and for industrialization in the electronics industries involving many companies and laboratories. The pan-European programs cover a period of several years, while national or regional programs in France and Italy are subject mostly to annual budget appropriation.

In December 2018, the European Commission announced the approval of the IPCEI, a Pan-European project initiated to foster research and innovation in microelectronics to be funded by Germany, France, Italy, the U.K. and Austria.

In our combined role as beneficiary of the IPCEI on Microelectronics, we have been allocated an overall funding budget of approximately €340 million for the period 2016-2022 in France (locally referenced as Nano2022) which was linked to technical objective and associated achievements, and about €720 million for the period 2018-2024 in Italy. The IPCEI program is highly strengthening our leadership in key technologies. It contributes to anticipating, accelerating, and securing our technological developments. The IPCEI also has wide ranging, pan-European benefits on the microelectronics ecosystem from education to downstream industries.

In December 2021, we submitted a new IPCEI program, titled IPCEI on Microelectronics and Communication Technologies (IPCEI – ME/CT). This new pan-European project was initiated to foster research and innovation and kick-start the first industrialization of microelectronics. This new IPCEI will involve ST in France (from 2022 to 2026), Italy (from 2023 to 2027) and Malta (from 2021 to 2025), as well as about 80 other companies across 16 European countries. In 2022 we recognized €101.5 million of grants related to our participation in IPCEI in Italy and €72.3 million related to our participation in IPCEI, KDT and other national and European programs in France.

In addition to public funding through IPCEI programs, in October 2022, the European Commission approved, under EU State Aid Rules, a support up to €292.5million through the Italian Recovery and Resilience Plan for the construction of a new integrated silicon carbide substrate manufacturing facility in Catania, Italy. The project has been recognized as a “first-of-a-kind” facility in Europe in line with the ambitions set out in the European Chips Act Communication, issued on February 8, 2022.

## Suppliers

We use three primary critical types of suppliers in our business: (i) equipment suppliers, (ii) material suppliers and (iii) external silicon foundries and back-end subcontractors. We also purchase third-party licensed technology from a limited number of providers.

In the front-end process, we use steppers, scanners, tracking equipment, strippers, chemo-mechanical polishing equipment, cleaners, inspection equipment, etchers, physical and chemical vapor-deposition equipment, implanters, furnaces, testers, probers and other specialized equipment. The manufacturing tools that we use in the back-end process include bonders, burn-in ovens, testers and other specialized equipment. The quality and technology of equipment used in the IC manufacturing process defines the limits of our technology. Demand for increasingly smaller chip structures means that semiconductor producers must quickly incorporate

the latest advances in process technology to remain competitive. Advances in process technology cannot occur without commensurate advances in equipment technology, and equipment costs tend to increase as the equipment becomes more sophisticated.

Our manufacturing processes consume significant amounts of energy and use many materials, including silicon and SiC, GaN and glass wafers, lead frames, mold compound, ceramic packages and chemicals, gases and water. The prices of energy, such as electricity and natural gas, and many of these materials are volatile due to the specificity of the market, and other factors including geopolitics. We have therefore adopted a “multiple sourcing strategy” designed to protect us from the risk of price increases. The same strategy applies to energy and to supplies for the materials used by us to avoid potential material disruption of essential materials and to ensure the continuity of energy supply. Our “multiple sourcing strategy”, our financial risk monitoring as well as the robustness of our supply chain and strong partnership with suppliers are intended to mitigate these risks. See “Item 3. Key Information — Risk Factors”.

Finally, we also use external subcontractors to outsource wafer manufacturing and assembly and testing of finished products. See “— Property, Plants and Equipment” above.

### **Environmental, Health and Safety Matters**

We are subject to a variety of environmental, health and safety laws and regulations in the jurisdictions where we operate. Such laws and regulations govern, among other things, the use, storage, discharge and disposal of chemicals and other hazardous substances, emissions and waste, as well as the investigation and remediation of soil and ground water contamination. We are also required to obtain environmental permits, licenses and other forms of authorization, or give prior notification, in order to operate.

We also adopt a rigorous and pro-active approach to managing our business operations in an environmentally responsible way. Consistent with our sustainability strategy, we have established proactive environmental policies with respect to the handling of chemicals, emissions, waste disposals and other substances of concern from our manufacturing operations. We are certified to be in compliance with quality standard ISO 9001 on a Company-wide basis. We implement the highest standards across our manufacturing activities and supply chain. The majority of our manufacturing sites are ISO 14001 (environment), ISO 14064 (greenhouse gas emissions), and ISO 50001 (energy) certified and EMAS validated.

We believe that in 2022 our activities complied with then-applicable environmental regulations in all material respects. We have engaged outside consultants to audit all of our environmental activities and have created environmental management teams, information systems and training. We have also instituted environmental control procedures for processes used by us as well as our suppliers. In 2022, there were no material environmental claims made against us.

On December 9, 2020, we announced our goal to become carbon neutral by 2027. Our comprehensive roadmap to carbon neutrality includes two specific targets: compliance with the 1.5°C scenario defined at the Paris COP21 by 2025, which implies a 50% reduction of direct and indirect greenhouse gas emissions compared to 2018, and the sourcing of 100% renewable energy by 2027. Our action plan will reduce:

- (i) our direct emissions of greenhouse gases (scope 1), mainly through investment in equipment to burn the gases remaining after manufacturing;
- (ii) our overall energy consumption (scope 2);
- (iii) our emissions from product transportation, business travel, and employee commuting (part of scope 3); and
- (iv) remaining emissions through the identification and implementation of the most credible and relevant carbon avoidance and sequestration programs.

On July 12, 2020, the EU Taxonomy Regulation entered into force. The EU Taxonomy Regulation provides the basis for the EU taxonomy: a classification system, on the basis of which a list of environmentally sustainable economic activities has been drawn up. The EU Taxonomy Regulation defines overarching conditions that an economic activity must meet to be considered environmentally sustainable, and focuses on six environmental objectives. On January 1, 2022 the delegated acts on the technical screening criteria for two environmental objectives, being Climate Change Mitigation and Adaption to Climate Change, entered into force, in which technical screening criteria have been laid down which specify environmental performance requirements for the economic activities to be classified as environmentally sustainable. The delegated acts on the technical screening criteria for the remaining four environmental objectives are expected to enter into force

in the course of 2023. As we are subject to an obligation to publish non-financial information pursuant to Directive 2013/34/EU of the European Parliament and of the Council of June 26, 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC (the Non-Financial Reporting Directive), the EU Taxonomy Regulation is applicable to us, and subsequently, we must disclose information on how and to what extent our activities are associated with economic activities that qualify as environmentally sustainable. This information will be disclosed in our Dutch Annual Report.

On January 5, 2023, the CSRD entered into force. The CSRD modernizes and strengthens the rules about the social and environmental information that companies have to report. The CSRD aims to ensure that investors and other stakeholders have access to the information they need to assess investment risks arising from climate change and other sustainability topics. As of our reporting in relation to financial year 2024, the CSRD will require us to disclose information on the basis of European Sustainability Reporting Standards (“ESRS”) in our annual report. Based on the CSRD, we will be required to report on the way we operate and manage social and environmental challenges. In connection with these reporting obligations we will be required to formulate long-term ESG targets, policy, strategic plans and to conduct due diligence for our own operations and supply chain. Under the CSRD, further transparency rules are introduced on division of roles and responsibilities within the Company for our ESG targets. The CSRD also makes it mandatory for companies to have an audit of the sustainability information that they report. The ESRS, that are currently being further developed, require us to disclose detailed information on environmental protection, social responsibility and treatment of employees, respect for human rights, anti-corruption, bribery and on diversity. This information will be disclosed in our Dutch Annual Report starting from financial year 2024.

## **Item 5. Operating and Financial Review and Prospects**

### **Overview**

*The following discussion should be read in conjunction with our Consolidated Financial Statements and Notes thereto included elsewhere in this Form 20-F. The following discussion contains statements of future expectations and other forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, or Section 21E of the Securities Exchange Act of 1934, each as amended, particularly in the sections “— Critical Accounting Policies Using Significant Estimates”, “— Business Outlook”, “— Liquidity and Capital Resources” and “— Financial Outlook: Capital Investment”. Our actual results may differ significantly from those projected in the forward-looking statements. For a discussion of factors that might cause future actual results to differ materially from our recent results or those projected in the forward-looking statements in addition to the factors set forth below, see “Cautionary Note Regarding Forward-Looking Statements” and Item 3. “Key Information — Risk Factors”. We assume no obligation to update the forward-looking statements or such risk factors.*

### **Critical Accounting Policies Using Significant Estimates**

The preparation of our Consolidated Financial Statements in accordance with U.S. GAAP requires us to make estimates and assumptions. The primary areas that require significant estimates and judgments by us include, but are not limited to:

- sales allowances and returns;
- inventory obsolescence reserves and normal manufacturing capacity thresholds to determine costs capitalized in inventory;
- recognition and measurement of loss contingencies;
- valuation at fair value of assets acquired and liabilities assumed on business acquisitions, and measurement of any contingent consideration;
- annual and trigger-based impairment review of goodwill and intangible assets, as well as the assessment of events, which could trigger impairment testing on long-lived assets;
- assessment of our long-lived assets economic useful lives;
- assumptions used in measuring expected credit losses and impairment charges on financial assets;
- assumptions used in assessing the number of awards expected to vest on stock-based compensation plans;
- assumptions used in calculating pension obligations and other long-term employee benefits; and
- determination of the amount of tax expected to be paid and tax benefit expected to be received, including deferred income tax assets, valuation allowance and provisions for uncertain tax positions and claims.

We base the estimates and assumptions on historical experience and on various other factors such as market trends, market information used by market participants and the latest available business plans that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. While we regularly evaluate our estimates and assumptions, the actual results we experience could differ materially and adversely from our estimates.

We believe the following critical accounting policies require us to make significant judgments and estimates in the preparation of our Consolidated Financial Statements:

*Revenue recognition.* Arrangements with customers are considered contracts if all the following criteria are met: (a) parties have approved the contract and are committed to perform their respective obligations; (b) each party's rights regarding the goods or services to be transferred can be identified; (c) payment terms for the goods or services to be transferred can be identified; (d) the contract has commercial substance and (e) collectability of substantially all of the consideration is probable. We recognize revenue from products sold to a customer, including distributors, when we satisfy a performance obligation by transferring control over a product to the customer. In certain circumstances, we may enter into agreements that concern principally revenues from services, where the performance obligation is satisfied over time. The objective when allocating the transaction price is to allocate the transaction price to each performance obligation (or distinct good or service) in an amount that depicts the amount of consideration to which we expect to be entitled in exchange for transferring the promised goods or services to the customer. The payment terms typically range between 30 and 90 days. Certain of our customers require us to hold inventory as consignment in their hubs and only purchase inventory when they require it. Revenue for sales of such inventory is recognized when, at the customer's option, the products are withdrawn from the consignment and we satisfy a performance obligation by transferring control over a product to the customer.

Consistent with standard business practice in the semiconductor industry, price protection is granted to distribution customers on their existing inventory of our products to compensate them for changes in market prices. We accrue a provision for price protection based on a rolling historical price trend computed monthly as a percentage of gross distributor sales. This historical price trend represents differences in recent months between the invoiced price and the final price to the distributor, adjusted to accommodate a significant change in the selling price. The short outstanding inventory time, visibility into the inventory product pricing and long distributor pricing history have enabled us to reliably estimate price protection provisions at period-end. We record the accrued amounts as a deduction of "Net sales" in the consolidated statements of income at the time of the sale.

Our customers occasionally return our products for technical reasons. Our standard terms and conditions of sale provide that if we determine that products do not conform, we will repair or replace the non-conforming products, or issue a credit note or rebate of the purchase price. Quality returns are identified shortly after sale in customer quality control testing. Quality returns are usually associated with end-user customers, not with distribution channels. We record the accrued amounts as a deduction of "Net sales" in the consolidated statements of income, using historical and current conditions to form a reasonable estimate of future returns.

We record a provision for warranty costs as a charge against "Cost of sales" in the consolidated statements of income, based on historical trends of warranty costs incurred as a percentage of sales, which management had determined to be a reasonable estimate of the probable losses to be incurred for warranty claims in a period. Any potential warranty claims are subject to our determination that we are at fault for damages, and that such claims usually must be submitted within a short period of time following the date of sale. This warranty is given in lieu of all other warranties, conditions or terms expressed or implied by statute or common law. Our contractual terms and conditions typically limit our liability to the sales value of the products that gave rise to the claims.

Our insurance policy relating to product liability covers third-party physical damages and bodily injury, indirect financial damages as well as immaterial non-consequential damages caused by defective products.

In addition to product sales, we enter into arrangements with customers consisting in transferring licenses or related to license services. The revenue generated from these arrangements is reported on the line "Other revenues" of the consolidated statements of income. Other revenues also include patent royalty income, sale of scrap materials and manufacturing by-products.

*Trade accounts receivable.* We use a lifetime expected credit losses allowance for all trade receivables. The allowance includes reasonable assumptions about future credit trends. The historical loss rates are adjusted to reflect current and forward-looking information on macro-economic factors affecting the ability of our customers to settle the receivables. Adjustments to the expected credit losses allowance are reported in the line "Selling, general and administrative" in the consolidated statements of income.

*Business combinations and goodwill.* The acquisition method of accounting applied to business combinations requires extensive use of estimates and judgments to allocate the purchase price to the fair value of acquired assets less assumed liabilities, including any contingent consideration, net of related deferred tax impacts. If the assumptions and estimates used to allocate the purchase price are not correct or if business



conditions change, purchase price adjustments or future asset impairment charges could be required. As of December 31, 2022, the value of goodwill in our consolidated balance sheet amounted to \$297 million.

*Impairment of goodwill.* Goodwill recognized in business combinations is not amortized but is tested for impairment annually, or more frequently if a triggering event indicating a possible impairment exists. Goodwill subject to potential impairment is tested at the reporting unit level. This impairment test determines whether the fair value of each reporting unit under which goodwill is allocated is lower than the total carrying amount of relevant net assets allocated to such reporting unit, including its allocated goodwill. A goodwill impairment charge, if any, is recorded for the amount by which a reporting unit's carrying value exceeds its fair value. Significant management judgments and estimates are used in forecasting the future discounted cash flows associated with the reporting unit, including: the applicable industry's sales volume forecast and selling price evolution, the reporting unit's market penetration and its revenues evolution, the market acceptance of certain new technologies and products, the relevant cost structure, the discount rates applied using a weighted average cost of capital and the perpetuity rates used in calculating cash flow terminal values. Our evaluations are based on financial plans updated with the latest available projections of the semiconductor market, our sales expectations and our costs evolution, and are consistent with the plans and estimates that we use to manage our business. It is possible, however, that the plans and estimates used may prove to be incorrect, and future adverse changes in market conditions, changes in strategies, lack of performance of major customers or operating results of acquired businesses that are not in line with our estimates may require impairments.

We performed our annual impairment test of goodwill during the fourth quarter of 2022 and concluded that there was no goodwill impairment loss. Impairment charges could result from new valuations triggered by changes in our product portfolio or strategic alternatives, particularly in the event of a downward shift in future revenues or operating cash flows in relation to our current plans or in case of capital injections by, or equity transfers to, third parties at a value lower than the current carrying value.

*Intangible assets subject to amortization.* Intangible assets subject to amortization include intangible assets purchased from third parties recorded at cost and intangible assets acquired in business combinations initially recorded at fair value, comprised mainly of technologies and licenses, and capitalized computer software. Intangible assets with finite useful lives are reflected net of any impairment losses and are amortized over their estimated useful lives. Amortization begins when the intangible asset is available for its intended use. Amortization reflects the pattern in which the asset's economic benefits are consumed, which usually consists in applying the straight-line method to allocate the cost of the intangible assets over the estimated useful lives. The carrying value of intangible assets with finite useful lives is evaluated whenever changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its fair value. We evaluate the remaining useful life of an intangible asset at each reporting date to determine whether events and circumstances warrant a revision to the remaining period of amortization. Our evaluations are based on financial plans updated with the latest available projections of growth in the semiconductor market and our sales expectations. They are consistent with the plans and estimates that we use to manage our business. It is possible, however, that the plans and estimates used may be incorrect and that future adverse changes in market conditions or operating results of businesses acquired may not be in line with our estimates and may therefore require us to recognize impairment charges on certain intangible assets.

In 2022, we recorded a \$38 million impairment loss related to certain technologies acquired from a recent business combination. In 2021 and 2020, we impaired \$1 million and \$4 million, respectively, of acquired licenses and technologies with no alternative future use.

We will continue to monitor the carrying value of our assets. If market conditions deteriorate, this could result in future impairment losses. Further impairment charges could also result from new valuations triggered by changes in our product portfolio or by strategic transactions, particularly in the event of a downward shift in future revenues or operating cash flows in relation to our current plans or in case of capital injections by, or equity transfers to, third parties at a value lower than the one underlying the carrying amount.

As of December 31, 2022, the value of intangible assets subject to amortization in our consolidated balance sheet amounted to \$405 million.



*Property, plant and equipment.* Our business requires substantial investments in technologically advanced manufacturing facilities, which may become significantly underutilized or obsolete as a result of rapid changes in demand and ongoing technological evolution. The largest component of our long-lived assets is our manufacturing equipment primarily in our front-end activities, for which the useful life is estimated to be six years, except for our 300mm manufacturing equipment whose useful life is estimated to be ten years. This estimate is based on our experience using the equipment over time. Depreciation expense is an important element of our manufacturing cost structure. We begin to depreciate property, plant and equipment when it is ready for its intended use.

We evaluate each period whether there is reason to suspect that tangible assets or groups of assets held for use might not be recoverable. Several impairment indicators exist for making this assessment, such as: restructuring plans, significant changes in the technology, market, economic or legal environment in which we operate, available evidence of obsolescence of the asset, or indication that its economic performance is, or will be, worse than expected. In determining the recoverability of assets to be held and used, we initially assess whether the carrying value of the tangible assets or group of assets exceeds the undiscounted cash flows associated with these assets. If exceeded, we then evaluate whether an impairment charge is required by determining if the asset's carrying value also exceeds its fair value. We normally estimate this fair value based on independent market appraisals or the sum of discounted future cash flows, using market assumptions such as the utilization of our fabrication facilities and the ability to upgrade such facilities, change in the selling price and the adoption of new technologies. We also evaluate and adjust, if appropriate, the assets' useful lives at each reporting date. In 2022, 2021 and 2020, no significant impairment charge was recorded on property, plant and equipment.

Our evaluations are based on financial plans updated with the latest projections of growth in the semiconductor market and our sales expectations, from which we derive the future production needs and loading of our manufacturing facilities, and which are consistent with the plans and estimates that we use to manage our business. These plans are highly variable due to the high volatility of the semiconductor business and therefore are subject to continuous modifications. If future growth differs from the estimates used in our plans, in terms of both market growth and production allocation to our manufacturing plants, this could require a further review of the carrying amount of our tangible assets and result in a potential impairment loss.

As of December 31, 2022, we did not hold any significant assets for sale.

*Inventory.* Inventory is stated at the lower of cost or net realizable value. Actual cost is based on an adjusted standard cost, which approximates cost on a first-in first-out basis for all categories of inventory (raw materials, work-in-process, finished products). Actual costs are therefore dependent on our manufacturing performance and cost is based on the normal utilization of our production capacity. In the case of underutilization of our manufacturing facilities, we estimate the costs associated with unused capacity. These costs are not included in the valuation of inventory but are charged directly to cost of sales in the consolidated statements of income. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation.

We perform, on a continuous basis, write-offs of inventories, which have the characteristics of slow-moving, old production dates and technical obsolescence. We evaluate inventory to identify obsolete or slow-selling items, as well as inventory that is not of saleable quality and we record a specific reserve if we estimate the inventory will eventually become obsolete. Reserve for obsolescence is estimated for excess uncommitted inventories based on historical sales data, order backlog and production plans. To the extent that future negative market conditions generate order backlog cancellations and declining sales, or if future conditions are less favorable than the projected revenue assumptions, we could record additional inventory reserve, which would have a negative impact on our gross margin.

*Share-based compensation.* Our share-based service awards are granted to senior executives and selected employees. We measure the cost of share-based service awards based on the fair value of the awards as of the grant date reflecting the market price of the underlying shares at the date of the grant, reduced by the present value of the dividends expected to be paid on the shares during the requisite service period. While the awards granted to selected employees are subject to a three-year service period, the awards granted to senior executives are subject to both a three-year service period and the fulfillment of certain performance conditions, including our financial results when compared to industry performance. The expense is recognized over the requisite service period. In 2022, approximately one-half of the total amount of shares awarded were granted to senior executives and consequently were contingent on the achievement of performance conditions. In order to

determine share-based compensation to be recorded for the period, we use significant estimates on the number of awards expected to vest, including the probability of achieving the fixed performance conditions including those relating to our financial results compared to industry performance, and our best estimates of award forfeitures and employees' service periods. Our assumptions related to industry performance are generally taken with a one quarter lag in line with the availability of market information. In 2022, 2021 and 2020, we recorded a total charge of approximately \$215 million, \$221 million and \$155 million relating to our outstanding stock award plans, respectively.

*Financial assets.* The financial assets held at reporting date are primarily receivables, debt securities and equity securities. Receivables are measured at amortized cost less any currently expected credit loss allowance. Investments in equity securities that have readily determinable fair values and for which we do not have the ability to exercise significant influence are classified as financial assets measured at fair value through earnings. For investments in equity securities without readily determinable fair values and for which we do not have the ability to exercise significant influence, we have elected to apply the cost-method as a measurement alternative. We determine the classification of our financial assets at initial recognition.

Debt securities are classified as-available-for-sale financial assets, with changes in fair value recognized as a component of other comprehensive income in our consolidated statements of comprehensive income.

The fair values of publicly traded securities are based on current market prices. If the market for a financial asset is not active and if no observable market price is obtainable, we measure fair value by using assumptions and estimates. In measuring fair value, we make maximum use of market inputs and minimize the use of unobservable inputs.

As of December 31, 2022, we did not hold any material equity securities reported under the equity method. Debt securities totaled \$679 million and were reported as marketable securities in the consolidated balance sheet as of December 31, 2022.

*Income taxes.* We make estimates and judgments in determining income tax for the period, comprising current and deferred income tax. We assess the income tax expected to be paid or the tax benefit expected to be received related to the current year taxable profit and loss in each individual tax jurisdiction and recognize deferred income tax for all temporary differences arising between the tax bases of assets and liabilities and their carrying amount in the Consolidated Financial Statements. Furthermore, at each reporting date, we assess all material uncertain tax positions in all jurisdictions to determine the amount of income tax benefits that we do not expect to reasonably sustain. As of December 31, 2022, we had uncertain tax positions estimated at \$61 million.

We also assess the likelihood of realization of our deferred tax assets. Their ultimate realization is dependent upon, among other things, our ability to generate future taxable profit available, or tax credits before their expiration, or our ability to implement prudent and feasible tax planning, or the possibility to settle uncertain tax positions against available net operating loss carry forwards, or similar tax losses and credits. We record a valuation allowance against the deferred tax assets when we consider it is more likely than not that the deferred tax assets will not be realized.

As of December 31, 2022, we had deferred tax assets of \$602 million, net of valuation allowance.

We could be required to record further valuation allowances thereby reducing the amount of total deferred tax assets, resulting in an increase in our income tax charge, if our estimates of projected future taxable income and benefits from available tax strategies are reduced as a result of a change in business conditions or in management's plans or due to other factors, or if changes in current tax regulations are enacted that impose restrictions on the timing or extent of our ability to utilize net operating losses and tax credit carry-forwards in the future. Likewise, a change in the tax rates applicable in the various jurisdictions or unfavorable outcomes of any ongoing tax audits could have a material impact on our future tax provisions in the periods in which these changes could occur.

*Pension and Post-Employment Benefits.* Our consolidated statements of income and our consolidated balance sheets include amounts for pension obligations and other long-term employee benefits that are measured using actuarial valuations. As of December 31, 2022, our pension and other long-term employee benefit obligations net of plan assets amounted to \$405 million. These valuations are based on key assumptions, including discount rates, expected long-term rates of return on funds, turnover rates and salary increase rates.

These assumptions used in the determination of the net periodic benefit cost are updated on an annual basis at the beginning of each fiscal year or more frequently upon the occurrence of significant events. Any changes in the pension schemes or in the above assumptions can have an impact on our valuations. The measurement date we use for our plans is December 31.

*Patent and other Intellectual Property (“IP”) litigation or claims.* We record a provision when we believe that it is probable that a liability has been incurred at the date of the Consolidated Financial Statements and the amount of the loss can be reasonably estimated. We regularly evaluate losses and claims to determine whether they need to be adjusted based on current information available to us. Such estimates are difficult to the extent that they are largely dependent on the status of ongoing litigation that may vary based on positions taken by the court with respect to issues submitted, demands of opposing parties, changing laws, discovery of new facts or other matters of fact or law. As of December 31, 2022, based on our current evaluation of ongoing litigation and claims we face, we have not estimated any amounts that could have a material impact on our results of operations and financial condition with respect to either probable or possible risks. In the event of litigation that is adversely determined with respect to our interests, or in the event that we need to change our evaluation of a potential third-party claim based on new evidence, facts or communications, unexpected rulings or changes in the law, this could have a material adverse effect on our results of operations or financial condition at the time it were to materialize. We are in discussion with several parties with respect to claims against us relating to possible infringement of IP rights. We are also involved in certain legal proceedings concerning such issues. See “Item 8. Financial Information — Legal Proceedings” and Note 26 to our Consolidated Financial Statements.

*Other claims.* We are subject to the possibility of loss contingencies arising in the ordinary course of business. These include but are not limited to: product liability claims and/or warranty costs on our products, contractual disputes, indemnification claims, employee grievances, tax claims beyond assessed uncertain tax positions as well as claims for environmental damages. We are also exposed to numerous legal risks which until now have not resulted in legal disputes and proceedings. These include risks related to product recalls, environment, anti-trust, anti-corruption and competition as well as other compliance regulations. We may also face claims in the event of breaches of law committed by individual employees or third parties. In determining loss contingencies, we consider the likelihood of a loss of an asset or the occurrence of a liability, as well as our ability to reasonably estimate the amount of such loss or liability. An estimated loss is recorded when we believe that it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. We regularly re-evaluate any losses and claims and determine whether our provisions need to be adjusted based on the current information available to us. As of December 31, 2022, based on our current evaluation of ongoing litigation and claims we face, we have not estimated any amounts that could have a material impact on our results of operations and financial condition with respect to either probable or possible risks. In the event we are unable to accurately estimate the amount of such loss in a correct and timely manner, this could have a material adverse effect on our results of operations or financial condition at the time such loss was to materialize. For further details of our legal proceedings refer to “Item 8. Financial Information — Legal Proceedings” and Note 26 to our Consolidated Financial Statements.

#### **Fiscal Year 2022**

Under Article 35 of our Articles of Association, our financial year extends from January 1 to December 31, which is the period end of each fiscal year. In 2022, the first quarter ended on April 2, the second quarter ended on July 2, the third quarter ended on October 1 and the fourth quarter ended on December 31. In 2023, the first quarter will end on April 1, the second quarter will end on July 1, the third quarter will end on September 30 and the fourth quarter will end on December 31. Based on our fiscal calendar, the distribution of our revenues and expenses by quarter may be unbalanced due to a different number of days in the various quarters of the fiscal year and can also differ from equivalent prior years’ periods, as illustrated in the below table for the years 2021, 2022 and 2023.

	Q1	Q2	Q3	Q4
	Days			
2021	93	91	91	90
2022	92	91	91	91
2023	91	91	91	92

## 2022 Business Overview

Our results of operations for each period were as follows:

	Year ended December 31,		Three Months Ended		
	2022	2021	December 31, 2022	October 1, 2022	December 31, 2021
	(In millions, except per share amounts)		(Unaudited, in millions, except per share amounts)		
Net revenues	\$ 16,128	\$ 12,761	\$ 4,424	\$ 4,321	\$ 3,556
Gross profit	7,635	5,326	2,102	2,059	1,609
Gross margin as percentage of net revenues	47.3%	41.7%	47.5%	47.6%	45.2%
Operating income	4,439	2,419	1,287	1,272	885
Operating margin	27.5%	19.0%	29.1%	29.4%	24.9%
Net income attributable to parent company <sup>(1)</sup>	3,960	2,000	1,248	1,099	750
Diluted earnings per share <sup>(2)</sup>	4.19	2.16	1.32	1.16	0.82

- (1) Following a change in U.S. GAAP reporting guidance effective January 1, 2022, net income for the full year 2022 and the third and fourth quarters of 2022, do not include phantom interests associated with convertible bonds. Prior year comparative periods have not been restated.
- (2) Diluted earnings per share for the full year 2022 and the third and fourth quarters of 2022, include the full dilutive effect of our outstanding convertible debt upon adoption of the new U.S. GAAP reporting guidance adopted on January 1, 2022. Prior year comparative periods have not been restated.

Our total available market is defined as “TAM”, while our serviceable available market is defined as “SAM” and represents the market for products sold by us (i.e., TAM excluding major devices such as microprocessors, DRAM and flash-memories, optoelectronics devices other than optical sensors, video processing and wireless application specific market products, such as baseband and application processors).

Based on industry data published by WSTS, semiconductor industry revenues in 2022 increased on a year-over-year basis by approximately 3% for the TAM and by approximately 16% for the SAM, to reach approximately \$573 billion and \$285 billion, respectively. In the fourth quarter of 2022, on a year-over-year basis, the TAM decreased by approximately 15% and the SAM increased by approximately 4%. Sequentially, the TAM decreased by approximately 8% and the SAM decreased by approximately 3%.

Full year 2022 net revenues increased 26.4% to \$16.13 billion, driven by strong demand in automotive and industrial, and our engaged customer programs; gross margin was 47.3% and operating margin was 27.5%.

Our fourth quarter net revenues amounted to \$4,424 million, increasing 24.4% year-over-year, gross margin was 47.5%, and operating margin was 29.1%. On a sequential basis, fourth quarter net revenues increased 2.4%, 60 basis points above the mid-point of our guidance. ADG and MDG reported increases in net revenues on a sequential basis, while AMS decreased.

Our quarterly performance was above the SAM on a sequential basis.

Our effective average exchange rate was \$1.10 for €1.00 for the full year 2022, as compared to \$1.18 for €1.00 for the full year 2021. Our effective average exchange rate for the fourth quarter of 2022 was \$1.04 for €1.00, compared to \$1.08 for €1.00 for the third quarter of 2022 and \$1.17 for €1.00 in the fourth quarter of 2021. For a more detailed discussion of our hedging arrangements and the impact of fluctuations in exchange rates, see “Impact of Changes in Exchange Rates”.

Our 2022 gross margin increased 560 basis points to 47.3% from 41.7% in 2021, principally driven by favorable pricing, improved product mix and positive currency effects, net of hedging, partially offset by the inflation of manufacturing input costs.

Our fourth quarter 2022 gross profit was \$2,102 million and gross margin was 47.5%, 20 basis points above the mid-point of our guidance, principally driven by a more favorable product mix. On a sequential basis, gross margin decreased by 10 basis points. On a year-over-year basis, gross margin increased 230 basis points, mainly due to favorable pricing, improved product mix, positive currency effects, net of hedging, partially offset by the inflation of manufacturing input costs.

Our operating expenses, comprised of aggregated selling, general & administrative (“SG&A”) and research & development (“R&D”) expenses, amounted to \$3,355 million in 2022, increasing by 10.2% from \$3,046 million in the prior year, mainly due to higher cost of labor and higher levels of activity, primarily in R&D programs, partially offset by positive currency effects. Aggregated R&D and SG&A expenses were \$850 million for the fourth quarter of 2022, compared to \$815 million and \$752 million in the prior and year-ago quarters, respectively. The sequential increase was mainly due to seasonality associated with lower vacation days and higher activity, primarily on R&D programs. The year-over-year increase of operating expenses was mainly due to higher cost of labor and higher activity, partially offset by positive currency effects.

Other income and expenses, net, were \$159 million in 2022 compared to \$141 million in 2021, increasing mainly due to higher income from public funding. Fourth quarter other income and expenses, net, were \$35 million, compared to \$28 million in the prior quarter and \$32 million in the year-ago quarter, mainly driven by higher income from public funding.

In 2022, no impairment and restructuring charges were reported compared to \$2 million in 2021.

Operating income in 2022 was \$4,439 million, increasing by \$2,020 million compared to 2021, mainly driven by the combining effect of higher revenues and improved gross margin profitability, partially offset by higher operating expenses.

Operating income in the fourth quarter grew on a sequential and year-over-year basis to \$1,287 million compared to \$1,272 million and \$885 million in the prior and year-ago quarter, respectively. The year-over-year increase was mainly driven by higher revenues and increased gross margin profitability, partially offset by higher operating expenses.

Full year 2022 net income was \$3,960 million, or \$4.19 diluted earnings per share, compared to net income of \$2,000 million, or \$2.16 diluted earnings per share for the full year 2021. Fourth quarter net income increased on a sequential and year-over-year basis to \$1,248 million, or \$1.32 diluted earnings per share, compared to net income of \$1,099 million, or \$1.16 diluted earnings per share, in the prior quarter, and a net income of \$750 million, or \$0.82 diluted earnings per share, in the year-ago quarter.

During 2022, our net cash from operating activities was at \$5,202 million. Our net cash used in investing activities was at \$4,591 million with capital expenditure payments, net of proceeds from sales at \$920 million and \$3,524 million during the fourth quarter and full year 2022, respectively, compared to \$1,828 million for the full year 2021.

Our free cash flow, a non-U.S. GAAP measure, amounted to \$1,591 million in 2022 compared to \$1,120 million in 2021. Refer to “Liquidity and Capital Resources” for the reconciliation of the free cash flow, a non-U.S. GAAP measure, to our consolidated statements of cash flows.

During 2022, we received \$200 million of proceeds from long-term debt and used \$346 million for the repurchase of common stock, \$212 million of cash dividends to our shareholders and \$134 million for long-term debt repayment.

### ***Business Outlook***

Our first quarter 2023 outlook reflects revenues of approximately \$4.20 billion at the mid-point, increasing year-over-year by 18.5%, and decreasing on a sequential basis by 5.1%, plus or minus 350 basis points. Gross margin is expected to be at approximately 48.0%, plus or minus 200 basis points. For 2023, we plan to invest about \$4.0 billion in capital expenditures, mainly to increase our 300mm wafer fabs and silicon carbide manufacturing capacity including our substrate initiative.

Based on our strong customer demand and increased manufacturing capacity, we will drive the Company based on a plan for 2023 revenues in the range of \$16.8 billion to \$17.8 billion.

*This outlook is based on an assumed effective currency exchange rate of approximately \$1.06 = €1.00 for the 2023 first quarter and includes the impact of existing hedging contracts. The first quarter will close on April 1, 2023.*

*These are forward-looking statements that are subject to known and unknown risks and uncertainties that could cause actual results to differ materially; in particular, refer to those known risks and uncertainties described in “Cautionary Note Regarding Forward-Looking Statements” and “Item 3. Key Information — Risk Factors” herein.*

### **Other Developments**

On December 13, 2022, we announced that we have been recognized for leadership in corporate transparency and performance on water security by global environmental non-profit CDP, securing a place on CDP’s annual “A List”.

On December 1, 2022, we announced the cooperation with Soitec on Silicon Carbide (SiC) substrates, with the qualification of Soitec’s SiC substrate technology by ST planned over the next 18 months.

On October 5, 2022, we announced our plan to build an integrated Silicon Carbide (SiC) substrate manufacturing facility in Italy to support the increasing demand from our customers for SiC devices across automotive and industrial applications. This facility, built at our Catania site in Italy alongside the existing SiC device manufacturing facility, will be a first of a kind in Europe for the production in volume of 150mm SiC epitaxial substrates, integrating all steps in the production flow. Production is expected to start in 2023, enabling a balanced supply of SiC substrate between internal and merchant supply.

On August 24, 2022, we published our IFRS 2022 Semi Annual Accounts for the six-month period ended July 2, 2022 on our website and filed them with the Netherlands Authority for the Financial Markets (*Autoriteit Financiële Markten*) (“AFM”).

On August 4, 2022, we signed a Commercial and Cooperation Agreement with GlobalFoundries to create a new, jointly-operated 300mm semiconductor manufacturing facility adjacent to ST’s existing 300mm facility in Crolles, France. This facility is targeted to ramp at full capacity by 2026, with up to 620,000 300mm wafer per year production at full build-out. The project remains subject to regulatory approvals from the European Commission’s DG Competition.

On July 20, 2022, we announced a new cooperation model with CARIAD, the software unit of Volkswagen Group, under which the underlying parties will jointly develop an automotive system-on-chip (SoC). The planned cooperation targets the new generation of Volkswagen Group vehicles that will be based on the unified and scalable software platform. At the same time, the parties indicated that they are moving to agree that TSMC, one of the world’s leading dedicated semiconductor foundry companies, will manufacture the SoC wafers for ST.

On July 11, 2022, we signed a Memorandum of Understanding with GlobalFoundries to create a new, jointly-operated 300mm semiconductor manufacturing facility adjacent to ST’s existing 300mm facility in Crolles, France. This facility is targeted to ramp at full capacity by 2026, with up to 620,000 300mm wafer per year production at full build-out.

On May 25, 2022, we held our AGM in Amsterdam, the Netherlands. The proposed resolutions, all approved by the shareholders, were:

- The adoption of the Company’s Statutory Annual Accounts for the year ended December 31, 2021, prepared in accordance with International Financial Reporting Standards (IFRS-EU) and filed with the Netherlands Authority for the Financial Markets (*Autoriteit Financiële Markten*) on March 24, 2022;
- 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 2022 and first quarter of 2023;
- The reappointment of Ms. Janet Davidson, as member of the Supervisory Board for a two-year term to expire at the end of the 2024 AGM;

- The appointment of Ms. Donatella Sciuto, as member of the Supervisory Board, for a three-year term expiring at the end of the 2025 AGM in replacement of Ms. Lucia Morselli whose mandate expired at the end of the 2022 AGM;
- The approval of the stock-based portion of the compensation of the President and CEO;
- The authorization to the Managing Board, until the end of the 2023 AGM, to repurchase shares, subject to the approval of the Supervisory Board;
- The delegation to the Supervisory Board of the authority to issue new common shares, to grant rights to subscribe for such shares, and to limit and/or exclude existing shareholders' pre-emptive rights on common shares, until the end of the 2023 AGM;
- The discharge of the sole member of the Managing Board; and
- The discharge of the members of the Supervisory Board.

On May 12, 2022, we outlined the path to our \$20 billion+ revenue ambition at our Capital Markets Day in Paris, France.

On May 3, 2022, we announced the publication of our 25<sup>th</sup> sustainability report detailing our 2021 performance.

On April 8, 2022, we announced a new collaboration with other leading semiconductor players to advance the next generation FD-SOI roadmap for Automotive, IoT and Mobile Applications.

On March 2, 2022, we announced that the European Investment Bank is providing us with a €600 million loan to support our research and development and pre-industrialisation activities in Europe.

## **Results of Operations**

### **Segment Information**

We design, develop, manufacture and market 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 further participate 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 dedicated automotive integrated circuits ("ICs"), and discrete and power transistor products.
- *Analog, MEMS and Sensors Group (AMS)*, comprised of analog, smart power, MEMS sensors and actuators, and optical sensing solutions.
- *Microcontrollers and Digital ICs Group (MDG)*, comprised of general-purpose microcontrollers and microprocessors, connected security products (e.g. embedded secured elements and NFC readers), memories (e.g. serial and page EEPROM) and RF and Communications products.

Effective July 1, 2022, the Low Power RF business unit was transferred from AMS (within the Analog sub-group) to MDG (within the Microcontrollers and Memories sub-group) with no significant impact on our segment reporting. Prior year periods have been adjusted accordingly.

For the computation of the segments' internal financial measurements, we use certain internal rules of allocation for the costs not directly chargeable to the segments, including cost of sales, SG&A expenses and a part of R&D expenses. In compliance with our internal policies, certain costs are not allocated to the segments, but reported in "Others". Net revenues of "Others" include revenues from sales assembly services and other revenues. Operating income (loss) of Others includes items such as unused capacity charges, including reduced manufacturing activity due to COVID-19 and incidents leading to power outage, impairment, restructuring charges and other related closure costs, management reorganization expenses, phase-out and start-up costs of certain manufacturing facilities, and other unallocated expenses such as: strategic or special R&D programs, certain corporate-level operating expenses, patent claims and litigations, and other costs that are not allocated to



product groups, as well as operating earnings of other products. 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 cost of sales. Finally, public grants are allocated to our segments proportionally to the incurred expenses on the sponsored projects.

Wafer costs are allocated to the segments based on actual cost. From time to time, with respect to specific technologies, wafer costs are allocated to segments based on market price.

## Annual Results of Operations

The following table sets forth certain financial data from our consolidated statements of income:

	2022		2021		2020	
	\$ million	% of net revenues	\$ million	% of net revenues	\$ million	% of net revenues
Net sales	\$ 16,083	99.7%	\$ 12,729	99.7%	\$ 10,181	99.6%
Other revenues	45	0.3	32	0.3	38	0.4
<b>Net revenues</b>	<b>16,128</b>	<b>100.0</b>	<b>12,761</b>	<b>100.0</b>	<b>10,219</b>	<b>100.0</b>
Cost of sales	(8,493)	(52.7)	(7,435)	(58.3)	(6,430)	(62.9)
<b>Gross profit</b>	<b>7,635</b>	<b>47.3</b>	<b>5,326</b>	<b>41.7</b>	<b>3,789</b>	<b>37.1</b>
Selling, general and administrative	(1,454)	(9.0)	(1,323)	(10.4)	(1,109)	(10.9)
Research and development	(1,901)	(11.8)	(1,723)	(13.5)	(1,548)	(15.1)
Other income and expenses, net	159	1.0	141	1.2	202	1.9
Impairment, restructuring charges and other related closure costs	—	—	(2)	—	(11)	(0.1)
<b>Operating income</b>	<b>4,439</b>	<b>27.5</b>	<b>2,419</b>	<b>19.0</b>	<b>1,323</b>	<b>12.9</b>
Interest income (expense), net	58	0.4	(29)	(0.2)	(20)	(0.1)
Other components of pension benefit costs	(11)	(0.1)	(10)	(0.1)	(12)	(0.1)
Income (loss) on equity-method investments	—	—	—	—	2	—
Loss on financial instruments, net	—	—	(43)	(0.4)	(26)	(0.3)
<b>Income before income taxes and noncontrolling interest</b>	<b>4,486</b>	<b>27.8</b>	<b>2,337</b>	<b>18.3</b>	<b>1,267</b>	<b>12.4</b>
Income tax expense	(520)	(3.2)	(331)	(2.6)	(159)	(1.6)
<b>Net income</b>	<b>3,966</b>	<b>24.6</b>	<b>2,006</b>	<b>15.7</b>	<b>1,108</b>	<b>10.8</b>
Net income attributable to noncontrolling interest	(6)	—	(6)	—	(2)	—
<b>Net income attributable to parent company stockholders</b>	<b>\$ 3,960</b>	<b>24.6%</b>	<b>\$ 2,000</b>	<b>15.7%</b>	<b>\$ 1,106</b>	<b>10.8%</b>

### Net revenues

	Year Ended December 31,			% Variation	
	2022	2021	2020	2022 vs 2021	2021 vs 2020
	(in millions)				
Net sales	\$ 16,083	\$ 12,729	\$ 10,181	26.3%	25.0%
Other revenues	45	32	38	40.3	(17.2)
<b>Net revenues</b>	<b>\$ 16,128</b>	<b>\$ 12,761</b>	<b>\$ 10,219</b>	<b>26.4%</b>	<b>24.9%</b>

Our 2022 net revenues increased 26.4% compared to the prior year, as a result of an approximate 27% increase in average selling prices, driven by a more favorable product mix and sales price increase, partially offset by 1% decrease in volumes.

Our 2021 net revenues increased 24.9% compared to the prior year, as a result of an approximate 19% increase in volumes and an approximate 6% increase in average selling price, mainly due to higher selling prices and a more favorable product mix.

In 2022, 2021 and 2020, our largest customer, Apple, accounted for 16.8%, 20.5% and 23.9% of our net revenues, respectively, reported within our three product groups.

### Net revenues by product group

	Year Ended			% Variation	
	2022	2021	2020	2022 vs 2021	2021 vs 2020
	(In millions)				
ADG	\$ 5,969	\$ 4,350	\$ 3,284	37.2%	32.5%
AMS <sup>(1)</sup>	4,911	4,587	3,858	7.1	18.9
MDG <sup>(1)</sup>	5,228	3,802	3,064	37.5	24.1
Others	20	22	13	—	—
<b>Total consolidated net revenues</b>	<b>\$ 16,128</b>	<b>\$ 12,761</b>	<b>\$ 10,219</b>	<b>26.4%</b>	<b>24.9%</b>

(1) Effective July 1, 2022, the Low Power RF business unit was transferred from AMS to MDG with no significant impact on segment reporting. Prior year periods have been adjusted accordingly.

For the full year 2022, ADG revenues were up 37.2% with higher average selling prices of approximately 40%, thanks to a better product mix and higher selling prices, partially offset by lower volumes of approximately 3%. AMS revenues increased 7.1% due to higher average selling prices of approximately 18%, mainly due to a better product mix, partially offset by lower volumes of approximately 11%. MDG revenues increased by 37.5% compared to prior year, driven by higher average selling prices of approximately 24%, due to a better product mix and higher selling prices, and higher volumes of approximately 14%.

For the full year 2021, ADG revenues were up 32.5% with higher volumes of approximately 17% and higher average selling prices of approximately 15%, mainly due to favorable product mix and higher selling prices. AMS revenues increased 18.9%, due to higher volumes of approximately 22%, partially offset by lower average selling prices of approximately 3%, as a result of a less favorable product mix. MDG revenues increased 24.1% compared to the prior year, driven by higher volumes of approximately 20%, and higher average selling prices of approximately 4%, mainly due to higher selling prices.

### Net revenues by Market Channel<sup>(1)</sup>

	Year Ended December 31,		
	2022	2021	2020
	(As percentage of net revenues)		
OEM	67%	66%	73%
Distribution	33	34	27
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

(1) Original Equipment Manufacturers (“OEM”) are the end-customers to which we provide direct marketing application engineering support, while Distribution refers to the distributors and representatives that we engage to distribute our products around the world.

By market channel, our 2022 net revenues in Distribution amounted to 33% of our total consolidated revenues, decreasing from 34% in 2021. When comparing 2021 with 2020 figures, net revenues in Distribution had increased by 7 percentage points, from 27% to 34%.

### Net Revenues by Location of Shipment<sup>(1)</sup>

	Year Ended December 31,			% Variation	
	2022	2021	2020	2022 vs 2021	2021 vs 2020
	(In millions)				
Europe, Middle East, Africa (“EMEA”)	\$ 3,619	\$ 2,557	\$ 1,966	41.6%	30.0%
Americas	2,310	1,525	1,165	51.4	30.9
Asia Pacific	10,199	8,679	7,088	17.5	22.5
<b>Total consolidated net revenues</b>	<b>\$ 16,128</b>	<b>\$ 12,761</b>	<b>\$ 10,219</b>	<b>26.4%</b>	<b>24.9%</b>

(1) 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 shipments from one location to another, as requested by our customers.

By location of shipment, EMEA revenues grew 41.6%, mainly driven by higher sales in Microcontrollers and Automotive. Americas revenues increased 51.4%, mainly due to higher sales in Microcontrollers, Automotive, RF Communications and Power Discrete. Asia Pacific revenues increased 17.5% mainly driven by higher sales in Automotive, Microcontrollers and Power Discrete.

In 2021, EMEA revenues grew 30.0%, mainly driven by higher sales in Automotive, Microcontrollers and Power Discrete. Americas revenues increased 30.9%, mainly due to higher sales in Power Discrete and Microcontrollers. Asia Pacific revenues increased 22.5% with all sub-groups except RF Communications contributing to the increase.

### **Gross profit**

	Year Ended December 31,			Variation	
	2022	2021	2020	2022 vs 2021	2021 vs 2020
	(In millions)				
Cost of sales	\$ (8,493)	\$ (7,435)	\$ (6,430)	(14.2)%	(15.6)%
Gross profit	\$ 7,635	\$ 5,326	\$ 3,789	43.4%	40.6%
Gross margin (as percentage of net revenues)	47.3%	41.7%	37.1%	560 bps	460 bps

In 2022, gross margin increased 560 basis points to 47.3% from 41.7% in 2021, principally driven by favorable pricing, improved product mix and positive currency effects, net of hedging, partially offset by the inflation of manufacturing input costs. Unused capacity charges in 2022 were \$22 million.

In 2021, gross margin increased by 460 basis points to 41.7% from 37.1% in the full year 2020, principally driven by improved manufacturing efficiency, lower unused charges, product mix and favorable pricing. Unused capacity charges in 2021 were \$16 million.

### **Operating expenses**

	Year Ended December 31,			Variation	
	2022	2021	2020	2022 vs 2021	2021 vs 2020
	(In millions)				
Selling, general and administrative expenses	\$(1,454)	\$(1,323)	\$(1,109)	(9.9)%	(19.2)%
Research and development expenses	(1,901)	(1,723)	(1,548)	(10.4)	(11.3)
<b>Total operating expenses</b>	<b>\$(3,355)</b>	<b>\$(3,046)</b>	<b>\$(2,657)</b>	<b>(10.2)%</b>	<b>(14.6)%</b>
As percentage of net revenues	20.8%	23.9%	26.0%	-310 bps	-210 bps

The 2022 operating expenses increased 10.2% from \$3,046 million in the prior year, mainly due to higher cost of labor and higher levels of activity primarily in R&D programs, partially offset by positive currency effects, net of hedging.

The 2021 operating expenses increased 14.6% compared to the prior year, mainly due to higher cost of labor and negative currency effects, net of hedging.

The R&D expenses were net of research tax credits, which amounted to \$106 million in 2022, \$130 million in 2021 and \$131 million in 2020.

### Other income and expenses, net

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Public funding	\$ 177	\$ 162	\$ 231
Start-up and phase-out costs	(13)	—	(8)
Exchange gain (loss), net	15	7	8
Patent costs	(8)	(10)	(11)
Gain on sale of non-current assets	2	5	14
COVID-19 incremental costs	(10)	(19)	(32)
Other, net	(4)	(4)	—
<b>Other income and expenses, net</b>	<b>\$ 159</b>	<b>\$ 141</b>	<b>\$ 202</b>
As percentage of net revenues	1.0%	1.2%	1.9%

In 2022 we recognized other income, net, of \$159 million, increasing compared to \$141 million in 2021. The increase was mainly due to higher public funding.

In 2021 we recognized other income, net, of \$141 million, decreasing compared to \$202 million in 2020. The decrease was mainly due to lower public funding.

### Impairment, restructuring charges and other related closure costs

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Impairment, restructuring charges and other related closure costs	\$ —	\$ (2)	\$ (11)

There were no pending restructuring initiatives in 2022.

In 2021 we recorded \$2 million of impairment, restructuring charges and other related closure costs, composed of \$3 million restructuring charges in association with the restructuring plan in Bouskoura, Morocco, \$2 million reversal as an adjustment to accrued restructuring charges when compared to actual amounts paid and \$1 million impairment charge on licenses with no alternative future use.

In 2020 we recorded \$11 million of impairment, restructuring charges and other related closure costs, mainly composed of \$8 million restructuring charges in association with the restructuring plan in Bouskoura, Morocco and \$4 million consisting of impairment of licenses with no alternative future use.

### Operating income

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Operating income	\$ 4,439	\$ 2,419	\$ 1,323
As percentage of net revenues	27.5%	19.0%	12.9%

Operating income in 2022 was \$4,439 million, increasing by \$2,020 million compared to 2021, mainly driven by the combining effect of higher revenues and improved gross margin profitability, partially offset by higher operating expenses.

Operating income in 2021 was \$2,419 million, increasing by \$1,096 million compared to 2020, mainly driven by the combining effect of higher revenues and improved gross margin profitability, partially offset by higher operating expenses and lower public funding.

**Operating income by product group**

	Year Ended December 31,					
	2022		2021		2020	
	\$ million	% of net revenues	\$ million	% of net revenues	\$ million	% of net revenues
ADG	\$ 1,469	24.6%	\$ 512	11.8%	\$ 182	5.5%
AMS(1)	1,237	25.2	1,022	22.5	816	21.2
MDG(1)	1,830	35.0	908	23.7	498	16.3
<b>Total operating income of product groups</b>	<b>4,536</b>	<b>28.1</b>	<b>2,442</b>	<b>19.2</b>	<b>1,496</b>	<b>14.6</b>
Others(2)	(97)	—	(23)	—	(173)	—
<b>Total consolidated operating income</b>	<b>\$ 4,439</b>	<b>27.5%</b>	<b>\$ 2,419</b>	<b>19.0%</b>	<b>\$ 1,323</b>	<b>12.9%</b>

(1) Effective July 1, 2022, the Low Power RF business unit was transferred from AMS to MDG with no significant impact on segment reporting. Prior year periods have been adjusted accordingly.

(2) Operating income (loss) of Others includes items such as unused capacity charges, including reduced manufacturing activity due to COVID-19 and incidents leading to power outage, impairment, restructuring charges and other related closure costs, management reorganization costs, phase-out and start-up costs of certain manufacturing facilities, and other unallocated income (expenses) such as: strategic or special R&D programs, certain corporate level operating expenses, patent claims and litigations, and other costs that are not allocated to product groups, as well as operating earnings of other products.

In 2022, ADG operating income was \$1,469 million compared to \$512 million in 2021, with higher profitability in both Automotive and Power Discrete. AMS operating income increased by \$215 million to \$1,237 million, with all subgroups contributing. MDG operating income increased by \$922 million from \$908 million in 2021, driven by both Microcontrollers and RF Communications.

In 2021, ADG operating income was \$512 million compared to \$182 million in 2020, with higher profitability in both Automotive and Power Discrete. AMS operating income increased by \$206 million to \$1,022 million, mainly driven by Analog and MEMS. MDG operating income increased to \$908 million from \$498 million in 2020, driven by Microcontrollers.

**Reconciliation to consolidated operating income**

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
<b>Total operating income of product groups</b>	<b>\$ 4,536</b>	<b>\$ 2,442</b>	<b>\$ 1,496</b>
Impairment, restructuring charges and other related closure costs	—	(2)	(11)
Start-up and phase-out costs	(13)	—	—
Unused capacity charges	(22)	(16)	(153)
Other unallocated manufacturing results	(57)	1	(8)
Gain on sale of non-current assets	2	3	11
Strategic and other R&D programs and other non-allocated provisions(1)	(7)	(9)	(12)
<b>Total operating loss Others</b>	<b>(97)</b>	<b>(23)</b>	<b>(173)</b>
<b>Total consolidated operating income</b>	<b>\$ 4,439</b>	<b>\$ 2,419</b>	<b>\$ 1,323</b>

(1) Includes unallocated income and expenses such as certain corporate-level operating expenses and other income (costs) that are not allocated to the product groups.

**Interest income (expense), net**

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Interest income (expense), net	\$ 58	\$ (29)	\$ (20)

In 2022, we recorded a net interest income of \$58 million, compared to net interest expense of \$29 million and \$20 million in 2021 and 2020, respectively. In 2022, net interest income was composed of \$71 million of interest income, partially offset by interest expense on borrowings and banking fees of \$13 million.

On January 1, 2022, we adopted the new U.S. GAAP reporting guidance on distinguishing liabilities from equity and EPS, by applying the modified retrospective method, under which prior year periods are not restated. Interest expense recorded in 2021 and 2020 included a charge of \$34 million and \$42 million related to the outstanding senior unsecured convertible bonds, mainly resulting from the non-cash accretion expense, as recorded under the previous accounting guidance. With the adoption of the new guidance, the finance cost of the convertible debt instruments outstanding at the date of adoption is limited to the amortization expense of debt issuance costs.

In 2021, interest expense on our borrowings and banking fees amounted to \$42 million, of which \$34 million was a non-cash interest expense resulting from the accretion of the liability component of our senior unsecured convertible bonds. The interest expense was partially offset by \$13 million of interest income on cash and cash equivalents, short-term deposits and marketable securities.

In 2020, interest expense on our borrowings and banking fees amounted to \$54 million, of which \$42 million was a non-cash interest expense related to our senior unsecured convertible bonds. The interest expense was partially offset by \$34 million of interest income on cash and cash equivalents, short-term deposits and marketable securities.

### ***Loss on financial instruments, net***

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Loss on financial instruments, net	\$ —	\$ (43)	\$ (26)

In 2022, we recorded a gain on financial instruments of less than \$1 million.

In 2021, we recorded a net \$43 million loss on financial instruments, of which \$45 million loss on the settlement of Tranche B of our 2017 Senior Unsecured Convertible Bonds. This loss was associated with the fair value measurement of the liability component of Tranche B upon settlement and the write-off of unamortized debt issuance costs. In addition, we recorded a \$2 million gain on the sale of one of our non-strategic investments.

In 2020, we recorded a net \$26 million loss on financial instruments, of which \$25 million loss on the settlement of Tranche A of our 2017 Senior Unsecured Convertible Bonds. This loss was associated with the fair value measurement of the liability component of Tranche A upon settlement and the write-off of the unamortized debt issuance costs.

### ***Income tax expense***

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Income tax expense	\$ (520)	\$ (331)	\$ (159)

In 2022, we registered an income tax expense of \$520 million, compared to \$331 million in 2021 and \$159 million in 2020. These amounts reflect the actual taxes calculated on our income before income taxes in each of our jurisdictions and tax benefits, net of valuation allowances, associated with our estimates of the net operating loss realization, in certain jurisdictions, against future taxable profits, one-time tax benefits related to previous year positions and our best estimate of additional tax charges related to potential uncertain tax positions and claims.

In 2022, the effective tax rate was 15%, before \$133 million of tax benefit from discrete items, which included a one-time non-cash income tax benefit of \$140 million due to the reversal of valuation allowances in certain tax jurisdictions.

In 2021, the effective tax rate was 15%, before \$17 million of tax benefit from discrete items, which included the reversal of valuation allowances in certain tax jurisdictions.

In 2020, the effective tax rate was 15%, before \$31 million of tax benefit from discrete items.

Our tax rate is variable and depends on changes in the level of operating results within various local jurisdictions and on changes in the taxation rates applicable in these jurisdictions, as well as changes in estimates and assumptions used when assessing our tax positions. Our income tax amounts and rates depend also on our loss carry-forwards and their relevant valuation allowances, which are based on estimated projected plans and available tax planning; in the case of material changes in these plans, the valuation allowances could be adjusted accordingly with an impact on our income tax expense (benefit). We currently enjoy certain tax benefits in some countries. Such benefits may not be available in the future due to changes in the local jurisdictions; our effective tax rate could be different in future periods and may increase in the coming years. In addition, our yearly income tax expense includes the estimated impact of provisions related to tax positions which have been considered as uncertain.

#### *Net income attributable to noncontrolling interest*

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Net income attributable to noncontrolling interest	\$ (6)	\$ (6)	\$ (2)

Net income attributable to noncontrolling interest amounted to \$6 million in 2022 and 2021, and \$2 million in 2020.

#### *Net income attributable to parent company*

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Net income attributable to parent company	\$ 3,960	\$ 2,000	\$ 1,106
As percentage of net revenues	24.6%	15.7%	10.8%

For 2022, we reported a net income attributable to parent company of \$3,960 million, compared to \$2,000 million and \$1,106 million for 2021 and 2020, respectively.

The 2022 net income attributable to parent company represented diluted earnings per share of \$4.19 compared to \$2.16 and \$1.20 for 2021 and 2020, respectively.

Diluted earnings per share for the year 2022 includes the full dilutive effect of our outstanding convertible debt upon adoption of the newly applicable U.S. GAAP reporting guidance on January 1, 2022. Prior year periods have not been restated.

#### **Quarterly Results of Operations**

Certain quarterly financial information for the years 2022 and 2021 are set forth below. Such information is derived from our unaudited Consolidated Financial Statements, prepared on a basis consistent with the audited Consolidated Financial Statements that include, in our opinion, all normal adjustments necessary for a fair statement of the interim information set forth therein. Operating results for any quarter are not necessarily indicative of results for any future period. In addition, in view of the significant volatility we have experienced in recent years, the increasingly competitive nature of the markets in which we operate, the changes in products mix and the currency effects of changes in the composition of sales and production among different geographic regions, we believe that period-to-period comparisons of our operating results should not be relied upon as an indication of future performance.



Our quarterly and annual operating results are also affected by a wide variety of other factors that could materially and adversely affect revenues and profitability or lead to significant variability of operating results, please see “Item 3. Key Information — Risk Factors — Risks Related to Our Operations”. As only a portion of our expenses varies with our revenues, there can be no assurance that we will be able to reduce costs promptly or adequately in relation to revenue declines to compensate for the effect of any such factors. As a result, unfavorable changes in the above or other factors have in the past and may in the future adversely affect our operating results. Quarterly results have also been and may be expected to continue to be substantially affected by the cyclical nature of the semiconductor and electronic systems industries, the speed of some process and manufacturing technology developments, market demand for existing products, the timing and success of new product introductions and the levels of provisions and other unusual charges incurred. Certain additions of our quarterly results will not total our annual results due to rounding.

### Net revenues

	Three Months Ended			% Variation	
	December 31, 2022	October 1, 2022	December 31, 2021	Sequential	Year-Over-Year
	(Unaudited, in millions)				
Net sales	\$ 4,408	\$ 4,305	\$ 3,542	2.4%	24.5%
Other revenues	16	16	14	(3.7)	9.1
<b>Net revenues</b>	<b>\$ 4,424</b>	<b>\$ 4,321</b>	<b>\$ 3,556</b>	<b>2.4%</b>	<b>24.4%</b>

Our fourth quarter 2022 net revenues amounted to \$4,424 million, registering a sequential increase of 2.4%, 60 basis points above the mid-point of the released guidance. The sequential increase resulted from higher average selling prices of approximately 10%, driven by a more favorable product mix, partially offset by lower volumes of approximately 8%.

On a year-over-year basis, our net revenues increased by 24.4%. This increase was mainly due to higher average selling prices of approximately 33%, driven by higher selling prices and a more favorable product mix, partially offset by lower volumes of approximately 9%.

### Net revenues by product group

	Three Months Ended			% Variation	
	December 31, 2022	October 1, 2022	December 31, 2021	Sequential	Year-Over-Year
	(Unaudited, in millions)				
ADG	\$ 1,696	\$ 1,563	\$ 1,226	8.5%	38.4%
AMS <sup>(1)</sup>	1,339	1,380	1,251	(3.0)	7.0
MDG <sup>(1)</sup>	1,383	1,374	1,072	0.7	29.1
Others	6	4	7	—	—
<b>Total consolidated net revenues</b>	<b>\$ 4,424</b>	<b>\$ 4,321</b>	<b>\$ 3,556</b>	<b>2.4%</b>	<b>24.4%</b>

(1) Effective July 1, 2022, the Low Power RF business unit was transferred from AMS to MDG with no significant impact on segment reporting. Prior year period has been adjusted accordingly.

On a sequential basis, ADG revenues were up 8.5%, driven by an approximate 20% increase in average selling prices, mainly due to a more favorable product mix, partially offset by lower volumes of approximately 11%. AMS revenues decreased 3.0%, as a result of lower volumes of approximately 9%, partially offset by higher average selling prices of 6%, mainly due to a more favorable product mix. MDG revenues increased 0.7% due to higher volumes of approximately 1%.

On a year-over-year basis, fourth quarter net revenues increased 24.4%. ADG revenues increased 38.4% compared to the year-ago quarter due to higher average selling prices of approximately 52%, mainly due to a better product mix and higher selling prices, partially offset by lower volumes of approximately 14%. AMS quarter revenues increased 7.0% year-over-year. The increase was driven by higher average selling prices of approximately 22% due to a more favorable product mix, partially offset by lower volumes of approximately 15%. MDG fourth quarter revenues increased 29.1%, driven by higher average selling prices of approximately 17%, due to the combination of a more favorable product mix and higher selling prices, and higher volumes of approximately 12%.

#### Net Revenues by Market Channel<sup>(1)</sup>

	Three Months Ended		
	December 31, 2022	October 1, 2022	December 31, 2021
	(Unaudited, in %)		
OEM	68%	67%	67%
Distribution	32	33	33
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

(1) Original Equipment Manufacturers (“OEM”) are the end-customers to which we provide direct marketing application engineering support, while Distribution refers to the distributors and representatives that we engage to distribute our products around the world.

By market channel, our fourth quarter revenues in Distribution amounted to 32% of our total net revenues, substantially flat compared to the previous and year-ago quarters.

#### Net Revenues by Location of Shipment<sup>(1)</sup>

	Three Months Ended			% Variation	
	December 31, 2022	October 1, 2022	December 31, 2021	Sequential	Year-Over-Year
	(Unaudited, in millions)				
EMEA	\$ 1,065	\$ 936	\$ 709	13.8%	50.3%
Americas	669	586	412	14.2	62.1
Asia Pacific	2,690	2,799	2,435	(3.9)	10.5
<b>Total consolidated net revenues</b>	<b>\$ 4,424</b>	<b>\$ 4,321</b>	<b>\$ 3,556</b>	<b>2.4%</b>	<b>24.4%</b>

(1) 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 shipments from one location to another, as requested by our customers.

By region of shipment, in the 2022 fourth quarter, EMEA revenues grew 13.8%, mainly driven by higher sales in Automotive and Microcontrollers. Americas revenues increased 14.2%, mainly due to higher sales in RF Communications and Power Discrete. Asia Pacific revenues decreased by 3.9%, mainly due to lower sales in Analog and MEMS, partially offset by higher sales in the Optical Sensing Solutions sub-group.

On a year-over-year basis, EMEA revenues grew 50.3%, mainly driven by higher sales in Microcontrollers and Automotive. Americas revenues increased 62.1%, mainly due to higher sales in Power Discrete, Automotive and Microcontrollers. Asia Pacific revenues increased 10.5%, mainly due to higher sales in Optical Sensing Solutions and Automotive, partially offset by lower sales in Analog.

## Gross Profit

	Three Months Ended			Variation	
	December 31, 2022	October 1, 2022	December 31, 2021	Sequential	Year-Over-Year
	(Unaudited, in millions)				
Cost of sales	\$ (2,322)	\$ (2,262)	\$ (1,947)	(2.6)%	(19.2)%
Gross profit	\$ 2,102	\$ 2,059	\$ 1,609	2.1%	30.7%
Gross margin (as percentage of net revenues)	47.5%	47.6%	45.2%	-10 bps	230 bps

Fourth quarter gross profit was \$2,102 million and gross margin was 47.5%, 20 basis points above the mid-point of our guidance, principally driven by a more favorable product mix. On a sequential basis, gross margin decreased by 10 basis points while it increased 230 basis points year-over-year, principally due to favorable pricing, improved product mix, positive currency effects, net of hedging, partially offset by the inflation of manufacturing input costs.

## Operating expenses

	Three Months Ended			% Variation	
	December 31, 2022	October 1, 2022	December 31, 2021	Sequential	Year-Over-Year
	(Unaudited, in millions)				
Selling, general and administrative expenses	\$ (378)	\$ (352)	\$ (350)	(7.3)%	(7.9)%
Research and development expenses	(472)	(463)	(402)	(1.9)	(17.4)
<b>Total operating expenses</b>	<b>\$ (850)</b>	<b>\$ (815)</b>	<b>\$ (752)</b>	<b>(4.3)%</b>	<b>(13.0)%</b>
As percentage of net revenues	19.2%	18.9%	21.1%	30 bps	-190 bps

On a sequential basis, operating expenses increased by \$35 million, mainly due to seasonality associated with lower vacation days and higher activity.

On a year-over-year basis, operating expenses increased by \$98 million, mainly due to higher cost of labor and higher activity primarily on R&D programs, partially offset by positive currency effects, net of hedging.

R&D expenses were net of research tax credits, which amounted to \$27 million in the fourth quarter of 2022, compared to \$33 million and \$31 million in the prior and year-ago quarters, respectively.

## Other income and expenses, net

	Three Months Ended		
	December 31, 2022	October 1, 2022	December 31, 2021
	(Unaudited, in millions)		
Public funding	\$ 47	\$ 28	\$ 40
Start-up and phase-out costs	(11)	(1)	—
Exchange gain (loss), net	2	6	2
Patent costs	(1)	(3)	(5)
COVID-19 incremental costs	(1)	(1)	(5)
Other, net	(1)	(1)	—
<b>Other income and expenses, net</b>	<b>\$ 35</b>	<b>\$ 28</b>	<b>\$ 32</b>
As percentage of net revenues	0.8%	0.6%	0.9%

Fourth quarter other income and expenses, net, amounted to \$35 million, compared to \$28 million in the prior quarter and \$32 million in the year-ago quarter, mainly driven by higher income from public funding.

### Impairment, restructuring charges and other related closure costs

	Three Months Ended		
	December 31, 2022	October 1, 2022	December 31, 2021
	(Unaudited, in millions)		
Impairment, restructuring charges and other related closure costs	\$ —	\$ —	\$ (4)

There were no pending restructuring initiatives in 2022.

In the fourth quarter of 2021 we recorded \$4 million of restructuring charges, related to an additional charge on benefits paid to employees as part of prior year restructuring plans incurred in one of our back-end sites.

### Operating income

	Three Months Ended		
	December 31, 2022	October 1, 2022	December 31, 2021
	(Unaudited, in millions)		
Operating income	\$ 1,287	\$ 1,272	\$ 885
As percentage of net revenues	29.1%	29.4%	24.9%

In the fourth quarter of 2022, operating income was \$1,287 million, compared to an operating income of \$1,272 million and \$885 million in the prior and year-ago quarters, respectively.

While on a sequential basis, our operating income remained substantially flat, the year-over-year increase was mainly driven by higher revenues and increased gross margin profitability, partially offset by higher operating expenses.

### Operating income by product group

	Three Months Ended					
	December 31, 2022		October 1, 2022		December 31, 2021	
	\$ million	% of net revenues	\$ million	% of net revenues	\$ million	% of net revenues
	(Unaudited)					
ADG	\$ 470	27.7%	\$ 404	25.9%	\$ 216	17.6%
AMS(1)	346	25.8	376	27.2	337	27.0
MDG(1)	495	35.8	504	36.7	316	29.5
<b>Total operating income of product groups</b>	<b>1,311</b>	<b>29.7</b>	<b>1,284</b>	<b>29.7</b>	<b>869</b>	<b>24.4</b>
Others(2)	(24)	—	(12)	—	16	—
<b>Total consolidated operating income</b>	<b>\$ 1,287</b>	<b>29.1%</b>	<b>\$ 1,272</b>	<b>29.4%</b>	<b>\$ 885</b>	<b>24.9%</b>

(1) Effective July 1, 2022, the Low Power RF business unit was transferred from AMS to MDG with no significant impact on segment reporting. Prior year periods have been adjusted accordingly.

(2) Operating income (loss) of Others includes items such as unused capacity charges, including reduced manufacturing activity due to COVID-19 and incidents leading to power outage, impairment, restructuring charges and other related closure costs, management reorganization costs, phase-out and start-up costs of certain manufacturing facilities, and other unallocated income (expenses) such as: strategic or special R&D programs, certain corporate level operating expenses, patent claims and litigations, and other costs that are not allocated to product groups, as well as operating earnings of other products.

On a sequential basis, ADG fourth quarter operating income improved by \$66 million, driven by both Automotive and Power Discrete. AMS operating income decreased sequentially by \$30 million, due to lower profitability in Analog and MEMS, partially offset by higher profitability in Optical Sensing Solutions. MDG operating income decreased by \$9 million sequentially.

On a year-over-year basis, ADG operating income increased by \$254 million, reflecting higher profitability in both Power Discrete and Automotive. AMS operating income increased by \$9 million, mainly due to higher profitability in Optical Sensing Solutions, partially offset by lower profitability in Analog. MDG operating income increased by \$179 million, driven by both Microcontrollers and RF Communications.

### Reconciliation to consolidated operating income

	Three Months Ended		
	December 31, 2022	October 1, 2022	December 31, 2021
	(Unaudited, in millions)		
<b>Total operating income of product groups</b>	<b>\$ 1,311</b>	<b>\$ 1,284</b>	<b>\$ 869</b>
Impairment, restructuring charges and other related closure costs	—	—	(4)
Start-up and phase-out costs	(11)	(1)	—
Other unallocated manufacturing results	2	(8)	8
Strategic and other R&D programs and other non-allocated provisions	(15)	(3)	12
<b>Total operating income (loss) Others</b>	<b>(24)</b>	<b>(12)</b>	<b>16</b>
<b>Total consolidated operating income</b>	<b>\$ 1,287</b>	<b>\$ 1,272</b>	<b>\$ 885</b>

### Interest income (expense), net

	Three Months Ended		
	December 31, 2022	October 1, 2022	December 31, 2021
	(Unaudited, in millions)		
Interest income (expense), net	\$ 33	\$ 16	\$ (5)

In the fourth quarter of 2022, we recorded net interest income of \$33 million, compared to \$16 million in the prior quarter and \$5 million of net interest expense in the year-ago quarter. The fourth quarter net interest income was composed of \$40 million of interest income, partially offset by \$7 million of interest expenses on our borrowings and banking fees.

On January 1, 2022, we adopted the new U.S. GAAP reporting guidance on distinguishing liabilities from equity and EPS, by applying the modified retrospective method, under which prior year periods are not restated. Interest expense recorded in the year ago quarter included a charge of \$5 million related to the outstanding senior unsecured convertible bonds, mainly resulting from the non-cash accretion expense, as recorded under the previous accounting guidance. With the adoption of the new guidance, the finance cost of the convertible debt instruments outstanding at the date of adoption is limited to the amortization expense of debt issuance costs.

### Income tax expense

	Three Months Ended		
	December 31, 2022	October 1, 2022	December 31, 2021
	(Unaudited, in millions)		
Income tax expense	\$ (66)	\$ (185)	\$ (127)

During the fourth and third quarters of 2022 and the fourth quarter of 2021, we recorded an income tax expense of \$66 million, \$185 million and \$127 million, respectively, reflecting (i) in the third quarter of 2022 the estimated annual effective tax rate based on expected taxes to be paid or received in each of our jurisdictions, as applied to the consolidated income before income taxes and (ii) in both fourth quarters, the actual income tax expense or benefit in each jurisdiction as well as the true-up of tax provisions based upon the most updated visibility on open tax positions.

The fourth quarter of 2022 income tax expense included a one-time tax benefit of \$140 million due to the reversal of valuation allowances in certain tax jurisdictions.

### *Net income attributable to parent company*

	Three Months Ended		
	December 31, 2022	October 1, 2022	December 31, 2021
	(Unaudited, in millions)		
Net income attributable to parent company	\$ 1,248	\$ 1,099	\$ 750
As percentage of net revenues	28.2%	25.4%	21.1%

For the fourth quarter of 2022, we reported a net income of \$1,248 million, compared to a net income of \$1,099 million and \$750 million in the prior and year-ago quarters, respectively. The fourth quarter 2022, net income represented diluted earnings per share of \$1.32 compared to \$1.16 in the prior quarter and \$0.82 in the prior-year quarter.

Diluted earnings per share for the fourth quarter of 2022 includes the full dilutive effect of our outstanding convertible debt upon adoption of the newly applicable U.S. GAAP reporting guidance on January 1, 2022. Prior periods have not been restated.

### **Impact of Changes in Exchange Rates**

Our results of operations and financial condition can be significantly affected by material changes in the exchange rates between the U.S. dollar and other currencies, particularly the Euro.

As a market practice, the reference currency for the semiconductor industry is the U.S. dollar and the market prices of semiconductor products are mainly denominated in U.S. dollars. However, revenues for some of our products are quoted in currencies other than the U.S. dollar, such as Euro-denominated sales, and consequently are directly affected by fluctuations in the value of the U.S. dollar. As a result of currency variations, the appreciation of the Euro compared to the U.S. dollar could increase our level of revenues when translated into U.S. dollars or the depreciation of the Euro compared to the U.S. dollar could decrease our level of revenues when reported in U.S. dollars. Over time and depending on market conditions, the prices in the industry could align to the equivalent amount in U.S. dollars, except that there is a lag between the changes in the currency rate and the adjustment in the price paid in local currency, which is proportional to the amplitude of the currency swing, and such adjustment could be only partial and/or delayed, depending on market demand. Furthermore, certain significant costs incurred by us, such as manufacturing costs, SG&A expenses, and R&D expenses, are largely incurred in the currency of the jurisdictions in which our operations are located. Given that most of our operations are located in the Eurozone and other non-U.S. dollar currency areas, including Singapore, our costs tend to increase when translated into U.S. dollars when the U.S. dollar weakens or to decrease when the U.S. dollar strengthens.

Our principal strategy to reduce the risks associated with exchange rate fluctuations is to balance as much as possible the proportion of sales to our customers denominated in U.S. dollars with the amount of materials, purchases and services from our suppliers denominated in U.S. dollars, thereby reducing the potential exchange rate impact of certain variable costs relative to revenues. Moreover, in order to further reduce the exposure to U.S. dollar exchange fluctuations, we hedge certain line items on our consolidated statements of income, in particular with respect to a portion of cost of sales, most of R&D expenses and certain SG&A expenses, located in the Eurozone, which we designate as cash flow hedge transactions. We use two different types of hedging instruments: forward contracts and currency options (including collars).

Our consolidated statements of income included income and expense items translated at the average U.S. dollar exchange rate for the period, plus the impact of the hedging contracts expiring during the period. Our effective average exchange rate was \$1.10 for €1.00 for the full year 2022 and \$1.18 for €1.00 for the full year 2021. Our effective exchange rate was \$1.04 for €1.00 for the fourth quarter of 2022, \$1.08 for €1.00 for the third quarter of 2022 and \$1.17 for €1.00 for the fourth quarter of 2021. These effective exchange rates reflect the actual exchange rates combined with the effect of cash flow hedge transactions impacting earnings in the period.

The time horizon of our cash flow hedging for manufacturing costs and operating expenses may run up to 24 months, for a limited percentage of our exposure to the Euro, depending on currency market circumstances. As of December 31, 2022, the outstanding hedged amounts were €1,777 million to cover manufacturing costs and €1,040 million to cover operating expenses, at an average exchange rate of approximately \$1.09 for €1.00 (considering the collars at upper strike), maturing from January 4, 2023 to August 28, 2024. As of December 31, 2022, measured in respect to the exchange rate at period closing of about \$1.07 to €1.00, these outstanding hedging contracts and certain settled contracts covering manufacturing expenses capitalized in inventory resulted in a deferred gain of approximately \$17 million before tax, recorded in “Accumulated other comprehensive income (loss)” in the consolidated statements of equity, compared to a deferred loss of approximately \$48 million before tax as of December 31, 2021.

We also hedge certain manufacturing costs denominated in Singapore dollars (SGD); as of December 31, 2022, the outstanding hedged amounts were SGD 247 million at an average exchange rate of about SGD 1.38 to \$1.00 maturing over the period from January 5, 2023 to November 30, 2023. As of December 31, 2022, the deferred gain of these outstanding hedging contracts were \$6 million, compared to immaterial deferred gains before tax as of December 31, 2021.

Our cash flow hedging policy is not intended to cover our full exposure and is based on hedging a declining portion of our exposure in the next four quarters. In 2022, as a result of our cash flow hedging, we recycled to earnings a loss of \$197 million, composed of a \$129 million loss impacting cost of sales, a \$53 million loss impacting R&D and a \$15 million loss impacting SG&A expenses. In 2021, as a result of our cash flow hedging, we recycled to earnings a gain of \$19 million, composed of a \$15 million gain impacting cost of sales, a \$3 million gain impacting R&D and \$1 million gain impacting SG&A expenses.

In addition to our cash flow hedging, in order to mitigate potential exchange rate risks on our commercial transactions, we purchase and enter into foreign exchange forward contracts and currency options to cover foreign currency exposure in payables or receivables at our affiliates, which we do not designate for hedge accounting. We may in the future purchase or sell similar types of instruments. See “Item 11. Quantitative and Qualitative Disclosures About Market Risk” in our Form 20-F. Furthermore, we may not predict on a timely basis the amount of future transactions in the volatile industry environment. No assurance may be given that our hedging activities will sufficiently protect us against fluctuations in the value of the U.S. dollar. Consequently, our results of operations have been and may continue to be impacted by fluctuations in exchange rates. The net effect of our consolidated foreign exchange exposure in payables and receivables at our affiliates resulted in a net gain of \$15 million recorded in “Other income and expenses, net” in our 2022 consolidated statement of income compared to a net gain of \$7 million and \$8 million in 2021 and 2020, respectively.

The assets and liabilities of subsidiaries whose functional currency is different from the U.S. dollar reporting currency are, for consolidation purposes, translated into U.S. dollars at the period-end exchange rate. Income and expenses, as well as cash flows, are translated at the average exchange rate for the period. The balance sheet impact, as well as the income statement and cash flow impact, of these currency translations have been, and may be, significant from period to period since a large part of our assets and liabilities and activities are accounted for in Euros as they are located in jurisdictions where the Euro is the functional currency. Adjustments resulting from the currency translation are recorded directly in equity and are reported as “Accumulated other comprehensive income (loss)” in the consolidated statements of equity. As of December 31, 2022, our outstanding indebtedness was denominated mainly in U.S. dollars and in Euros.

For a more detailed discussion, see “Item 3. Key Information — Risk Factors — Risks Related to Our Operations”.

### **Impact of Changes in Interest Rates**

Interest rates may fluctuate upon changes in financial market conditions and material changes can affect our results of operations and financial condition, since these changes can impact the total interest income received on our cash and cash equivalents, short-term deposits and marketable securities, as well as the total interest expense paid on our financial debt.

Our interest income (expense), net, as reported in our consolidated statements of income, is the balance between interest income received from our cash and cash equivalents, short-term deposits and marketable securities and interest expense recorded on our financial liabilities, including bank fees (including fees on committed credit lines or on the sale without recourse of receivables, if any). Our interest income is dependent



upon fluctuations in interest rates, mainly in U.S. dollars and Euros, since we invest primarily on a short-term basis; any increase or decrease in the market interest rates would mean a proportional increase or decrease in our interest income. Our interest expenses are also dependent upon fluctuations in interest rates since our financial liabilities include European Investment Bank (“EIB”) and Cassa Depositi e Prestiti SpA (“CDP”) Floating Rate Loans at Euribor plus variable spreads. See Note 15 to our Consolidated Financial Statements.

As of December 31, 2022, our total financial resources, including cash and cash equivalents, short-term deposits and marketable securities, generated an average annual interest rate of 4.16%. At the same date, the average annual interest rate on our outstanding debt was 0.82%.

A rise in interest rates to address inflation or otherwise will also impact the base rates applicable in our credit arrangements and will result in borrowed funds becoming more expensive to us over time. These financing and inflationary pressures may also reduce disposable income on a macro-economic basis, eroding the values of savings, and could have a negative impact on our customers’ ability to purchase our products in the same volumes.

### **Impact of Changes in Equity Prices**

As of December 31, 2022, we did not hold any significant investments in equity securities with a material exposure to equity price risk. However, on these equity investments, carrying value could be reduced due to further losses or impairment charges. See Note 12 and Note 13 to our Consolidated Financial Statements.

### **Liquidity and Capital Resources**

Treasury activities are regulated by our policies, which define procedures, objectives and controls. Our policies focus on the management of our financial risk in terms of exposure to currency rates and interest rates. Most treasury activities are centralized, with any local treasury activities subject to oversight from our head treasury office. The majority of our cash and cash equivalents are held in U.S. dollars and Euros and are placed with financial institutions rated at least as 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 Ratings (“Fitch”). Marginal amounts are held in other currencies. See “Item 11. Quantitative and Qualitative Disclosures About Market Risk”.

Our total liquidity was \$4,518 million as of December 31, 2022, increasing compared to \$3,516 million as of December 31, 2021. As of December 31, 2022, our total liquidity was comprised of \$3,258 million in cash and cash equivalents, \$581 million in short-term deposits and \$679 million in marketable securities, all classified as current assets.

As of December 31, 2022, marketable securities were \$679 million invested in U.S. Treasury Bonds, with a rating of Aaa/AA+/AAA from Moody’s, S&P and Fitch, respectively, and a weighted average maturity of 3.5 years. The securities are classified as available-for-sale and reported at fair value. This fair value measurement corresponds to a Level 1 fair value hierarchy measurement. To optimize the return yield on our short-term investments, we also held \$581 million of available cash in short-term deposits as of December 31, 2022. These short-term deposits represent liquidity with original maturity beyond three months and no significant risk of changes in fair value.

### **Cash flow**

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

During 2022, our cash and cash equivalents increased by \$33 million. The components of the net cash increase for 2022 and the comparable periods are set forth below:

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Net cash from operating activities	\$ 5,202	\$ 3,060	\$ 2,093
Net cash used in investing activities	(4,591)	(1,518)	(2,043)
Net cash from (used in) financing activities	(567)	(1,314)	348
Effect of changes in exchange rates	(11)	(9)	1
<b>Net cash increase</b>	<b>\$ 33</b>	<b>\$ 219</b>	<b>\$ 399</b>

*Net cash from operating activities.* Net cash from operating activities is the sum of (i) net income adjusted for non-cash items and (ii) changes in net working capital. The net cash from operating activities in 2022 was \$5,202 million compared to \$3,060 million in the prior year, increasing mainly due to higher net income.

*Net cash used in investing activities.* Investing activities used \$4,591 million in 2022, increasing from \$1,518 million in the prior year, mainly due to higher payment for net purchase of tangible assets which totaled \$3,524 million compared to \$1,828 million in the prior year, purchases of marketable securities and net investments in short-term deposits. Capital investments for the year 2022 included (i) investments in advanced wafer fabs, such as the 300mm fab in Crolles, France and the new 300mm fab in Agrate, Italy; (ii) SiC activities, primarily in Singapore and Catania, Italy; and (iii) in selected programs of capacity growth in other front-end and back-end activities.

*Net cash from (used in) financing activities.* Net cash used in financing activities was \$567 million in 2022, compared to net cash from financing activities of \$1,314 million in 2021, and consisted mainly of \$346 million repurchase of common stock, \$212 million of dividends paid to our stockholders and \$134 million repayment of long-term debt, partially offset by \$200 million of proceeds from the drawdown of our credit facility with CDP signed in 2022.

*Free Cash Flow (non-U.S. GAAP measure).* We also present Free Cash Flow, which is a non-U.S. GAAP measure, defined as (i) net cash from operating activities plus (ii) net cash used in investing activities, excluding payment for purchase of (and proceeds from matured) marketable securities, and net investment in (and proceeds from) short-term deposits, 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 net cash paid for business acquisitions. We believe Free Cash Flow, a non-U.S. GAAP measure, 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 U.S. GAAP measure and does not represent total cash flow since it does not include the cash flows generated by or used in financing activities. Free Cash Flow reconciles with the net cash increase (decrease) by including the payment for purchase of (and proceeds from matured) marketable securities and net investment in (and proceeds from) short-term deposits, 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. Free Cash Flow is determined from our consolidated statements of cash flows as follows:

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
<b>Net cash from operating activities</b>	<b>\$ 5,202</b>	<b>\$ 3,060</b>	<b>\$ 2,093</b>
Payment for purchase, net of proceeds from sale of tangible assets	(3,524)	(1,828)	(1,279)
Payment for purchase, net of proceeds from sale, of intangible assets	(87)	(97)	(75)
Payment for purchase, net of proceeds from sale, of financial assets and equity investments	—	(15)	1
Payment for business acquisitions, net of cash acquired	—	—	(113)
<b>Free Cash Flow (non-U.S. GAAP measure) <sup>(1)</sup></b>	<b>\$ 1,591</b>	<b>\$ 1,120</b>	<b>\$ 627</b>

(1) Free Cash Flow can also be expressed as Net cash from operating and investing activities, excluding cash from (used in) marketable securities and short-term deposits.

In 2022, we had a positive Free Cash Flow of \$1,591 million, compared to positive \$1,120 million and positive \$627 million in 2021 and 2020, respectively.

## Capital Resources

*Net Financial Position (non-U.S. GAAP measure).* Our Net Financial Position represents the difference between our total liquidity and our total financial debt. Our total liquidity includes cash and cash equivalents, short-term deposits and marketable securities, and our total financial debt includes short-term debt and long-term debt, as reported in our consolidated balance sheets. Net Financial Position is not a U.S. GAAP measure, but we believe it provides useful information for investors and management because it gives evidence of our global position either in terms of net indebtedness or net cash by measuring our capital resources based on cash and cash equivalents, short-term deposits and marketable securities and the total level of our financial debt. Our definition of Net Financial Position may differ from definitions used by other companies and therefore comparability may be limited. Our Net Financial Position for each period has been determined from our consolidated balance sheets as follows:

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Cash and cash equivalents	\$ 3,258	\$ 3,225	\$ 3,006
Short-term deposits	581	291	581
Marketable securities	679	—	133
<b>Total liquidity</b>	<b>4,518</b>	<b>3,516</b>	<b>3,720</b>
Short-term debt	(175)	(143)	(795)
Long-term debt	(2,542)	(2,396)	(1,826)
<b>Total financial debt</b>	<b>(2,717)</b>	<b>(2,539)</b>	<b>(2,621)</b>
<b>Net Financial Position</b>	<b>\$ 1,801</b>	<b>\$ 977</b>	<b>\$ 1,099</b>

Our Net Financial Position as of December 31, 2022 was a net cash position of \$1,801 million, increasing compared to the net cash position of \$977 million as of December 31, 2021.

Cash and cash equivalents amounted to \$3,258 million as of December 31, 2022.

Short-term deposits amounted to \$581 million as of December 31, 2022 and consisted of available liquidity with original maturity over three months.

Marketable securities amounted to \$679 million as of December 31, 2022 and consisted of U.S. Treasury Bonds classified as available-for-sale.

Financial debt was \$2,717 million, as of December 31, 2022 and was composed of (i) \$175 million of short-term debt and (ii) \$2,542 million of long-term debt. The breakdown of our total financial debt included (i) \$827 million in EIB loans, (ii) \$334 million in CDP loans, (iii) \$1,495 million in our 2020 Senior Unsecured Convertible Bonds, (iii) \$57 million in finance leases and, (iv) \$4 million in loans from other funding programs.

The EIB loans are comprised of three long-term amortizing credit facilities as part of public funding programs. The first, signed in August 2017, is a €500 million loan, in relation to R&D and capital expenditures in the European Union, fully drawn in Euros, of which \$346 million was outstanding as of December 31, 2022. The second one, signed in 2020, is a €500 million credit facility agreement with EIB to support R&D and capital expenditure programs in Italy and France. The amount was fully drawn in Euros representing \$481 million outstanding as of December 31, 2022. In 2022, the Company signed a third long-term amortizing credit facility with EIB of €600 million, out of which, no amount had been drawn as of December 31, 2022.

The CDP loans are comprised of two long-term credit facilities. The first, signed in 2021, is a €150 million loan, fully drawn in Euros, of which \$120 million were outstanding as of December 31, 2022. The second one, signed in 2022, is a €200 million loan, fully drawn in Euros, of which \$214 million was outstanding as of December 31, 2022.

On August 4, 2020, we issued a \$1.5 billion principal amount of dual tranche senior unsecured convertible bonds (Tranche A and Tranche B for \$750 million each tranche), due 2025 and 2027, respectively. Tranche A bonds were issued at 105.8% as zero-coupon bonds while Tranche B bonds were issued at 104.5% as zero-coupon bonds. The conversion price at issuance was \$43.62 for Tranche A equivalent to a 47.5% conversion premium and \$45.10 for Tranche B, equivalent to a 52.5% conversion premium. These conversion features correspond to an equivalent of 4,585 shares per each Tranche A bond \$200,000 par value and an equivalent of 4,435 shares per each Tranche B bond \$200,000 par value. The bonds are convertible by the bondholders or are callable by the issuer upon certain conditions, on a net-share settlement basis, except if the issuer elects a full-cash or full-share conversion as an alternative settlement. The net proceeds from the bond offering were \$1,567 million, after deducting issuance costs paid by the Company.

As of December 31, 2022, the Company's stock price did not exceed the conversion price of the senior unsecured convertible bonds issued on August 4, 2020.

Our long-term debt contains standard conditions but does not impose minimum financial ratios. We had unutilized committed medium-term credit facilities with core relationship banks totaling \$1,281 million as of December 31, 2022.

As of December 31, 2022, debt payments at principal amount by period were as follows:

	Payments Due by Period						
	Total	2023	2024	2025	2026	2027	Thereafter
	(In millions)						
Long-term debt (including current portion)	\$ 2,722	\$ 175	\$ 172	\$ 922	\$ 172	\$ 908	\$ 373

Our 2020 Senior Unsecured Convertible Bonds are presented at their principal amount with original maturity date of 2025 for Tranche A and 2027 for Tranche B, in line with contractual terms.

Our current ratings with the three major rating agencies that report on us on a solicited basis, are as follows: S&P: "BBB" with positive outlook; Moody's: "Baa2" with stable outlook; Fitch: "BBB" with stable outlook.

#### Contractual Obligations, Commercial Commitments and Contingencies

Our contractual obligations, commercial commitments and contingencies as of December 31, 2022, and for each of the five years to come and thereafter, were as follows:(1)

	Total	2023	2024	2025	2026	2027	Thereafter
		(In millions)					
Purchase obligations(2)	\$5,554	\$4,556	\$424	\$287	\$101	\$62	124
of which:							
<i>Equipment and other asset purchases</i>	3,587	3,584	3	—	—	—	—
<i>Foundry purchases</i>	1,827	872	393	275	101	62	124
<i>Software, design, technologies and licenses</i>	140	100	28	12	—	—	—
Other obligations(2)	1,864	1,072	155	100	56	155	326
Operating Lease obligations (including current portion)(3)	193	52	36	24	15	10	56
Long-term debt obligations (including current portion)(3)(4)	2,722	175	172	922	172	908	373
of which:							
Finance Lease obligations	57	7	5	5	5	4	31
Pension obligations (including current portion)(3)	333	44	47	58	71	52	61
Other long-term liabilities(3)(5)	313	—	178	28	21	13	73
<b>Total</b>	<b>\$11,036</b>	<b>\$5,906</b>	<b>\$1,017</b>	<b>\$1,424</b>	<b>\$441</b>	<b>\$1,204</b>	<b>\$1,044</b>

(1) Contingent liabilities which cannot be quantified are excluded from the table above.

(2) Items not reflected on the consolidated balance sheet as of December 31, 2022.

- (3) Items reflected on the consolidated balance sheet as of December 31, 2022.
- (4) For long-term debt obligations the difference between the total obligations and the total carrying amount of long-term debt is due to the unamortized debt issuance costs on the dual tranche senior unsecured convertible bonds. See Note 15 to our Consolidated Financial Statements as of December 31, 2022 for additional information related to long-term debt.
- (5) For other long-term liabilities, the difference with the amount reported on the consolidated balance sheet as of December 31, 2022 is related to the long-term portion of the operating lease obligation of \$141 million reported under the "Lease obligations" line. See Note 11 and Note 17 to our Consolidated Financial Statements as of December 31, 2022 for additional information related to leases and other long-term liabilities.

Purchase obligations are primarily comprised of purchase commitments for equipment, outsourced foundry wafers and software licenses.

Other obligations primarily relate to firm contractual commitments with respect to partnership and cooperation agreements.

Long-term debt obligations mainly consist of bank loans and senior unsecured convertible bonds. In the table above, our 2020 Senior Unsecured Convertible Bonds are presented at their principal amount with original maturity date of 2025 for Tranche A and 2027 for Tranche B, in line with contractual terms. In 2023 we expect to repay with available cash and cash equivalents an amount of \$166 million related to our loan with the European Investment Bank as an annual installment and \$7 million related to our finance leases. See "— Net financial position (non-U.S. GAAP measure)" above.

Pension obligations amounting to \$333 million consist of our best estimates of the amounts projected to be payable by us for the pension and post-employment plans. The final actual amount to be paid and related timing of such payments may vary significantly due to early retirements, terminations and changes in assumptions rates. See Note 16 to our Consolidated Financial Statements.

Other long-term liabilities mainly include future obligations related to other long-term employees benefits, contingent consideration on business combinations and other contractual obligations. In accordance with the authoritative guidance for accounting for uncertainty in income taxes, as of December 31, 2022, liabilities related to uncertain tax positions totaled \$61 million. See Note 23 of our Consolidated Financial Statements.

#### *Off-Balance Sheet Arrangements*

We had no material off-balance sheet arrangements as of December 31, 2022.

#### **Financial Outlook: Capital Investment**

Our policy is to modulate our capital spending according to the evolution of the semiconductor market. For 2023, we plan to invest about \$4.0 billion in capital expenditures mainly to increase our 300mm wafer fabs and silicon carbide manufacturing capacity including our substrate initiative.

A large portion of capital expenditures will be devoted to support capacity additions and mix change in our manufacturing footprint, in particular for our wafer fabs: (i) the ramp-up of our new 300mm wafer fab in Agrate, Italy, to support mixed signal technologies and then phase-in smart power technologies and embedded-non-volatile memory at a later stage; (ii) digital 300mm in Crolles, France, to extend the cleanroom and support production ramp-up of our main runner technologies; (iii) certain selected programs of capacity growth in some of our most advanced 200mm fabs, including the analog 200mm fab in Singapore; (iv) increase capacity for silicon carbide products in our Catania and Singapore fabs; and (v) ramping a new integrated silicon carbide substrate manufacturing facility for the production in volume of 150mm, moving to 200mm in the future, silicon carbide epitaxial substrates. The most important 2023 capital investments for our back-end facilities will be: (i) capacity growth on certain package families, including the SiC technology and automotive related packages, (ii) the new generation of Intelligent Power Modules for Automotive and Industrial applications, and (iii) specific investments in innovative assembly processes and test operations.

The remaining part of our capital investment plan covers the overall maintenance and efficiency improvements of our manufacturing operations and infrastructure, R&D activities, laboratories as well as the execution of our carbon neutrality programs.

We will continue to invest to support revenues growth and new products introduction, taking into consideration factors such as trends in the semiconductor industry, capacity utilization and our goal to become

carbon neutral by 2027. 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 with 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.

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, share buy-backs as part of our current repurchase program and the repayment of our debt in line with maturity dates.

Based on our strong customer demand and increased manufacturing capacity, we will drive the Company based on a plan for 2023 revenues in the range of \$16.8 billion to \$17.8 billion.

### **Impact of Recently Issued U.S. Accounting Standards**

See Note 2 to our Consolidated Financial Statements.

### **Backlog and Customers**

See “Item 4. Information on the Company — Backlog”.

## **Item 6. Directors, Senior Management and Employees**

### **Directors and Senior Management**

The management of our Company is entrusted to the Managing Board under the supervision of the Supervisory Board.

The term “Directors” refers to the non-executive members of the Supervisory Board of the Company and the term “Senior Management” refers to:

- The sole member of the Managing Board, our President and Chief Executive Officer;
- The members of the Executive Committee (including the sole member of the Managing Board, our President and Chief Executive Officer) of the Company; and
- The Executive Vice Presidents of the Company.

#### **A. Supervisory Board**

##### **i. Role of the Supervisory Board**

Our Supervisory Board advises our Managing Board and is responsible for supervising the policies pursued by our Managing Board, the manner in which the Managing Board implements the long-term value creation strategy and the general course of our affairs and business. In performing its duties, the Supervisory Board shall be guided by the interests of our Company and its business; it shall take into account the relevant interests of all stakeholders (including our shareholders). The Supervisory Board is responsible for the quality of its own performance.

Our Supervisory Board consists of such number of members as is resolved by our AGM upon a non-binding proposal of our Supervisory Board, with a minimum of six members. Decisions by our AGM concerning the number and the identity of our Supervisory Board members are taken by a simple majority of the votes cast at a meeting, provided quorum conditions are met.

Our Supervisory Board was composed of the following nine members as of December 31, 2022<sup>(1)</sup>:

<b>Name</b>	<b>Position</b>	<b>Year First Appointed</b>	<b>Term Expires</b>	<b>Age</b>
Maurizio Tamagnini	Chairman	2014	2023	57
Nicolas Dufourcq	Vice Chairman	2015	2024	59
Janet Davidson	Member	2013	2024	66
Ana de Pro Gonzalo	Member	2020	2023	55
Yann Delabrière	Member	2020	2023	72
Heleen Kersten	Member	2014	2023	57
Alessandro Rivera	Member	2011	2023	52
Frédéric Sanchez	Member	2017	2023	62
Donatella Sciuto <sup>(1)</sup>	Member	2022	2025	60

(1) Ms. Lucia Morselli was a member of our Supervisory Board until May 25, 2022, on which date her term expired and on such date she was replaced by Ms. Donatella Sciuto.

Resolutions of our Supervisory Board require the approval of at least three-quarters of its members in office, with each member being entitled to one vote. Our Supervisory Board must meet upon request by two or more of its members or by our Managing Board. Our Supervisory Board meets at least five times a year (and in 2022, our Supervisory Board met 10 times), including to approve our quarterly, semi-annual and annual accounts and their release. In 2022, the average attendance rate for the meetings of our Supervisory Board was 90.5%. Our Supervisory Board has adopted (i) a Supervisory Board charter, (ii) a profile for the Supervisory Board based on which proposed new members of the Supervisory Board are selected (both of which are available on our website ([www.st.com](http://www.st.com))), (iii) a diversity policy for the composition of the Managing Board, the Executive Committee and the Supervisory Board, and (iv) a selection criteria and appointment procedure for the Supervisory Board and Managing Board members.

Our Supervisory Board may make a proposal to our AGM for the suspension or dismissal of one or more of its members. Each member of our Supervisory Board must resign no later than three years after appointment, as described in our Articles of Association, but may be reappointed following the expiration of his/her term of office. Pursuant to Dutch law, there is no mandatory retirement age for members of our Supervisory Board. Members of the Supervisory Board may be suspended or dismissed by our AGM. Certain of our Supervisory Board members are proposed by and may retain certain relationships with our direct or indirect shareholders represented through our major shareholder. See “Item 7. Major Shareholders and Related Party Transactions — Major Shareholders”.

In accordance with the best practice provisions of the Dutch Corporate Governance Code, on an annual basis our Supervisory Board undertakes to perform an evaluation of the functioning of the Managing Board and the Supervisory Board (which also includes an evaluation of the functioning of the Supervisory Board’s committees and its individual members). Once every three years, this evaluation is conducted by an independent external expert, whose mission is to assist the Supervisory Board in this evaluation through, *inter alia*, conducting interviews with individual members of the Supervisory Board and Managing Board and facilitating discussions within the Supervisory Board on the functioning of the boards, its committees and its members, including an evaluation of the involvement of each member, the culture within the Supervisory Board and the relationship between the Supervisory Board and the Managing Board. The evaluation for the year ended December 31, 2022 was completed on February 22, 2023 and concluded that both our Supervisory Board and our Managing Board are functioning well. The evaluation noted opportunities for improvements, including but not limited to additional training sessions for members of the Supervisory Board.

## **ii. Biographies of our Current Supervisory Board Members**

### *Maurizio Tamagnini*

Maurizio Tamagnini has been a member of our Supervisory Board since June 2014 and is the Chairman of our Supervisory Board since June 2020. He was the Chairman of the Supervisory Board from June 2014 to June 2017 and Vice Chairman from June 2017 to June 2020. He also serves on our Supervisory Board’s Nominating & Corporate Governance Committee, Sustainability Committee, and chairs its Compensation Committee and Strategic Committee. Mr. Tamagnini is currently Chief Executive Officer of FSI SGR S.p.A., an asset management company sponsored, until July 2022, by Cassa Depositi e Prestiti S.p.A. (“CDP”) (with a 39% stake), which is 82.7% controlled by the Italian Government. FSI SGR S.p.A. manages “FSI I” and “FSI II”, private equity closed-end funds with approximately €2 billion capital endowment, specialized on growth equity



investments in Italian midmarket companies with development potential. He was, until April 2019, non-executive Chairman of FSI Investimenti S.p.A., which is controlled 77% by CDP. Until 31st March 2016, Mr. Tamagnini was Chief Executive Officer and Chairman of the Investment Committee of Fondo Strategico Italiano S.p.A.(now CDP Equity S.p.A.), an investment company controlled by CDP. Until April 2016, he was Chairman of the joint venture between Fondo Strategico Italiano S.p.A. and Qatar Holding (IQ Made in Italy Investment Company S.p.A.) with capital endowment of up to €2 billion in total for investments in the food, brands, furniture & design and tourism sectors. He was previously Southern European Manager of the Corporate & Investments Banking division of Bank of America Merrill Lynch and a member of the Executive Committee of Bank of America Merrill Lynch for the EMEA region. Mr. Tamagnini has gained over 32 years of experience in the financial sector specializing in the areas of Corporate Finance, Private Equity, Debt and Equity. Mr. Tamagnini is also a member of the International Advisory Board of BIDMC Harvard Medical School. He holds a degree in International Monetary Economics from Bocconi University in Milan and has also studied at the Rensselaer Polytechnic Institute — Troy in New York, USA.

*Nicolas Dufourcq*

Nicolas Dufourcq has been a member of our Supervisory Board since May 2015, its Chairman from June 2017 to June 2020 and its Vice-Chairman since June 2020. He serves on our Supervisory Board's Nominating & Corporate Governance Committee, Compensation Committee, Strategic Committee and Sustainability Committee. Mr. Dufourcq is a graduate of HEC (Hautes Etudes Commerciales) and ENA (Ecole Nationale d'Administration). He began his career at the French Ministry of Finance and Economics before joining the Ministry of Health and Social Affairs in 1992. In 1994, he joined France Telecom, where he created the Multimedia division, before going on to chair Wanadoo, the firm's listed Internet and Yellow Pages subsidiary. After joining the Cap Gemini Group in 2003, he was made responsible for the Central and Southern Europe region, successfully leading their financial turnaround. He was appointed Chief Financial Officer of the Group and member of the Executive Committee in September 2004. In 2005, he was named deputy Chief Executive Officer in charge of finance, risk management, IT, delivery, purchases and LEAN program and, in 2007, also in charge of the follow-up of the group's major contracts. On February 7, 2013, Mr. Dufourcq was appointed Chief Executive Officer of Bpifrance (Banque Publique d'Investissement), which is one of the shareholders of ST Holding. Until January 2023, he was a member of the Supervisory Committee of Doctolib and he is currently a member of the Board of Directors of Stellantis.

*Janet Davidson*

Janet Davidson has been a member of our Supervisory Board since June 2013. She serves on our Supervisory Board's Audit Committee and Strategic Committee and chairs our newly established Supervisory Board's Sustainability Committee. She began her career in 1979 as a member of the Technical Staff of Bell Laboratories, Lucent Technologies (as of 2006 Alcatel Lucent), and served from 1979 through 2011 in several key positions, most recently as Chief Strategy Officer (2005 – 2006), Chief Compliance Officer (2006 – 2008) and EVP Quality & Customer Care (2008 – 2011). From 2005 through 2012, Ms. Davidson was a member of the Lehigh University Board of Trustees. In 2007 she served on the Riverside Symphonia Board of Trustees and in 2005 and 2006, Ms. Davidson was a member of the Liberty Science Center Board of Trustees. Ms. Davidson was a member of the board of the Alcatel Lucent Foundation from 2011 until 2014 and a member of the board of directors of Millicom from April 2016 until June 2020. Ms. Davidson is also a member of the board of the AES Corporation, since February 2019. Ms. Davidson is a graduate of the Georgia Institute of Technology (Georgia Tech), Atlanta, GA, USA, and Lehigh University, Bethlehem, PA, USA and holds a Master's degree in Electrical Engineering.

*Ana de Pro Gonzalo*

Ana de Pro Gonzalo has been a member of our Supervisory Board since June 2020. She chairs our Supervisory Board's Audit Committee and serves on our Supervisory Board's Sustainability Committee. She has been an independent non-executive director for National Express Group PLC and a member of its safety and security committee, audit committee and remuneration committee since October 2019 and she serves as independent non-executive director of Novartis A.G. and as a member of its audit and risk committees since March 2022. Until December 2020, she was chief financial officer of Amadeus IT Holding (a world leading technology provider and transaction processor for the global travel and tourism industry), with global responsibility for financial management and control for the Amadeus group. She was appointed in this role in February 2010 and was also a member of the Amadeus executive management team. From 2002 to 2010, Ms. De Pro Gonzalo was corporate general manager at Sacyr Vallehermoso and was instrumental in leading the

international expansion of one of the major construction groups in the world. From 1994 to 2002, Ms. De Pro Gonzalo was deputy general manager and finance director at Metrovacesa, and from 1990 to 1994 she was a senior auditor at Arthur Andersen. She has been independent non-executive director for Merlin Properties, S.A. from 2015-2017 and for Indra Sistemas S.A. from 2020-2022. Since June 2019, Ms. De Pro Gonzalo is an independent member of the non-profit Global Steering Group for Impact Assessment (Consejo Asesor Nacional Español) and member of the Board of Trustees of foundation Juan XXIII for the people with special intellectual needs since October 2020. Ms. De Pro Gonzalo holds a BSc in Business Studies, specializing in Auditing, from Universidad Complutense de Madrid, and completed IESE Business School's general management executive program.

*Yann Delabrière*

Yann Delabrière has been a member of our Supervisory Board since June 2020. He serves on our Supervisory Board's Audit Committee. Mr. Delabrière began his career with the French Court of Auditors before working in the French Foreign Trade ministry from 1981 to 1983. He served as chief financial officer for COFACE, from 1983 to 1987, and for Printemps (a retail group, now Kering) as group Chief Financial Officer from 1987 to 1990. In 1990, he joined PSA Peugeot Citroën as chief finance officer and, in 1998, he joined the newly created executive committee of the group and, in parallel of his position as Chief Financial Officer, became chairman and chief executive officer of PSA's consumer finance unit, Banque PSA Finance. From February 2007 until July 2016, Mr. Delabrière was the chief executive officer of Faurecia, and the chairman of its board of directors until May 2017. He was appointed in April 2017 as adviser to the board and then in June 2017 as chief executive officer of Zodiac Aerospace and oversaw the sale to Safran group in February 2018. Since July 2020, Mr. Delabrière has been the chairman of the board of Idemia, a global leader in augmented reality, where he previously served as president and Chief Executive Officer (between October 2018 and July 2020). He has been appointed a non-executive member of the board of directors of Leddar Tech in February 2021 and has been the lead independent director of Alstom since March 2017. Mr. Delabrière also served as non-executive director and chairman of the audit committee of Capgemini from 2004 to May 2018, and as non-executive director of Société Générale from 2012 to 2016. Mr. Delabrière holds a PhD in Mathematics having graduated from the Ecole Normale Supérieure and the Ecole Nationale d'Administration. He is also a Chevalier de la Légion d'Honneur (Knight of the Legion of Honor) and Officier de l'Ordre National du Mérite (Officer of the National Order of Merit).

*Heleen Kersten*

Heleen Kersten has been a member of our Supervisory Board since June 2014. She serves on our Supervisory Board's Audit Committee, Sustainability Committee and Compensation Committee and chairs its Nominating & Corporate Governance Committee. Ms. Kersten is a partner at Stibbe in Amsterdam, where she held the position of managing partner from 2008 to 2013. Stibbe is a Benelux law firm with offices in Amsterdam, Brussels, Luxembourg, London and New York. She began her career in 1989 with Stibbe before joining Davis Polk in New York and London (1992-1993). After her return to Stibbe Amsterdam, she rose through the ranks to become a partner in 1997. As a member of the Bar of Amsterdam since 1989, Ms. Kersten specializes in mergers and acquisitions, equity capital markets, corporate law and corporate governance. Ms. Kersten was a supervisory board member of the Dutch listed Bank Van Lanschot N.V. until May 2015 and the chairman of the supervisory board of Egeria Investment B.V. until April 2016. She is currently chairman of the board of the Dutch Red Cross (Vereniging Het Nederlandse Rode Kruis), since January 2020, and a supervisory board member of the Rijksmuseum (Stichting Het Rijksmuseum), since 2015. She is also a Supervisory Board Member of Wolters Kluwer N.V since 2022. Ms. Kersten holds master's degrees in Dutch law and tax law, both from Leiden University in the Netherlands.

*Alessandro Rivera*

Alessandro Rivera has been a member of our Supervisory Board since May 2011. Mr. Rivera serves on our Supervisory Board's Strategic Committee & Nominating and Corporate Governance Committee. He was appointed as the Director General of the Treasury in August 2018. He is the representative for Finance Deputies meetings of the G7, G20, and the IMF, and a member of the Economic and Financial Committee (as Vice-President) and the Euro Working Group of the European Union, and of the Board of Directors of the European Stability Mechanism. He chairs the EFC Sub-Committee on IMF related issues. Prior to his appointment as Director General of the Treasury, Mr. Rivera was the Head of Directorate IV "Financial Sector Policy and Regulation Legal Affairs" at the Department of the Treasury, Ministry of Economy and Finance from 2008 to 2018. He served as Head of Unit in the Department of the Treasury from 2000 to 2008 and was responsible for a

variety of policy matters: financial services and markets, banking foundations, accounting, finance, corporate governance, and auditing. Since 2013, he has been a member of the board of directors of Cassa Depositi e Prestiti. Since 2022, he has also been a member of the board of Istituto Italiano di Tecnologia and Scuola Nazionale di Amministrazione. He was the Chairman of the Board of Directors of AMCO S.p.A. (formerly SGA S.p.A.) (2017-2020). He was a member of the Boards of Directors and Compensation Committees of Poste Italiane S.p.A. (2011-2014), Italia Lavoro S.p.A. (2005- 2008) and Mediocredito del Friuli-Venezia Giulia S.p.A (2001-2003).

*Frédéric Sanchez*

Frédéric Sanchez has been a member of our Supervisory Board since June 2017. He serves on our Supervisory Board's Compensation Committee, Strategic Committee and Nominating & Corporate Governance Committee. Mr. Sanchez is the chairman of the executive board of Fives, an industrial engineering group with heritage of over 200 years of engineering excellence and expertise. Fives designs and supplies machines, process equipment and production lines for the world's largest industrial groups in various sectors such as aluminium, steel, glass, automotive, logistics, aerospace, cement and energy, in both developing and developed countries. Mr. Sanchez started his career in 1985 with Renault in Mexico, then in the USA. In 1987 he became a mission manager at Ernst & Young. In 1990 he joined Fives-Lille group, in which he held various positions before being appointed chief financial officer in 1994 and becoming chief operating officer in 1997. In 2002, the "Compagnie de Fives-Lille" (renamed Fives in 2007) became a company with a management board and supervisory board chaired by Mr. Sanchez. In 2018, Fives became a French simplified joint stock company (société par actions simplifiée) and Mr. Sanchez its chairman and Chief Executive Officer. Within MEDEF (French Business Confederation), Mr. Sanchez is President of MEDEF International, President of the Council of Entrepreneurs France-Japan, France-United Arab Emirates and France-Barhain. Mr. Sanchez is an administrator of Primagaz, Orange, Thea and Bureau Veritas and he is honorary copresident of the Alliance Industrie du Futur. Mr. Sanchez graduated from HEC Business School (1983) and Sciences-Po Paris (1985) and he also holds a Master Degree in Economics from Université Paris-Dauphine (1984).

*Donatella Sciuto*

Donatella Sciuto has been a member of our Supervisory Board since May 25, 2022 and serves on our Supervisory Board's Audit Committee and Compensation Committee. Donatella Sciuto has been the Executive Vice Rector of Politecnico di Milano since 2015 and is its Executive Rector since January 2023, and full professor in computer science and engineering since 2000. She was appointed IEEE Fellow for her scientific contribution in the "embedded systems design". Ms. Sciuto has been a member of the governing board of the Bank of Italy, since 2013. Since 2017, she has been an independent member of the board of directors of Avio S.p.A and Railway S.p.A. and of Fila S.p.A. since 2020. Ms. Sciuto has also been a member of the board of the Italian Institute of Technology since 2021 and she was a member of the supervisory board of the Human Technopole Foundation until May 2022. Donatella Sciuto holds a degree in Electronic Engineering from Politecnico di Milano and a PhD in Electrical and Computer Engineering from the University of Colorado, Boulder. She holds a Master in Business and Administration (CEGA) from the Bocconi University School of Business Management.

**iii. Supervisory Board Committees**

*Membership and Attendance.* As of December 31, 2022, the composition of the five standing committees of our Supervisory Board was as follows: (i) Ms. Ana de Pro Gonzalo is the Chair of the Audit Committee, and Ms. Janet Davidson, Mr. Yann Delabrière, Ms. Heleen Kersten and Ms. Donatella Sciuto are members of the Audit Committee; (ii) Mr. Maurizio Tamagnini is the Chair of the Compensation Committee, and Mr. Nicolas Dufourcq, Ms. Heleen Kersten, Ms. Donatella Sciuto and Mr. Frédéric Sanchez are members of the Compensation Committee; (iii) Ms. Heleen Kersten is the Chair of the Nominating and Corporate Governance Committee, and Messrs. Nicolas Dufourcq, Alessandro Rivera, Frédéric Sanchez and Maurizio Tamagnini are members of the Nominating and Corporate Governance Committee; (iv) Mr. Maurizio Tamagnini is the Chair of the Strategic Committee, and Ms. Janet Davidson, and Messrs. Nicolas Dufourcq, Alessandro Rivera and Frédéric Sanchez are members of the Strategic Committee; and (v) Ms. Janet Davidson is the Chair of the Sustainability Committee, and Mr. Nicolas Dufourcq, Ms. Heleen Kersten, Ms. Ana de Pro Gonzalo and Mr. Maurizio Tamagnini are members of the Sustainability Committee.

Detailed information on attendance at full Supervisory Board and Supervisory Board Committee meetings during 2022 is as follows:

Number of Meetings attended in 2022	Supervisory Board	% Attendance	Audit Committee	% Attendance	Compensation Committee	% Attendance	Strategic Committee	% Attendance	Nominating & Corporate Governance Committee	% Attendance	Sustainability Committee	% Attendance
Maurizio Tamagnini	10	100%	—	—	3	100%	2	100%	3	100%	4	100%
Nicolas Dufourcq	8	80%	—	—	3	100%	2	100%	3	100%	3	75%
Janet Davidson	10	100%	10	100%	—	—	2	100%	—	—	4	100%
Ana de Pro Gonzalo	10	100%	10	100%	—	—	—	—	—	—	4	100%
Yann Delabrière	10	100%	9	90%	—	—	—	—	—	—	—	—
Heleen Kersten	9	90%	9	90%	3	100%	—	—	3	100%	4	100%
Lucia Morselli <sup>(1)</sup>	3	75%	4	80%	2	100%	—	—	—	—	—	—
Alessandro Rivera	6	60%	—	—	—	—	1	50%	2	67%	—	—
Frédéric Sanchez	10	100%	—	—	3	100%	2	100%	3	100%	—	—
Donatella Sciuto <sup>(1)</sup>	6	100%	5	100%	1	100%	—	—	—	—	—	—

(1) Ms. Lucia Morselli was a member of our Supervisory Board until May 25, 2022, on which date her term expired and on such date she was replaced by Ms. Donatella Sciuto.

**Audit Committee.** Our Audit Committee assists the Supervisory Board in fulfilling its oversight responsibilities relating to corporate accounting, reporting practices, and the quality and integrity of our financial reports as well as our auditing practices, legal and regulatory related risks, execution of our auditors' recommendations regarding corporate auditing rules and the independence of our external auditors.

Our Audit Committee met ten times during 2022. At many of the Audit Committee's meetings, the committee received presentations on current financial and accounting issues and had the opportunity to discuss with our Chief Executive Officer, Chief Financial Officer, Chief Accountant, Chief Audit and Risk Executive, President, Legal Counsel, Chief Compliance & Ethics Officer and our external auditors. Our Audit Committee also proceeded with its annual review of our internal audit function. Our Audit Committee reviewed our annual Consolidated Financial Statements in U.S. GAAP for the year ended December 31, 2022, and the results press release was published on January 26, 2023.

Our Audit Committee approved the compensation of our external auditors for 2022 and discussed the scope of their audit, audit related and non-audit related services for 2022.

At the end of each quarter, prior to each Supervisory Board meeting to approve our quarterly results, our Audit Committee reviewed our interim financial information and the proposed press release and had the opportunity to raise questions to management and the independent registered public accounting firm. In addition, our Audit Committee reviewed our quarterly "Operating and Financial Review and Prospects" and Consolidated Financial Statements (and notes thereto) before they were furnished to the SEC and voluntarily certified by the Chief Executive Officer and the Chief Financial Officer (pursuant to sections 302 and 906 of the Sarbanes Oxley Act). Our Audit Committee also reviewed Operating and Financial Review and Prospects and our Consolidated Financial Statements contained in this Form 20-F, prior to its approval by our Supervisory Board. Furthermore, our Audit Committee monitored our compliance with the European Directive and applicable provisions of Dutch law that require us to prepare a set of accounts pursuant to IFRS in advance of our AGM, which was held on May 25, 2022. See "Item 3. Key Information—Risk Factors—Risks Related to Our Operations".

Our Audit Committee regularly reviewed management's conclusions as to the effectiveness of internal control over financial reporting and supervised the implementation of our corporate Enterprise Risk Management ("ERM") process.

As part of each of its quarterly meetings, our Audit Committee also reviewed our financial results as presented by management and whistleblowing reports, including independent investigative reports provided in relation thereto.

**Compensation Committee.** Our Compensation Committee advises our Supervisory Board in relation to the compensation of the members of the Supervisory Board and Managing Board, including in the case of our President and Chief Executive Officer, the variable portion of such compensation based on performance criteria recommended by our Compensation Committee. Our Compensation Committee also reviews the stock based compensation plans for our Senior Management and key employees. Our Compensation Committee met three times in 2022.

Among its main activities, in 2022 our Compensation Committee: (i) discussed the performance targets relating to the bonus of our President and Chief Executive Officer for the fiscal year ending on December 31, 2022 (which short-term targets are based on, *inter alia*, four to seven performance conditions with a mix of financial criteria for approximately 70% and non-financial criteria (including sustainability/corporate social responsibility performance) for approximately 30%, and long-term targets are based on, *inter alia*, two financial performance conditions constituting revenue growth versus a range of semiconductor peer companies (the “Peer Group” as discussed below) and average of operating margin ratio before restructuring, and one non-financial performance condition constituting the composite sustainability/corporate social responsibility index, including health and safety, CO<sub>2</sub> neutrality, diversity & inclusion and people engagement (as further detailed in “—Compensation”)); and (ii) established, on behalf and with the approval of the entire Supervisory Board, the applicable performance criteria, which must be met by senior managers and selected key employees participating in the employee stock award plans to benefit from such awards (for the 2021 unvested stock award plan, these performance criteria are further described below in “Item 6. Managing Board – Managing Board compensation – Managing Board remuneration structure”).

*Strategic Committee.* Our Strategic Committee advises the Supervisory Board on and monitor key developments within the semiconductor industry, our overall strategy for long-term value creation, and the long-term planning and budgeting. Our Strategic Committee met twice in 2022. In addition, there were strategic discussions, many of which occurred at extended Supervisory Board meetings and involved all Supervisory Board members.

*Nominating and Corporate Governance Committee.* Our Nominating and Corporate Governance Committee advises the Supervisory Board on the selection criteria and procedures relating to the appointment of members to our Supervisory Board and Managing Board, and the review of principles relating to corporate governance. Our Nominating and Corporate Governance Committee met three times during 2022 to discuss succession planning for our Supervisory Board and Managing Board, best practices regarding corporate governance, and the update of our corporate governance documents.

*Sustainability Committee.* Our Sustainability Committee advises and supports the Supervisory Board in relation to its responsibilities in supervising, monitoring and advising on the Company's sustainability strategy, targets, goals and overall sustainability performance. Our Sustainability Committee met four times in 2022 to discuss our overall sustainability strategy, as well as our sustainability performances and reporting.

*Secretariat and Controllers.* Our Supervisory Board appoints a Secretary and Vice Secretary. Furthermore, the Managing Board makes an Executive Secretary available to our Supervisory Board, who is also appointed by the Supervisory Board. The Secretary, Vice Secretary and Executive Secretary constitute the Secretariat of the Supervisory Board. The mission of the Secretariat is primarily to organize meetings, to ensure the continuing education and training of our Supervisory Board members and to maintain record keeping. Our Chief Compliance & Ethics Officer, Philippe Dereeper, serves as Executive Secretary for our Supervisory Board, and for each of the five standing committees of our Supervisory Board. Mr. Gabriele Pagnotta serves as Secretary and Ms. Charlotte Fadlallah serves as Vice Secretary. Mr. Pagnotta and Ms. Fadlallah also serve as managing directors of ST Holding.

Our Supervisory Board also appoints two financial experts (“Controllers”). The mission of the Controllers is primarily to assist our Supervisory Board in evaluating our operational and financial performance, business plan, strategic initiatives and the implementation of Supervisory Board decisions, as well as to review the operational reports provided under the responsibility of the Managing Board. The Controllers generally meet once a month with the management of the Company and report to our full Supervisory Board. The current Controllers are Messrs. Samuel Dalens and Marco Zizzo. Mr. Dalens also serves as a member of the supervisory board of ST Holding.

The STH Shareholders Agreement between our principal indirect shareholders contains provisions with respect to the appointment of the Secretary, Vice Secretary and Controllers. See “Item 7. Major Shareholders and Related Party Transactions”.

#### iv. Supervisory Board Compensation

##### a. Supervisory Board Remuneration Policy

On December 1, 2019, a Dutch act implementing the revised EU Shareholders' Rights Directive (2017/828/EU ("SRDII")) took effect in The Netherlands. As the Company is incorporated under the laws of The Netherlands and the common shares of the Company are admitted to trading on regulated markets in the European Union, the Company was required, *inter alia*, to update the remuneration policy accordingly with respect to the compensation of the Supervisory Board members and to comply with the respective disclosure requirements introduced to the Dutch Civil Code. In connection therewith, we present in this section certain comparative information on our performance relative to the compensation of the Supervisory Board members.

Our Articles of Association provide that the compensation of our Supervisory Board members is determined by our general meeting of shareholders. Our proposal for adoption of a remuneration policy for the Supervisory Board members to ensure compliance with the new requirements under the Dutch Civil Code, following the implementation of SRDII, was approved by the AGM on June 17, 2020 with a vote percentage in favor of the policy of 98.43%.

##### b. Compensation paid to current and former Supervisory Board Members in financial year 2022

The annual compensation of the Supervisory Board Members is comprised of an annual fee and an attendance fee, promoting effective and independent supervision in the interest of the Company and the long-term success of the Company. There is no variable compensation nor stock-based compensation awarded to the members of our Supervisory Board.

The aggregate compensation for current and former members of our Supervisory Board with respect to service in 2022 was €961,000 before any applicable withholding or other taxes, as set forth in the following table. No reimbursement fees were paid to members of our Supervisory Board in 2022.

Supervisory Board Members Fees	Annual Fees	Attendance Fees	Total
Maurizio Tamagnini	€ 144,000	€ 26,000	€ 170,000
Nicolas Dufourcq (1)	€ -	€ -	€ -
Janet Davidson	€ 84,500	€ 29,500	€ 114,000
Ana de Pro Gonzalo	€ 161,500	€ -	€ 161,500
Yann Delabrière	€ 77,500	€ 22,000	€ 99,500
Heleen Kersten	€ 88,000	€ 33,000	€ 121,000
Lucia Morselli (2)	€ -	€ 9,000	€ 9,000
Alessandro Rivera	€ 87,000	€ -	€ 87,000
Frédéric Sanchez	€ 80,500	€ 21,500	€ 102,000
Donatella Sciuto	€ 81,000	€ 16,000	€ 97,000
<b>Total</b>	<b>€ 804,000</b>	<b>€ 157,000</b>	<b>€ 961,000</b>

(1) Mr. Dufourcq waived his rights to receive any compensation from the Company in relation to his mandate as a member of the Supervisory Board or otherwise.

(2) Ms. Lucia Morselli was a member of our Supervisory Board until May 25, 2022 and was replaced by Ms. Donatella Sciuto as of May 25, 2022.



c. *Supervisory Board Remuneration Comparison*

Set forth in the following table is the annual change over the last three years of (i) the average remuneration of our Supervisory Board Members, (ii) the performance of the Company and (iii) the average remuneration of our indirect employees (i.e., all indirect employees other than the members of our Senior Management, including the sole member of the Managing Board, our President and Chief Executive Officer):

	2022	2021	2020
<b>Supervisory Board remuneration</b>			
Average remuneration of Supervisory Board members <sup>(1)</sup>	\$ 106,778	\$ 114,775	\$ 99,431
<b>Company's performance</b>			
Net revenues (amounts in millions)	\$ 16,128	\$ 12,761	\$ 10,219
Operating income (amounts in millions)	\$ 4,439	\$ 2,419	\$ 1,323
<b>Employee remuneration</b>			
Average remuneration <sup>(2)</sup> of all global indirect employees (FTE basis) <sup>(3)</sup>	\$ 109,600	\$ 111,200	\$ 98,500

(1) Using the Euro per U.S. dollar exchange rate on December 31, 2022 of €1 = \$1.0675.

(2) Remuneration is defined as all remuneration paid to indirect employees including base salary, variable compensation in both cash and shares, social premiums, pension, expense allowances and benefits in kind. The average is calculated by taking the sum of remuneration costs and dividing by the average number of full-time equivalent indirect employees over the period.

(3) Global indirect employees are all employees other than those directly manufacturing our products, excluding Senior Management. "FTE" refers to full time equivalent.

We do not have any service agreements with any of the members of our Supervisory Board. We did not extend any loans or overdrafts to any of our Supervisory Board members. Furthermore, we have not guaranteed any debts or concluded any leases with any of our Supervisory Board members or their families.

**B. Managing Board**

**i. Role of the Managing Board**

In accordance with Dutch law, our management is entrusted to the Managing Board under the supervision of our Supervisory Board. Mr. Jean-Marc Chery was appointed on May 31, 2018 for a three-year term and was re-appointed on May 27, 2021 for a subsequent three-year term expiring at the 2024 AGM and is currently the sole member of the Managing Board with the function of President and Chief Executive Officer. For further biographical details concerning the sole member of the Managing Board, our President and Chief Executive Officer, please refer to the "Biographies of our Executive Committee members (including the President and Chief Executive Officer)" section.

Under our Articles of Association, Managing Board members are appointed for a three-year term upon a non-binding proposal by our Supervisory Board at our AGM and adoption by a simple majority of the votes cast at the AGM, provided quorum conditions are met, which term may be renewed one or more times.

Our shareholders' meeting may suspend or dismiss one or more members of our Managing Board, in accordance with the procedures laid down in our Articles of Association. Under Dutch law, our Managing Board is entrusted with our general management and the representation of the Company. Our Managing Board must seek prior approval from our shareholders' meeting for decisions regarding a significant change in the identity or nature of the Company. Under our Articles of Association and our Supervisory Board charter, our Managing Board must also seek prior approval from our Supervisory Board for certain other decisions with regard to the Company and our direct or indirect subsidiaries.

The sole member of our Managing Board may not serve on the board of a public company without the prior approval of our Supervisory Board. Pursuant to the Supervisory Board charter, the sole member of our Managing Board must inform our Supervisory Board of any (potential) conflict of interest and pursuant to such charter and Dutch law, any Managing Board resolution regarding a transaction in relation to which the sole member of our Managing Board has a conflict of interest must be approved and adopted by our Supervisory Board. Should our entire Supervisory Board also have a conflict of interest, the resolution must be adopted by our shareholders' meeting pursuant to Dutch law. We are not aware of any actual or potential conflicts of interests between the private interest or other duties of the sole member of our Managing Board and members of our Senior Management and their duties to us.



Pursuant to our Articles of Association and the Supervisory Board charter, the following decisions by our Managing Board with regard to the Company and any of our direct or indirect subsidiaries (an “ST Group Company”) require prior approval from our Supervisory Board: (i) any modification of our or any ST Group Company’s Articles of Association or other constitutional documents, other than those of wholly owned subsidiaries; (ii) other than for wholly owned subsidiaries, any change in our or any ST Group Company’s authorized share capital or any issue, acquisition or disposal by us — with the exception of shares in our share capital acquired in order to transfer these shares under employee stock option or stock purchase plans — or any ST Group Company of own shares or change in share rights and any issue of instruments resulting in a share in performance conditions related to corporate social responsibility and environmental, social and governance factors. Both short-term and long-term incentive includes performance conditions promoting ST’s sustainable growth.

**ii. Managing Board compensation**

**a. Guiding principles of Managing Board compensation**

Amongst others, the following key principles are considered by the Supervisory Board to determine the remuneration structure of the sole member of the Managing Board, our President and Chief Executive Officer:

- Alignment with the Company’s strategy: the compensation package should be strongly linked to the achievement of targets that are indicators of the execution of the Company’s business strategy.
- Improving the performance of the Company: most of the compensation (excluding base salary, benefits, and pensions) is directly linked to the Company’s performance through variable pay incentives. These incentives are based on ambitious performance conditions that include a mix of internal and external criteria as well as relative performance conditions against peers.
- Enhancing long-term creation of shareholder value: to strengthen the alignment with the interests of the shareholders and to enhance the long-term value creation of the Company, the compensation structure includes short-term and long-term variable remuneration either in cash or in shares or a combination thereof.
- Promoting sustainable corporate development: to ensure that the Company is managed in a sustainable and responsible manner for the common good, the remuneration includes non-financial performance conditions related to corporate social responsibility and environmental, social, and governance factors. Both short- and long-term incentive include performance conditions promoting ST’s sustainable growth.
- Retaining and motivating key employees: the compensation package should be competitive, ensuring remuneration levels are determined by reference internally between the Company’s senior managers and externally against the Peer Group.

In accordance with the key principles of the Company’s remuneration structure, the total remuneration of the sole member of the Managing Board, our President and Chief Executive Officer takes into consideration factors such as the size and complexity of our Company, our global presence and that of our customers, the pace of change in our industry, the Company’s value proposition, strategy and goal of long-term value creation, and the need to recruit and retain key personnel.

**b. Managing Board remuneration policy**

The remuneration of the sole member of the Managing Board, our President and Chief Executive Officer, is determined by our Supervisory Board on the advice of the Compensation Committee

On December 1, 2019, the SRDII took effect in The Netherlands. As we are incorporated under the laws of The Netherlands and our common shares are admitted to trading on regulated markets in the European Union, we are required, *inter alia*, to update the remuneration policy with respect to the compensation of the sole member of the Managing Board, our President and Chief Executive Officer and to comply with the respective disclosure requirements introduced to the Dutch Civil Code. In connection therewith, we present in this Item 6 comparative information on our performance relative to the compensation of the members of our Senior Management and the sole member of the Managing Board, our President and Chief Executive Officer.

The Compensation Committee advises the Supervisory Board in reviewing the remuneration package of the sole member of the Managing Board, our President and Chief Executive Officer both in the context of the Company performance and against the Peer Group and relevant market index. Before setting targets for the sole member of the Managing Board, our President and Chief Executive Officer, the Compensation Committee carries out scenario analyses of the possible financial outcomes of meeting target levels.

Set forth in the table below is the list of companies retained for the Peer Group compensation analysis used for the remuneration policy for the Managing Board adopted at the 2021 AGM:

Analog Devices	ON Semiconductor
Infineon	Texas Instruments
Monolithic Power Systems	Vishay
Microchip	Rohm
NXP Semiconductors	Renesas

Should one of the Peer Group companies not publish financial results for any reason, Diodes and/or Melexis would replace the missing company.

The remuneration of the sole member of the Managing Board, our President and Chief Executive Officer, is bound by the remuneration policy as adopted by our 2021 AGM for a duration of a maximum of 4 years. Under the terms of the Dutch Civil Code, the remuneration policy for the Managing Board shall be submitted to the AGM for adoption at least every four years after its adoption. A resolution to adopt the remuneration policy requires a majority of at least 75% of the votes cast.

The remuneration policy for the Managing Board contains the following key features:

- the reinforcement of the link between Managing Board remuneration and long-term company strategy;
- the simplification of the short-term incentive structure (fully paid in cash, as compared to a hybrid cash-equity pay-out previously) featuring enhanced disclosure of criteria and threshold, targets, and maximum performance levels;
- the inclusion of corporate social responsibility criteria among performance conditions for both the short-term and long-term incentive in line with our objectives of promoting sustainable corporate development;
- enhanced disclosure of long-term incentive (share-settled) performance conditions and threshold and target performance levels as well as the remaining outstanding shares (which are not yet vested);
- a three-year performance period for long-term incentives (as compared to one year previously), with vesting based on performance measured over the 3-year performance period, to improve alignment of Managing Board remuneration with our objective of enhancing long-term shareholder value;
- enhanced disclosure regarding early vesting provisions for the unvested stock awards;
- the implementation of share ownership guidelines for the Managing Board; and
- claw-back provisions in order to reclaim payments after they have been awarded or to withhold remuneration under specific conditions.

We continue to increase the level of disclosure and transparency in relation to the remuneration of the sole member of the Managing Board, our President and Chief Executive Officer to provide our stakeholders with an increased level of insight in our remuneration practices.

*c. Managing Board remuneration structure*

The remuneration structure is reflective of the level of responsibility of the Company's sole member of the Managing Board, our President and Chief Executive Officer. The remuneration structure is further aligned to the Company's current context while remaining competitive and providing an incentive to promote the Company's performance over the medium to long-term, and is in line with the Company's corporate interest and the interests of all its stakeholders.

The Supervisory Board, upon proposal from the Compensation Committee, determines the remuneration structure and remuneration amounts for the sole member of the Managing Board, our President and Chief Executive Officer based on the analysis of the theoretical maximum total direct remuneration (i.e., sum of base salary, maximum short-term incentive, and maximum long-term incentive).

The remuneration package of the sole member of the Managing Board, our President and Chief Executive Officer is comprised of the following:

- **A base salary;** and
- **Variable components, linked to performance:**
  - o **A short-term incentive** of up to 210% of base salary which is fully paid in cash.
  - o **A long-term incentive** through the grant of **stock awards**, up to a maximum of 100,000 shares.

The sum of these three elements represents the **maximum total direct remuneration** for the sole member of the Managing Board, our President and Chief Executive Officer.

The above-mentioned three elements of the total maximum remuneration of the sole member of the Managing Board, our President and Chief Executive Officer are further described below:

#### *Base salary*

The purpose of the base salary is to provide a fixed level of earnings and to attract and retain the sole member of the Managing Board, our President and Chief Executive Officer. It is a key component of overall remuneration, particularly as the short-term incentive is expressed as a percentage of base salary. The Company seeks to determine a fair and competitive base salary as compared to the Peer Group based on several factors.

#### *Short-term incentive*

The purpose of the short-term incentive is to motivate the sole member of the Managing Board, our President and Chief Executive Officer to achieve financial and commercial objectives consistent with and supportive of the Company's strategy and to create a tangible link between annual performance and individual pay opportunity.

In accordance with the Managing Board remuneration policy and effective from the year 2021, the short-term incentive of the sole member of the Managing Board, our President and Chief Executive Officer is fully paid in cash up to a maximum of 210% of the base salary for the relevant year, all subject to the assessment and achievement of a number of performance conditions which are set annually by the Compensation Committee of our Supervisory Board.

The short-term incentive is subject to annual performance measurement of a unique set of 4 to 7 predefined criteria (both financial and non-financial) and a performance matrix both for financial and non-financial criteria that explicitly outline threshold and target outcomes (as well as overperformance conditions for financial criteria).

Performance measures and weightings are reviewed annually by the Compensation Committee. The recommendations made by the Compensation Committee regarding scorecard targets and weightings are designed to support the delivery of the Company's strategy. The Supervisory Board, upon recommendation by the Compensation Committee, retains the ability to adjust performance measure targets and weightings year-by-year within the overall target and maximum pay-outs approved in the remuneration policy.

The Supervisory Board, upon the recommendation of its Compensation Committee, sets the conditions and performance criteria that must be met by the sole member of the Managing Board, our President and Chief Executive Officer for the attribution of his short-term incentive (which is paid in the subsequent year).

These performance conditions will enable the Supervisory Board to conduct a holistic and comprehensive assessment of the annual performance of the sole member of the Managing Board, our President and Chief Executive Officer. The combination of financial and non-financial criteria is well balanced in terms of external and internal criteria and reflect the challenging objectives set by the Compensation Committee in line with the Company's ambitious long-term vision and business strategy.

The financial performance criteria for 2022, as chosen by the Supervisory Board were as follows:

- *Market share evolution*, which is measured by assessing the Company’s relative positioning and competitiveness in relation to its market and its industry peers and how fast the Company grows its revenues compared to its competitors. Market share is assessed on the basis of industry data published by WSTS (“World Semiconductor Trade Statistics”).
- *Revenue growth*, which represents the total amount of income generated by the Company’s operations;
- *Operating income*, which is an important yardstick of profit measurement and reflects the operating performance of the business which does not take into consideration of non-operating gains or losses suffered by business, the impact of financial leverage and tax factors; and
- *Net operating cash flow*, which is a liquidity metric that evaluates whether the Company has enough liquidity to meet its debt obligations. This metric helps assess the financial soundness of the company in terms of liquidity risk, financial risk, credit risk and business risk.

The non-financial performance criteria for 2022, as chosen by the Supervisory Board were as follows:

- Execution of special manufacturing programs;
- Execution of strategy implementation; and
- Sustainability/corporate social responsibility index, which is divided into four criteria related to:
  - Health & safety: measured against, amongst others, the employee safety performance;
  - Environment/climate: measured against, amongst others, direct emissions (kCO<sub>2</sub> equivalent);
  - Diversity & inclusion: measured against, amongst others, gender ratio among management levels; and
  - People management: measured against, amongst others, the employee survey (engagement index).

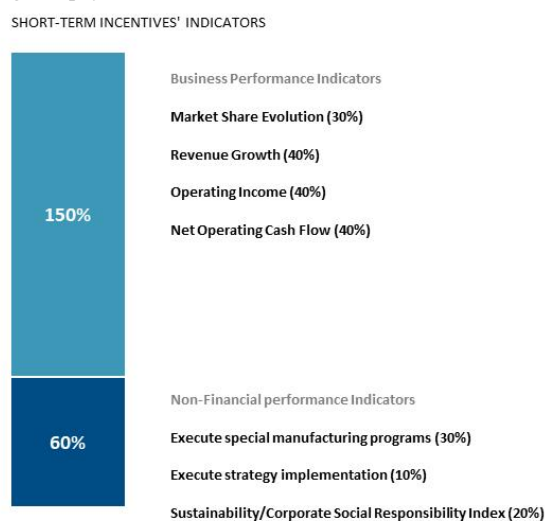
The weight of the sustainability/corporate social responsibility index is designed to remain stable over time, however the individual sub-components used to form the sustainability/corporate social responsibility index may evolve in the future to address sustainability priorities facing the Company and society.

Set forth in the following Table A1 and Chart A1 is the weight set for 2022 for each of the performance criteria that will be assessed by the Supervisory Board in March 2023 for the attribution of the 2022 short-term incentive (to be paid in 2023):

Table A1: Performance criteria with target weighting and pay-out

Annual short-term incentive performance criteria financial year 2022 (to be paid in 2023)	Target Weighting (as a % of total weighting for performance criteria)	Target pay-out (as a % of base salary)
<b>Financial performance conditions</b>		
o Market share evolution	14%	30%
o Revenue growth	19%	40%
o Operating income	19%	40%
o Net operating cash flow	19%	40%
<b>Sub-total for financial performance conditions</b>	<b>71%</b>	<b>150%</b>
<b>Non-financial performance conditions</b>		
o Execute special manufacturing programs	14%	30%
o Execute strategy implementation	5%	10%
o Sustainability/corporate social responsibility index	10%	20%
<b>Sub-total for non-financial performance conditions</b>	<b>29%</b>	<b>60%</b>
<b>Total</b>	<b>100%</b>	<b>210%</b>

Chart A1: Performance criteria with target weighting and pay-out



As described in Table A2 below, the final pay-out of the short-term incentive is calculated by measuring the performance of each condition, then adding the sums of the corresponding pay-out from Table A1 above, taking into account any applicable caps. The sum is then multiplied by the base salary to determine the final short-term incentive pay-out.

Table A2: Pay-out according to performance for each performance criterion

Annual short-term incentive performance criteria financial year 2022 (to be paid in 2023)	Performance below threshold	Pay-out as a percentage of base salary		
		Performance above or equal to threshold and below target	Performance above or equal to target and below stretch	Performance above stretch
<b>Financial performance conditions</b>				
○Market share evolution	0%	15%	30%	45%
○Revenue growth	0%	20%	40%	60%
○Operating income	0%	20%	40%	60%
○Net operating cash flow	0%	20%	40%	60%
<b>Sub-total for financial performance conditions</b>	<b>0%</b>	<b>75%</b>	<b>150%</b>	<b>Capped at 150% (1)</b>
<b>Non-financial performance conditions</b>				
○Execute special manufacturing programs	0%	15%	30%	30%
○Execute strategy implementation	0%	5%	10%	10%
○Sustainability/corporate social responsibility index	0%	10%	20%	20%
<b>Sub-total for non-financial performance conditions</b>	<b>0%</b>	<b>30%</b>	<b>60%</b>	<b>60%(2)</b>
<b>Total</b>	<b>0%</b>	<b>105%</b>	<b>210%</b>	<b>short-term incentive pay- out capped at 210%</b>

(1) Over-performance for financial conditions can balance the potential under-performance of other financial conditions if performance exceeds stretch targets, without exceeding a maximum pay-out of 150% of base salary regarding the portion of the short-term incentive dependent on financial performance criteria.

(2) No stretch targets are defined for non-financial performance criteria.

As of the publication of this Form 20-F the evaluation and assessment of the fulfillment of conditions and performance criteria as well as the determination of conditions for the 2022 short-term incentive have not yet been completed by the Supervisory Board upon the proposal of the Compensation Committee (expected in March 2023).

As a result, performance achievement levels and final pay-out for the short-term incentive based on 2022 performance (to be paid in 2023), as well as the scorecard for the 2022 short-term incentive will be disclosed at a later date, and is expected to be included in the 2022 Dutch Annual Report. Scorecard targets are not disclosed prospectively as it would require the disclosure of commercially sensitive information. Scorecard targets for the 2022 short-term incentive will be disclosed only when they are no longer deemed to be commercially sensitive.

#### *Long-term incentive*

The purpose of the long-term incentive is to motivate the sole member of the Managing Board, our President and Chief Executive Officer to deliver sustainable long-term shareholder value through long-term profitability and share price growth.

The terms of this long-term incentive are included in the long-term incentive plan approved at the 2021 AGM, allowing for grants of unvested stock awards in 2021, 2022 and 2023. The vesting of unvested stock awards is subject to the achievement of performance conditions and calculated over a three-year performance period. Grants of unvested stock awards made in 2022 and 2023 will fully vest, subject to performance conditions, in 2025 and 2026 respectively.

Award levels are determined annually by the Compensation Committee within the maximum amounts set by the Supervisory Board. In accordance with the resolution adopted by our AGM, the maximum annual grant allowed in relation to the sole member of the Managing Board, our President and Chief Executive Officer's stock award for 2020, 2021 and 2022 was 100,000 unvested stock awards subject to performance criteria.

The Supervisory Board, upon recommendation of the Compensation Committee, determines whether the performance criteria are met and concludes whether and to which extent the sole member of the Managing Board, our President and Chief Executive Officer, is entitled to any stock awards under the long-term incentive plan. Scorecard targets are not disclosed prospectively as it would require the disclosure of commercially sensitive information. Scorecard targets will be disclosed only when they are no longer deemed to be commercially sensitive.

#### *Grants in 2022 and 2021*

In accordance with the long-term incentive plan approved at the 2021 AGM, allowing for grants in 2021, 2022 and 2023, the stock awards vest at the end of a three-year performance period, from the date of the grant, provided that the sole member of the Managing Board, our President and Chief Executive Officer is still an employee at such time (subject to the termination provisions listed below in "Section f. Compensation provisions in the event of termination or departure of the sole member of the Managing Board, our President and Chief Executive Officer").

For the 2022 long-term incentive, the performance criteria are:

- Revenue growth;
- Operating margin; and
- Sustainability/corporate social responsibility index, which was comprised of the following KPIs (including two external criteria):
  - Environment/climate: measured against, amongst others, the direct emissions (kCO<sub>2</sub> equivalent);
  - Diversity, inclusion and people engagement: measured against, amongst others, gender ratio among management levels;
  - Investor ESG index: measured against, amongst others, the Dow Jones sustainability indices; and
  - Carbon rating: measured against, amongst others, the CDP carbon rating.

Set forth in the following Table B1 and Chart B1 is the weight set for each of the performance criteria that will be assessed by the Supervisory Board over the three performance periods for the attribution of the relevant long-term incentive.

Table B1: Long-term incentive performance criteria and target weighting over the three performance periods

Long-term incentive plan performance criteria to be assessed over a 3-year period	Target Weighting (as % of maximum achievement score)
Revenue growth (financial year 2024 vs financial year 2021 in comparison to Peer Group)	33.33%
Operating margin ratio before restructuring (average for the 2022 – 2024 period)	33.33%
Sustainability/corporate social responsibility index	33.33%
<b>Maximum achievement score</b>	<b>100%</b>

**which correspond to a maximum of 100,000 unvested stock awards**

Chart B1: Long-term incentive performance criteria and target weighting over the three performance periods

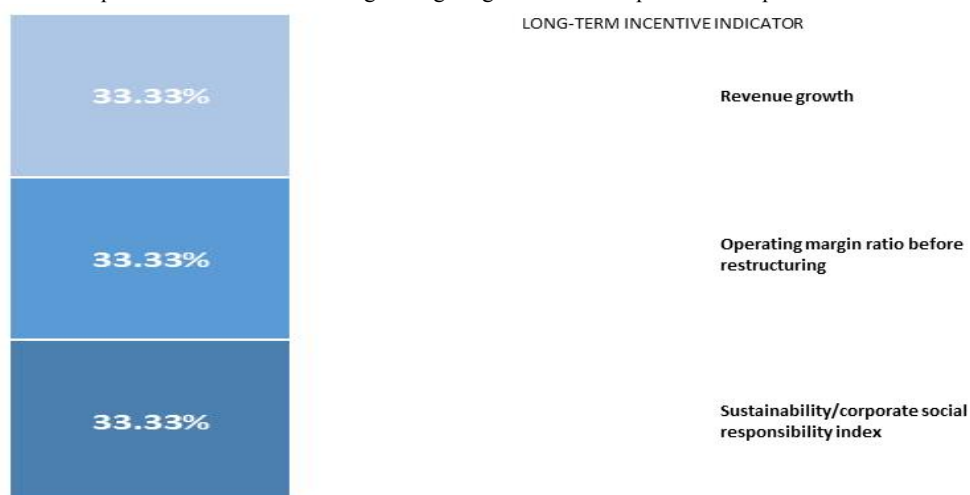


Table B2: Shares to vest at the end of the 3-year vesting period according to performance for each performance criterion

Long-term incentive plan performance criteria to be assessed over a 3-year period	Shares to vest as a percentage of maximum award			
	Performance below threshold	Performance equal to threshold	Performance above threshold and below target	Performance above or at target
Revenue growth (financial year 2024 vs financial year 2021 in comparison to Peer Group)	0%	16.67%	25%	33.33%
Operating margin ratio before restructuring (average for the 2022 – 2024 period)	0%	16.67%	16.67%	33.33%
Sustainability/corporate social responsibility index	0%	16.67%	16.67%	33.33%
<b>Total</b>	<b>0%</b>	<b>50%</b>	<b>58.34%</b>	<b>100%</b>

Table B3: Vesting schedule for the 2021 and 2022 long-term incentive grants



Set forth in the following table is an overview of the outstanding awards that have been granted to the sole member of the Managing Board, our President and Chief Executive Officer, in accordance with the new long-term incentive plan adopted by the 2021 AGM. For the purposes of the vesting schedule table below, a hypothetical achievement rate of 100% of performance conditions is used:

Grant date	Final vesting date	Max. number of shares that can be granted	Share price at grant (in \$)	2022 vesting	2023 vesting	2024 vesting	2025 vesting	Unvested shares as of end of 2022
July 27, 2022	AGM date for 2025	100,000	\$36.33				100,000 <sup>(1)</sup>	100,000
July 28, 2021	AGM date for 2024	100,000	\$39.33			100,000 <sup>(1)</sup>		100,000
<b>Total vesting</b>								<b>200,000</b>

(1) In the event of 100% achievement of performance criteria to be assessed by the Supervisory Board.

*Grant in 2020*

Set forth in the following table are the performance criteria, weight, and achievement rate for the periods indicated below set for the long-term incentive grant in 2020.

Under the terms of the previous long-term incentive plan in place before the current remuneration policy, performance was measured over the course of the year following the grant, subject to three performance conditions. Based on the achievement of long-term incentive performance conditions, the total number of shares to be vested was determined, up to a maximum of 100,000 shares. Performance conditions were assessed once, one year following the grant date. The unvested stock awards then vested as follows:

- One year post-grant: 32% of unvested stock awards vest (a maximum of 32,000 shares if all targets were met)
- 2 years post-grant: 32% of unvested stock awards vest (a maximum of 32,000 shares if all targets were met)
- 3 years post-grant: 36% of unvested stock awards vest (a maximum of 36,000 shares if all targets were met)

Following the implementation of the remuneration policy adopted at the 2021 AGM, the terms of long-term incentive plans from 2021 onwards have changed, as detailed in the section “Grants in 2022 and 2021” above).

*Assessment of performance criteria for 2020 long-term incentive grants*

Long-term incentive plan performance criteria	Target weighting (as % of maximum achievement score)	2020
Evolution of sales	33.33%	Criteria met
Evolution of operating income	33.33%	Criteria met
Return on net assets	33.33%	Criteria met
<b>Maximum achievement score</b>	<b>100%</b> <b>which correspond to a maximum of 100,000 unvested stock awards</b>	<b>100%</b> <b>performance achieved</b>

*Vesting schedule for outstanding shares*

Set forth in the following table is an overview of the outstanding awards under grants prior to implementation of the new long-term incentive plan adopted in 2021 that have been granted to the sole member of the Managing Board, our President and Chief Executive Officer:

Plan	Grant date	Final vesting date	Max. number of shares that can be granted	Number of shares awarded based on performance conditions achievement	Share price at grant (in \$)	2020 vesting	2021 vesting	2022 vesting	2023 vesting	Unvested shares as of end of 2022
2020 unvested stock awards	Grant July 23, 2020	June 17, 2023	100,000	100,000	\$29.97		32,000	32,000	36,000	36,000
2019 unvested stock awards	Grant July 24, 2019	May 23, 2022	100,000	66,672	\$19.45	21,335	21,335	24,002		
<b>Total vesting</b>						<b>21,335</b>	<b>53,335</b>	<b>56,002</b>	<b>36,000</b>	<b>36,000</b>

*Share ownership guidelines*

The sole member of the Managing Board, our President and Chief Executive Officer is expected to build up a shareholding in the Company equal to 1.5 times of the base salary, in line with the remuneration policy.

*Claw-back provisions*

All performance-related remuneration awarded to the sole member of the Managing Board, our President and Chief Executive Officer are subject to the following claw-back provisions, in accordance with Dutch law. If the Supervisory Board considers that there is a significant downward restatement of the Company's financial results, breach of duty from the sole member of the Managing Board, our President and Chief Executive Officer, or where remuneration has been paid based upon incorrect information about the achievement of the goals on which the remuneration was based or the circumstances on which the short-term incentive was dependent, it may, in its discretion, within two years of the performance-related remuneration of the sole member of the Managing Board, our President and Chief Executive Officer vesting or being paid:

- require the sole member of the Managing Board, our President and Chief Executive Officer to repay to the Company an amount equal to the after-tax value of some or all of any short-term incentive or the Company's shares that were granted; and/or
- require the Company to withhold from, or offset against, any other remuneration to which the sole member of the Managing Board, our President and Chief Executive Officer may be or become entitled in connection with its employment such an amount as the Supervisory Board considers appropriate.

When reaching its decision, the Supervisory Board will take into account of the significance of the breach of duty and in addition, the Supervisory Board may take other actions in relation to the statutory provision e.g. claim for damages.

During 2022, no claw-backs have occurred.

The sole member of the Managing Board, our President and Chief Executive Officer may also receive other types of remuneration included as described in the remuneration policy approved at the 2021 AGM, such

as social premiums, benefits in kind (including a company car), pension contributions and miscellaneous allowances.

*d. Compensation paid to the sole member of the Managing Board, our President and Chief Executive Officer in financial year 2022*

The sole member of the Managing Board, our President and Chief Executive Officer, received compensation in the form of a base salary, short-term incentive (fully paid in cash from 2021 onwards), long-term incentive grant (unvested stock awards), social premiums, benefits in kind (including a company car), pension contributions and miscellaneous allowances.

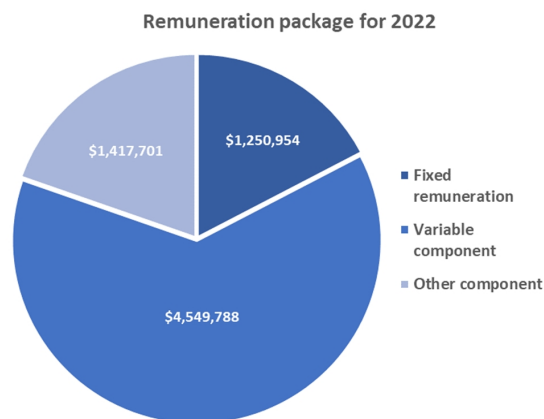
Set forth in the following table and chart is an overview of the total compensation of the sole member of the Managing Board, our President and Chief Executive Officer paid in 2022:

<b>Base Salary</b>	\$	1,250,954
<b>Variable components</b>		
<b>Short-term incentive(1)</b>	\$	2,506,576
<b>Long-term incentive(2)</b>	\$	2,043,212
<b>Other components</b>		
<b>Benefits</b>	\$	108,023
<b>Social security contributions</b>	\$	857,448
<b>Pensions(3)</b>	\$	452,230
<b>Miscellaneous allowances</b>		-
<b>Termination benefits</b>		-
<b>Total</b>	\$	7,218,443

(1) Short-term incentive includes both the amount paid in cash in 2022 (based on 2021 performance) and a tranche from the short-term incentive payable in shares based on his 2019 and 2020 performance. The achievement rate based on 2021 performance was 205% and paid in 2022. The short-term incentive based on 2022 performance will be determined by the Compensation Committee and paid at a date after the publication of this Form 20-F.

(2) The sole member of the Managing Board, our President and Chief Executive Officer was granted, in accordance with the remuneration policy and subsequent shareholder authorizations, up to 100,000 unvested stock awards, subject to performance criteria. The vesting of such stock awards is conditional upon the sole member of the Managing Board, our President and Chief Executive Officer's, continued service with us.

(3) Complementary pension plan for certain of the Company's key executives.



During 2022, the sole member of the Managing Board, our President and Chief Executive Officer, did not have any stock options, and did not purchase any shares in the Company. During 2022, the sole member of the Managing Board, our President and Chief Executive Officer sold 73,043 shares.

*e. Evolution of paid remuneration to the Managing Board*

In 2022, our Supervisory Board has decided to increase the base salary of the sole member of the Managing Board, our President and Chief Executive Officer.

In making this decision, the Supervisory Board has, amongst others:

- (i) reviewed the market landscape as shown in the table below and noted that the base salary of the sole member of the Managing Board, our President and Chief Executive Officer, has been below the market median for many years;
- (ii) considered the fact that the performance of our Company and of the sole member of the Managing Board, our President and Chief Executive Officer, has increased since his nomination, despite the heavy market volatility during this period; and
- (iii) considered that the base salary of the sole member of the Managing Board, our President and Chief Executive Officer has remained unchanged since his nomination in 2018.

Managing Board, President and Chief Executive Officer or equivalent titles	Base salary(1)		Base salary 2022 vs median	Base salary 2021 vs median
	in €	in \$		
STMicroelectronics	2022	1,100,000		
	2021	800,000		
	2020(2)	800,000		
	2019	800,000		
	2018	800,000		
Peer Group median	946,718		116%	85%

(1) The sole member of the Managing Board, our President and Chief Executive Officer has a base salary paid in Euros which is converted every year in U.S. dollar for the purpose of the Form 20-F. For ease of reference the evolution of his base salary is therefore reflected in both currencies, using the Euro per U.S. dollar exchange rate on December 31 of the relevant year.

- (2) The base salary of the sole member of the Managing Board, our President and Chief Executive Officer for 2020, does not take into consideration the voluntary decrease of his base salary in 2020 for a period of six months as a result of the COVID-19 pandemic.

Set forth in the following table is the total compensation of the sole member of the Managing Board, our President and Chief Executive Officer, from 2020 to 2022:

Name	Year	Base salary	Variable components			Other components <sup>(3)</sup>			Total	Fixed/ Variable remuneration
			Short-term Incentives (1)	Long-term Incentives	Benefits	Social security contributions (2)	Pensions			
Jean-Marc Chery	2022	\$ 1,250,954	\$ 2,506,576	\$ 2,043,212	\$ 108,023	\$ 857,448	\$ 452,230	\$ 7,218,443	37% fixed / 63% variable	
Jean-Marc Chery	2021	\$ 936,357	\$ 1,907,307	\$ 3,245,640	\$ 101,867	\$ 904,742	\$ 463,617	\$ 7,559,530	32% fixed / 68% variable	
Jean-Marc Chery	2020	\$ 856,837	\$ 1,285,378	\$ 2,224,984	\$ 103,599	\$ 797,306	\$ 471,143	\$ 5,739,247	39% fixed / 61% variable	

- (1) The short-term incentive includes both the amount paid in cash and the amount paid in shares for the year 2020. As of 2021 with the implementation of the remuneration policy for our Managing Board adopted at the 2021 AGM, the short-term incentive is paid fully in cash. The short-term incentive related to 2021, 2020 and 2019 was approved by the Compensation Committee and Supervisory Board with respect to the 2021, 2020 and 2019 financial year, respectively, based on the evaluation and assessment of the actual fulfillment of a number of pre-defined objectives for such year. The short-term incentive related to a relevant year is paid in the subsequent year, i.e. the short-term incentive related to the 2021, 2020 and 2019 financial year, respectively, is paid in 2022, 2021 and 2020 respectively. The achievement rate for the 2021 short-term incentive (paid in 2022), based on 2021 performance, was 205% in cash out of maximum of 210%. The achievement rate for the 2020 short-term incentive (paid in 2021), based on 2020 performance, was 183% (135% in cash and 48% in shares) out of maximum of 210%. The achievement rate for the 2019 short-term incentive (paid in 2020), based on 2019 performance, was 170% (110% in cash and 60% in shares) out of maximum of 210%.
- (2) The social security contributions relate to the fixed and variable remuneration, including the unvested stock awards.
- (3) There were no miscellaneous allowances nor termination benefits in the years 2022, 2021, and 2020.
- (4) The base salary of the sole member of the Managing Board, our President and Chief Executive Officer for 2020, does not take into consideration the voluntary decrease of his base salary in 2020 for a period of six months as a result of the COVID-19 pandemic.

*f. Compensation provisions in the event of termination or departure of the sole member of the Managing Board, our President and Chief Executive Officer*

The sole member of the Managing Board, our President and Chief Executive Officer, was appointed on May 31, 2018 for a three-year term and was reappointed for another three-year term at the 2021 AGM, expiring at the 2024 AGM. He has two employment agreements with us, the first with the Company, which relates to his activities as sole member of our Managing Board and representative of the Company, and the second with one of our entities in Switzerland, which relates to his activities as President and Chief Executive Officer, the EIP, Pension and other items covered by the remuneration policy for our Managing Board. While the relationship between a member of the Managing Board and a listed Dutch company will be treated as a mandate agreement, not an employment agreement, existing employment agreements, including the employment agreement between us and our sole member of the Managing Board, will remain in effect.

The agreements can be terminated with a notice period of 6 months if terminated by the Company or 3 months if terminated by the sole member of the Managing Board, our President and Chief Executive Officer.

*Severance clause*

Pursuant to the agreements, the sole member of the Managing Board, our President and Chief Executive Officer will be entitled to a severance payment if his employment is terminated at the initiative of the Company and other than for cause, considering amongst others, his critical role in the Company and his seniority. The severance payment will be equal to a gross lump sum payment in the amount of two times his latest gross annual salary, plus the short-term incentive (being the average of the short-term incentive received in the last three years) subject to any and all applicable legal, regulatory and/or contractual deductions.

Any severance payments made will be disclosed in the remuneration report in the annual report of the financial year that this amount relates to, as well as the reason for the severance payment.

*Vesting of stock awards in the event of termination or departure*

In the event of termination of the employment or departure of the sole member of the Managing Board, our President and Chief Executive Officer, his stock awards will either (i) be forfeited in full, (ii) accelerate in vesting or (iii) continue vesting, as shown in the table below.

*Table of the compensation in the event of termination or departure of the sole member of the Managing Board, our President and Chief Executive Officer*

Set forth in the table below is an overview of the compensation of the sole member of the Managing Board, our President and Chief Executive Officer in the event of his termination or departure, as applicable.

	Resignation	Retirement	Termination by the Company		
			Not in connection with change of control or serious or gross misconduct	In connection with change of control	In connection with serious or gross misconduct
<b>Severance Clause</b>	Not applicable	Not applicable	2 times the annual base salary plus average short-term incentive over the last 3 years	2 times the annual base salary plus average short-term incentive over the last 3 years	Not applicable
<b>Outcome of unvested stock awards</b>	Forfeited in full	Continuation of vesting	Accelerated vesting	Accelerated vesting	Forfeited in full

**C. Senior Management**

**i. Definition of Senior Management**

The term “Senior Management” refers to:

- The sole member of the Managing Board, our President and Chief Executive Officer;
- The members of the Executive Committee (including the sole member of the Managing Board, our President and Chief Executive Officer); and
- The Executive Vice Presidents of the Company.

The sole member of the Managing Board, our President and Chief Executive Officer, is entrusted with our general management and is supported in his tasks by our Executive Committee and Executive Vice Presidents, who together constitute the Senior Management.

**ii. Role of Executive Committee**

The Executive Committee acts under the authority and responsibility of the Managing Board and in this respect manages the Company. The Managing Board remains legally responsible for the management of the Company. The responsibilities of the Executive Committee include overseeing the general strategy as well as the risk management in connection with the Company's activities, operational and financial objectives and financial reporting processes. The Executive Committee adopts resolutions based on consensus, or if no consensus can be reached, by a majority of the votes cast by the members of the Managing Board including the vote of the chairman of the Executive Committee.

The chairman of the Executive Committee is the President and Chief Executive Officer of the Company. Members of the Executive Committee are appointed by the Managing Board subject to the approval of the Supervisory Board. Members of the Executive Committee can be suspended and dismissed by the Managing Board without prior approval by the Supervisory Board.

The Executive Committee was composed of the following nine members as of December 31, 2022 as set forth in the table below:

Name(1)	Position	Years with Company	Years in Semi-Conductor Industry	Age
Jean-Marc Chery	President and Chief Executive Officer	38	38	62
Orio Bellezza	President, Technology, Manufacturing, Quality and Supply Chain	39	39	63
Marco Cassis	President, Analog, MEMS and Sensors Group	35	35	59
Remi El-Ouazzane (1)	President, Microcontrollers and Digital ICs Group	1	25	49
Lorenzo Grandi	Chief Financial Officer (CFO) and President, Finance, Purchasing, Enterprise Risk Management (ERM) & Resilience	35	35	61
Marco Monti	President, Automotive and Discrete Group	36	36	61
Steven Rose	President, Legal Counsel	31	31	60
Rajita D'Souza	President, Human Resources, Corporate Social Responsibility	2	2	50
Jerome Roux (2)	President, Sales & Marketing	31	35	57

(1) Claude Dardanne retired from the Executive Committee on January 1, 2022, on which date Remi El-Ouazzane joined the Executive Committee as President, Microcontrollers & Digital ICs Group.

(2) Jerome Roux joined the Executive Committee as President, Sales & Marketing on January 1, 2022.

### iii. Biographies of our Senior Management

#### a. Biographies of our Executive Committee Members (including the President and Chief Executive Officer)

##### *Jean-Marc Chery*

Jean-Marc Chery is STMicroelectronics' President and Chief Executive Officer and has held this position since May 31, 2018. He is the sole member of ST's Managing Board and chairs its Executive Committee. Chery began his career in the Quality organization of Matra, the French engineering group. In 1986, he joined Thomson Semiconducteurs, which subsequently became ST, and held various management positions in product planning and manufacturing, rising to lead ST's wafer fabs in Tours, France, and later in Rousset, France. In 2005, Chery led the company-wide 6-inch wafer-production restructuring program before taking charge of ST's Front-End Manufacturing operations in Asia Pacific. In 2008, he was promoted to Chief Technology Officer and assumed additional responsibilities for Manufacturing and Quality (2011) and the Digital Product Sector (2012). In 2014, Chery was appointed ST's Chief Operating Officer responsible for Technology and Manufacturing operations. In July 2017, Chery was appointed Deputy Chief Executive Officer with overall responsibility for Technology and Manufacturing, as well as for Sales and Marketing operations. Chery sits on the board of directors at the Global Semiconductor Alliance (GSA). He is also a member of the Board of Directors at Legrand and Chairman of the France – Malaysia Business Council at Medef International. Previously, he was President of the European microelectronics R&D program AENEAS and served as President of the European Semiconductor Industry Association (ESIA) in 2019- 2021. Chery was promoted Knight of the Legion of Honor by the French Ministry of Economy and Finance in July 2019. Jean-Marc Chery was born in Orleans, France, in 1960, and graduated with a degree in Engineering from the ENSAM engineering school in Paris, France.

##### *Orio Bellezza*

Orio Bellezza is STMicroelectronics' President, Technology, Manufacturing, Quality and Supply Chain and has held this position since May 31, 2018. He has been responsible for Front-End Manufacturing since 2008 and his mandate was expanded in 2018 to cover ST's technology, manufacturing operations, supply chain, and quality. Bellezza is a member of ST's Executive Committee. Bellezza joined SGS-ATES, a predecessor



company to STMicroelectronics, in 1984 as a fab process engineer. He soon moved to ST's Central R&D organization and participated in several key projects, including the introduction of process technology modules for manufacturing sub-micron non-volatile memories. In 1996, Bellezza was appointed Director of ST's R&D facility in Agrate and led its upgrade and expansion into a manufacturing and development center for non-volatile memory and smart-power technologies. In 2002, he became Vice President of Central R&D, and in 2005, was appointed Vice President and Assistant General Manager of Front-End Technology and Manufacturing. Bellezza also serves as Managing Director of the ST Italy legal entity. He has published multiple technical papers and earned several patents in non-volatile memories. Orio Bellezza was born in Bergamo, Italy, in 1959, and graduated cum laude with a degree in Chemistry from the University of Milan, Italy.

#### *Marco Cassis*

Marco Cassis is STMicroelectronics' President, Analog, MEMS and Sensors Group and has held this position since January 1, 2022. He also heads the corporate functions of Strategy Development, System Research and Applications, and Innovation Office, and is a member of ST's Executive Committee. Cassis joined SGS-Thomson Microelectronics (now STMicroelectronics) as a car-radio chip designer in 1987. He later moved to Japan to help expand ST's audio business with major local players, including ST's strategic alliance with Pioneer. In the early 2000s, Cassis managed the Audio Business Unit and was subsequently promoted to Director of Audio and Automotive Group. In 2004, Cassis was named Vice President of Marketing for automotive, computer peripheral, and telecom products. In 2005, he advanced to Vice President of the Automotive Segment Group and was promoted to lead ST's operations in Japan. His mandate was expanded to include Korea in 2010 and Greater China and South Asia in 2016, when he was appointed President of ST's Asia Pacific Region. In 2017, Cassis was promoted President, Global Sales and Marketing, and added Communications and Strategy Development in 2018. Marco Cassis was born in Treviso, Italy, in 1963, and graduated with a degree in Electronic Engineering from the Polytechnic of Milan, Italy.

#### *Remi El-Ouazzane*

Remi El-Ouazzane is STMicroelectronics' President, Microcontrollers and Digital ICs Group and has held this position since January 1, 2022. He is a member of ST's Executive Committee. El-Ouazzane started his career at Texas Instruments in 1997. He rose through the ranks across the broadband, mobile, and embedded processing divisions to become Vice President and General Manager of the Open Multimedia Applications Platform (OMAP) in 2009. El-Ouazzane was appointed Chief Executive Officer of Movidius in 2013, responsible for driving its vision-processing technologies to advance the adoption of AI in the Internet of Things. With the acquisition of Movidius by Intel in 2016, he joined Intel's New Technology Group as Vice President and General Manager and became Chief Operating Officer of Intel's Artificial Intelligence Products Group in 2018. In 2020, El-Ouazzane became Intel's Datacenter Platform Group Chief Strategy Officer, driving strategic initiatives in the data center and cloud markets. In 2009, El-Ouazzane was honored with the French-American Foundation's Young Leaders Award. Remi El-Ouazzane was born in Neuilly-sur-Seine, France in 1973 and graduated from the Grenoble Institute of Technology (INPG) in 1996 and the Grenoble Institute of Political Studies in 1997. He graduated from the General Management Program at Harvard Business School in 2004.

#### *Lorenzo Grandi*

Lorenzo Grandi is STMicroelectronics' Chief Financial Officer (CFO) and President, Finance, Purchasing, Enterprise Risk Management (ERM) & Resilience, and has held this position since January 1, 2022. He is a member of ST's Executive Committee. Grandi joined SGS-THOMSON Microelectronics (now STMicroelectronics) in 1987 as an R&D process engineer. In 1990, he moved to ST's Memory Product Group as Financial Analyst and later was appointed Group Controller contributing to the expansion of ST's flash memory business. In 2005, Grandi joined ST's Corporate Finance organization responsible for Budgeting and Reporting. In 2012, he was promoted to Corporate Vice President in charge of Corporate Control. Grandi was appointed ST's Chief Financial Officer in 2018 and his overall responsibilities include Finance and Business Control, Treasury, Capital investment Control and Planning, Global Procurement, Investor Relations and Enterprise Risk Management and Business Continuity. In December 2020, Grandi received a special award for his long-standing professional achievements from the French Association of Financial Directors and Management Controllers (DFCG). Lorenzo Grandi was born in Sondrio, Italy, in 1961. He graduated cum laude in Physics from the University of Modena, Italy, and holds an MBA from SDA Bocconi School of Management in Milan, Italy.

*Marco Monti*

Marco Monti is STMicroelectronics' President, Automotive and Discrete Group. The head of ST's Automotive Product Group since 2012, his mandate was expanded to include discrete and power transistor products in January 2016. Monti is a member of ST's Executive Committee. Monti joined ST in Central R&D in 1986 and transferred to the Automotive Division in 1988, where he designed automotive ICs incorporating smart-power technologies. He moved to Japan in 1990 working on a co-development activity designing a noise-reduction system for audio applications. Subsequently, Monti transferred into marketing, contributing to the expansion of ST's automotive business in Japan. In 2000, he became the marketing manager for ST's Automotive Division and started the Company's automotive microprocessor business two years later. In 2004, Monti was promoted to Division General Manager for Powertrain, Safety, and Chassis products. He earned responsibility for the Automotive Electronics Division in 2009. Then, in 2012, Monti was appointed Executive Vice President, General Manager of ST's Automotive Product Group. Marco Monti was born in Milan, Italy, in 1961. He graduated cum laude in Electronic Engineering from the Polytechnic of Milan and earned a PhD in Electronics from the University of Pavia, Italy.

*Steven Rose*

Steven Rose is STMicroelectronics' President, Legal Counsel, and has held this position since May 31, 2018. He has been in charge of ST's legal affairs since 2013. Rose is a member of ST's Executive Committee. Rose started his career as a corporate attorney at the law firm Gardere & Wynne in Dallas, Texas, providing legal advice and services to public and private companies. He joined SGS-THOMSON Microelectronics (now STMicroelectronics) in 1991 as the Associate General Counsel for the U.S. subsidiary, STMicroelectronics, Inc. In 2006, Rose was appointed Senior Associate General Counsel for the Americas, Greater China & South Asia, and Japan & Korea regions, in addition to serving as Vice President, Secretary & General Counsel and a Director of STMicroelectronics, Inc. Steven Rose was born in Wichita, Kansas (USA), in 1962. He obtained a degree in Accounting from Oklahoma State University and a Juris Doctor degree from the University of Oklahoma College of Law.

*Rajita D'Souza*

Rajita D'Souza is President of STMicroelectronics' Human Resources and Corporate Social Responsibility (CHRO) and has held this role since January 2021. Her mandate also entails the Company's directions on environment, health, and safety. D'Souza is a member of ST's Executive Committee. D'Souza started her career in 1993 as Manager Operations with Reliance Consultancy Services in Mumbai, India. In 1997 she joined General Electric, where she held various HR leadership positions with increasing responsibility and scope. In 2007 D'Souza moved to SABIC to become Director Human Resources in Europe. In 2011, she was appointed Vice President Human Resources for the EMEA region of The Goodyear Tire & Rubber Company. In 2017 D'Souza joined Bekaert as Chief Human Resources Officer. Rajita D'Souza was born in Mumbai, India, in 1973. She holds a master's degree in Law from the University of Mumbai and a bachelor's degree in Business Management. She is also a certified Master Black-Belt in Six Sigma quality.

*Jerome Roux*

Jerome Roux is STMicroelectronics' President, Sales & Marketing, and has held this position since January 1, 2022. He is a member of ST's Executive Committee. Roux began his career in the Planning department of SGS-THOMSON Microelectronics (now STMicroelectronics) in 1988. He soon moved to the Company's packaging facility in Casablanca, Morocco as Material Manager. Afterwards, Roux moved to Singapore and then Shanghai as the Asia Pacific Marketing Director for ST's Discrete and Standard Product Group. He left ST briefly to manage an ST supplier company and returned to ST in 2006 as Group Vice President, Assembly & Testing Outsourcing Operations. Global Purchasing responsibilities were added to his mandate in 2008. Roux was promoted to Corporate Vice President in 2012 and managed ST's sales in the Greater China & South Asia Region and later the whole Asia Pacific Region. In 2017, Roux was appointed Executive Vice President, Sales & Marketing, for the Company's Asia Pacific region. Roux serves as Advisor to the French Government (CCEF) on Foreign Trade. Jerome Roux was born in Antibes, France, in 1965, and graduated from ISG Business School in Paris with a master's degree in Commerce (Management & Marketing).

*b. Biographies of our Executive Vice Presidents*

The group of Executive Vice Presidents consisted of the following people as of December 31, 2022:

Name(1)	Position	Years with Company	Years in Semi-Conductor Industry	Age
Michael Anfang	Executive Vice President, Sales & Marketing, Europe, Middle East and Africa Region (EMEA)	24	32	54
Eric Aussebat	Executive Vice President and General Manager of the Imaging sub-group within ST's Analog, MEMS and Sensors Group	42	42	68
Stefano Cantù	Executive Vice President, Smart Power Solutions Sub-Group within STMicroelectronics' Automotive and Discrete Group (ADG), Automotive Business Deputy	28	28	54
Henry Cao	Executive Vice President, Sales & Marketing, China Region	2	2	49
Alessandro Cremonesi	Executive Vice President, Chief Innovation Officer and General Manager System Research and Applications (SRA) Group	38	38	64
Alberto Della Chiesa	Executive Vice President Supply Chain	34	34	58
Ricardo De Sa Earp	Executive Vice President, General-Purpose Microcontroller Sub-Group	25	25	59
Franck Freymond	Executive Vice President, Chief Audit & Risk Executive	12	12	54
Fabio Gualandris	Executive Vice President, Head of Back-End Manufacturing & Technology	34	35	63
Michael Hummel	Executive Vice President, Analog and Power, Front-End Manufacturing	4	32	63
Frédérique Le Grevés	Executive Vice President, Europe and France Public Affairs	2	2	55
Claudia Levo	Executive Vice President, Integrated Marketing & Communications	11	13	57
Matteo Lo Presti	Executive Vice President, Analog, Sub-Group General Manager, Analog MEMS and Sensors Group	29	32	58
Laurent Malier	Executive Vice President Digital Front-End Manufacturing and Technology	7	28	55
Edoardo Merli	Executive Vice President, Power Transistor Sub-Group	24	24	60
Hiroshi Noguchi	Executive Vice President, Sales & Marketing, Asia Pacific Region excluding China (APeC)	15	15	47
Giuseppe Notarnicola	Executive Vice President, Corporate, Treasury, Insurance, M&A, IP BU, Real Estate and Italy Public Affairs	17	17	61
Andrea Onetti	Executive Vice President, MEMS Sub-Group	32	32	57
Rino Peruzzi	Executive Vice President, Sales & Marketing, Americas and Global Key Account Organization	24	24	57
Chouaib Rokbi	Executive Vice President, Digital Transformation and Information Technology	22	22	51
Bertrand Stoltz	Executive Vice President Finance, Global Shared Services and Systems, Asia Public Affairs	28	28	52
Nicolas Yackowlew	Executive Vice President, Product Quality & Reliability	27	28	53

- (1) Eric Aussebat retired in January 2023 and was replaced by Alexandre Balmefrezol, who was appointed Executive Vice President, Optical Sensing Solutions Sub-Group. Paul Cihak left his position in September 2022, and Rino Peruzzi was appointed Executive Vice President, Sales & Marketing, Americas. Joel Hartmann retired as Executive Vice President, Digital & Smart Power Technology and Digital Front-End Manufacturing in 2022.

c. *Biographies of our Executive Vice Presidents Committee Members*

*Michael Anfang*

Michael Anfang is Executive Vice President, Sales & Marketing for STMicroelectronics' Europe, Middle East and Africa Region (EMEA), and has held this position since November 2018. Anfang started his career with Siemens Semiconductor AG in 1990 in product engineering, followed by responsibilities in product design, automotive and strategic marketing. In 1999, he joined ST as an automotive business development manager. In 2002, Anfang was given responsibility for microcontroller product marketing at ST's Automotive Division in Agrate, Italy and was promoted to Director of Marketing & Applications in 2005. Four years later, he was appointed Digital Automotive Business Unit Director of the Automotive Product Group and became a member of the management team responsible for the MCU Joint Development Program between Freescale and STMicroelectronics. In 2013, Anfang joined the EMEA regional organization of STMicroelectronics as Automotive Marketing & Applications Vice President. Michael Anfang was born in Kitzbühel, Austria, in 1968. He graduated with a degree in Electronic Engineering from the Higher Technical School in Saalfelden, Austria, and a degree in Business Management and Marketing from the FU University in Hagen-Munich, Germany.

*Eric Ausse dat*

Eric Ausse dat is Executive Vice President and General Manager of the Optical Sensing Solutions sub-group within ST's Analog, MEMS and Sensors Group and has held this position since October 2014. Ausse dat joined Thomson Semiconducteurs, a predecessor company to ST, as Product Engineer in 1981. He held various positions in product engineering and planning and was promoted Planning Manager of the Video Products Group in 1986. Later on, Ausse dat was appointed to manage the product and manufacturing planning operations of INMOS, a UK company acquired by ST. Subsequently, he supervised the Engineering and Test Strategy for the Programmable Product Group before his promotion to head ST's Microcontroller Division in 1995. In 2000-2004, Ausse dat led the TV and Display Division and became General Manager of ST's Cellular Communication Division in 2005. Two years later, Ausse dat was appointed General Manager of the Optical Sensing Solutions Division. In 2012, Ausse dat was appointed ST's Executive Vice President in charge of the Optical Sensing Solutions, Bi-CMOS ASIC and Silicon Photonics Group. Eric Ausse dat was born in Montmorency near Paris, France, in 1954. He graduated with a degree in Electronic Engineering from the Institut National Polytechnique in Grenoble and earned a diploma from the Institut d'Administration des Entreprises of Grenoble.

*Stefano Cantù*

Stefano Cantù is Executive Vice President, Smart Power Solutions Sub-Group within STMicroelectronics' Automotive and Discrete Group (ADG) and has held this position since September 2020. He has also been Automotive Business Deputy across all ADG organizations since April 2019. After experiences at Italtel and the Italian Ministry of Defense, Cantù joined the Planning organization of STMicroelectronics' Dedicated Product Group in 1994. Five years later, he was appointed Central Planning Manager for the Telecom, Peripheral, and Automotive Group. In 2003-2004, Cantù managed production control at ST's manufacturing sites in Phoenix and Carrollton in Texas, US and in 2005, he moved to Planning Director at ST's Automotive Product Group. Cantù was promoted to Automotive Product Group Vice President responsible for Supply Chain in 2009 with Group Operations added to his mandate in 2012, before becoming Supply Chain General Manager in 2016. Stefano Cantù was born in Milan, Italy, in 1968, and he graduated with a degree in Electronic Engineering from the Polytechnic of Milan.

*Henry Cao*

Henry Cao is Executive Vice President, Sales & Marketing for STMicroelectronics' China Region and has held this position since January 2022. Cao began his career as Account Manager at Siemens Communications Group in 1995 in charge of the communication-infrastructure business. In the following years, he moved among roles as Business Development Manager and Sales Director in various Siemens BUs and corporate functions in Munich, Beijing, and Shanghai. In 2006, Cao joined Dell Technologies as a Director, managing enterprise solutions covering server, storage, networking, and related software & service businesses. In 2014, he was appointed Vice President in charge of the data-center solutions business for Dell Technologies in Greater China and was promoted to Senior Vice President in 2018. Cao joined ST in June 2020 as Corporate Vice President to manage the Company's sales in China. Henry Cao was born in Shanghai, China, in 1973. He graduated from Shanghai University of Engineering & Science with a degree in Mechanical & Electrical Engineering and holds an MBA degree from Washington University in St. Louis.

*Alessandro Cremonesi*

Alessandro Cremonesi is STMicroelectronics' Executive Vice President, Chief Innovation Officer and General Manager of STMicroelectronics' System Research and Applications (SRA) Group. He has managed the SRA group since 2013 and added the Innovation Office to his mandate in early 2020. Cremonesi's responsibilities span from global innovation coordination to corporate advanced R&D to system-solutions support for ST customers. Cremonesi joined STMicroelectronics in 1984. He has served in managerial roles with both Strategic Marketing and R&D responsibilities across domains from telecommunications to audio/video digital-signal processing and multimedia applications. He has been a key contributor to ST's extensive efforts and strategy in IoT and Artificial Intelligence and, more recently, has led the creation of strategic initiatives to increase ST's innovation capability. Cremonesi was part of an expert group defining the strategy for Artificial Intelligence for the Italian Ministry of Economic Development. He has authored several technical papers and patents and is a member of the Scientific Advisory Board at IMEC. Born in Sant'Angelo Lodigiano, Italy in 1958, Alessandro Cremonesi graduated with a master's degree in Electronics Engineering from University of Pavia in 1984.

*Alberto Della Chiesa*

Alberto Della Chiesa is STMicroelectronics' Executive Vice President in charge of Supply Chain and has held this role since May 2012. Della Chiesa joined STMicroelectronics as a New Product Planning Engineer in 1988. He was in charge of new product introductions in the Automotive and Hard Disk Drive market and pioneered a number of ST's successful collaborative programs with major key customers. In his tenure at STMicroelectronics, Della Chiesa has covered different positions in both Planning and Operations. In 2005, he was appointed Director, Planning & Service for the Computer Peripherals Group, where he actively contributed to the creation of ST's first operations and planning structure in Singapore. Over time, Della Chiesa rose to become Group Vice President of Supply Chain, followed by the nomination of General Manager and consequently Head of Operations and Supply Chain for ST's Computers and Communications Infrastructure Product Group. Alberto Della Chiesa was born in Varese, Italy, in 1964, and holds a bachelor's degree in Statistics from the Catholic University of Milan, with a specialization in the manufacturing processes. He is also CPIM certified with the American Production and Inventory Control Society (APICS) in Paris, France.

*Ricardo De Sa Earp*

Ricardo De Sa Earp is STMicroelectronics' Executive Vice President, General-Purpose Microcontroller Sub-Group Vice President and has held this position since January 2022. De Sa Earp started his career with Philips Consumer Electronics in Sao Paulo, Brazil, working in TV design. In 1993, he moved to the Electronics Division of Valeo, where he held positions in marketing and project management. De Sa Earp joined ST in 1997 as Strategic Marketing Manager in the ASD&IPAD Division at ST Tours (France). In 2003, he was promoted to the position of ASD&IPAD Division General Manager and successfully led the Division for 15 years. In 2018, De Sa Earp was appointed Group Vice President and General Manager of the Microcontrollers Division within ST's Microcontrollers and Digital ICs Group. Ricardo De Sa Earp was born in Petropolis, Brazil, in 1963. He graduated in Electronic Engineering from the Instituto Tecnológico de Aeronautica Sao Jose dos Campos, Brazil, and completed his master's degree in Electronic Engineering at the Technical University of Eindhoven, Holland. De Sa Earp also holds an MBA from INSEAD in France.

*Franck Freymond*

Franck Freymond is STMicroelectronics' Executive Vice President, Chief Audit & Risk Executive, and has held this role since March 2019. Freymond started his career with Credit Suisse Group in 1992 as credit analyst/assistant account manager and then became manager in charge of financing solutions for specific segments of Swiss Corporates. In 2000, he joined EY (Ernst & Young) in Switzerland as manager in the Risk Advisory service line and was promoted Regional Leader and member of the service line leadership team in 2004. In those roles, Freymond advised multi-national companies globally in a wide cross-section of industries in governance, risk management, internal control, and internal audit matters. In 2010, he joined STMicroelectronics as Group Vice President, Chief Audit Executive in charge of the Corporate Audit function. Freymond's scope of responsibilities was subsequently extended to Enterprise Risk Management and Resilience Management, including business continuity and crisis management. Freymond served as Chairman of STMicroelectronics' Corporate Ethics Committee from 2012 to 2018. Franck Freymond was born in Morges near Lausanne, Switzerland in 1968. He holds a Master of Science in Management from HEC Lausanne (Switzerland) and various professional certifications in internal audit and risk management assurance.

*Fabio Gualandris*

Fabio Gualandris is Executive Vice President, Head of ST's Back-End Manufacturing & Technology organization, responsible for product test, assembly and packaging, and has held this position since January 2016. He manages the Company's manufacturing strategy in Asia and its efforts in System-in-Package technology. Gualandris joined SGS Microelettronica (now ST) R&D in 1984. He was promoted to R&D Director of Operations in 1989 and became Automotive BU Director in 1996. After two years as President and Chief Executive Officer of Semitool, a US semiconductor manufacturing equipment vendor, he rejoined ST in 2000 as Group VP responsible for the RAM/PSRAM Product Division and the Flash Automotive BU. In 2005, Gualandris was appointed Chief Executive Officer of ST Incard, an ST smart-card subsidiary. In 2008-2010, he served as VP and Supply Chain General Manager at ST's memory JV with Intel. In 2011, Gualandris was appointed ST's Executive Vice President, Product Quality Excellence. Gualandris has authored several technical and managerial papers and holds some international patents. He serves as Chairman of STS, ST's manufacturing joint venture in China, and previously sat on boards of Incard, Numonyx, and Numonyx-Hynix JV. Fabio Gualandris was born in Bergamo, Italy, in 1959. He holds a Master's degree in Physics from the University of Milan.

*Michael Hummel*

Michael Hummel is Executive Vice President of STMicroelectronics, Analog and Power Front-End Manufacturing, and has held this position since March 2019. In 1991, Hummel started his professional career with IBM Microelectronics as a Process Engineer at Europe's first 200mm wafer fab in Böblingen, Germany. He held several managerial positions in Manufacturing and Engineering and became Director of Marketing & Supply Chain Management for the Philips-IBM JV in 1996. In the early 2000s, Hummel served as VP of Philips' Display Driver business – first in Zürich and later in Taipei. In 2005, he was promoted to VP and General Manager of Philips Semiconductors Germany and Head of the Wafer Fab Operation in Böblingen. In 2007, Hummel joined Texas Instruments as Operations Manager in Dallas and two years later became Fab Manager at the Freising, Germany wafer plant. Upon TI's acquisition of National Semiconductors in 2011, Hummel assumed additional responsibility for the Greenock, UK wafer fab and its integration into TI's Front-End Fab structure. Hummel sat on SEMI European Advisory Board in 2005-2017. Michael Hummel was born in Heilbronn, Germany, in 1959. He studied Chemistry at the University of Tübingen and received his PhD degree in Organic & Physical Chemistry in 1991.

*Frédérique Le Grevès*

Frédérique Le Grevès is STMicroelectronics' Executive Vice President, Europe and France Public Affairs. She has also held the position of President and Chief Executive Officer of STMicroelectronics France since March 2021. In 1990, Le Grevès started her career in marketing and communication for various international companies in Europe and in the US. From 1995 to 2003, she worked at Aptiv (ex-Delphi Automotive) as EMEA Communication Director. In 2003, Le Grevès joined Nissan Motors as VP Communication for Europe and in 2004, she moved to Los Angeles as VP Communications for Nissan Americas. Le Grevès returned to France in 2008 and joined the Renault Group as Global VP for Corporate Communication. Two years later, she expanded her role to Global VP of Communications and Deputy to the Chief Marketing and Communication officer. In 2011, Le Grevès was appointed Chief of Staff for the Renault Nissan Mitsubishi Alliance Chairman and Chief Executive Officer. More recently, she worked as senior advisor for several companies helping on corporate effectiveness, operations efficiency, and brand reputation. In April 2022, Le Grevès was appointed President of the "Electronic Industry" sector strategic committee in France. She has also sat at the Supervisory Board of TRIGO Holding as an independent board member since May 2021 and at the Strategic Board of Clinatec since October 2021. Born in Suresnes, France, in 1967, Frédérique Le Grevès graduated with a master's degree in business management from the Paris School of Business (1991) and graduated from the Senior Executive Program at the London Business School (2019).

*Claudia Levo*

Claudia Levo is Executive Vice President at STMicroelectronics with responsibility, since June 2018, for integrated Marketing & Communications strategies and plans. Her responsibilities encompass corporate communications, including PR, media and industry analyst relations, marketing communications and digital marketing. Levo began her career in 1993, with Marconi, a global telecommunications company, where she had responsibility for a number of management roles within the Communication function, including marketing communications and internal and external communications across wide geographies. In 2005, Levo managed the communication activities related to the integration of Marconi with Ericsson, and was subsequently appointed



Vice President for Communications at the newly formed Ericsson Multimedia Business Unit. In 2008, Levo was appointed Vice President Communications at Italtel. In early 2009 she joined ST-Ericsson, the wireless joint venture between STMicroelectronics and Ericsson, as Senior Vice President and head of Global Communications. In this capacity, she has successfully built the Global Communication function covering marketing and portfolio communication, public and media relations, investor relations and internal communication. Claudia Levo was born in Genoa, Italy, in 1965, and holds a language school diploma (Liceo Linguistico) in English and Russian.

*Matteo Lo Presti*

Matteo Lo Presti is Executive Vice President, General Manager of the Analog sub-group within ST's Analog, MEMS and Sensors Group, and has held this position since January 2016. Lo Presti joined the Advanced Research Group of SGS-Thomson Microelectronics (now STMicroelectronics) in 1994 and was appointed Head of Fuzzy Logic R&D four years later. From 2002 to 2004, Lo Presti led the marketing and application labs for the Industrial and Automotive market segments in ST's Emerging Markets. He gained responsibility for the Company's Systems Lab in 2004 and the Subsystem Product Group and Technical Marketing for the Industrial & Multisegment Sector were added to his mandate in 2008 and 2009, respectively. In 2012, Lo Presti was promoted to Group Vice President, General Manager, Industrial and Power Conversion Division. From 1996 to 2004, Lo Presti served as a visiting professor at the University of Messina (Italy) and the University of Catania (Italy). He has authored more than 40 international publications and holds several industrial patents. Matteo Lo Presti was born in Misterbianco, Italy, in 1965, and graduated with a degree in Electronic Engineering from the University of Catania.

*Laurent Malier*

Laurent Malier is Executive Vice President of STMicroelectronics, Digital Front-End Manufacturing and Technology, and has held this position since January 2022. He manages ST's manufacturing operations in Crolles and Rousset, as well as Technology R&D and Design Enablement for the Company's Digital, Optical Sensing Solutions, RF, Non-Volatile Memory, and Smart Power technologies. After several years of research in chemical physics, Malier worked at the French Ministry of Defence from 1995 to 2000. He then joined Alcatel Optronics, first to lead new-product development and later managed semiconductor activities. Malier was appointed Front-End R&D and Manufacturing Director for Avanex Group that merged Alcatel's and Corning's opto-electronics operations in 2003. In 2005, he joined the French technology research center CEA-LETI as deputy director, Strategy and Programs, and became Chief Executive Officer of LETI in 2006. In 2015, Malier joined ST to drive the Company's Digital Technology R&D. He was promoted to Group VP, RF & Communication sub-group in 2020. Malier was elected as Member of the French "Académie des Technologies" in 2019. He has authored 29 publications in physics and solid-state chemistry. Laurent Malier was born in Paris, France, in 1967. He graduated from the Ecole Polytechnique and has a PhD in Physics from Paris-Saclay University.

*Edoardo Merli*

Edoardo Merli is STMicroelectronics' Executive Vice President, Power Transistor Sub-Group Vice President and has held this position since January 2022. Merli joined STMicroelectronics in 1998 as Head of System Architecture in the Telecom Wireline Division. In 2002, he formed and led ST's WLAN Business Unit. Merli was appointed Director of the Automotive Product Group in 2007, where he took responsibility for the RF Competence Center & Connectivity Business Unit and subsequently for the Car Radio Business Unit. In 2012, Merli was promoted to Marketing & Application Director for ST's Automotive and Discrete Group in Greater China and South Asia. In 2016, his responsibilities were extended to include the Company's automotive activities in Korea. In 2017, Merli was promoted to Power Transistor Macro-Division General Manager and Group Vice President of ST's Automotive and Discrete Group. Merli has filed several patents on ADSL, multi-service routers, switches, and throughput management, and authored numerous publications in the areas of Telecommunications, Automotive, and Connectivity. Edoardo Merli was born in Parma, Italy, in 1962, and graduated with a degree in Electronic Engineering from University of Bologna in 1989.

*Hiroshi Noguchi*

Hiroshi Noguchi is Executive Vice President, Sales & Marketing for STMicroelectronics' Asia Pacific Region excluding China (APeC) and has held this position since January 1, 2022. Noguchi started his career as an optics engineer in Bell Labs at Lucent Technologies in 1999. He joined ST Japan in 2007 as a Motion MEMS marketing engineer. In 2011, Noguchi was promoted to Senior Marketing Manager for ST's Advanced Analog



group. Since 2015, he has served as Director of Analog, MEMS & Sensor group in Japan contributing to significant business growth and strengthening ST's market leadership in Japan. In 2017, Noguchi was appointed Country Manager for ST Japan. Hiroshi Noguchi was born in Nagasaki, Japan, in 1975. He graduated from Northwestern University with a Bachelor of Science degree in Electrical Engineering and from Stanford University with a Master of Science degree in Electrical Engineering.

*Giuseppe Notarnicola*

Giuseppe Notarnicola is STMicroelectronics' Executive Vice President responsible for managing Corporate Treasury, a position he has held since January 2006. His responsibilities were expanded in 2013 to include Insurance and in 2018 to include M&A, IP Business Unit and Public Affairs for Italy. Notarnicola started his career with Banca Nazionale del Lavoro (BNL), one of Italy's largest banks, in 1987. At BNL, he managed financial operations in Singapore, the Financial Department of the London branch, the global Head Office, financial advisory arm for corporate and institutional customers, and in 2004, was promoted Head of Large Corporate clients. Notarnicola joined ST in 2006, when he initiated the Company's relationship with the European Investment Bank and managed the financing aspects of ST's Flash memory business spin-out, as well as all the Company's strategic funding in the capital markets. Notarnicola is President of ST Italy and a board member of several other ST affiliates. In 2021, he was appointed Vice President for Economic Research Department and FDI Attraction at Assolombarda, an industrial organization that associates nearly 7,000 companies in the Lombardy Region of Italy. Giuseppe Notarnicola was born in Codroipo near Udine, Italy, in 1961. He graduated cum laude in Business Administration from the LUISS Guido Carli University in Rome, Italy.

*Andrea Onetti*

Andrea Onetti is STMicroelectronics' Executive Vice President, MEMS Sub-Group General Manager and has held this position since January 2022. Onetti joined STMicroelectronics' R&D Lab in Castelletto, Italy, in 1990, as a designer of mixed-signal audio ICs. Later he moved into Product Management and Marketing for Consumer Audio and was promoted to General Manager of a Product Division. Onetti's mandate was expanded to include ST's Audio and Sound Business Unit in 2011 and the Analog and Audio Systems Division in 2014. In 2016, he was promoted to Head of ST's MEMS Sensors Division, driving business and margin growth in MEMS sensors, product portfolio expansion and optimization, as well as ST MEMS ecosystem creation including strategic partnerships with key industry players including Qualcomm and Microsoft. Onetti has several patents for analog circuit implementations in the Audio domain. Andrea Onetti was born in Pavia, Italy, in 1965, and graduated with a Degree in Microelectronics from University of Pavia.

*Rino Peruzzi*

Rino Peruzzi is Executive Vice President, Sales & Marketing, Americas and Global Key Account Organization, and has held this combined position since August 2022. Peruzzi began his career in Electronics at Micom Communications Systems in 1984, moved to Macom, Inc in 1989, and into the storage sector in 1990, with StorageTek, Maxtor, and Seagate Technology. In 1998 he joined ST as an account executive in the Storage Business Unit, where he earned Samsung Electronics' Presidential Award. Peruzzi was promoted to Key Account Manager in 2000 and Director of Sales for Worldwide Storage Business in 2003. He was promoted to VP Worldwide Storage Sales (2008) and VP Sales for the Consumer Business Unit (2011), before being appointed VP Global Key Accounts (GKAs) in 2012. Here, he assembled a global organization and grew a key account's revenue to become ST's biggest. In 2014 Peruzzi's perimeter expanded to include both GKA and EMS (Electronics Manufacturing Services). In 2018 Peruzzi was promoted to the Chief Executive Officer's staff as Group VP of GKAs and became Executive VP GKAs Sales and Marketing Regions in 2021. Rino Peruzzi was born in Buffalo, New York (USA), in 1965. He is currently pursuing his MBA from York St John University.

*Chouaib Rokbi*

Chouaib Rokbi is Executive Vice President, Digital Transformation and Information Technology at STMicroelectronics and has held this position since January 2022. Rokbi started his career in Tamrock, Sandvik's hard-rock mining division, in 1995 as the design manager for small-size mining rigs, where he successfully led the redesign to reduce the cost of the equipment line. After earning his MBA in 2000, he joined STMicroelectronics as the industrial controller for the Rousset plant in France. Four years later, Rokbi's controlling responsibilities were expanded to cover all of ST's front-end manufacturing operations. Between 2007 and 2018, he held senior positions in financial control, efficiency improvement programs, and corporate

strategic initiatives. In 2018, Rokbi was appointed Chief Transformation Officer with the mission to rebuild the Company's main operational processes, including Supply Chain, Product Lifecycle Management, and Manufacturing Analytics, leveraging state-of-the-art digital technologies. Chouaib Rokbi was born in Lyon, France in 1971, and holds a degree in mechanical engineering from INSA Lyon and an MBA from Emlyon Business School in Lyon.

*Bertrand Stoltz*

Bertrand Stoltz is STMicroelectronics' Executive Vice President in charge of Finance, Global Shared Services and Systems, as well as the Company's Asia Public Affairs, and has held both roles since April 2022. He also sits on ST's Corporate Ethics Committee. Stoltz started his career in the Finance department of SGS-Thomson (now ST) in Tours, France, in 1994. From 1999 to 2002, he worked at the Company's headquarters in Corporate Strategic Planning and Corporate Internal Audit. In 2002, Stoltz moved to Singapore to lead ST's Asia Internal Audit team. He rose to Head of Finance at ST Singapore in 2005. Stoltz was subsequently promoted to Group Vice President, expanding his mandate to cover Asia, Americas, France, Italy, and most recently all local financial reporting and regional business control across ST entities worldwide. Stoltz acts as Managing Director for ST's Singapore entities and serves as a Board Member at several other ST affiliates. Bertrand Stoltz was born in Moulins, France, in 1970. He holds an honour's degree with a major in finance from the Institute of Political Studies in Lyon, France. He also graduated with a degree from the University Business School in Tours, and the International Executive Program of INSEAD.

*Nicolas Yackowlew*

Nicolas Yackowlew is Executive Vice President, Product Quality & Reliability at STMicroelectronics and has held this position since August 2018. Yackowlew began his career in 1996 as Product Quality Engineer at ST. He has successfully driven Quality and Reliability departments for many years at both the Division and Group levels. Yackowlew was promoted Division Quality & Reliability Manager in 2006 leading quality for Serial Non Volatile Memory. Three years later, he was appointed Quality & Reliability Director in charge of the Quality for Memory, Microcontrollers and Secured Microcontrollers. In 2016, Yackowlew took the responsibility of Quality & Reliability for the Microcontroller and Digital ICs Group (MDG). Nicolas Yackowlew was born in Mulhouse (France) in 1969 and graduated with a degree in Chemistry from the University of Nice Sophia Antipolis, France.

**iv. Senior Management compensation**

*a. Guiding principles of Senior Management compensation*

The Managing Board determines the remuneration structure of the Senior Management based on, amongst others, the same key principles that the Supervisory Board considers when determining the remuneration structure of the Managing Board. These key principles are described above in "section B.ii.a Guiding principles of Managing Board compensation".

In accordance with the key principles, the total remuneration of the Senior Management takes into consideration factors such as the size and complexity of the Company, our global presence and that of our customers, the pace of change in our industry, the Company's value proposition, strategy and goal of long-term value creation, and the need to recruit and retain key personnel.

*b. Senior Management remuneration structure*

The Managing Board determines the remuneration structure and remuneration amounts for our Senior Management based on the analysis of the theoretical maximum total direct remuneration (i.e., sum of base salary, maximum short-term incentive, and maximum long-term incentive).

The remuneration package of the Senior Management is comprised of the following:

- **Base salary;** and
- **Variable components, linked to performance:**
  - **A short-term incentive** which is fully paid in cash.

- o **A long-term incentive** through the grant of **stock awards**, that are included in the long-term incentive plan approved at the AGM.

The sum of these three elements represents the **maximum total direct remuneration** for the Senior Management.

#### *Base salary*

The purpose of the base salary is to provide a fixed level of earnings and to attract and retain talent. It is a key component of overall remuneration, particularly as the short-term incentive is expressed as a percentage of base salary.

#### *Short-term incentive*

The short-term incentive based on the corporate executive incentive program (“EIP”), entitles selected executives, including the members of Senior Management, to an annual short-term incentive. This short-term incentive is based upon the assessment of the achievement of individual, organizational and Company objectives that are set on an annual basis and focused on, *inter alia*, return on net assets, customer service, profit, cash flow and market share. The maximum amount awarded under the short-term incentive is based upon a percentage of the executive’s salary and the overall achievement of the relevant objectives on an annual basis.

The 2022 short-term incentive includes a sustainability/corporate social responsibility index for Senior Management, as part of our efforts to include corporate social responsibility into the performance framework of our Senior Management. For Executive Committee members and Executive Vice Presidents, the weight of the sustainability/corporate social responsibility index ranges between 5% and 10%. The sustainability/corporate social responsibility index is divided into four criteria related to health and safety, environment, diversity & inclusion, and people engagement.

For the 2022 short-term incentive, the sustainability/corporate social responsibility index was comprised of the following KPIs:

- Health & safety: measured against, amongst others, the employee safety performance
- Environment/climate: measured against, amongst others, direct emissions (kCO<sub>2</sub> equivalent)
- Diversity & inclusion: measured against, amongst others, gender ratio among management levels
- People management: measured against, amongst others, the employee survey (engagement index)

The weight of the sustainability/corporate social responsibility index is designed to remain stable over time, however the individual sub-components used to form the sustainability/corporate social responsibility index may evolve in the future to address sustainability priorities facing the Company and society.

#### *Long-term incentive*

The purpose of the long-term incentive, through the grant of stock awards, is to motivate the Senior Management to deliver sustainable long-term shareholder value through long-term profitability and share price growth.

In accordance with the current long-term incentive plan, stock awards vest over a three-year horizon from the date of the grant, with 32% vesting after one year, a further 32% after two years and the remaining 36% after three years, subject to performance criteria and provided that the eligible employee is still an employee of the Company at such time.

The Supervisory Board determines whether the performance criteria are met and concludes whether and to which extent all eligible employees are entitled to any stock awards under the long-term incentive plan.

From 2021, a new sustainability/corporate social responsibility index has been introduced among the performance conditions for the long-term incentive.

For the 2022 long-term incentive, the sustainability/corporate social responsibility index was comprised of the following KPIs:

- Environment/climate: measured against, amongst others, the direct emissions (kCO<sub>2</sub> equivalent)
- Diversity & inclusion: measured against, amongst others, gender ratio among management levels
- ESG investor index: measured against, amongst others, the Dow Jones sustainability indices
- Carbon rating agency: measured against, amongst others, the CDP carbon rating

The weight of the sustainability/corporate social responsibility index is designed to remain stable for future grants, however the individual sub-components used to form the sustainability/corporate social responsibility index may evolve in the future to address sustainability priorities facing the Company and society.

#### *Pension plan, life and medical insurance*

Our Supervisory Board has approved the establishment of a complementary pension plan for certain key executives as selected by the sole member of the Managing Board, our President and Chief Executive Officer, according to the general criteria of eligibility and service as determined by the Supervisory Board upon the proposal of its Compensation Committee. With respect to such complementary pension plan, we have set up an independent foundation under Swiss law which manages the plan and to which we make contributions. Pursuant to this plan, in 2022, we made a contribution of approximately \$0.5 million to the plan of the sole member of the Managing Board, our President and Chief Executive Officer, and of \$1.05 million to the plan for all beneficiaries other than the sole member of the Managing Board, our President and Chief Executive Officer. The amount of pension plan payments made for other beneficiaries, such as former employees retired in 2022 and/or no longer salaried in 2022, was \$1.1 million.

The members of our Senior Management, including the sole member of the Managing Board, our President and Chief Executive Officer, were covered in 2022 under certain group life and medical insurance programs provided by us. The aggregate additional amount set aside by us in 2022 to provide pension, retirement or similar benefits to our Senior Management, including the sole member of the Managing Board, our President and Chief Executive Officer, including the amounts allocated to the complementary pension plan described above, is estimated to have been approximately \$7.5 million, which includes statutory employer contributions for state run retirement, similar benefit programs and other miscellaneous allowances.

The structure of our remuneration for our (i) Managing Board, President and Chief Executive Officer, (ii) Senior Management, and (iii) certain other groups of senior employees is aligned and consists of a base salary, short-term incentive and long-term incentive, under specified conditions. The standard benefits for the aforementioned groups are also aligned.

#### *c. Compensation paid to the Senior Management in 2022, 2021 and 2020*

##### *Base salary*

Over the last three years the base salary paid to the Senior Management (including the sole member of the Managing Board, our President and Chief Executive Officer) is:

	<u>2022<sup>(1)</sup></u>		<u>2021<sup>(2)</sup></u>		<u>2020<sup>(3)</sup></u>
<b>Senior Management base salary</b>	<b>\$ 20,848,371</b>	<sup>(4)</sup>	<b>\$ 14,665,462</b>	<sup>(5)</sup>	<b>\$ 12,640,518</b>

(1) During 2022, our Senior Management consisted of 33 members, including Joel Hartmann and Paul Cihak, who left during the course of 2022.

(2) During 2021, our Senior Management consisted of 24 members.

(3) During 2020, our Senior Management consisted of 22 members.

(4) Including amounts paid in 2022 to our former Executive Vice President, Digital & Smart Power Technology and Digital Front-End Manufacturing, Joel Hartmann, and former Executive Vice President, General Manager, Sales & Marketing, Americas Region, Paul Cihak.

(5) This includes amounts paid in 2021 to our former President, Analog, MEMS and Sensors Group, Benedetto Vigna and former Executive Vice President Europe and France Public Affairs, Thierry Tingaud.

### Short-term incentive

The amounts paid in 2022 to our Senior Management (including the sole member of the Managing Board, our President and Chief Executive Officer) pursuant to the short-term incentive represented approximately 18.41% of the total compensation paid to our Senior Management and are further detailed below:

	Bonus paid in 2022 (2021 performance)(1)	Bonus paid in 2021 (2020 performance)(2)	Bonus paid in 2020 (2019 performance)
<b>Short-term incentive (cash) amount</b>	\$ 17,557,713	\$ 11,476,929	\$ 8,708,142
<b>Ratio short-term incentive / (base salary + Short-term incentive)</b>	45.72%	47.43%	43.15%

- (1) Including amounts paid in 2022 to our former Executive Vice President, Digital & Smart Power Technology and Digital Front-End Manufacturing, Joel Hartmann, and former Executive Vice President, General Manager, Sales & Marketing, Americas Region, Paul Cihak.
- (2) Including amounts paid in 2021 to our former President, Analog, MEMS and Sensors Group, Benedetto Vigna and former Executive Vice President Europe and France Public Affairs, Thierry Tingaud.

### Long-term incentive

The second part of the variable component is the long-term incentive which links the long-term interests of the Senior Management with the shareholders' and investors' interests.

The amounts paid in 2022 to our Senior Management (including the sole member of the Managing Board, our President and Chief Executive Officer) pursuant to the long-term incentive represented approximately 42.99% of the total compensation paid to our Senior Management and are further detailed below:

	Long-term incentives paid in 2022(1)	Long-term incentives paid in 2021(2)	Long-term incentives paid in 2020
<b>Long-term incentive amount</b>	\$ 41,000,100	\$ 43,042,934	\$ 26,925,145
<b>Ratio long-term incentive / base salary</b>	196.66%	293.50%	213.01%
<b>Ratio long-term incentive / (short-term incentive + long-term incentive)</b>	70.02%	78.95%	75.56%

- (1) Including amounts paid in 2022 to our former Executive Vice President, Digital & Smart Power Technology and Digital Front-End Manufacturing, Joel Hartmann, and former Executive Vice President, General Manager, Sales & Marketing, Americas Region, Paul Cihak.
- (2) Including amounts paid in 2021 to our former President, Analog, MEMS and Sensors Group, Benedetto Vigna and former Executive Vice President Europe and France Public Affairs, Thierry Tingaud.

### Total Compensation

The following table sets forth the total amount paid as compensation in 2022, 2021 and 2020 to our Senior Management (including the sole member of the Managing Board, our President and Chief Executive Officer) as of December 31 of each year, before applicable withholding taxes and social contributions (amounts in millions):

Year	Variable components			Other components(1)				Total	Fixed/ Variable remuneration
	Base salary	Short-term Incentives	Long-term Incentives	Benefits	Social security contributions	Pensions	Termination benefits		
2022(2)	\$ 20,848,371	\$ 17,557,713	\$ 41,000,100	\$ 1,706,799	\$ 10,468,677	\$ 1,498,828	\$ 2,284,907	\$ 95,365,395	39% fixed/ 61% variable
2021(3)	\$ 14,665,462	\$ 11,476,929	\$ 43,042,934	\$ 1,395,509	\$ 9,626,193	\$ 794,387	\$ 3,288,715	\$ 84,290,129	35% fixed/ 65% variable
2020	\$ 12,640,518	\$ 8,708,142	\$ 26,925,145	\$ 1,605,886	\$ 7,890,424	\$ 803,967	\$ 974,705	\$ 59,548,787	40% fixed/ 60% variable

- (1) There were no miscellaneous allowances in the years 2022, 2021, and 2020.
- (2) Including amounts paid in 2022 to our former Executive Vice President, Digital & Smart Power Technology and Digital Front-End Manufacturing, Joel Hartmann, and former Executive Vice President, General Manager, Sales & Marketing, Americas Region, Paul Cihak.

- (3) Including amounts paid in 2021 to our former President, Analog, MEMS and Sensors Group, Benedetto Vigna and former Executive Vice President Europe and France Public Affairs, Thierry Tingaud.

We did not extend any loans or overdrafts to the sole member of the Managing Board, our President and Chief Executive Officer, nor to any other member of our Senior Management. Furthermore, we have not guaranteed any debts or concluded any leases with the sole member of the Managing Board, our President and Chief Executive Officer, nor with any other member of our Senior Management or their families.

*d. Remuneration comparison between the Managing Board, Senior Management and employees*

Set forth in the following table is the annual change over the last three years of (i) the remuneration of the sole member of the Managing Board, our President and Chief Executive Officer, (ii) the remuneration of the Senior Management, (iii) the performance of the Company and (iv) the average remuneration of all our indirect employees other than the members of our Senior Management, including the sole member of the Managing Board, our President and Chief Executive Officer. The average is calculated by taking the sum of remuneration costs and dividing by the average number of full-time equivalent employees over the period. The table below also shows the pay ratio between our Managing Board, our Senior Management and our employees.

	2022		2021		2020
<b>Managing Board remuneration</b>					
Total remuneration of the sole member of the Managing Board, our President and Chief Executive Officer (A) (amounts in millions)	\$ 7,218		\$ 7,559		\$ 5,739
Evolution of the sole member of the Managing Board, our President and Chief Executive Officer remuneration	(5)	%	32	%	(26)
<b>Senior Management remuneration</b>					
Average remuneration of our Senior Management (B) (amounts in millions)	\$ 2,890 <sup>(1)</sup>		\$ 3,512		\$ 2,706
Evolution of average remuneration of our Senior Management	(18)	%	30	%	40
Ratio A versus B	2.5		2.2		2.1
<b>Employee remuneration<sup>(2)</sup></b>					
Average remuneration of all global indirect employees (FTE basis) (C) <sup>(3)</sup>	\$ 109,600		\$ 111,200		\$ 98,500
Evolution of the average remuneration of all global indirect employees (FTE basis) <sup>(3)</sup>	(1)	%	13	%	1
Ratio A versus C	65.9		68.0		58.2
Ratio B versus C	26.4		31.6		27.5
<b>Company's performance</b>					
Net revenues (amounts in millions)	\$ 16,128		\$ 12,761		\$ 10,219
Evolution of the revenues	26	%	25	%	7
Operating income (amounts in millions)	\$ 4,439		\$ 2,419		\$ 1,323
Evolution of the Operating income	84	%	83	%	10

- (1) Average remuneration of our Senior Management includes amounts paid in 2022 to our former Executive Vice President, Digital & Smart Power Technology and Digital Front-End Manufacturing, Joel Hartmann, and former Executive Vice President, General Manager, Sales & Marketing, Americas Region, Paul Cihak.
- (2) Employee remuneration is defined as all remuneration paid to our indirect employees including base salary, variable compensation in both cash and shares, social premiums, pension, expense allowances and benefits in kind. The average is calculated by taking the sum of remuneration costs and dividing by the average number of full-time equivalent indirect employees over the period.
- (3) Global indirect employees are all employees other than those directly manufacturing our products, excluding Senior Management. "FTE" refers to full time equivalent.

**Share Ownership and Stock Awards**

*i. Share Ownership*

None of the members of our Supervisory Board, Managing Board or Senior Management holds shares or options to acquire shares representing more than 1% of our issued share capital.

## ii. Overview of Stock Awards and Options

Our stock-based compensation plans are designed to incentivize, attract and retain our executives and key employees by aligning compensation with our performance and the evolution of our share price. Since 2005, we have adopted long-term incentive plans based on stock awards for our management as well as key employees. Furthermore, until 2012, the Compensation Committee (on behalf of the Supervisory Board and with its approval) granted stock-based awards (the options to acquire common shares in the share capital of the Company) to the members and professionals of the Supervisory Board. For a description of our stock option plans and unvested share award plans, please see Note 18 to our Consolidated Financial Statements, which is incorporated herein by reference.

Pursuant to the shareholders' resolutions adopted by our General Meetings of Shareholders, our Supervisory Board, upon the proposal of the Managing Board and the recommendation of the Compensation Committee, took the following actions:

- approved conditions relating to our 2020 unvested stock award allocation under the 2017 Unvested Stock Award Plan, including restriction criteria linked to our performance (for selected employees); and
- approved conditions relating to our 2021 unvested stock award allocation under the 2021 Unvested Stock Award Plan, including restriction criteria linked to our performance (for selected employees).
- approved conditions relating to our 2022 unvested stock award allocation under the 2021 Unvested Stock Award Plan, including restriction criteria linked to our performance (for selected employees).

The sale or purchase of shares of our stock by the members or professionals of our Supervisory Board, the sole member of the Managing Board, our President and Chief Executive Officer, and all our employees are subject to an internal policy which involves, *inter alia*, certain blackout periods.

## Employees

The tables below set forth the breakdown of employees by geographic area and main category of activity for the past three years.

	At December 31,		
	2022	2021	2020
France	11,953	11,312	10,840
Italy	12,037	11,334	10,765
Rest of Europe	1,128	1,044	991
Americas	789	759	766
Mediterranean (Malta, Morocco, Tunisia, Egypt)	5,634	4,854	4,378
Asia	19,829	18,951	18,276
<b>Total</b>	<b>51,370</b>	<b>48,254</b>	<b>46,016</b>

	At December 31,		
	2022	2021	2020
Research and Development	9,036	8,355	8,145
Marketing and Sales	2,573	2,379	2,311
Manufacturing	33,690	31,780	30,134
Administration and General Services	2,787	2,582	2,464
Divisional Functions	3,284	3,158	2,962
<b>Total</b>	<b>51,370</b>	<b>48,254</b>	<b>46,016</b>

Our future success will partly depend on our ability to continue to attract, retain and motivate highly qualified technical, marketing, engineering and management personnel, as well as on our ability to timely adapt the size and/or profile of our personnel to changing industry needs. Unions are represented at almost all of our manufacturing facilities and at several of our R&D sites. We use temporarily employees if required during production spikes and, in Europe, during summer vacation. We have not experienced any significant strikes or work stoppages in recent years.

**Disclosure of a registrants action to recover erroneously awarded compensation**

Not applicable.



**Item 7. Major Shareholders and Related Party Transactions****Major Shareholders**

The following table sets forth certain information with respect to the ownership of our issued common shares as of December 31, 2022 based on information available to us:

Shareholders	Common Shares Owned	
	Number	%
STMicroelectronics Holding N.V. (“ST Holding”)	250,704,754	27.51
Public <sup>(1)</sup>	653,161,009	71.67
Treasury shares	7,416,157	0.81
<b>Total</b>	<b>911,281,920</b>	<b>100.0</b>

(1) According to the report available on Schedule 13G filed with the SEC on February 7, 2023, we understand that as of December 31, 2022 BlackRock, Inc. is the beneficial owner of 65,684,356 of our common shares (representing approximately 7.2% of our issued common shares).

We are not aware of any significant change over the past three years in the percentage ownership of our shares by ST Holding, our major shareholder. ST Holding does not have any different voting rights from those of our other shareholders.

*Shareholders Agreement*

According to the report on Schedule 13G (“2020 ST Holding 13G”) jointly filed with the SEC on February 11, 2020, by ST Holding, the Italian Ministry of the Economy and Finance (the “MEF”), Bpifrance Participations S.A., a successor to its former wholly-owned subsidiary FT1CI, (“Bpifrance” and together with the MEF, the “STH Shareholders”) and the Italian Government and the French Government, each indirectly through the MEF and Bpifrance, respectively, held 14.1% of our share capital as of December 31, 2019. The ownership percentages of each the MEF and Bpifrance are based on 891,434,489 shares outstanding as of December 31, 2019. As of the date of this Form 20-F, no report on 13G in respect of the STH Shareholders was filed subsequent to the 2020 ST Holding 13G. Below is a brief summary of certain details from the 2020 ST Holding 13G.

*Corporate Governance*

Managing Board and Supervisory Board members can only be appointed by the general meeting of shareholders upon a proposal by the Supervisory Board. The Supervisory Board passes resolutions, including on such a proposal, by at least three quarters of the votes of the members in office. The STH Shareholders Agreement, to which we are not a party, furthermore provides that: (i) each of the STH Shareholders, Bpifrance, on the one hand, and the MEF, on the other hand, may propose the same number of members for election to the Supervisory Board by our shareholders, and ST Holding shall vote in favor of such members; and (ii) any decision relating to the voting rights of ST Holding shall require the unanimous approval of the STH Shareholders. ST Holding may therefore be in a position to effectively control actions that require shareholder approval, including, as discussed above, the proposal of six out of nine members for election to our Supervisory Board (three members by each STH Shareholder) and the appointment of our Managing Board, as well as corporate actions, and the issuance of new shares or other securities. As a result of the STH Shareholders Agreement, the Chairman of our Supervisory Board is proposed by an STH Shareholder for a three-year term, and the Vice-Chairman of our Supervisory Board is proposed by the other STH Shareholder for the same period, and vice-versa for the following three-year term. The STH Shareholder proposing the appointment of the Chairman may furthermore propose the appointment of the Assistant Secretary of our Supervisory Board, and the STH Shareholder proposing the appointment of Vice-Chairman proposes the appointment of the Secretary of our Supervisory Board. Finally, each STH Shareholder also proposes the appointment of a financial controller to the Supervisory Board.

### *Ownership of ST Shares*

The STH Shareholders Agreement provides that each STH Shareholder retains the right to cause ST Holding to dispose of its stake in us at its sole discretion pursuant to the issuance of financial instruments, an equity swap, a structured finance deal or a straight sale; however, except in the case of a public offer, no sales by any party to the STH Shareholders Agreement may be made of any of our shares or any shares of Bpifrance or ST Holding to any of our top ten competitors or any company controlling such a competitor. The STH Shareholders Agreement also requires all of the parties to the STH Shareholders Agreement to hold their stakes in us at all time through the current holding structure of ST Holding, subject to certain limited exceptions, and precludes all such parties and their affiliates from acquiring any of our common shares other than through ST Holding.

### *Change of Control Provision*

The STH Shareholders Agreement provides for tag-along rights, pre-emptive rights, and provisions with respect to a change of control of any of the STH Shareholders or any controlling shareholder of Bpifrance, on the one hand, and the Italian Ministry of the Economy and Finance, on the other hand. The STH Shareholders may transfer shares of ST Holding and/or Bpifrance, as applicable, to any of their respective affiliates, which could include entities ultimately controlled by the Italian Government or the French Government.

### *Preference Shares*

We have an option agreement with an independent foundation, Stichting Continuïteit ST (the “Stichting”), whereby the Stichting can acquire a maximum of 540,000,000 preference shares 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 an unsolicited offer for our common shares are not supported by our Managing Board and Supervisory Board. If the Stichting exercises its call option and acquires preference shares, it must pay at least 25% of the par value of such preference shares. 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 hostile by our Managing Board and 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. In addition, any issuance of additional capital within the limits of our authorized share capital, as approved by our shareholders, is subject to approval by our Supervisory Board, other than pursuant to an exercise of the call option granted to the Stichting.

### **Related Party Transactions**

See Note 28 to our Consolidated Financial Statements, incorporated herein by reference, for transactions with significant related parties, which also include transactions between us and our equity method investments.

### **Item 8. Financial Information**

#### **Consolidated Statements and Other Financial Information**

Please see “Item 18. Financial Statements” for a list of the financial statements filed with this Form 20-F.

#### **Legal Proceedings**

For a description of our material pending legal proceedings, please see Note 26 “Contingencies, Claims and Legal Proceedings” to our Consolidated Financial Statements, which is incorporated herein by reference.

#### **Dividend Policy**

Our dividend policy reads as follows: “STMicroelectronics seeks to use its available cash in order to develop and enhance its position in a competitive semiconductor market while at the same time managing its cash resources to reward its shareholders for their investment and trust in STMicroelectronics. Based on its results, projected capital requirements as well as business conditions and prospects, the Managing Board proposes on an annual basis to the Supervisory Board, whenever deemed possible and desirable in line with

STMicroelectronics' objectives and financial situation, the distribution of a quarterly cash dividend, if any. The Supervisory Board, upon the proposal of the Managing Board, decides or proposes on an annual basis, in accordance with this policy, which portion of the profits or distributable reserves shall not be retained in reserves to fund future growth or for other purposes and makes a proposal concerning the amount, if any, of the quarterly cash dividend".

On May 25, 2022, our shareholders approved a cash dividend of US\$0.24 per outstanding share of our common stock, which was distributed in quarterly installments of US\$0.06 in each of the second, third and fourth quarters of 2022 and will also be distributed in the first quarter of 2023. Future dividends, if any, and their timing and amounts may be affected by our accumulated profits, our capacity to generate cash flow, our financial situation, the general economic situation and prospects and any other factors that the Supervisory Board, upon the recommendation of our Managing Board, shall deem important. For a history of dividends paid by us to our shareholders in the past three years, see Note 18 to our Consolidated Financial Statements "Shareholders' Equity – Dividends".

## **Item 9. Listing**

### **Market Information**

Our common shares are traded on the NYSE under the symbol "STM" and CUSIP #861012102, are listed on the compartment A (large capitalizations) of Euronext Paris under the ISIN Code NL0000226223 and are traded on the Borsa Italiana. On August 4, 2020, ST issued a \$1.5 billion dual-tranche offering of new 2020 Senior Unsecured Convertible Bonds due 2025 and 2027 that trade on the Frankfurt Stock Exchange.

Our common shares are included in the CAC 40, a free float market capitalization weighted index that reflects the performance of the 40 most capitalized and traded shares listed on Euronext Paris, and is the most widely used indicator of the Paris stock market. Our common shares are included in the FTSE MIB Index, which measures the performance of the 40 most liquid and capitalized shares listed on the Borsa Italiana and seeks to replicate the broad sector weights of the Italian stock market.

Of the 903,865,763 common shares outstanding as of December 31, 2022, 68,905,940, or 7.6%, were registered in the common share registry maintained on our behalf in New York and 834,959,823 or 92.4%, of our common shares outstanding were listed on Euroclear France and traded on Euronext Paris and on the Borsa Italiana in Milan.

## **Item 10. Additional Information**

### **A. Share Capital**

Not applicable.

### **B. Memorandum and Articles of Association**

We were incorporated under the laws of The Netherlands by deed of May 21, 1987 and are registered with the trade register (*handelsregister*) of the Dutch Chamber of Commerce (*Kamer van Koophandel*) under no. 33194537. Set forth below is a summary of certain provisions of our Articles of Association and relevant Dutch law. The summary below does not purport to be complete and is qualified in its entirety by reference to our Articles of Association, most recently amended on June 20, 2017, and relevant Dutch law.

#### *Object and Purposes (Article 2)*

The objects of our company is to participate in or take, in any manner, any interests in other business enterprises; to manage such enterprises; to carry on business in semiconductors and electronic devices; to take and grant licenses and other industrial property interests; to assume commitments in the name of any enterprises with which we may be associated within a group of companies; to take financial interests in such enterprises and to take any other action, such as but not limited to the granting of securities or the undertaking of obligations on behalf of third parties, which in the broadest sense of the term, may be related or contribute to the aforementioned objects.

### *Supervisory Board Members*

Our Articles of Association do not include any provisions related to a Supervisory Board member's:

- power to vote on proposals, arrangements or contracts in which such member is materially interested;
- power, in the absence of an independent quorum, to vote on compensation to themselves or any members of the Supervisory Board;
- borrowing powers exercisable by the directors and how such borrowing powers can be varied;
- mandatory retirement age; or
- number of owned shares in our company required to qualify as a Supervisory Board member.

Our Supervisory Board charter and Dutch law, however, explicitly prohibit members of our Supervisory Board from participating in discussions and voting on matters where they have a conflict of interest. If our entire Supervisory Board has a conflict of interest, our shareholders' meeting is the competent corporate body to adopt the relevant resolution. Our Articles of Association provide that our shareholders' meeting must adopt the compensation of our Supervisory Board members. Neither our Articles of Association nor our Supervisory Board charter has a requirement or policy that Supervisory Board members hold a minimum number of our common shares.

We have balanced participation by men and women on our Supervisory Board and currently, our Supervisory Board comprises nine members of which 4 are female and 5 are male.

### *Distribution of Profits (Articles 37, 38, 39 and 40)*

Subject to certain exceptions, dividends may only be paid out of the profits as shown in our adopted annual accounts. Our profits must first be used to set up and maintain reserves required by Dutch law and our Articles of Association. Subsequently, if any of our preference shares are issued and outstanding, preference shareholders shall be paid a dividend, which will be a percentage of the paid up part of the par value of their preference shares. Our Supervisory Board may then, upon proposal of our Managing Board, also establish reserves out of our annual profits. The portion of our annual profits that remains after the establishment or maintenance of reserves and the payment of a dividend to our preference shareholders is at the disposal of our shareholders' meeting. No distribution may be made to our shareholders when the equity after such distribution is or becomes inferior to the fully-paid share capital, increased by the legal reserves. Our preference shares are cumulative by nature, which means that if in a financial year the dividend or the preference shares cannot be (fully) paid, the deficit must first be paid in the following financial year(s).

Our Supervisory Board independently as well as our shareholders' meeting, upon the proposal of our Supervisory Board, may each declare distributions out of our share premium reserve and other reserves available for shareholder distributions under Dutch law. Pursuant to a resolution of our Supervisory Board, distributions adopted by the shareholders' meeting may be fully or partially made in the form of our new shares to be issued. Our Supervisory Board may, subject to certain statutory provisions, make one or more interim distributions in respect of any year before the accounts for such year have been adopted at a shareholders' meeting. Rights to cash dividends and distributions that have not been collected within five years after the date on which they became due and payable shall revert to us.

For the history of dividends paid by us to our shareholders in the past five years, see Note 18 to our Consolidated Financial Statements.

### *Notice Convening the Shareholders' Meeting (Articles 25, 26, 27, 28 and 29)*

Our ordinary shareholders' meetings are held at least annually, within six months after the close of each financial year, in The Netherlands. Extraordinary shareholders' meetings may be held as often as our Supervisory Board deems necessary, and must be held upon the written request of registered shareholders or other persons entitled to attend shareholders' meetings of at least 10% of the total issued share capital to our Managing Board or our Supervisory Board specifying in detail the business to be dealt with. Such written requests may not be submitted electronically.

The notice convening the shareholders' meeting shall be given in such manner as shall be authorized or required by law with due observance of the statutory notice period, which is currently 42 days prior to the meeting.

One or more shareholders or other persons entitled to attend shareholders' meetings representing at least one-tenth of our issued share capital may, provided that the request was made at least five days prior to the date of convocation of the meeting, request proposals to be included on the agenda. Furthermore, a request that a proposal be included on the agenda can be made in writing to our Managing Board within sixty days of a meeting by persons who are entitled to attend our shareholders' meetings who, solely or jointly, represent at least 1% of our issued share capital or a market value of at least €50 million. The aforementioned requests may not be submitted electronically and must comply with conditions stipulated by our Managing Board, subject to the approval of our Supervisory Board, which shall be posted on our website. Pursuant to Dutch law a shareholder requesting discussion of an agenda item must disclose to us its entire beneficial interest (long and short position) and we are required to disclose this information on our website.

We are exempt from the proxy solicitation rules under the United States Securities Exchange Act of 1934. Euroclear France will provide notice of shareholders' meetings to, and compile voting instructions from, holders of shares held directly or indirectly through Euroclear France. The Depository Trust Company ("DTC") will provide notice of shareholders' meetings to holders of shares held directly or indirectly through DTC and the New York Transfer Agent and Registrar will compile voting instructions. In order for holders of shares held directly or indirectly through Euroclear France to attend shareholders' meetings in person, such holders must withdraw their shares from Euroclear France and have such shares registered directly in their name or in the name of their nominee. In order for holders of shares held directly or indirectly through DTC to attend shareholders' meetings of shareholders in person, such holders need not withdraw such shares from DTC but must follow rules and procedures established by the New York Transfer Agent and Registrar.

*Attendance at Shareholders' Meetings and Voting Rights (Articles 30, 31, 32, 33 and 34)*

Each share is entitled to one vote.

All shareholders and other persons entitled to attend shareholders' meetings may attend in person or be represented by a person holding a written proxy. Shareholders and other persons entitled to vote, may do so pursuant to our Articles of Association. Subject to the approval of our Supervisory Board, our Managing Board may resolve to facilitate the use of electronic means of communication in relation to the participation and voting in shareholders' meetings. Dutch law prescribes a fixed registration date of 28 days prior to the shareholders' meeting, which means that shareholders and other persons entitled to attend shareholders' meetings are those persons who have such rights at the 28th day prior to the shareholders' meeting and, as such, are registered in a register designated by our Managing Board, regardless of who is a shareholder or otherwise a person entitled to attend shareholders' meetings at the time of the meeting if a registration date would not be applicable. In the notice convening the shareholders' meeting, the time of registration must be mentioned as well as the manner in which shareholders and other persons entitled to attend shareholders' meetings can register themselves and the manner in which they can exercise their rights.

All matters regarding admittance to the shareholders' meeting, the exercise of voting rights and the result of voting, as well as any other matters regarding the business of the shareholders' meeting, shall be decided upon by the chairman of that meeting, in accordance with the requirements of Section 2:13 of the Dutch Civil Code.

Our Articles of Association allow for separate meetings for holders of common shares and for holders of preference shares. At a meeting of holders of preference shares at which the entire issued capital of shares of such class is represented, valid resolutions may be adopted even if the requirements in respect of the place of the meeting and the giving of notice have not been observed, provided that such resolutions are adopted by unanimous vote. Also, valid resolutions of preference shareholder meetings may be adopted outside a meeting if all persons entitled to vote on our preference shares indicate in writing that they vote in favor of the proposed resolution, provided that no depositary receipts for preference shares have been issued with our cooperation.

*Authority of our Shareholders' Meeting (Articles 12, 16, 19, 25, 28, 32 and 41)*

Our AGM may decide upon (i) the discharge of the members of our Managing Board for their management during the past financial year and the discharge of the members of our Supervisory Board for their supervision during the past financial year; (ii) the adoption of our statutory annual accounts and the distribution of dividends; (iii) the appointment of the members of our Supervisory Board and our Managing Board; and (iv) any other resolutions listed on the agenda.

Furthermore, our shareholders' meeting has to approve resolutions of our Managing Board regarding a significant change in the identity or nature of us or our enterprise, including in any event (i) transferring our enterprise or practically our entire enterprise to a third-party, (ii) entering into or canceling any long-term cooperation between us or a subsidiary of us and any other legal person or company or as a fully liable general partner of a limited partnership or a general partnership, provided that such cooperation or the cancellation thereof is of essential importance to us, and (iii) us or a subsidiary of us acquiring or disposing of a participating interest in the capital of a company with a value of at least one-third of our total assets according to our consolidated balance sheets and notes thereto in our most recently adopted annual accounts.

Our Articles of Association may only be amended (and our liquidation can only be decided on) if amendments are proposed by our Supervisory Board and approved by a simple majority of the votes cast at a shareholders' meeting at which at least 15% of the issued and outstanding share capital is present or represented. The complete proposal for the amendment (or liquidation) must be made available for inspection by the shareholders and the other persons entitled to attend shareholders' meetings at our offices as from the day of the notice convening such meeting until the end of the meeting. Any amendment of our Articles of Association that negatively affects the rights of the holders of a certain class of shares requires the prior approval of the meeting of holders of such class of shares.

*Quorum and Majority (Articles 4, 13 and 32)*

Unless otherwise required by our Articles of Association or Dutch law, resolutions of shareholders' meetings require the approval of a majority of the votes cast at a meeting at which at least 15% of the issued and outstanding share capital is present or represented, subject to the provisions explained below. We may not vote our common shares held in treasury. Blank and invalid votes shall not be counted.

A quorum of shareholders, present or represented, holding at least half of our issued share capital, is required to dismiss a member of our Managing Board, unless the dismissal is proposed by our Supervisory Board. In the event of the lack of a quorum, a second shareholders' meeting must be held within four weeks, with no applicable quorum requirement. Any decision or authorization by the shareholders' meeting which has or could have the effect of excluding or limiting preferential subscription rights must be taken by a majority of at least two-thirds of the votes cast, if at the shareholders' meeting less than 50% of the issued and outstanding share capital is present or represented. Otherwise such a resolution can be taken by a simple majority at a meeting at which at least 15% of the issued and outstanding share capital is represented.

*Disclosure of holdings and capital interest under Dutch Law*

Holders of our shares (including certain comparable instruments, such as instruments with a value (partly) dependent on shares or distributions on shares, or contracts creating an economic position similar to shares) or voting rights (including potential interests, such as via options or convertible bonds) may have disclosure obligations under Dutch law. Any person or entity whose direct or indirect interest in our share capital or voting rights (including potential interest) reaches, exceeds or falls below a certain threshold must make a disclosure to the AFM immediately. The threshold percentages are 3%, 5%, 10%, 15%, 20%, 25%, 30%, 40%, 50%, 60%, 75% and 95%. If a person's direct or indirect interest in the share capital or voting rights passively reaches, exceeds or falls below the abovementioned thresholds (e.g. as a result of a change in the capital of the company), the person in question must give notice to the AFM no later than the fourth trading day after the AFM has published the change in the share capital and/or voting rights in the public register. In addition, a notification requirement applies in respect of shares with special statutory rights (e.g. priority shares), regardless of the abovementioned percentages.

Furthermore, each person who is or ought to be aware that the substantial holding he holds in the Company, reaches, exceeds or falls below any of the abovementioned thresholds vis-à-vis his most recent notification to the AFM, which change relates to the composition of the notification as a result of certain acts (e.g. (i) the exchange of certain financial instruments for shares or depositary receipts for shares, (ii) the exchange of shares for depositary receipts for shares, or (iii) as a result of the exercise of rights pursuant to a contract for the acquisition of voting rights) must give notice to the AFM no later than the fourth trading day after he became or ought to be aware of this change.

For the purpose of calculating the percentage of capital interest or voting rights, among others, the following interests must be taken into account: (i) those directly held by him; (ii) those held by his controlled undertakings for purposes of the Dutch Financial Supervision Act; (iii) shares held by a third-party for such person's account and the votes such third-party may exercise; (iv) the votes held by a third-party if such person has concluded an oral or written voting agreement with such party which provides for a lasting common policy on voting; (v) the votes held by a third-party if such person has concluded an oral or written agreement with such party which provides for a temporary and paid transfer of the votes; and (vi) the votes which a person may exercise as a proxy but in his own discretion. A person who has a 3% or larger interest in the share capital or voting rights and who ceases to be a controlled undertaking must without delay notify the AFM. As of that moment, all notification obligations under the Dutch Financial Supervision Act will become applicable to the former controlled undertaking itself. The management company of a common fund (*beleggingsfonds*) shall be deemed to have the disposal of the shares held by the depositary and the related voting rights. The depositary of a common fund shall be deemed not to have the disposal of shares or voting rights. Furthermore, special rules apply to the attribution of the ordinary shares which are part of the property of a partnership or other community of property. A holder of a pledge or right of usufruct in respect of our shares can also be subject to a notification obligation if such person has, or can acquire, the right to vote on our shares. If a pledgor or usufructuary acquires such voting rights, this may also trigger a notification obligation for the holder of our shares. A person is also deemed to hold shares if he has a financial instrument (i) whose rise in value depends in part on the rise in value of the underlying shares or on dividend or other payments on those shares (in other words, a long position must be held in those shares), and (ii) which does not entitle him to acquire shares in a listed company (i.e., it is a cash-settled financial instrument). In addition, a person who may, by virtue of an option, be obliged to buy shares in a listed company is also equated with a shareholder. Moreover, a person who has entered into a contract (other than a cash-settled financial instrument) that gives him an economic position comparable to that of a shareholder in a listed company is also deemed to hold shares for the purposes of the disclosure obligation.

The holder of a financial instrument representing a short position in our shares is required to notify the AFM if such short position, expressed in a capital percentage, reaches or crosses a threshold percentage. The threshold percentages are the same as referred to above in this section. Short position refers to the gross short position (i.e., a long position held by the holder cannot be offset against the short position). There is also a requirement to notify the AFM of the net short position (i.e., long positions are offset against short positions) if such short position, expressed in a capital percentage, reaches or crosses a threshold percentage; The threshold percentages are 0.2% and each 0.1% above that. Notifications as of 0.5% and each 0.1% above that will be published by the AFM. The notification shall be made no later than 3:30 pm CET on the following trading day.

Under Dutch law, the sole member of our Managing Board and each of the members of our Supervisory Board must without delay notify the AFM of any changes in his interest or potential interest in our share capital or voting rights. Under the European Market Abuse Regulation, the sole member of our Managing Board, the members of the Executive Committee and each of the members of our Supervisory Board, as well as any other person who would have the power to take managerial decisions affecting the future developments and business prospects of the Company having regular access to inside information relating, directly or indirectly, to the Company, must notify the AFM of any transactions conducted for his or her own account relating to the shares or in financial instruments the value of which is also based on the value of the shares. In addition, certain persons who are closely associated with members of the Managing Board, the Executive Committee and Supervisory Board or any of the other persons as described above, are required to notify the AFM of any transactions conducted for their own account relating to the shares or in financial instruments the value of which is also based on the value of the shares.



The AFM publishes all notifications on its public website ([www.afm.nl](http://www.afm.nl)). Non-compliance with the notification obligations under European or Dutch law can lead to imprisonment or criminal fines, or administrative fines or other administrative sanctions. In addition, non-compliance with these notification obligations may lead to civil sanctions, including, without limitation, suspension of the voting rights attaching to our shares held by the offender for a maximum of three years, (suspension and) nullification of a resolution adopted by our shareholders' meeting (if it is likely that such resolution would not have been adopted if the offender had not voted) and a prohibition for the offender to acquire our shares or votes for a period of no more than five years. Shareholders are advised to consult with their own legal advisers to determine whether notification obligations apply to them.

#### *Share Capital (Articles 4, 5 and 6)*

Our shares may not be issued at less than their par value. Our common shares must be fully paid up at the time of their issuance. Our preference shares must be paid up for at least 25% of their par value at the time of their issuance (and the remaining 75% if and when requested by our Managing Board). Our authorized share capital is not restricted by redemption provisions, sinking fund provisions or liability to further capital calls by us. Our Articles of Association allows for the acquisition of own shares and the cancellation of shares.

Type II shares are common shares in the form of an entry in our shareholders register with the issue of a share certificate consisting of a main part without a dividend coupon. In addition to type II shares, type I shares are available. Type I shares are common shares in the form of an entry in our shareholders register without the issue of a share certificate. Type II shares are only available should our Supervisory Board decide to offer them. Our preference shares are in the form of an entry in our shareholders register without issue of a share certificate.

Non-issued authorized share capital, which is different from issued share capital, allows us to proceed with capital increases excluding the preemptive rights, upon our Supervisory Board's decision. Other securities in circulation which give access to our share capital include (i) the options giving the right to subscribe to our shares granted to our employees, including the sole member of our Managing Board and our senior managers; (ii) the options giving the right to subscribe to our shares granted in the past to the members of our Supervisory Board, its secretaries and controllers, as described in "Item 6. Directors, Senior Management and Employees"; (iii) our bonds; and (iv) the option giving the right to subscribe to our preference shares to Stichting Continuïteit ST. See "Item 7. Major Shareholders and Related Party Transactions". We do not have securities not representing our share capital.

Our shareholders' meeting, upon proposal and on the terms and conditions set by our Supervisory Board, has the power to issue shares and rights to subscribe for shares. The shareholders' meeting may authorize our Supervisory Board, for a period of no more than five years, to issue shares and rights to subscribe for shares and to determine the terms and conditions of such issuances.

Each holder of common shares has a pro rata preemptive right to subscribe to an offering of common shares issued for cash in proportion to the number of common shares which he owns. There is no preemptive right with respect to an offering of shares for non-cash consideration, with respect to an offering of shares to our employees or to the employees of one of our subsidiaries, or with respect to preference shares.

Our shareholders' meeting, upon proposal by our Supervisory Board, has the power to limit or exclude preemptive rights in connection with new issuances of shares. Such a resolution of the shareholders' meeting must be taken with a majority of at least two-thirds of the votes cast if at such shareholders' meeting less than 50% of the issued and outstanding share capital is present or represented. Otherwise such a resolution can be taken by a simple majority of the votes cast at a shareholders' meeting at which at least 15% of our issued and outstanding share capital is present or represented. Our shareholders' meeting may authorize our Supervisory Board, for a period of no more than five years, to limit or exclude preemptive rights.

#### *Acquisition of Shares in Our Own Share Capital (Article 5)*

We may acquire our own shares, subject to certain provisions of Dutch law and of our Articles of Association. Share acquisitions may be effected by our Managing Board, subject to the approval of our Supervisory Board, only if the shareholders' meeting has authorized our Managing Board to effect such repurchases, which authorization may apply for a maximum period of 18 months. We may not vote shares we hold in treasury. Our purchases of our own shares are subject to acquisition price conditions as authorized by our shareholders' meeting. Our Articles of Association provide that we shall be able to acquire shares in our own share capital in order to transfer these shares under employee stock option or stock purchase plans, without an authorization of our shareholders' meeting.

Upon the proposal of our Supervisory Board, our shareholders' meeting may, in accordance with the legal provisions, reduce our issued capital by canceling the shares that we hold in treasury, by reducing the par value of the shares or by canceling our preference shares.

*Liquidation Rights (Articles 42 and 43)*

In the event of our dissolution and liquidation, after payment of all debts and liquidation expenses, the holders of preference shares if issued, would receive the paid up portion of the par value of their preference shares. Any assets then remaining shall be distributed among the registered holders of common shares in proportion to the par value of their shareholdings.

*Limitations on Right to Hold or Vote Shares*

There are currently no limitations imposed by Dutch law or by our Articles of Association on the right of non-resident holders to hold or vote the shares.

**C. Material Contracts**

None.

**D. Exchange Controls**

None.

**E. Taxation**

**Dutch Taxation**

*This section only outlines certain material Dutch tax consequences of the acquisition, holding and disposal of our common shares. This section does not purport to describe all possible tax considerations or consequences that may be relevant to a holder or prospective holder of our common shares and does not purport to deal with the tax consequences applicable to all categories of investors, some of which (such as trusts or similar arrangements) may be subject to special rules. In view of its general nature, this section should be treated with corresponding caution.*

Tax matters are complex, and the tax consequences of the acquisition, holding and disposal to a particular holder of common shares will depend in part on such holder's circumstances. Accordingly, you are urged to consult your own tax advisor for a full understanding of the tax consequences of the acquisition, holding and disposal to you, including the applicability and effect of Dutch tax laws.

Where in this section English terms and expressions are used to refer to Dutch concepts, the meaning to be attributed to such terms and expressions shall be the meaning to be attributed to the equivalent Dutch concepts under Dutch tax law. Where in this section the terms "The Netherlands" and "Dutch" are used, these refer solely to the European part of the Kingdom of The Netherlands.

This section assumes that we are organized, and that our business will be conducted, in the manner outlined in this Form 20-F. A change to such organizational structure or to the manner in which we conduct our business may invalidate the contents of this section, which will not be updated to reflect any such change.

Please note that this section does not describe the Dutch tax consequences for a holder of our common shares:

- (i) who may be deemed an owner of our common shares for Dutch tax purposes pursuant to specific statutory attribution rules in Dutch tax law;
- (ii) who has a substantial interest (*aanmerkelijk belang*) or deemed substantial interest (*fictief aanmerkelijk belang*) in us under the Dutch Income Tax Act 2001 (*Wet inkomstenbelasting 2001*). Generally, a holder is considered to hold a substantial interest in us if such holder alone or, in the case of an individual, together with such holder's partner for Dutch income tax purposes, or any relatives by blood or marriage in the direct line (including foster-children), directly or indirectly, holds (i) an interest of 5% or more of the total issued and outstanding capital of us or of 5% or more

of the issued and outstanding capital of a certain class of shares; or (ii) rights to acquire, directly or indirectly, such interest; or (iii) certain profit sharing rights that relate to 5% or more of our annual profits or to 5% or more of our liquidation proceeds. A deemed substantial interest may arise if a substantial interest (or part thereof) in has been disposed of, or is deemed to have been disposed of, on a non-recognition basis;

- (iii) if the common shares held by such holder qualify or qualified as a participation (*deelname*) for purposes of the Dutch Corporate Income Tax Act 1969 (*Wet op de vennootschapsbelasting 1969*). Generally, a holder's shareholding of, or right to acquire, 5% or more in our nominal paid-up share capital qualifies as a participation. A holder may also have a participation if (a) such holder does not have a shareholding of 5% or more but a related entity (statutorily defined term) has a participation or (b) we are a related entity (statutorily defined term);
- (iv) which is or who is entitled to the dividend withholding tax exemption (*inhoudingsvrijstelling*) with respect to any profits derived from the common shares (as defined in Article 4 of the Dutch Dividend Withholding Tax Act 1965 (*Wet op de dividendbelasting*)). Generally, a holder of common shares may be entitled or required to apply, subject to certain other requirements, the dividend withholding tax exemption if it is an entity and holds an interest of 5% or more in our nominal paid-up share capital;
- (v) pension funds, investment institutions (*fiscale beleggingsinstellingen*) and tax exempt investment institutions (*vrijgestelde beleggingsinstellingen*) (each as defined in the Dutch Corporate Income Tax Act 1969) and other entities that are, in whole or in part, not subject to or exempt from Dutch corporate income tax, entities that have a function comparable to an investment institution or a tax exempt investment institution, as well as entities that are exempt from corporate income tax in their country of residence, such country of residence being another state of the European Union, Norway, Liechtenstein, Iceland or any other state with which The Netherlands has agreed to exchange information in line with international standards; and
- (vi) if such holder is an individual for whom the common shares or any benefit derived from the common shares is a remuneration or deemed to be a remuneration for (employment) activities performed by such holder or certain individuals related to such holder (as defined in the Dutch Income Tax Act 2001).

### **Dividend withholding tax**

Dividends distributed by us are generally subject to Dutch dividend withholding tax at a rate of 15%. Generally, we are responsible for the withholding of such dividend withholding tax at source; the Dutch dividend withholding tax is for the account of the holder of common shares.

The expression “dividends distributed” includes, but is not limited to:

- distributions in cash or in kind, deemed and constructive distributions and repayments of paid-in capital not recognized for Dutch dividend withholding tax purposes;
- liquidation proceeds, proceeds from the redemption of common shares or proceeds from the repurchase of common shares (other than as temporary portfolio investment; *tijdelijke belegging*) by us or one of our subsidiaries or other affiliated entities, in each case to the extent such proceeds exceed the average paid-in capital of those common shares as recognized for Dutch dividend withholding tax purposes;
- an amount equal to the par value of the common shares issued or an increase of the par value of the common shares, to the extent that no related contribution, recognized for Dutch dividend withholding tax purposes, has been made or will be made; and
- partial repayment of the paid-in capital, recognized for Dutch dividend withholding tax purposes, if and to the extent that we have “net profits” (*zuivere winst*), unless (i) our general meeting of shareholders has resolved in advance to make such repayment and (ii) the par value of the common shares concerned has been reduced by an equal amount by way of an amendment to our articles of association. The term “net profits” includes anticipated profits that have yet to be realized.

Corporate legal entities that are resident or deemed to be resident of The Netherlands for Dutch corporate income tax purposes (“Dutch Resident Entities”) generally are entitled to an exemption from, or a credit for, any Dutch dividend withholding tax against their Dutch (corporate) income tax liability. The credit in any given year

is, however, limited to the amount of Dutch corporate income tax payable in respect of the relevant year with an indefinite carry forward of any excess amount. Individuals who are resident or deemed to be resident of The Netherlands for Dutch personal income tax purposes (“Dutch Resident Individuals”) generally are entitled to a credit for any Dutch dividend withholding tax against their Dutch personal income tax liability and to a refund of any residual Dutch dividend withholding tax. The above generally also applies to holders of common shares that are neither resident nor deemed to be resident of The Netherlands (“Non-Resident Holders”) if the common shares are attributable to a Dutch permanent establishment of such Non-Resident Holder.

A holder of common shares resident of a country other than The Netherlands may, depending on such holder’s specific circumstances, be entitled to exemptions from, reduction of, or full or partial refund of, Dutch dividend withholding tax under Dutch domestic tax law, EU law, or treaties for the avoidance of double taxation in effect between The Netherlands and such other country.

#### *Dividend stripping*

According to “Dutch domestic anti-dividend stripping” rules, no credit against Dutch tax, exemption from, reduction, or refund of Dutch dividend withholding tax will be granted if the recipient of the dividends we paid is not considered the beneficial owner (*uiteindelijk gerechtigde*; as described in the Dutch Dividend Withholding Tax Act 1965) of those dividends. This legislation generally targets situations in which a shareholder retains its economic interest in shares but reduces the withholding tax costs on dividends by a transaction with another party. It is not required for these rules to apply that the recipient of the dividends is aware that a dividend stripping transaction took place. The Dutch State Secretary of Finance takes the position that the definition of beneficial ownership introduced by this legislation will also be applied in the context of a double taxation convention.

#### *Conditional withholding tax on dividends (as of January 1, 2024)*

As of January 1, 2024, a Dutch conditional withholding tax will be imposed on dividends distributed by us to entities related (*gelieerd*) to us (within the meaning of the Dutch Withholding Tax Act 2021; *Wet bronbelasting 2021*), if such related entity:

- (i) is considered to be resident (*gevestigd*) in a jurisdiction that is listed in the yearly updated Dutch Regulation on low-taxing states and non-cooperative jurisdictions for tax purposes (*Regeling laagbelastende staten en niet-coöperatieve rechtsgebieden voor belastingdoeleinden*) (a “Listed Jurisdiction”); or
- (ii) has a permanent establishment located in a Listed Jurisdiction to which the common shares are attributable; or
- (iii) holds the common shares with the main purpose or one of the main purposes of avoiding taxation for another person or entity and there is an artificial arrangement or transaction or a series of artificial arrangements or transactions; or
- (iv) is not considered to be the beneficial owner of the common shares in its jurisdiction of residence because such jurisdiction treats another entity as the beneficial owner of the common shares (a hybrid mismatch); or
- (v) is not resident in any jurisdiction (also a hybrid mismatch); or
- (vi) is a reverse hybrid (within the meaning of Article 2(12) of the Dutch Corporate Income Tax Act 1969), if and to the extent (x) there is a participant in the reverse hybrid which is related (*gelieerd*) to the reverse hybrid, (y) the jurisdiction of residence of such participant treats the reverse hybrid as transparent for tax purposes and (z) such participant would have been subject to the Dutch conditional withholding tax in respect of dividends distributed by us without the interposition of the reverse hybrid,

all within the meaning of the Dutch Withholding Tax Act 2021.

The Dutch conditional withholding tax on dividends will be imposed at the highest Dutch corporate income tax rate in effect at the time of the distribution (2023: 25.8%). The Dutch conditional withholding tax on dividends will be reduced, but not below zero, by any regular Dutch dividend withholding tax withheld in respect of the same dividend distribution. As such, based on the currently applicable rates, the overall effective tax rate of withholding the regular Dutch dividend withholding tax (as described above) and the Dutch conditional withholding tax on dividends will not exceed the highest corporate income tax rate in effect at the time of the distribution (2023: 25.8%).

## **Taxes on income and capital gains**

### *Dutch Resident Entities*

Generally, if the holder of common shares is a Dutch Resident Entity, any income derived or deemed to be derived from the common shares or any capital gains realized on the disposal or deemed disposal of the common shares is subject to Dutch corporate income tax at a rate of 19% with respect to taxable profits up to €200,000 and 25.8% with respect to taxable profits in excess of that amount (rates and brackets for 2023).

### *Dutch Resident Individuals*

If the holder of common shares is a Dutch Resident Individual, any income derived or deemed to be derived from the common shares or any capital gains realized on the disposal or deemed disposal of the common shares is subject to Dutch personal income tax at the progressive rates (with a maximum of 49.5% in 2023), if:

- (i) the common shares are attributable to an enterprise from which the holder of common shares derives a share of the profit, whether as an entrepreneur (*ondernemer*) or as a person who has a co-entitlement to the net worth (*medegerechtigd tot het vermogen*) of such enterprise without being a shareholder (as defined in the Dutch Income Tax Act 2001); or
- (ii) the holder of common shares is considered to perform activities with respect to the common shares that go beyond ordinary asset management (*normaal, actief vermogensbeheer*) or otherwise derives benefits from the common shares that are taxable as benefits from miscellaneous activities (*resultaat uit overige werkzaamheden*).

*Taxation of savings and investments.* If the above-mentioned conditions (i) and (ii) do not apply to the Dutch Resident Individual, the common shares will be subject to an annual Dutch income tax under the regime for savings and investments (*inkomen uit sparen en beleggen*). Taxation only occurs insofar the Dutch Resident Individual's net investment assets for the year exceed a statutory threshold (*heffingvrij vermogen*). The net investment assets for the year are the fair market value of the investment assets less the fair market value of the liabilities on January 1 of the relevant calendar year (reference date; *peildatum*). The common shares are included as investment assets. The taxable benefit for the year (*voordeel uit sparen en beleggen*) is taxed at a flat rate of 32% (rate for 2023). Actual income or capital gains realized in respect of the common shares are as such not subject to Dutch income tax.

The taxable benefit for the year is calculated as follows:

- (i) The Dutch Resident Individual's assets and liabilities taxed under this regime, including the common shares, are allocated over the following three categories: (a) bank savings, (b) other investments, including the common shares, and (c) liabilities.
- (ii) The return (*rendement*) in respect of these assets and liabilities is calculated as follows (the return is at a minimum nihil):
  - a) a deemed return on the fair market value of the actual amount of bank savings and cash on January 1 of the relevant calendar year; plus
  - b) a deemed return on the fair market value of the actual amount of other investments, including the common shares, on January 1 of the relevant calendar year; minus
  - c) a deemed return on the sum of the fair market value of the actual amount of liabilities on January 1 of the relevant calendar year less the statutory threshold for liabilities (*drempel*).
- (iii) The return percentage (%) (*rendementspercentage*) is calculated as follows:
  - a) by dividing the return calculated under (ii) above by the net investment assets for the year of the Dutch Resident Individual; multiplied by
  - b) 100.
- (iv) The taxable base (*grondslag sparen en beleggen*) is calculated as follows:
  - a) the net investment assets for the year of the Dutch Resident Individual; minus
  - b) the applicable statutory threshold.

- (v) The taxable benefit for the year is equal to the taxable base calculated under (iv) above multiplied by the return percentage calculated under (iii) above.

At the date hereof, the deemed returns for the different investment categories mentioned under (ii) above have been temporarily set at: (a) 0.01%, (b) 5.69% and (c) 2.46%. The definitive percentages for the year 2023 will be published in the first months of 2024 and will have retroactive effect to January 1, 2023. Transactions in the three-month period before and after January 1 of the relevant calendar year implemented to arbitrate between the deemed return percentages applicable to bank savings, other investments and liabilities will for this purpose be ignored if the holder of common shares cannot sufficiently demonstrate that such transactions are implemented for other than tax reasons.

#### *Non-Resident Holders*

A holder of common shares that is neither a Dutch Resident Entity nor a Dutch Resident Individual will not be subject to Dutch income tax in respect of income derived or deemed to be derived from the common shares or in respect of capital gains realized on the disposal or deemed disposal of the common shares, provided that:

- (i) such holder does not have an interest in an enterprise or deemed enterprise (as defined in the Dutch Income Tax Act 2001 and the Dutch Corporate Income Tax Act 1969, as applicable) which, in whole or in part, is either effectively managed in The Netherlands or carried on through a permanent establishment, a deemed permanent establishment or a permanent representative in The Netherlands and to which enterprise or part of an enterprise the common shares are attributable; and
- (ii) in the event the holder is an individual, such holder does not carry out any activities in The Netherlands with respect to the common shares that go beyond ordinary asset management and does not otherwise derive benefits from the common shares that are taxable as benefits from miscellaneous activities in The Netherlands.

If you are neither a Dutch Resident Individual nor a Dutch Resident Entity, you will for Dutch tax purposes not carry on or be deemed to carry on an enterprise, in whole or in part, through a permanent establishment or a permanent representative in The Netherlands by reason only of acquisition or holding of the common shares.

#### **Gift and inheritance taxes**

##### *Residents of The Netherlands*

Gift or inheritance taxes will arise in The Netherlands with respect to a transfer of common shares by way of a gift by, or on the death of, a holder of common shares who is resident or deemed resident of The Netherlands at the time of the gift or such holder's death.

##### *Non-Residents*

No gift or inheritance taxes will arise in The Netherlands with respect to a transfer of common shares by way of a gift by, or on the death of, a holder of common shares who is neither resident nor deemed to be resident of The Netherlands, unless:

- (i) in the case of a gift of a common share by an individual who at the date of the gift was neither resident nor deemed to be resident of The Netherlands, such individual dies within 180 days after the date of the gift, while being resident or deemed to be resident of The Netherlands; or
- (ii) in the case of a gift of a common shares is made under a condition precedent, the holder of common shares is resident or is deemed to be resident of The Netherlands at the time the condition is fulfilled; or
- (iii) the transfer is otherwise construed as a gift or inheritance made by, or on behalf of, a person who, at the time of the gift or death, is or is deemed to be resident of The Netherlands.

For purposes of Dutch gift and inheritance taxes, amongst others, a person that holds the Dutch nationality will be deemed to be resident of The Netherlands if such person has been a resident of The Netherlands at any time during the ten years preceding the date of the gift or such person's death. Additionally, for purposes of Dutch gift tax, amongst others, a person not holding the Dutch nationality will be deemed to be resident of The Netherlands if such person has been a resident of The Netherlands at any

time during the twelve months preceding the date of the gift. Applicable tax treaties may override deemed residency.

### **Value added tax (VAT)**

No Dutch VAT will be payable by a holder of common shares in respect of any payment in consideration for the holding or disposal of the common shares.

### **Stamp Duties**

No Dutch documentation taxes (commonly referred to as stamp duties) will be payable by a holder of common shares in respect of any payment in consideration for the holding or disposal of the common shares.

### **United States Federal Income Taxation**

The following discussion is a general summary of the material U.S. federal income tax consequences to a U.S. holder (as defined below) of the ownership and disposition of our common shares. You are a U.S. holder only if you are a beneficial owner of common shares:

- that is, for U.S. federal income tax purposes, (a) a citizen or individual resident of the United States, (b) a U.S. domestic corporation or a U.S. domestic entity taxable as a corporation, (c) an estate, the income of which is subject to U.S. federal income taxation regardless of its source, or (d) a trust, if a court within the United States can exercise primary supervision over the administration of the trust and one or more U.S. persons are authorized to control all substantial decisions of the trust;
- that owns, directly, indirectly or by attribution, less than 10% of our voting power or outstanding share capital;
- that holds the common shares as capital assets;
- whose functional currency for U.S. federal income tax purposes is the U.S. dollar;
- that is a resident of the United States and not also a resident of The Netherlands for purposes of the United States – The Netherlands Income Tax Treaty (the “U.S./NL Income Tax Treaty”);
- that is entitled, under the “limitation on benefits” provisions contained in the U.S./NL Income Tax Treaty, to the benefits of the U.S./NL Income Tax Treaty; and
- that does not have a permanent establishment or fixed base in The Netherlands.

This summary does not discuss all of the tax consequences that may be relevant to you in light of your particular circumstances. Also, it does not address holders that may be subject to special rules including, but not limited to, U.S. expatriates, tax-exempt organizations, persons subject to the alternative minimum taxes, banks, securities broker-dealers, financial institutions, regulated investment companies, insurance companies, traders in securities who elect to apply a mark-to-market method of accounting, persons holding our common shares as part of a straddle, hedging or conversion transaction, or persons who acquired common shares pursuant to the exercise of employee stock options or otherwise as compensation. Because this is a general summary, you are advised to consult your own tax advisor with respect to the U.S. federal, state, local and applicable foreign tax consequences of the ownership and disposition of our common shares. In addition, you are advised to consult your own tax advisor concerning whether you are entitled to benefits under the U.S./NL Income Tax Treaty.

If a partnership (including for this purpose any entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds common shares, the tax treatment of a partner generally will depend upon the status of the partner and the activities of the partnership. If you are a partner in a partnership that holds common shares, you are urged to consult your own tax advisor regarding the specific tax consequences of the ownership and the disposition of common shares.

This summary is based on the Internal Revenue Code of 1986, as amended, the U.S./NL Income Tax Treaty, judicial decisions, administrative pronouncements and existing, temporary and proposed Treasury regulations as of the date of this Form 20-F, all of which are subject to change or changes in interpretation, possibly with retroactive effect.



## ***Dividends***

In general, you must include the gross amount of distributions paid (including the amount of any Dutch taxes withheld from those distributions) to you by us with respect to the common shares in your gross income as foreign-source taxable dividend income. The amount of any distribution paid in foreign currency (including the amount of any Dutch withholding tax thereon) will be equal to the U.S. dollar value of the foreign currency on the date of actual or constructive receipt by you regardless of whether the payment is in fact converted into U.S. dollars at that time. Gain or loss, if any, realized on a subsequent sale or other disposition of such foreign currency generally will be U.S.-source ordinary income or loss. Special rules govern and specific elections are available to accrual method taxpayers to determine the U.S. dollar amount includible in income in the case of taxes withheld in a foreign currency. Accrual basis taxpayers are urged to consult their own tax advisers regarding the requirements and elections applicable in this regard.

Subject to applicable limitations, Dutch taxes withheld from a distribution paid to you at a rate not exceeding the rate provided in the U.S./NL Income Tax Treaty will be eligible for credit against your U.S. federal income tax liability. As described in “— Taxation — Dutch Taxation Tax” above, under limited circumstances we may be entitled to retain a portion of the Dutch withholding tax that otherwise would be required to be remitted to the taxing authorities in The Netherlands. If we withhold an amount from dividends paid to you that we then are not required to remit to any taxing authority in The Netherlands, the amount in all likelihood would not qualify as a creditable tax for U.S. federal income tax purposes. We will endeavor to provide you with information concerning the extent to which we have applied the reduction described above to dividends paid to you. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. For this purpose, dividends distributed by us with respect to the common shares generally will constitute “passive category income” or in the case of certain U.S. holders, “general category income”. The use of foreign tax credits is subject to complex rules and limitations. In lieu of a credit, a U.S. holder who itemizes deductions may elect to deduct all of such holder’s foreign taxes in the taxable year. A deduction does not reduce tax on a dollar-for-dollar basis like a credit, but the deduction for foreign taxes is not subject to the same limitations applicable to foreign tax credits. You should consult your own tax advisor to determine whether and to what extent a credit would be available to you.

Certain non-corporate U.S. holders (including individuals) are eligible for reduced rates of U.S. federal income tax in respect of “qualified dividend income”. For this purpose, “qualified dividend income” generally includes dividends paid by a non-U.S. corporation if, among other things, the U.S. holders meet certain minimum holding period and other requirements and the non-U.S. corporation satisfies certain requirements, including either that (i) the shares of the non-U.S. corporation are readily tradable on an established securities market in the United States, or (ii) the non-U.S. corporation is eligible for the benefits of a comprehensive income tax treaty with the United States (such as the U.S./NL Income Tax Treaty) which provides for the exchange of information. We currently believe that dividends paid by us with respect to our common shares should constitute “qualified dividend income” for U.S. federal income tax purposes; however, this is a factual matter and subject to change. You are urged to consult your own tax advisor regarding the availability to you of a reduced dividend tax rate in light of your own particular situation. A dividends-received deduction will not be allowed with respect to dividends paid by us to corporate U.S. holders.

## ***Sale, Exchange or Other Disposition of Common Shares***

Upon a sale, exchange or other disposition of common shares, you generally will recognize capital gain or loss in an amount equal to the difference between the amount realized and your tax basis in the common shares, as determined in U.S. dollars. This gain or loss generally will be U.S.-source gain or loss, and will be treated as long-term capital gain or loss if you have held the common shares for more than one year. If you are an individual, capital gains generally will be subject to U.S. federal income tax at preferential rates if specified minimum holding periods are met. The deductibility of capital losses is subject to significant limitations.

## ***Net Investment Income Tax***

Certain U.S. holders that are individuals, estates or trusts and whose income exceeds certain thresholds generally will be subject to a 3.8% tax on “net investment income”, including, among other things, dividends on, and gains from the sale or other taxable disposition of, our common shares, subject to certain limitations and exceptions. You should consult your own tax advisor regarding the effect, if any, of such tax on your ownership and disposition of our common shares.

### ***Passive Foreign Investment Company Status***

We believe that we should not be classified as a passive foreign investment company (a “PFIC”) for U.S. federal income tax purposes for the year ended December 31, 2022 and we do not expect to become a PFIC in the foreseeable future. This conclusion is a factual determination that must be made annually at the close of each taxable year and therefore we can provide no assurance that we will not be a PFIC in our current or any future taxable year. If we were to be characterized as a PFIC for any taxable year, the tax on certain distributions on our common shares and on any gains realized upon the disposition of common shares may be materially less favorable than as described herein. In addition, if we were a PFIC in a taxable year in which we were to pay dividends or the prior taxable year, such dividends would not be “qualified dividend income” (as described above) and would be taxed at the higher rates applicable to other items of ordinary income. You should consult your own tax advisor regarding the application of the PFIC rules to your ownership of our common shares.

### ***U.S. Information Reporting and Backup Withholding***

Dividend payments with respect to our common shares and proceeds from the sale, exchange, retirement or other disposition of our common shares may be subject to information reporting to the U.S. Internal Revenue Service (the “IRS”) and possible U.S. backup withholding. Backup withholding will not apply to you, however, if you furnish a correct taxpayer identification number and make any other required certification, or if you are otherwise exempt from backup withholding. U.S. persons required to establish their exempt status generally must provide certification on IRS Form W-9. Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against your U.S. federal income tax liability, and you may obtain a refund of any excess amounts withheld under the backup withholding rules by timely filing the appropriate claim for refund with the IRS and furnishing any required information.

In addition, U.S. holders should be aware of annual reporting requirements with respect to the holding of certain foreign financial assets, including our common shares that are not held in an account maintained by certain types of financial institutions, if the aggregate value of all of such assets exceeds \$50,000 (or \$100,000 for married couples filing a joint return). You should consult your own tax advisor regarding the application of the information reporting and backup withholding rules to our common shares and the application of the annual reporting requirements to your particular situation.

#### **F. Dividends and Paying Agents**

Not applicable.

#### **G. Statement by Experts**

Not applicable.

#### **H. Documents on Display**

Any statement in this Form 20-F about any of our contracts or other documents is not necessarily complete. If the contract or document is filed as an exhibit to this Form 20-F the contract or document is deemed to modify the description contained in this Form 20-F. You must review the exhibits themselves for a complete description of the contract or document.

Our Articles of Association, the minutes of our AGM, reports of the auditors and other corporate documentation may be consulted by the shareholders and any other individual authorized to attend the meetings at our head office at Schiphol Airport Amsterdam, The Netherlands, at the registered offices of the Managing Board in Geneva, Switzerland and at Crédit Agricole-Indosuez, 9, Quai du Président Paul-Doumer, 92400 Courbevoie, France.

You may review a copy of our filings with the U.S. Securities and Exchange Commission (the “SEC”), including exhibits and schedules filed with it, at the SEC’s public reference facilities in Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information. In addition, the SEC maintains an internet site ([www.sec.gov](http://www.sec.gov)) that contains reports and other information regarding issuers that file electronically with the SEC. These SEC filings are also available to the public from commercial document retrieval services.

WE ARE REQUIRED TO FILE REPORTS AND OTHER INFORMATION WITH THE SEC UNDER THE SECURITIES EXCHANGE ACT OF 1934. REPORTS AND OTHER INFORMATION FILED BY U.S. WITH THE SEC MAY BE INSPECTED AND COPIED AT THE SEC’S PUBLIC REFERENCE FACILITIES DESCRIBED ABOVE OR THROUGH THE INTERNET ([WWW.SEC.GOV](http://WWW.SEC.GOV)). AS A FOREIGN PRIVATE ISSUER, WE ARE EXEMPT FROM THE RULES UNDER THE EXCHANGE ACT PRESCRIBING THE FURNISHING AND CONTENT OF PROXY STATEMENTS AND OUR OFFICERS, DIRECTORS AND MAJOR SHAREHOLDERS ARE EXEMPT FROM THE REPORTING AND SHORT-SWING PROFIT RECOVERY PROVISIONS CONTAINED IN SECTION 16 OF THE EXCHANGE ACT. UNDER THE EXCHANGE ACT, AS A FOREIGN PRIVATE ISSUER, WE ARE NOT REQUIRED TO PUBLISH FINANCIAL STATEMENTS AS FREQUENTLY OR AS PROMPTLY AS UNITED STATES COMPANIES.

**I. Subsidiary Information**

Not applicable.

**Item 11. Quantitative and Qualitative Disclosures About Market Risk**

We are exposed to changes in financial market conditions in the normal course of business due to our operations in different foreign currencies and our ongoing investing and financing activities. Market risk is the uncertainty to which future earnings or asset/liability values are exposed due to operating cash flows denominated in foreign currencies and various financial instruments used in the normal course of operations. The major financial risks to which we are exposed are the foreign exchange risks related to the fluctuations of the U.S. dollar exchange rate compared to the Euro and the other major currencies in which costs are incurred, the variation of the interest rates and the risks associated to the investments of our available cash. We have established policies, procedures and internal processes governing our management of market risks and the use of financial instruments to manage our exposure to such risks.

Our interest income (expense), net, as reported in our consolidated statements of income, is the balance between interest income received from our cash and cash equivalents, short-term deposits and marketable securities and interest expense on our financial liabilities, including bank fees (including fees on committed credit lines or on the sale without recourse of receivables, if any). Our interest income is dependent upon fluctuations in interest rates, mainly in U.S. dollars and Euros, since we invest primarily on a short-term basis; any increase or decrease in the market interest rates would mean an equivalent increase or decrease in our interest income. See “Item 5. Operating and Financial Review and Prospects — Impact of Changes in Interest Rates”.

We place our cash and cash equivalents, or a part of it, with financial institutions with at least a single “A” long-term rating from two of the major rating agencies, meaning at least A3 from Moody’s and A- from S&P or Fitch, or better, invested as short-term deposits and Government debt securities and, as such, we are exposed to the fluctuations in the market interest rates on our placement and our cash, which can have an impact on our consolidated financial statements. We manage the credit risks associated with financial instruments through credit approvals, investment limits and centralized monitoring procedures but do not normally require collateral or other security from the parties to the financial instruments. As of December 31, 2022, the marketable securities have a value of \$679 million. They are classified as available-for-sale and are reported at fair value. This fair value measurement corresponds to a Level 1 fair value hierarchy measurement. The estimated value of these securities could further decrease in the future as a result of credit market deterioration and/or other downgrading.

We do not anticipate any material adverse effect on our financial position, results of operations or cash flows resulting from the use of our instruments in the future. There can be no assurance that these strategies will be effective or that transaction losses can be minimized or forecasted accurately.

The information below summarizes our market risks associated with cash and cash equivalents, short-term deposits, marketable securities and debt obligations as of December 31, 2022. The information below should be read in conjunction with Note 15 and Note 27 to our Consolidated Financial Statements.

The table below presents principal amounts and related weighted-average interest rates by year of maturity for our investment portfolio and debt obligations (in millions of U.S. dollars, except percentages):

	Total	2022	2023	2024	2025	2026	Thereafter	Fair Value at December 31, 2022
<b>Assets:</b>								
Cash and cash equivalents	\$ 3,258							\$ 3,258
of which Cash at bank and on hand	\$ 262							\$ 262
of which Deposits at call with banks	\$ 2,996							\$ 2,996
Short-term deposits	\$ 581							\$ 581
Current marketable securities	\$ 679							\$ 679
Average yield to maturity	3.95%							
<b>Long-term debt(1):</b>	<b>\$ 2,722</b>	<b>\$ 175</b>	<b>\$ 172</b>	<b>\$ 922</b>	<b>\$ 172</b>	<b>\$ 908</b>	<b>\$ 373</b>	<b>\$ 2,783</b>
Average interest rate	0.82%							

(1) Long-term debt is presented at principal amount

	Amounts in millions of U.S. dollars
Long-term debt by currency As of December 31, 2022:	
U.S. dollar	1,500
Euro	1,222
<b>Total in U.S. dollars</b>	<b>2,722</b>
	Amounts in millions of U.S. dollars
Long-term debt by currency As of December 31, 2021:	
U.S. dollar	1,500
Euro	1,152
<b>Total in U.S. dollars</b>	<b>2,652</b>

The following table provides information about our FX forward contracts and FX currency options not designated as a hedge as of December 31, 2022 (in millions of U.S. dollars):

#### FORWARD CONTRACTS AND CURRENCY OPTIONS AS OF DECEMBER 31, 2022

				Notional Amount	Average Rate	Fair Value
Buy	AUD	Sell	USD	1	0.67	—
Buy	EUR	Sell	USD	399	1.06	(2)
Buy	USD	Sell	SEK	2	10.81	—
Buy	USD	Sell	CNY	7	6.69	—
Buy	USD	Sell	PHP	2	55.23	—
Buy	EUR	Sell	MAD	32	11.17	—
Buy	CHF	Sell	USD	47	0.92	—
Buy	HKD	Sell	USD	1	7.79	—
Buy	JPY	Sell	EUR	32	141.64	—
Buy	JPY	Sell	USD	49	133.45	1
Buy	MYR	Sell	USD	29	4.41	—
Buy	SEK	Sell	USD	7	10.31	—
Buy	SGD	Sell	USD	149	1.38	4
Buy	TWD	Sell	USD	17	30.66	—
Buy	CNY	Sell	USD	73	7.02	2
Buy	PHP	Sell	USD	19	56.86	1
Buy	MAD	Sell	USD	5	10.64	—
Buy	INR	Sell	USD	47	82.22	(1)
Buy	KRW	Sell	USD	11	1,353.81	1
Buy	CNH	Sell	USD	1	6.96	—

The following table provides information about our FX forward contracts and FX currency options not designated as a hedge as of December 31, 2021 (in millions of U.S. dollars):

#### FORWARD CONTRACTS AND CURRENCY OPTIONS AS OF DECEMBER 31, 2021

				Notional Amount	Average Rate	Fair Value
Buy	AUD	Sell	USD	1	0.72	—
Buy	EUR	Sell	USD	5	1.13	—
Buy	USD	Sell	SEK	2	8.83	—
Buy	USD	Sell	PHP	1	50.04	—
Buy	EUR	Sell	MAD	13	10.46	—
Buy	CHF	Sell	USD	29	0.91	—
Buy	HKD	Sell	USD	2	7.80	—
Buy	JPY	Sell	EUR	36	129.87	—
Buy	JPY	Sell	USD	29	114.41	—
Buy	MYR	Sell	USD	23	4.21	—
Buy	SEK	Sell	USD	46	8.91	(1)
Buy	SGD	Sell	USD	131	1.35	1
Buy	TWD	Sell	USD	15	27.79	—
Buy	CNY	Sell	USD	94	6.46	2
Buy	PHP	Sell	USD	17	50.75	—
Buy	INR	Sell	USD	39	75.29	—
Buy	KRW	Sell	USD	18	1,188.06	—
Buy	SEK	Sell	EUR	3	10.23	—
Buy	CNH	Sell	USD	1	6.39	—

Our FX forward contracts and FX currency options, including collars, designated as a hedge, are further described in Note 27 to our Consolidated Financial Statements.

**Item 12. Description of Securities Other than Equity Securities**

We sell ordinary shares in the United States that are evidenced by American registered certificates (“New York Shares”). In connection therewith, a holder of our New York Shares may have to pay, either directly or indirectly, certain fees and charges, as described in Item 12D.3. In addition, we receive fees and other direct and indirect payments from our New York Agent that are related to our New York Shares, as described in Item 12D.4.

*Fees and Charges that a holder of our New York Shares May Have to Pay*

J.P. Morgan collects fees for the delivery and surrender of New York Shares directly from investors depositing or surrendering New York Shares for the purpose of withdrawal or from intermediaries acting for them.

Persons depositing or withdrawing our New York Shares must pay to J.P. Morgan:

- Up to \$5.00 per 100 New York Shares (or portion of 100 New York Shares) for the issuance of New York Shares, including issuances resulting from a distribution of shares or rights or other property, and cancellation of New York Shares for the purpose of withdrawal, including if the New York Share agreement terminates;
- Taxes (including applicable interest and penalties) and other governmental charges;
- Registration fees as may from time to time be in effect for the registration of New York Shares;
- Cable, telex, facsimile and electronic transmission and delivery expenses;
- Expenses and charges incurred by J.P. Morgan in the conversion of foreign currency or the sale of any securities or property; and
- Any charges incurred by J.P. Morgan in connection with compliance with exchange control regulations and other regulatory requirements applicable to New York Shares

*Fees and Other Payments Made by the New York Agent to Us*

Under the New York Share program agreement with J.P. Morgan the annual amount (contribution) of USD 941,145 in respect of 2022 will be paid in 2023.

**PART II**

**Item 13. Defaults, Dividend Arrearages and Delinquencies**

None.

**Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds**

None.

**Item 15. Controls and Procedures**

**Disclosure Controls and Procedures**

*Evaluation*

Our management, including the Chief Executive Officer and Chief Financial Officer, performed an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934 (“Disclosure Controls”) as of the end of the period covered by this Form 20-F. Disclosure Controls are controls and procedures designed to reasonably assure that information required to be disclosed in our reports filed under the Securities and Exchange Act of 1934, such as this Form 20-F, is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. Disclosure Controls are also designed to reasonably assure that such information is accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

The evaluation of our Disclosure Controls included a review of the controls’ objectives and design, our implementation of the controls and their effect on the information generated for use in this Form 20-F. The components of our Disclosure Controls are also evaluated on an ongoing basis by our Corporate Audit Department, which reports directly to our Audit Committee. The overall goals of these various evaluation activities are to monitor our Disclosure Controls, and to modify them as necessary. Our intent is to maintain the Disclosure Controls as dynamic systems that change as conditions warrant.

Based on their evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this Form 20-F, our Disclosure Controls were effective.

*Changes in Internal Control over Financial Reporting*

There were no changes to our internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) under the Securities and Exchange Act of 1934) that occurred during the period covered by this form 20-F that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

*Limitations on Effectiveness of Controls*

No system of internal control over financial reporting, including one determined to be effective, may prevent or detect all misstatements. It can provide only reasonable assurance regarding financial statement preparation and presentation. Also, projections of the results of any evaluation of the effectiveness of internal control over financial reporting into future periods are subject to inherent risk. The relevant controls may become inadequate due to changes in circumstances or the degree of compliance with the underlying policies or procedures may deteriorate.

***Other Reviews***

We have sent this Form 20-F to our Audit Committee and Supervisory Board, which had an opportunity to raise questions with our management and independent auditors before we filed it with the SEC.



## **Management’s Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company’s assets that could have a material effect on the financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. See “Item 3. Key Information — Risk Factors”.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2022, the end of our fiscal year. Management based its assessment on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) in *Internal Control-Integrated Framework (2013)*. Management’s assessment included evaluation of such elements as the design and operating effectiveness of key financial reporting controls, process documentation, accounting policies and our overall control environment. Based on this assessment the management concluded that, as of December 31, 2022 our internal control over financial reporting was effective and the financial reporting is prepared on a going concern basis.

The effectiveness of the Company’s internal control over financial reporting as of December 31, 2022 has been audited by Ernst & Young AG, an independent registered public accounting firm, as stated in their report.

## **Report of Independent Registered Public Accounting Firm**

To the Supervisory Board and Stockholders of STMicroelectronics N.V.

## **Opinion on Internal Control over Financial Reporting**

We have audited STMicroelectronics N.V.’s internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, STMicroelectronics N.V. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of STMicroelectronics N.V. as of December 31, 2022 and 2021, the related consolidated statements of income, comprehensive income, equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and financial statements schedule on page S-1, and our report dated February 23, 2023 expressed an unqualified opinion thereon.

## **Basis for Opinion**

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

## **Definition and Limitations of Internal Control Over Financial Reporting**

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young AG

Lancy - Geneva, Switzerland  
February 23, 2023

**Item 16.****Item 16A. Audit Committee Financial Expert**

Our Supervisory Board has concluded that Ana de Pro Gonzalo, the Chair of our Audit Committee, qualifies as an “audit committee financial expert” as defined in Item 16A and is independent as defined in the listing standards applicable to us as a listed issuer as required by Item 16A(2) of Form 20-F.

**Item 16B. Code of Ethics**

We have adopted written standards of business conduct and ethics (“Code of Conduct”) and related policies, which are designed to promote honest and ethical business conduct, to deter wrongdoing and to provide principles to which our employees are expected to adhere and advocate. Our Code of Conduct is applicable to all of our employees and senior managers. We believe our Code of Conduct is effective in its mission and we believe our employees are in compliance with the Code of Conduct. We have adapted and will amend our Code of Conduct and related policies as appropriate to reflect regulatory or other changes. Our Code of Conduct provides that if any employee or senior manager to whom it applies acts in contravention of the principles set forth therein, we will take appropriate steps in terms of the procedures in place for fair disciplinary action. This action may, in cases of severe breaches, include dismissal. Our Code of Conduct is available on our website in the Corporate Governance section, at [https://www.st.com/content/st\\_com/en/about/st\\_company\\_information/code-of-conduct.html](https://www.st.com/content/st_com/en/about/st_company_information/code-of-conduct.html).

**Item 16C. Principal Accountant Fees and Services**

Our independent external auditors are elected at the AGM. At our AGM held in May 2015, Ernst & Young was first appointed as our independent external auditor for the 2016-2019 fiscal years. At our AGM held on June 17, 2020, our shareholders re-appointed Ernst & Young as our independent external auditor for the 2020-2023 fiscal years. The following table presents the aggregate fees for professional audit services and other services rendered to us by Ernst & Young in 2022 and 2021.

	2022	Percentage of Total Fees	2021	Percentage of Total Fees
<b>Audit Fees</b>				
Audits of consolidated and statutory financial statements	\$ 4,950,590	95.2%	\$ 5,134,390	95.5%
Audit-Related Fees	\$ 210,780	4.1%	\$ 135,778	2.5%
<b>Non-audit Fees</b>				
Tax Fees	\$ 38,400	0.7%	\$ 104,843	2.0%
All Other Fees	—		—	
<b>Total</b>	<b>\$ 5,199,770</b>	<b>100.0%</b>	<b>\$ 5,375,011</b>	<b>100.0%</b>

Audit Fees consist of fees billed for the annual audit of our Company’s Consolidated Financial Statements, the statutory audit of the financial statements of the Company’s subsidiaries and consultations on complex accounting issues relating to the annual audit. Audit Fees also include services that only our independent external auditor can reasonably provide, such as comfort letters and carve-out audits in connection with strategic transactions.

Audit-related services are assurance and related fees consisting of the audit of employee benefit plans, due diligence services related to acquisitions and certain agreed-upon procedures.

Tax Fees include fees billed for tax compliance services, including the preparation of original and amended tax returns and claims for refund; tax consultations, such as assistance in connection with tax audits and expatriate tax compliance.

***Audit Committee Pre-approval Policies and Procedures***

Our Audit Committee is responsible for selecting the independent registered public accounting firm to be employed by us to audit our financial statements, subject to ratification by the Supervisory Board and approval by our shareholders for appointment. Our Audit Committee also assumes responsibility (*inter alia* in accordance with Dutch law and the Dutch Corporate Governance Code) for the retention, compensation, oversight and

termination of any independent external auditor employed by us. We adopted a policy (the “Policy”), which was approved in advance by our Audit Committee, for the pre-approval of audit and permissible non-audit services provided by our independent external auditors. The Policy defines those audit-related services eligible to be approved by our Audit Committee.

All engagements with our independent external auditors, regardless of amount, must be authorized in advance by our Audit Committee, pursuant to the Policy and its pre-approval authorization or otherwise.

The independent external auditors submit a proposal for audit-related services to our Audit Committee on a quarterly basis in order to obtain prior authorization for the amount and scope of the services. The independent external auditors must state in the proposal that none of the proposed services affect their independence. The proposal must be endorsed by the office of our Chief Financial Officer with an explanation of why the service is needed and the reason for sourcing it to the audit firm and validation of the amount of fees requested.

We do not intend to retain our independent external auditors for permissible non-audit services other than by exception and within a limited amount of fees, and the Policy provides that such services must be explicitly authorized by our Audit Committee.

The Chief Audit and Risk Executive is responsible for monitoring that the actual fees are complying with the pre-approval amount and scope authorized by our Audit Committee. During 2022, all services provided to us by Ernst & Young were approved by our Audit Committee pursuant to paragraph (c)(7)(i) of Rule 2-01 of Regulation S-X.

#### Item 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

#### Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

On July 1, 2021, we announced the launch of a share buy-back program of up to \$1,040 million to be executed within a 3-year period. We intend to carry out the buy-back program, and hold the shares bought back as treasury stock for the purpose of meeting our obligations in relation to our employee stock award plans and to support the potential settlement of our outstanding convertible debt.

Period	Total Number of Securities Purchased	Average Price Paid per Security €	Total Number of Securities Purchased as Part of Publicly Announced Programs	Maximum Number of Securities that may be Purchased Under the Programs
2022-01-01 to 2022-01-31	786,524	41.91	4,731,556	28,500,000
2022-02-01 to 2022-02-28	1,116,854	39.28	5,848,410	28,500,000
2022-03-01 to 2022-03-31	—	—	5,848,410	28,500,000
2022-04-01 to 2022-04-30	903,431	35.6	6,751,841	28,500,000
2022-05-01 to 2022-05-31	1,092,540	36.11	7,844,381	28,500,000
2022-06-01 to 2022-06-30	318,127	33.45	8,162,508	28,500,000
2022-07-01 to 2022-07-31	927,706	31.66	9,090,214	28,500,000
2022-08-01 to 2022-08-31	812,127	36.75	9,902,341	28,500,000
2022-09-01 to 2022-09-30	761,737	35.23	10,664,078	28,500,000
2022-10-01 to 2022-10-31	1,195,442	32.86	11,859,520	28,500,000
2022-11-01 to 2022-11-30	908,504	33.67	12,768,024	28,500,000
2022-12-01 to 2022-12-31	421,304	35.63	13,189,328	28,500,000

As of December 31, 2022, we held 7,416,157 of our common shares in treasury stock pursuant to repurchases made in prior years, and as of January 31, 2023 we held 8,103,962 of such shares.

**Item 16F. Change in Registrant’s Certifying Accountant**

Not applicable.

**Item 16G. Corporate Governance**

*As we have common shares listed on the NYSE, pursuant to SEC and NYSE rules, in this Item 16G we provide a concise summary of any significant ways in which our corporate governance practices differ from those followed by U.S. companies under NYSE listing standards.*

As a Dutch company, we are subject to the Dutch Corporate Governance Code. We have summarized our policies and practices in the field of corporate governance in our Corporate Governance Charter, including our corporate organization, the remuneration principles which apply to our Managing and Supervisory Boards, our information policy and our corporate policies relating to business ethics and conflicts of interests. We are committed to informing our shareholders of any significant changes in our corporate governance policies and practices at our AGM. Along with our Supervisory Board charter (which also includes the charters of our Supervisory Board Committees) and our Code of Conduct, the current version of our Corporate Governance Charter is posted on our website (www.st.com), and these documents are available in print to any shareholder who may request them.

Below is a description of the significant ways our corporate governance practices as a Dutch company differ from those followed by U.S. companies listed on the NYSE:

- Because we are a Dutch company, the Audit Committee is an advisory committee to the Supervisory Board, which reports to the Supervisory Board, and our general meeting of shareholders appoints our statutory auditors. Our Audit Committee has established a charter outlining its duties and responsibilities with respect to, among others, the monitoring of our accounting, auditing, financial reporting and the appointment, retention and oversight of our external auditors. In addition, our Audit Committee has established procedures for the receipt, retention and treatment of complaints regarding accounting, internal accounting controls or auditing matters, and the confidential anonymous submission by our employees regarding questionable accounting or auditing matters.
- Pursuant to our Supervisory Board charter, the Supervisory Board is responsible for handling and deciding on potential reported conflicts of interests between the Company and members of the Supervisory Board, as well as the Managing Board. See “Item 7. Major Shareholders and Related Party Transactions”.
- Our Supervisory Board is carefully selected based upon the combined experience and expertise of its members. In fulfilling their duties under Dutch law, Supervisory Board members shall be guided by the interests of our Company and its business, and it shall take into account the relevant interests of all of our stakeholders (including our shareholders) and must act independently in their supervision of our management. Our Supervisory Board has adopted criteria to assess the independence of its members in accordance with corporate governance listing standards of the NYSE. Our Supervisory Board has on various occasions discussed Dutch corporate governance standards, the implementing rules and corporate governance standards of the SEC and of the NYSE, as well as other corporate governance standards. The Supervisory Board has determined, based on the evaluations by an ad hoc committee, the following independence criteria for its members: Supervisory Board members must not have any material relationship with STMicroelectronics N.V., or any of our consolidated subsidiaries, or our management. A “material relationship” can include commercial, industrial, banking, consulting, legal, accounting, charitable and familial relationships, among others, but does not include a relationship with direct or indirect shareholders.

We believe we are fully compliant with all material NYSE corporate governance standards, to the extent possible for a Dutch company listed on Euronext Paris, Borsa Italiana, as well as the NYSE.

Our consistent commitment to good corporate governance principles is evidenced by:

- Our corporate organization under Dutch law that entrusts our management to a Managing Board acting under the supervision and control of a Supervisory Board totally independent from the Managing Board. Members of our Managing Board and of our Supervisory Board are appointed and dismissed by our shareholders;
- Our early adoption of policies on important issues such as business ethics, anticorruption and conflicts of interest and strict policies to comply with applicable regulatory requirements concerning financial reporting, insider trading and public disclosures;
- Our compliance with Dutch securities laws, because we are a company incorporated under the laws of The Netherlands, as well as our compliance with American, French and Italian securities laws, as applicable, because our shares are listed in these jurisdictions, in addition to our compliance with the corporate, social and financial laws applicable to our subsidiaries in the countries in which we do business;
- Our broad-based activities in the field of corporate social responsibility, encompassing environmental, social, health, safety, educational and other related issues including our corporate governance statement which evidences our policy objectives with respect to diversity as well as the results of implementing our diversity policy for the year ended December 31, 2022;
- Our implementation of a non-compliance reporting channel (managed by an independent third-party). We encourage everyone, including external business partners, to express, in good faith, any concerns they might have regarding possible violations of our Code of Conduct, the Company's policies, or the law through, amongst other things, our Code of Conduct, dedicated intranet web pages and our ST Integrity App. Our misconduct reporting process is communicated to all employees and includes, in addition to internal local and corporate reporting channels, an independent multilingual misconduct reporting hotline;
- Our Corporate Ethics Committee and Local Ethics Committees, whose mandate is to provide support to our management in its efforts to foster a business ethics culture consistent across regions, functions and organizations;
- Our Chief Compliance Officer, who reports to our Chief Executive Officer, also acts as Executive Secretary to our Supervisory Board; and
- Our Executive Vice President, Chief Audit and Risk Executive, who reports directly to our Audit Committee for Internal Audit and directly to the Chief Financial Officer for Enterprise Risk Management and Resilience (business continuity and crisis management) is also responsible for our whistle-blowing hotline and related investigations.

No member of the Supervisory Board or Managing Board has been (i) subject to any convictions in relation to fraudulent offenses during the five years preceding the date of this Form 20-F, (ii) no member has been associated with any company in bankruptcy, receivership or liquidation in the capacity of member of the administrative, management or supervisory body, partner with unlimited liability, founder or senior manager in the five years preceding the date of this Form 20-F or (iii) subject to any official public incrimination and/or sanction by statutory or regulatory authorities (including professional bodies) or disqualified by a court from acting as a member of the administrative, management or supervisory bodies of any issuer or from acting in the management or conduct of the affairs of any issuer during the five years preceding the date of this Form 20-F.

**PART III****Item 17. Financial Statements**

Not applicable.

**Item 18. Financial Statements****Financial Statements:**

	<u>Page</u>
<a href="#">Report of Independent Registered Public Accounting Firm for the Years Ended December 31, 2022 and 2021 (PCAOB ID:1460)</a>	F-1
<a href="#">Consolidated Statements of Income for the Years Ended December 31, 2022, 2021 and 2020</a>	F-3
<a href="#">Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2022, 2021 and 2020</a>	F-4
<a href="#">Consolidated Balance Sheets as of December 31, 2022 and 2021</a>	F-5
<a href="#">Consolidated Statements of Equity for the Years Ended December 31, 2022, 2021 and 2020</a>	F-6
<a href="#">Consolidated Statements of Cash Flows for the Years Ended December 31, 2022, 2021 and 2020</a>	F-7
<a href="#">Notes to the Consolidated Financial Statements</a>	F-8
<b>Financial Statement Schedule:</b>	
<a href="#">For each of the three years in the period ended December 31, 2022, 2021 and 2020 Schedule II Valuation and Qualifying Accounts</a>	S-1

**Item 19. Exhibits**

2.3	<a href="#">Description of Securities Registered under Section 12 of the Securities Exchange Act of 1934 (the “Exchange Act”)</a>
8.1	<a href="#">Subsidiaries of the Company</a>
12.1	<a href="#">Certification of Jean-Marc Chery, President and Chief Executive Officer and Sole Member of the Managing Board of STMicroelectronics N.V., pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>
12.2	<a href="#">Certification of Lorenzo Grandi, President, Finance, Purchasing, Enterprise Risk Management (ERM) and Resilience and Chief Financial Officer of STMicroelectronics N.V., pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>
13.1	<a href="#">Certification of Jean-Marc Chery, President and Chief Executive Officer and Sole Member of the Managing Board of STMicroelectronics N.V., and Lorenzo Grandi, President, Finance, Purchasing, Enterprise Risk Management (ERM) and Resilience and Chief Financial Officer of STMicroelectronics N.V., pursuant to 18 U.S.C. §1350, as adopted by Section 906 of the Sarbanes-Oxley Act of 2002</a>
15.1	<a href="#">Consent of Independent Registered Public Accounting Firm</a>
101	<a href="#">Inline Interactive Data File</a>
104	<a href="#">Cover Page Interactive Data File (embedded within the Inline XBRL document)</a>

**CERTAIN TERMS**

ASD	application-specific discrete technology
ASIC	application-specific integrated circuit
ASSP	application-specific standard product
BCD	bipolar, CMOS and DMOS process technology
Bi-CMOS	bipolar and CMOS process technology
CMOS	complementary metal-on silicon oxide semiconductor
DMOS	diffused metal-on silicon oxide semiconductor
DRAMs	dynamic random access memory
EEPROM	electrically erasable programmable read-only memory
EMAS	Eco-Management and Audit Scheme, the voluntary European Community scheme for companies performing industrial activities for the evaluation and improvement of environmental performance
EMS	electronics manufacturing services
EWS	electrical wafer sorting
FD-SOI	fully depleted silicon-on-insulator
GaN	gallium nitride
GNSS	Global Navigation Satellite System
GPS	global positioning system
HID	high-intensity discharge
IC	integrated circuit
IGBT	insulated gate bipolar transistors
IP	intellectual property
IPAD	integrated passive and active devices
ISO	International Organization for Standardization
LED	light-emitting diode
LoRa	long range low-power wide-area network modulation technique
LPWANs	low-power wide-area networks
MASK WORK	the two- or three-dimensional layout of an integrated circuit.
MEMS	micro-electro-mechanical system
MOS	metal-on silicon oxide semiconductor process technology
MOSFET	metal-on silicon oxide semiconductor field effect transistor
NFC	near field communication
OEM	original equipment manufacturer
QFP	quad-flat no-leads package
QFN	quad-flat package
RAM	random access memory
RF	radio frequency
SAM	serviceable available market
SiGe	silicon germanium
SiC	silicon carbide
SOI	silicon on insulator
SOIC	small-outline integrated circuit
TAM	total available market
VIPpower™	vertical integration power



**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

STMICROELECTRONICS N.V.

Date: February 23, 2023

By: /s/ Jean-Marc Chery

**Jean-Marc Chery**  
**President and Chief Executive Officer and Sole Member of our**  
**Managing Board**

## Report of Independent Registered Public Accounting Firm

To the Supervisory Board and Stockholders of STMicroelectronics N.V.

### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of STMicroelectronics N.V. (the Company) as of December 31, 2022 and 2021, and the related consolidated statements of income, comprehensive income, equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes and financial statements schedule on page S-1 (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 23, 2023 expressed an unqualified opinion thereon.

### Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

### Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

*Recoverability of deferred tax assets*

*Description of the Matter:*

At December 31, 2022 the Company reports deferred tax assets of \$602 million. As explained in note 2.7 to the consolidated financial statements, the Company performs an evaluation of the likelihood that future taxable income will be generated in an amount sufficient to utilize such deferred tax assets prior to their expiration, and, after having considered positive and negative available evidence, records a valuation allowance for any deferred tax assets when it is more likely than not they will not be realized.

Assessing the recoverability of deferred tax assets involves significant judgement and estimates in relation to the prospective financial information used by management in order to assess future taxable income, which are dependent on the outcome of future events.

*How We Addressed the Matter*

*In Our Audit:*

We obtained an understanding, evaluated the design and tested the operating effectiveness of management's controls around, among others: the calculation of the gross amount of deferred tax assets recorded, the preparation of the prospective financial information used to determine the Company's future taxable income and the assessment of valuation allowance needed for deferred tax assets not deemed recoverable.

We involved tax professionals to assist with our procedures in evaluating management's weighting of available positive and negative evidence used in their assessment of the realizability of deferred tax assets. Among other procedures, we evaluated the timing of the reversal of the temporary differences and management's prospective financial information used to determine future taxable income and its consistency with current transfer pricing policies. We compared management's projections with the actual results of prior periods, as well as management's consideration of current and expected industry and economic trends.

/s/ Ernst & Young AG

We have served as the Company's auditor since 2016.

Lancy - Geneva, Switzerland

February 23, 2023

**STMicroelectronics N.V.**

**CONSOLIDATED STATEMENTS OF INCOME**

<b>In million of U.S. dollars except per share amounts</b>	<b>Twelve months ended</b>		
	<b>December 31, 2022</b>	<b>December 31, 2021</b>	<b>December 31, 2020</b>
Net sales	16,083	12,729	10,181
Other revenues	45	32	38
<b>Net revenues</b>	<b>16,128</b>	<b>12,761</b>	<b>10,219</b>
Cost of sales	(8,493)	(7,435)	(6,430)
<b>Gross profit</b>	<b>7,635</b>	<b>5,326</b>	<b>3,789</b>
Selling, general and administrative	(1,454)	(1,323)	(1,109)
Research and development	(1,901)	(1,723)	(1,548)
Other income and expenses, net	159	141	202
Impairment, restructuring charges and other related closure costs	—	(2)	(11)
<b>Operating income</b>	<b>4,439</b>	<b>2,419</b>	<b>1,323</b>
Interest income (expense), net	58	(29)	(20)
Other components of pension benefit costs	(11)	(10)	(12)
Income (loss) on equity-method investments	—	—	2
Loss on financial instruments, net	—	(43)	(26)
<b>Income before income taxes and noncontrolling interest</b>	<b>4,486</b>	<b>2,337</b>	<b>1,267</b>
Income tax expense	(520)	(331)	(159)
<b>Net income</b>	<b>3,966</b>	<b>2,006</b>	<b>1,108</b>
Net income attributable to noncontrolling interest	(6)	(6)	(2)
<b>Net income attributable to parent company stockholders</b>	<b>3,960</b>	<b>2,000</b>	<b>1,106</b>
<b>Earnings per share (Basic) attributable to parent company stockholders</b>	<b>4.37</b>	<b>2.21</b>	<b>1.24</b>
<b>Earnings per share (Diluted) attributable to parent company stockholders</b>	<b>4.19</b>	<b>2.16</b>	<b>1.20</b>

The accompanying notes are an integral part of these audited consolidated financial statements

STMicroelectronics N.V.

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**

In million of U.S. dollars	Twelve months ended		
	December 31, 2022	December 31, 2021	December 31, 2020
<b>Net income</b>	<b>3,966</b>	<b>2,006</b>	<b>1,108</b>
<b>Other comprehensive income (loss), net of tax:</b>			
Currency translation adjustments arising during the period	(148)	(189)	203
Less: reclassification adjustment for gains on disposal of equity investment	—	—	—
<b>Foreign currency translation adjustments</b>	<b>(148)</b>	<b>(189)</b>	<b>203</b>
Net unrealized gains (losses) on securities arising during the period	(14)	(1)	—
Less: reclassification adjustment for (income) losses included in net income (loss)	—	—	—
<b>Net unrealized gains (losses) on securities</b>	<b>(14)</b>	<b>(1)</b>	<b>—</b>
Net unrealized gains (losses) on derivatives arising during the period	(108)	(79)	56
Reclassification adjustment for (gains) losses included in net income	170	(16)	—
<b>Net unrealized gains (losses) on derivatives</b>	<b>62</b>	<b>(95)</b>	<b>56</b>
Net gains (losses) on defined benefit pension plans arising during the period	64	57	(12)
Amortization of prior service cost included in net periodic pension cost	1	1	1
<b>Defined benefit pension plans</b>	<b>65</b>	<b>58</b>	<b>(11)</b>
<b>Other comprehensive income (loss), net of tax</b>	<b>(35)</b>	<b>(227)</b>	<b>248</b>
<b>Comprehensive income (loss)</b>	<b>3,931</b>	<b>1,779</b>	<b>1,356</b>
Less: comprehensive income (loss) attributable to noncontrolling interest	7	6	2
<b>Comprehensive income (loss) attributable to the Company's stockholders</b>	<b>3,924</b>	<b>1,773</b>	<b>1,354</b>

The accompanying notes are an integral part of these audited consolidated financial statements

## STMicroelectronics N.V.

## CONSOLIDATED BALANCE SHEETS

In million of U.S. dollars	As of	
	December 31, 2022	December 31, 2021
<b>Assets</b>		
<b>Current assets:</b>		
Cash and cash equivalents	3,258	3,225
Short-term deposits	581	291
Marketable securities	679	—
Trade accounts receivable, net	1,970	1,759
Inventories	2,583	1,972
Other current assets	734	581
<b>Total current assets</b>	<b>9,805</b>	<b>7,828</b>
Goodwill	297	313
Other intangible assets, net	405	438
Property, plant and equipment, net	8,201	5,660
Non-current deferred tax assets	602	652
Long-term investments	11	10
Other non-current assets	661	639
<b>Total assets</b>	<b>19,982</b>	<b>15,540</b>
<b>Liabilities and equity</b>		
<b>Current liabilities:</b>		
Short-term debt	175	143
Trade accounts payable	2,122	1,582
Other payables and accrued liabilities	1,385	1,101
Dividends payable to stockholders	60	55
Accrued income tax	95	68
<b>Total current liabilities</b>	<b>3,837</b>	<b>2,949</b>
Long-term debt	2,542	2,396
Post-employment benefit obligations	331	442
Long-term deferred tax liabilities	60	64
Other long-term liabilities	454	416
<b>Total liabilities</b>	<b>7,224</b>	<b>6,267</b>
<b>Equity</b>		
Parent company stockholders' equity		
Common stock (preferred stock: 540,000,000 shares authorized, not issued; common stock: Euro 1.04 par value, 1,200,000,000 shares authorized, 911,281,920 shares issued, 903,865,763 shares outstanding as of December 31, 2022)	1,157	1,157
Additional paid-in capital	2,631	2,533
Retained earnings	8,713	5,223
Accumulated other comprehensive income	460	496
Treasury stock	(268)	(200)
<b>Total parent company stockholders' equity</b>	<b>12,693</b>	<b>9,209</b>
Noncontrolling interest	65	64
<b>Total equity</b>	<b>12,758</b>	<b>9,273</b>
<b>Total liabilities and equity</b>	<b>19,982</b>	<b>15,540</b>

The accompanying notes are an integral part of these audited consolidated financial statements

**STMicroelectronics N.V.**
**CONSOLIDATED STATEMENTS OF EQUITY**

In million of U.S. dollars, except per share amounts	Common Stock	Additional Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interest	Total Equity
<b>Balance as of December 31, 2019</b>	<b>1,157</b>	<b>2,992</b>	<b>(328)</b>	<b>2,747</b>	<b>475</b>	<b>68</b>	<b>7,111</b>
Repurchase of common stock			(125)				(125)
Issuance of senior convertible bonds		184					184
Settlement of senior convertible bonds		(269)	258				(11)
Stock-based compensation expense		155	102	(102)			155
Comprehensive income (loss):							
Net income				1,106		2	1,108
Other comprehensive income (loss), net of tax					248		248
Comprehensive income (loss)							1,356
Dividends to noncontrolling interest						(12)	(12)
Dividends, \$0.168 per share				(152)			(152)
<b>Balance as of December 31, 2020</b>	<b>1,157</b>	<b>3,062</b>	<b>(93)</b>	<b>3,599</b>	<b>723</b>	<b>58</b>	<b>8,506</b>
Repurchase of common stock			(485)				(485)
Settlement of senior convertible bonds		(750)	220				(530)
Stock-based compensation expense		221	158	(158)			221
Comprehensive income (loss):							
Net income				2,000		6	2,006
Other comprehensive income (loss), net of tax					(227)		(227)
Comprehensive income (loss)							1,779
Dividends, \$0.24 per share				(218)			(218)
<b>Balance as of December 31, 2021</b>	<b>1,157</b>	<b>2,533</b>	<b>(200)</b>	<b>5,223</b>	<b>496</b>	<b>64</b>	<b>9,273</b>
Repurchase of common stock			(346)				(346)
Transition effect of update in accounting standard		(117)		25			(92)
Stock-based compensation expense		215	278	(278)			215
Comprehensive income (loss):							
Net income				3,960		6	3,966
Other comprehensive income (loss), net of tax					(36)	1	(35)
Comprehensive income (loss)							3,931
Dividends to noncontrolling interest						(6)	(6)
Dividends, \$0.24 per share				(217)			(217)
<b>Balance as of December 31, 2022</b>	<b>1,157</b>	<b>2,631</b>	<b>(268)</b>	<b>8,713</b>	<b>460</b>	<b>65</b>	<b>12,758</b>

The accompanying notes are an integral part of these audited consolidated financial statements

## STMicroelectronics N.V.

## CONSOLIDATED STATEMENTS OF CASH FLOWS

In million of U.S. dollars	Twelve Months Ended		
	December 31, 2022	December 31, 2021	December 31, 2020
<b>Cash flows from operating activities:</b>			
<b>Net income</b>	<b>3,966</b>	<b>2,006</b>	<b>1,108</b>
<b>Items to reconcile net income and cash flows from operating activities:</b>			
Depreciation and amortization	1,216	1,045	923
Interest and amortization of issuance costs on convertible bonds	1	36	44
Interest on settled convertible bonds	—	(40)	(41)
Loss on financial instruments, net	—	43	26
Non-cash stock-based compensation	215	221	155
Other non-cash items	(69)	(153)	(130)
Deferred income tax	3	45	(8)
Income on equity-method investments	—	—	(2)
Impairment, restructuring charges and other related closure costs, net of cash payments	—	2	(3)
<b>Changes in assets and liabilities:</b>			
Trade receivables, net	(231)	(307)	(72)
Inventories	(650)	(188)	(84)
Trade payables	240	95	161
Other assets and liabilities, net	511	255	16
<b>Net cash from operating activities</b>	<b>5,202</b>	<b>3,060</b>	<b>2,093</b>
<b>Cash flows used in investing activities:</b>			
Payment for purchase of tangible assets	(3,528)	(1,830)	(1,283)
Proceeds from sale of tangible assets	4	2	4
Payment for purchase of marketable securities	(687)	—	—
Proceeds from matured marketable securities	—	132	—
Net proceeds from (investment in) short-term deposits	(293)	290	(577)
Payment for purchase of intangible assets	(87)	(97)	(75)
Net payment for financial assets	—	(17)	—
Proceeds from sale of financial assets	—	2	—
Proceeds from sale of equity investments	—	—	1
Payment for business acquisitions, net of cash acquired	—	—	(113)
<b>Net cash used in investing activities</b>	<b>(4,591)</b>	<b>(1,518)</b>	<b>(2,043)</b>
<b>Cash flows from (used in) financing activities:</b>			
Proceeds from long-term debt	200	788	4
Net proceeds from issuance of convertible bonds	—	—	1,567
Repayment of issued convertible bonds	—	(1,223)	(709)
Repayment of long-term debt	(134)	(134)	(184)
Repurchase of common stock	(346)	(485)	(125)
Dividends paid to stockholders	(212)	(205)	(168)
Dividends paid to noncontrolling interest	(6)	(6)	(6)
Payment of withholding tax on vested shares	(44)	(49)	(31)
Payment for deferred consideration on business acquisitions	(25)	—	—
<b>Net cash from (used in) financing activities</b>	<b>(567)</b>	<b>(1,314)</b>	<b>348</b>
Effect of changes in exchange rates	(11)	(9)	1
<b>Net cash increase</b>	<b>33</b>	<b>219</b>	<b>399</b>
<b>Cash, cash equivalents and restricted cash at beginning of the period</b>	<b>3,225</b>	<b>3,006</b>	<b>2,607</b>
<b>Cash and cash equivalents at end of the period</b>	<b>3,258</b>	<b>3,225</b>	<b>3,006</b>
Supplemental cash information:			
Interest paid	2	2	7
Income tax paid	416	279	138

The accompanying notes are an integral part of these audited consolidated financial statements



## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In millions of U.S. dollars, except share and per-share amounts)

### 1. THE COMPANY

STMicroelectronics N.V. (the “Company”) is registered in the Netherlands with its corporate legal seat in Amsterdam, the Netherlands, and its corporate headquarters located in Geneva, Switzerland.

The Company is a global semiconductor company that designs, develops, manufactures and markets a broad range of products, including discrete and general purpose 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 Company participates in the manufacturing value chain of smartcard products, which includes the production and sale of both silicon chips and smartcards.

### 2. ACCOUNTING POLICIES

The accounting policies of the Company conform to accounting principles generally accepted in the United States of America (“U.S. GAAP”). All balances and values in the current and prior periods are in millions of U.S. dollars, except share and per-share amounts. Under Article 35 of the Company’s Articles of Association, the financial year extends from January 1 to December 31, which is the period-end of each fiscal year.

#### 2.1 Basis of presentation and consolidation

The Company’s consolidated financial statements include the assets, liabilities, results of operations and cash flows of its wholly-owned and majority-owned subsidiaries, after elimination of intercompany transactions and balances. Subsidiaries are fully consolidated from the date on which control is transferred to the Company. They are deconsolidated from the date that control ceases.

The Company assesses each investment in equity securities to determine whether the investee is a Variable Interest Entity (“VIE”). The Company consolidates the VIEs for which the Company is determined to be the primary beneficiary. The primary beneficiary of a VIE is the party that: (i) has the power to direct the most significant activities of the VIE and (ii) is obligated to absorb losses or has the rights to receive returns that would be considered significant to the VIE. Assets, liabilities, and the noncontrolling interest of newly consolidated VIEs are initially measured at fair value in the same manner as if the consolidation resulted from a business combination.

When the Company owns some, but not all, of the voting stock of a consolidated entity, the shares held by third parties represent a noncontrolling interest. The consolidated financial statements are prepared based on the total amount of assets and liabilities and income and expenses of the consolidated subsidiaries. However, the portion of these items that does not belong to the Company’s shareholders is reported in the line “Noncontrolling interest” of the consolidated financial statements.

#### 2.2 Use of estimates

The preparation of consolidated financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions. The primary areas that require significant estimates and judgments by management include, but are not limited to:

- sales allowances and returns,
- inventory obsolescence reserves and normal manufacturing capacity thresholds to determine costs capitalized in inventory,
- recognition and measurement of loss contingencies,
- valuation at fair value of assets acquired and liabilities assumed on business acquisitions, and measurement of any contingent consideration,
- annual and trigger-based impairment review of goodwill and intangible assets, as well as the assessment of events which could trigger impairment testing on long-lived assets,

- assessment of the Company's long-lived assets economic useful lives,
- assumptions used in measuring expected credit losses and impairment charges on financial assets,
- assumptions used in assessing the number of awards expected to vest on stock-based compensation plans,
- assumptions used in calculating pension obligations and other long-term employee benefits,
- determination of the amount of tax expected to be paid and tax benefit expected to be received, including deferred income tax assets, valuation allowance and provisions for uncertain tax positions and claims.

The Company bases the estimates and assumptions on historical experience and on various other factors such as market trends, market information used by market participants and the latest available business plans that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. While the Company regularly evaluates its estimates and assumptions, the actual results experienced by the Company could differ materially and adversely from those estimates.

### **2.3 Foreign currency**

The U.S. dollar is the reporting currency of the Company. The U.S. dollar is the currency of the primary economic environment in which the Company operates since the worldwide semiconductor industry uses the U.S. dollar as a currency of reference for actual pricing in the market. Furthermore, the majority of the Company's transactions are denominated in U.S. dollars, and revenues from external sales in U.S. dollars largely exceed revenues in any other currency. However, certain significant costs are incurred in the countries of the Eurozone and other non-U.S. dollar currency areas.

The functional currency of each subsidiary of the Company is either the local currency or the U.S. dollar, depending on the basis of the economic environment in which each subsidiary operates. Foreign currency transactions, including operations in local currency when the U.S. dollar is the functional currency, are measured into the functional currency using the prevailing exchange rate. Foreign exchange gains and losses resulting from the re-measurement at reporting date of monetary assets and liabilities denominated in currencies other than the functional currency are recognized in the line "Other income and expenses, net" of the consolidated statements of income.

For consolidation purposes, the results and financial position of the subsidiaries whose functional currency is different from the U.S. dollar are translated into the reporting currency as follows:

- (a) assets and liabilities for each consolidated balance sheet presented are translated into U.S. dollars using exchange rates at the balance sheet dates;
- (b) income and expenses for each consolidated statement of income presented are translated into U.S. dollars using the average monthly exchange rates;
- (c) the resulting exchange differences are reported as Currency Translation Adjustments ("CTA"), a component of "Other comprehensive income (loss)" in the consolidated statements of comprehensive income.

### **2.4 Cash and cash equivalents**

Cash and cash equivalents include cash on hand, deposits held at call with external financial institutions and other short-term highly liquid investments with original maturities of three months or less. They are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates.

Short-term deposits representing cash equivalent with original maturity beyond three months are reported as current assets in the line "Short-term deposits" of the consolidated balance sheets.

## 2.5 Trade accounts receivable

Trade accounts receivable are amounts due from customers for goods sold and services rendered to third parties in the ordinary course of business. The Company uses a lifetime expected losses allowance for all trade receivables. The allowance includes reasonable assumptions about future credit trends. The historical loss rates are adjusted to reflect current and forward-looking information on macro-economic factors affecting the ability of the Company's customers to settle the receivables. Adjustments to the expected credit losses allowance are reported on the line "Selling, general and administrative" in the consolidated statements of income and write-offs, if any, are recorded against the expected credit losses allowance.

In the event of transfers of receivables such as factoring, the Company derecognizes the receivables only to the extent that the Company has surrendered control over the receivables in exchange for a consideration other than beneficial interest in the transferred receivables.

## 2.6 Inventories

Inventories are stated at the lower of cost and net realizable value. Actual cost is based on an adjusted standard cost, which approximates cost on a first-in, first-out basis for all categories of inventory (raw materials, work-in-process, finished products). Actual cost is therefore dependent on the Company's manufacturing performance and cost is based on the normal utilization of its production capacity. In case of underutilization of manufacturing facilities, the costs associated with unused capacity are not included in the valuation of inventories but charged directly to cost of sales. Net realizable value is based upon the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation.

The Company performs, on a continuous basis, write-offs of inventories, which have the characteristics of slow-moving, old production dates and technical obsolescence. The Company evaluates its inventory to identify obsolete or slow-selling items, as well as inventory that is not of saleable quality and records a specific reserve if the Company estimates the inventory will eventually become obsolete. Reserve for obsolescence is estimated for excess uncommitted inventory based on historical sales data, order backlog and production plans.

## 2.7 Income taxes

Income tax for the period comprises current and deferred income tax. Current income tax represents the income tax expected to be paid or the tax benefit expected to be received related to the current year taxable profit and loss in each tax jurisdiction. Deferred income tax is recognized, using the liability method, for all temporary differences arising between the tax bases of assets and liabilities and their carrying amount in the consolidated financial statements. Deferred tax liabilities are not recognized on the initial recognition of goodwill as a result of a business combination. Deferred income tax is determined using tax rates and laws that are enacted at the balance sheet date and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled. The effect on deferred tax assets and liabilities from changes in tax laws and tax rates is recognized on the line "Income tax expense" in the consolidated statements of income in the period in which the law is enacted. Deferred income tax assets are recognized in full but the Company assesses whether future taxable profit will be available against which temporary differences can be utilized. A valuation allowance is provided for deferred tax assets when management considers it is more likely than not that they will not be realized.

The Company recognizes a deferred tax liability on undistributed earnings of subsidiaries when there is a presumption that taxable earnings will be remitted to the parent. A deferred tax asset is recognized on compensation for the grant of stock awards to the extent that such charge constitutes a temporary difference in the subsidiaries' local tax jurisdictions. Changes in the stock price do not result in any adjustments to the deferred tax asset prior to vesting.

At each reporting date, the Company assesses all significant income tax positions in all tax jurisdictions to determine any uncertain tax positions. The Company uses a two-step process for the evaluation of uncertain tax positions. The first step consists in assessing whether the tax benefit must be recognized. The second step consists in measuring the amount of tax benefit to be recognized on each uncertain tax position. In step 1 (recognition), the Company assesses whether a tax position, based solely on its technical merits, is more likely than not to be sustained upon examination. Only tax positions with a sustainability threshold higher than 50% are recognized. In Step 2 (measurement), the Company determines the amount of recognizable tax benefit. The measurement methodology is based on a "cumulative probability" approach, resulting in the recognition of the largest amount that is greater than 50% likely of being realized upon settlement with the taxing authority. The

Company accrues for interest and penalties on uncertain tax liabilities reported on the consolidated balance sheets. Interests and penalties are classified as components of income tax expense in the consolidated statements of income.

## **2.8 Business combinations and goodwill**

The acquisition method of accounting is applied to all business combinations. The identifiable assets acquired, liabilities assumed, and equity instruments issued are measured at acquisition date fair value. Any contingent consideration is recorded at acquisition date fair value and remeasured at each reporting date. Acquisition-related transaction costs and restructuring costs related to the acquired business are expensed as incurred. Acquired in-process research and development (“IPR&D”) is capitalized and recorded as an intangible asset at acquisition date, subject to impairment testing until the research or development is completed. The excess of the consideration transferred over the acquisition-date fair value of the identifiable assets acquired and liabilities assumed, net of related deferred tax impacts, is recorded as goodwill. In case of a bargain purchase, the Company reassesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed, the noncontrolling interest in the acquiree, if any, the Company’s previously held equity interest in the acquiree, if any, and the consideration transferred. If after this review, a bargain purchase is still indicated, it is recognized in earnings attributable to parent company stockholders. The purchase of additional interests in a partially owned subsidiary is treated as an equity transaction as well as all transactions concerning the sale of subsidiary stock or the issuance of stock by the partially owned subsidiary, assuming there is no change in control of the subsidiary. In the case of a sale of subsidiary shares, whereby the Company no longer maintains control of the subsidiary, the Company recognizes a gain or loss in earnings.

Goodwill is carried at cost less accumulated impairment losses, if any. Goodwill is not amortized but is tested for impairment at least annually, and more frequently whenever events or changes in circumstances indicate that the carrying amount of goodwill may not be recoverable. Goodwill subject to potential impairment is tested at the reporting unit level. The impairment test determines whether the fair value of each reporting unit under which goodwill is allocated is lower than the total carrying amount of relevant net assets allocated to such reporting unit, including its allocated goodwill. The Company records an impairment loss on goodwill when a reporting unit’s carrying value exceeds its fair value. Significant management judgments and estimates are used in forecasting the future discounted cash flows associated with the reporting unit, including: the applicable industry’s sales volume forecast and selling price evolution, the reporting unit’s market penetration and its revenues evolution, the market acceptance of certain new technologies and products, the relevant cost structure, the discount rates applied using a weighted average cost of capital and the perpetuity rates used in calculating cash flow terminal values.

## **2.9 Intangible assets with definite useful lives**

Intangible assets subject to amortization include intangible assets purchased from third parties recorded at cost and intangible assets acquired in business combinations initially recorded at fair value. Amortization begins when the intangible asset is available for its intended use. Amortization reflects the pattern in which the asset’s economic benefits are consumed, which usually consists in applying the straight-line method to allocate the cost of the intangible assets over their estimated useful lives.

The carrying value of intangible assets with definite useful lives is evaluated whenever changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset’s carrying amount exceeds its fair value. The Company evaluates the remaining useful life of an intangible asset at each reporting date to determine whether events and circumstances warrant a revision to the remaining period of amortization.

### ***Technologies and licenses***

Separately acquired technologies and licenses are recorded at historical cost. Technologies and licenses acquired in a business combination are initially recognized at acquisition date fair value. Technologies and licenses have a useful life which usually ranges from 3 to 8 years and are carried at cost less accumulated amortization and impairment losses, if any.

### ***Computer software***

Separately acquired computer software is recorded at historical cost. Costs associated with maintaining computer software programs are expensed as incurred and reported as “Cost of sales”, “Selling, general and

administrative”, or “Research and development” in the consolidated statements of income according to their intended use. The capitalization of costs for internally generated software developed by the Company for its internal use begins when the preliminary project stage is completed and when the Company, implicitly or explicitly, authorizes and commits to funding a computer software project. It must be probable that the project will be completed and will be used to perform the function intended. Amortization of computer software begins when the software is available for its intended use and is calculated using the straight-line method over the estimated useful life, which does not exceed 4 years.

## 2.10 Property, plant and equipment

Property, plant and equipment are stated at historical cost, net of accumulated depreciation and any impairment losses. Property, plant and equipment acquired in a business combination are initially recognized at acquisition date fair value. Major additions and improvements are capitalized, while minor replacements and repairs are expensed and reported as “Cost of sales”, “Selling, general and administrative”, or “Research and development” in the consolidated statements of income according to their intended use.

Land is not depreciated. Depreciation on fixed assets is computed using the straight-line method over their estimated useful lives, as follows:

Buildings	33 years
Facilities and leasehold improvements	5-10 years
Machinery and equipment	2-10 years
Computer and R&D equipment	3-6 years
Other	2-5 years

Property, plant and equipment are periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or a group of assets may not be recoverable. Several impairment indicators exist for making this assessment, such as: restructuring plans, significant changes in the technology, market, economic or legal environment in which the Company operates, available evidence of obsolescence of the asset, or indication that its economic performance is, or will be, worse than expected. In determining the recoverability of assets to be held and used, the Company initially assesses whether the carrying value of the tangible assets or group of assets exceeds the undiscounted cash flows associated with these assets. If exceeded, the Company then evaluates whether an impairment charge is required by determining if the asset’s carrying value also exceeds its fair value. This fair value is normally estimated by the Company based on independent market appraisals or the sum of discounted future cash flows, using market assumptions such as the utilization of the Company’s fabrication facilities and the ability to upgrade such facilities, change in the selling price and the adoption of new technologies. The Company also evaluates, and adjusts if appropriate, the assets’ useful lives. Any impairment loss is reported on the same income statement line as the depreciation expense recorded on the impaired group of assets, except in case of closure of operating sites or major restructuring plans and reorganizations. In such case, any impairment loss is reported on the line “Impairment, restructuring charges and other related closure costs” in the consolidated statements of income.

When property, plant and equipment are retired or otherwise disposed of, the net book value of the assets is removed from the Company’s books. Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are included in “Other income and expenses, net” in the consolidated statements of income.

The Company did not hold any significant assets held for sale as of December 31, 2022 and December 31, 2021.

## 2.11 Leases

A lease contract is a contract, or part of a contract, that conveys the right to control the use of an identified asset for a period of time in exchange for consideration. If a lease is identified, classification between finance or operating is determined at lease commencement. Most leases entered by the Company are operating leases. Operating lease liabilities are recognized at the present value of the future lease payments at the lease commencement date. The rate implicit in the lease should be used as a discount rate whenever that rate is readily determinable. In most cases, this rate is not readily determinable and therefore, the Company uses its incremental borrowing rate, which is derived from information available at the lease commencement date. The Company considers its recent debt issuances as well as publicly available data for instruments with similar characteristics when calculating its incremental borrowing rates. Operating lease right-of-use assets are based on the corresponding lease liability adjusted for any lease payments made at or before commencement, initial direct costs, and lease incentives.

Right-of-use assets are included in the line “Property, plant and equipment, net” of the consolidated balance sheet. Operating lease liabilities due within one year are included in the line “Other payables and accrued liabilities”, while noncurrent operating lease liabilities are included in the line “Other long-term liabilities” of the Company’s consolidated balance sheets. Operating lease expenses are recognized in the consolidated statements of income, on a straight-line basis over the lease period and reported as “Cost of sales”, “Selling, general and administrative”, or “Research and development”, according to the intended use of the leased asset.

Finance lease liabilities due within one year are included in the line “Short-term debt”, while noncurrent finance lease liabilities are included in the line “Long-term debt” of the Company’s consolidated balance sheets. Right-of-use assets for finance leases are depreciated on a straight-line basis since the lease commencement date over the lease period or the estimated useful life of the leased asset in case of transfer of ownership or purchase option that is reasonably certain to be exercised. The depreciation expense is reported as “Cost of sales”, “Selling, general and administrative”, or “Research and development”, according to the intended use of the leased asset.

Certain lease contracts contain options to extend the lease. On these contracts, the Company estimates the lease term by including the extended duration when it is reasonably certain for the Company to exercise that option. In addition, for short-term leases, defined as leases with a term of twelve months or less, the Company elected the practical expedient to not recognize an associated lease liability and right-of-use asset. The short-term lease election is made at the commencement date only. Additionally, lease contracts with a sum of lease payments not exceeding \$5,000 are excluded from recognition on the consolidated balance sheet.

The right-of-use asset is a nonmonetary asset while the lease liability is a monetary liability. When accounting for a lease that is denominated in a foreign currency, the lease liability is remeasured using the current exchange rate, while the right-of-use asset is measured using the historical exchange rate as of the commencement date.

The Company does not separate lease and non-lease components and instead accounts for each separate lease component and the non-lease components associated with that lease component as a single lease component.

Variable lease payments that depend on an index or a rate are included in the lease payments and are measured using the prevailing index or rate at the measurement date. Changes to index and rate-based variable lease payments are recognized in earnings in the period of the change.

## **2.12 Loss contingencies**

In determining loss contingencies, the Company considers the likelihood of the incurrence of a liability as well as the ability to reasonably estimate the amount of such loss or liability. An estimated loss from a loss contingency is accrued when information available indicates that it is probable that a liability has been incurred at the date of the consolidated financial statements and when the amount of the loss can be reasonably estimated.

## **2.13 Long-term debt**

### **(a) Convertible debt**

The Company adopted on January 1, 2022 the new guidance on distinguishing liabilities from equity by applying the modified retrospective approach, with the impact upon transition recorded in retained earnings for instruments outstanding as of the adoption date. Prior to the new guidance adoption, the Company evaluated, at initial recognition of a convertible debt, the different components and features of the hybrid instruments and determined whether certain elements were embedded derivative instruments which required bifurcation. Components of convertible debt instruments that may be settled in cash upon conversion based on a net-share settlement basis were accounted for separately as long-term debt and equity when the conversion feature of the convertible bonds constituted an embedded equity instrument. When an equity instrument was identified, proceeds from issuance were allocated between debt and equity by measuring first the liability component and then determining the equity component as a residual amount. The liability component was measured as the fair value of a similar non-convertible debt, which resulted in the recognition of a debt discount. In subsequent periods, the Company amortized the debt discount through earnings in the line “Interest income (expense), net” of the consolidated statements of income, using the effective interest method, based on the contractual maturity of the debt. The equity component, reported on the line “Additional paid-in capital” of the consolidated statement of equity, was not remeasured. Deferred taxes were recognized on the difference between the carrying amount of the liability component and its tax basis. In case of conversion from the bondholders, the fair value of the consideration transferred was allocated between the liability component and the equity component. The

difference between the carrying amount of the debt at the settlement date and the fair value of the debt component was recorded in earnings as a loss on debt extinguishment and reported in the line “Loss on financial instruments, net” of the consolidated statements of income. The liability component was measured as the fair value of a similar non-convertible debt prior to settlement. The reacquired equity component was recorded in equity and reported on the line “Additional paid-in capital” of the consolidated statement of equity.

The new accounting guidance adopted on January 1, 2022 has eliminated the cash conversion model in ASC 470-20 applicable to the convertible debt issued by the Company, which required separate accounting for embedded conversion features. At initial recognition, total cash proceeds received at issuance are reported as financial debt and no equity conversion instrument is recorded separately in equity. Impact of the new guidance upon adoption is further described in Note 2.25.

Debt issuance costs are reported as a deduction of debt. They are subsequently amortized through earnings on the line “Interest income (expense), net” of the consolidated statements of income, using the effective interest rate method.

(b) Bank loans

Bank loans and non-convertible senior bonds are recognized at the amount of cash proceeds received, net of debt issuance costs incurred. They are subsequently reported at amortized cost; any difference between the proceeds (net of debt issuance costs) and the principal amount is recognized through earnings on the line “Interest income (expense), net” of the consolidated statements of income over the period of the borrowings using the effective interest method.

## 2.14 Employee benefits

### (a) Pension obligations

The Company sponsors various pension schemes for its employees. These schemes conform to local regulations and practices in the countries in which the Company operates. Such plans include both defined benefit and defined contribution plans. For defined benefit pension plans, the liability recognized in the consolidated balance sheets is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. The overfunded or underfunded status of the defined benefit plans are calculated as the difference between plan assets and the projected benefit obligations. Estimates are used in determining the assumptions incorporated in the calculation of the pension obligations, which is supported by input from independent actuaries. Actuarial gains and losses arising from changes in actuarial assumptions are recognized in “Accumulated other comprehensive income (loss)” in the consolidated statements of equity and are charged or credited to earnings over the employees’ expected average remaining working lives. Past service costs are recognized in “Accumulated other comprehensive income (loss)” in the consolidated statements of equity and are amortized on a straight-line basis over the vesting period. The net periodic benefit cost of the year is determined based on the assumptions used at the end of the previous year. Past service costs are recognized in earnings on the line “Other components of pension benefit costs” of the consolidated statements of income if the changes to the pension scheme are not conditional on the employees remaining in service for a specified period (the vesting period).

For defined contribution pension plans, the Company pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Company has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expense when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

The service cost component of net periodic benefit costs is presented in the same income statement line as other employee compensation costs arising from services rendered during the period. The other components of the net periodic benefit cost are presented separately, outside operating income, on the line “Other components of pension benefit costs” of the consolidated statements of income. These elements include: interest cost; expected return on plan assets; amortization of transition (asset) obligation; amortization of prior service cost; amortization of net (gain) loss; (gain) loss recognized due to curtailment or settlement and; cost of special termination benefits.



***(b) Termination benefits***

Termination benefits are payable when an employee is involuntarily terminated, or whenever an employee accepts voluntary termination in exchange for termination benefits. For the accounting treatment and timing recognition of involuntary termination benefits, the Company distinguishes between one-time termination benefit arrangements and ongoing termination benefit arrangements. A one-time termination benefit arrangement is established by a termination plan and applies to a specified termination event. One-time involuntary termination benefits are recognized as a liability when the termination plan meets certain criteria and has been communicated to employees. If employees are required to render future service in order to receive these one-time termination benefits, the liability is recognized ratably over the future service period. Termination benefits other than one-time termination benefits are termination benefits for which the communication criterion is not met but that are committed to by management, or termination obligations that are not specifically determined in a new and single plan. These termination benefits are all legal, contractual and past practice termination obligations to be paid to employees in case of involuntary termination. These termination benefits are accrued for when commitment creates a present obligation to others for the benefits expected to be paid, when it is probable that employees will be entitled to the benefits and the amount can be reasonably estimated.

In case of special termination benefits related to voluntary redundancy programs, the Company recognizes a provision for voluntary termination benefits at the date on which the employee irrevocably accepts the offer and the amount can be reasonably estimated.

***(c) Profit-sharing and bonus plans***

The Company recognizes a liability and an expense for bonuses and profit-sharing plans when a contractual obligation exists or where there is a past practice that has created a present obligation.

***(d) Other long-term employee benefits***

The Company provides long-term employee benefits such as seniority awards in certain countries. The entitlement to these benefits is usually conditional on the employee completing a minimum service period. The expected costs of these benefits are accrued over the period of employment. Actuarial gains and losses arising from changes in actuarial assumptions are charged or credited to earnings in the period of the revised estimate. These obligations are valued annually with the assistance of independent qualified actuaries.

***(e) Share-based compensation***

The Company accounts for stock-based compensation for all stock-based awards granted to senior executives and selected employees, including awards that vest upon the satisfaction of a service condition and awards that vest upon the satisfaction of both a service condition and a performance condition. Both equity awards vest over a three-year service period while performance-based awards also require the Company's attainment of certain performance conditions. The Company measures the cost of the awards based on the grant-date fair value of the awards, reflecting the market price of the underlying shares at the date of the grant, reduced by the present value of the dividends expected to be paid on the shares during the requisite service period. That cost is recognized using graded vesting over the period during which an employee is required to provide service in exchange for the award or the requisite service period. The compensation cost is recorded through earnings with the corresponding amount reported in equity, under "Additional paid-in capital" of the consolidated statements of equity. The compensation cost is calculated based on the number of awards expected to vest, net of an estimated number of awards to be forfeited due to the employees failing to satisfy the service condition or one or more performance conditions. By the end of the vesting period, compensation is recognized only for the awards that ultimately vest.

Liabilities for the Company's portion of payroll taxes are recognized at vesting, which is the event triggering the payment of the social contributions in most of the Company's local tax jurisdictions. Employee-related social charges are measured based on the intrinsic value of the share and recorded at vesting date.



## **2.15 Share capital**

Ordinary shares are classified as “Common stock” within equity on the consolidated balance sheets. Incremental costs directly attributable to the issuance of new shares are shown in equity as a deduction, net of tax, from the proceeds received.

Where the Company purchases its own equity share capital (treasury stock), the consideration paid, including any directly attributable incremental costs (net of income taxes), is deducted from parent company stockholders’ equity until the shares are cancelled, reissued, or disposed of.

## **2.16 Comprehensive income (loss)**

Comprehensive income (loss) is defined as the change in equity of a business during a period except those changes resulting from investment by and distributions to stockholders. In the consolidated financial statements, “Other comprehensive income (loss)” and “Accumulated other comprehensive income” primarily consists of foreign currency translation adjustments, unrealized gains (losses) on debt securities classified as available-for-sale, unrealized gains (losses) on derivatives designated as cash flow hedge and the accounting for defined benefit plans as described in Note 2.14, net of tax.

## **2.17 Revenue recognition**

Arrangements with customers are considered contracts if all the following criteria are met: (a) parties have approved the contract and are committed to perform their respective obligations; (b) each party’s rights regarding the goods or services to be transferred can be identified; (c) payment terms for the goods or services to be transferred can be identified; (d) the contract has commercial substance and (e) collectability of substantially all of the consideration is probable. The Company recognizes revenue from products sold to a customer, including distributors, when it satisfies a performance obligation by transferring control over a product to the customer. In certain circumstances, the Company may enter into agreements that concern principally revenues from services, where the performance obligation is satisfied over time. The objective when allocating the transaction price is to allocate the transaction price to each performance obligation (or distinct good or service) in an amount that depicts the amount of consideration to which the Company expects to be entitled in exchange for transferring the promised goods or services to the customer. The payment terms typically range between 30 and 90 days. Certain customers require the Company to hold inventory as consignment in their hubs and only purchase inventory when they require it. Revenue for sales of such inventory is recognized when, at the customer’s option, the products are withdrawn from the consignment and the Company satisfies a performance obligation by transferring control over a product to the customer.

Consistent with standard business practice in the semiconductor industry, price protection is granted to distribution customers on their existing inventory of the Company’s products to compensate them for changes in market prices. The Company accrues a provision for price protection based on a rolling historical price trend computed monthly as a percentage of gross distributor sales. This historical price trend represents differences in recent months between the invoiced price and the final price to the distributor, adjusted to accommodate a significant change in the selling price. The short outstanding inventory time, visibility into the inventory product pricing and long distributor pricing history have enabled the Company to reliably estimate price protection provisions at period-end. The Company records the accrued amounts as a deduction of “Net sales” in the consolidated statements of income at the time of the sale.

The Company’s customers occasionally return the Company’s products for technical reasons. The Company’s standard terms and conditions of sale provide that if the Company determines that products do not conform, the Company will repair or replace the non-conforming products, or issue a credit note or rebate of the purchase price. Quality returns are identified shortly after sale in customer quality control testing. Quality returns are usually associated with end-user customers, not with distribution channels. The Company records the accrued amounts as a deduction of “Net sales” in the consolidated statements of income, using historical and current conditions to form a reasonable estimate of future returns.

The Company records a provision for warranty costs as a charge against “Cost of sales” in the consolidated statements of income, based on historical trends of warranty costs incurred as a percentage of sales, which management has determined to be a reasonable estimate of the probable losses to be incurred for warranty claims in a period. Any potential warranty claims are subject to the Company’s determination that the Company is at fault for damages, and such claims usually must be submitted within a short period of time following the date of sale. This warranty is given in lieu of all other warranties, conditions or terms expressed or implied by statute or common law. The Company’s contractual terms and conditions typically limit its liability to the sales value of the products which gave rise to the claims.

The Company’s insurance policy relating to product liability covers third-party physical damages and bodily injury, indirect financial damages as well as immaterial non-consequential damages caused by defective products.

In addition to product sales, the Company enters into arrangements with customers consisting in transferring licenses or related to license services. The revenue generated from these arrangements are reported on the line “Other revenues” of the consolidated statements of income. Other revenues also include patent royalty income, sale of scrap materials and manufacturing by-products.

## **2.18 Public funding**

The Company receives funding mainly from governmental agencies and income is recognized when all contractual conditions for receipt of these funds are fulfilled. The Company’s primary sources for government funding are French, Italian and other country governmental entities. Such funding is generally provided to encourage research, development and other innovation activities, industrialization and local economic development. The conditions to receive government funding may include eligibility restrictions, approval by the European Union authorities, annual budget appropriations, compliance with European Commission regulations, as well as specifications regarding objectives and results. Certain specific contracts include obligations to maintain a minimum level of employment and investment during a certain period. There could be penalties if these objectives are not fulfilled. Other contracts contain penalties for late deliveries or for breach of contract, which may result in repayment obligations. Funding related to these contracts is recorded when the conditions required by the contracts are met. The Company’s funding programs are classified under two general categories: funding for research, development and other innovative activities, and capital investments.

Funding for research, development and innovative activities is the most common form of funding that the Company receives. This public funding is recorded as “Other income and expenses, net” in the consolidated statements of income. The funding is recognized ratably as the related costs are incurred once the agreement with the respective governmental agency has been signed and all applicable conditions are met. Other government assistance, such as funding received for industrialization and local economic development in certain regions, are reported as a deduction of cost of sales or other operating expenses according to the nature of the underlying costs eligible to the grants.

French research tax credits (“Crédit Impôt Recherche”) and Italian research tax credits (“Credito d’Imposta Ricerca & Sviluppo”) are deemed to be grants in substance. The French research tax credits are to be paid in cash by the taxing authorities within three years in case they are not deducted from income tax payable during this period of time. The Italian tax credits are compensated against payroll-related social charges. French and Italian tax credits are reported as a reduction of “Research and development” in the consolidated statements of income.

Capital investment funding is recorded as a reduction of “Property, plant and equipment, net” and is recognized in the Company’s consolidated statements of income by offsetting the depreciation charges of the funded assets during their useful lives. The Company also receives capital funding in Italy, which can be recovered through the reduction of various governmental liabilities, including income tax, value-added tax and employee-related social charges.

Funding receivables are reported as non-current assets unless cash settlement features of the receivables evidence that collection is expected within one year. Long-term receivables that do not present any tax attribute or legal restriction are reflected in the consolidated balance sheets at their net present value when the discounting effect is deemed to be significant.

### **2.19 Research and development**

Research and development expenses include costs incurred by the Company, the Company's share of costs incurred by other research and development interest groups, and costs associated with co-development contracts. Research and development expenses do not include marketing design center costs, which are accounted for as "Selling, general and administrative" in the consolidated statements of income and process engineering, pre-production or process transfer costs which are recorded as "Cost of sales" in the consolidated statements of income. Research and development costs are expensed as incurred. The amortization expense recognized on technologies and licenses purchased by the Company from third parties to facilitate the Company's research and development activities is reported as "Research and development" in the consolidated statements of income.

### **2.20 Advertising costs**

Advertising costs are expensed as incurred and are recorded as "Selling, general and administrative" in the consolidated statements of income. Advertising expenses for 2022, 2021 and 2020 were \$18 million, \$14 million and \$12 million, respectively.

### **2.21 Start-up and phase-out costs**

Start-up costs represent costs incurred in the ramp-up phase of the Company's newly integrated manufacturing facilities. The costs of phase-outs are associated with the latest stages of facilities closure when the relevant production volumes become immaterial. Start-up costs and phase-out costs are included in the line "Other income and expenses, net" of the consolidated statements of income.

### **2.22 Investments in equity securities**

Investments in equity securities that have readily determinable fair values and for which the Company does not have the ability to exercise significant influence are classified as equity securities measured at fair value through earnings. Changes in the fair value of these securities are reported in the consolidated statements of income within "Other income and expenses, net" when these instruments are held within the Company's operating activities. Gains and losses arising from changes in the fair value of securities not related to operating activities are presented in the consolidated statements of income as non-operating elements within "Gain (loss) on financial instruments, net" in the period in which they arise.

For investments in equity securities without readily determinable fair values and for which the Company does not have the ability to exercise significant influence, the Company has elected to apply the cost method as a measurement alternative. Under the cost method of accounting, investments are carried at historical cost, less impairment, adjusted for subsequent observable price changes. An impairment loss is recorded when there are identified events or changes in circumstances that may have a significant adverse effect on the value of the investment. Loss is immediately recorded in the consolidated statements of income on the line "Gain (loss) on financial instruments, net" and is based on the Company's assessment of any significant and sustained reductions in the investment's value. Gains and losses on investments sold are determined on the specific identification method and are recorded as non-operating element in the line "Gain (loss) on financial instruments, net" of the consolidated statements of income when the transaction is not related to operating activities.

The fair values of quoted equity securities are based on current market prices. If the market for a financial asset is not active and if no observable market price is obtainable, the Company measures fair value by using assumptions and estimates. In measuring fair value, the Company makes maximum use of market inputs and minimizes the use of unobservable inputs.

The Company did not hold any material equity securities as of December 31, 2022 and December 31, 2021.

### **2.23 Investments in debt securities**

Debt securities are included in current assets when they represent investments of funds available for current operations or when management intends to dispose of the securities within twelve months of the balance sheet date.

Changes in fair value of debt securities classified as available-for-sale are recognized as a component of "Other comprehensive income (loss)" in the consolidated statements of comprehensive income. The Company assesses at each balance sheet date whether there is objective evidence that a debt security or group of debt securities is

impaired. An unrealized impairment loss exists when the fair value of the instrument declines below its amortized cost basis. An impairment loss is recognized in earnings, through a direct reduction of the value of the asset, when the Company intends to sell the debt security or when it is more likely than not that the Company will be required to sell the instrument before recovery of the amortized cost basis. Moreover, an impairment loss is recognized in earnings through a credit loss allowance for any portion of the unrealized impairment loss resulting from a credit loss. Impairment losses recognized in the consolidated statements of income are not reversed through earnings.

The fair values of quoted debt securities are based on current market prices. If the market for a financial asset is not active and if no observable market price is obtainable, the Company measures fair value by using assumptions and estimates. In measuring fair value, the Company makes maximum use of market inputs and minimizes the use of unobservable inputs.

The Company did not hold any debt securities classified as held-to-maturity or for which the Company would have elected to apply the fair value option.

## **2.24 Derivative financial instruments and hedging activities**

Derivative financial instruments are initially recognized on the date a derivative contract is entered into and are subsequently measured at fair value. The method of recognizing the gain or loss resulting from the derivative instrument depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the hedge transaction. The Company has designated certain derivatives as hedges of a particular risk associated with a highly probable forecasted transaction (cash flow hedge).

The Company documents, at inception of the transaction, the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. The Company also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in cash flows of hedged items. Derivative instruments that are not designated as hedges are measured at fair value through earnings.

### *Cash Flow Hedge*

As part of its ongoing operating, investing and financing activities, the Company enters into certain derivative transactions that may be designated and may qualify as hedging instruments. To reduce its exposure to U.S. dollar exchange rate fluctuations, the Company hedges certain Euro-denominated forecasted transactions that cover at reporting date a large part of its research and development, and selling, general and administrative expenses as well as a portion of its front-end manufacturing costs of semi-finished goods within cost of sales through the use of currency forward contracts and currency options, including collars. The Company also hedges through the use of currency forward contracts certain Singapore dollar-denominated manufacturing forecasted transactions.

The derivative instruments are designated and qualify for cash flow hedge at inception of the contract and on an ongoing basis over the duration of the hedge relationship. They are reflected at their fair value as "Other current assets" or "Other payables and accrued liabilities" in the consolidated balance sheets. The criteria for designating a derivative as a hedge include the instrument's effectiveness in risk reduction and a one-to-one matching of the derivative instrument to its underlying transaction with the critical terms of the hedging instrument matching the terms of the hedged forecasted transaction. This enables the Company to conclude that changes in cash flows attributable to the risk being hedged are expected to be substantially offset by the hedging instruments.

For derivative instruments designated as cash flow hedge, the change in fair value for the effective portion of the hedge is reported as a component of "Other comprehensive income (loss)" in the consolidated statements of comprehensive income and is reclassified into earnings in the same period in which the hedged transaction affects earnings, and within the same consolidated statements of income line as the hedged transaction. For these derivatives, ineffectiveness appears if the cumulative gain or loss on the derivative hedging instrument exceeds the cumulative change in the expected future cash flows on the hedged transaction. Effectiveness on transactions hedged through purchased options is measured on the full fair value of the option, including time value.

*Derivative financial instruments not designated as a hedge*

The Company conducts its business on a global basis in various major international currencies. As a result, the Company is exposed to adverse movements in foreign currency exchange rates. The Company enters into foreign 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 Company's subsidiaries.

Financial instruments not designated as a hedge are classified as current assets when they are expected to be realized within twelve months of the balance sheet date. Marked-to-market gains or losses arising from changes in the fair value of these instruments are reported in the consolidated statements of income within "Other income and expenses, net" in the period in which they arise, since the transactions for these instruments occur within the Company's operating activities.

**2.25 Recent accounting pronouncements**

*(a) Accounting pronouncements effective in 2022*

In August 2020, the FASB issued new guidance on distinguishing liabilities from equity and EPS, to simplify an issuer's accounting for convertible instruments by eliminating the cash conversion and beneficial conversion feature models in ASC 470-20 that require separate accounting for embedded conversion features. The guidance also simplifies the settlement assessment that issuers perform to determine whether a contract in their own equity qualifies for equity classification. Finally, the guidance requires entities to use in the calculation of the diluted EPS the if-converted method for all convertible instruments and to include the effect of share settlement for instruments that may be settled in cash or shares. The new guidance was effective for public companies for annual periods beginning after December 15, 2021, with early adoption permitted in fiscal years beginning after December 15, 2020. The guidance could be adopted either on a full retrospective basis or by applying the modified retrospective approach, with the impact upon transition recorded in retained earnings for existing instruments outstanding as of the adoption date.

The guidance became effective for the Company on January 1, 2022. The Company adopted the new guidance by applying the modified retrospective method on instruments outstanding at transition date. These instruments correspond solely to the dual-tranche senior unsecured convertible bonds issued on August 4, 2020, which are convertible instruments with cash conversion features in the scope of the new guidance. The impact of the new guidance on the Company's consolidated financial statements resulted at adoption date in a \$107 million increase in Long-term debt, to reflect the convertible debt at its \$1,500 million nominal value, less \$6 million of unamortized debt issuance costs, and a \$15 million decrease in Long-term deferred tax liabilities, with a corresponding \$92 million decrease in equity (composed of a \$117 million decrease in Additional paid-in capital and a \$25 million increase in Retained earnings). On subsequent periods, the carrying value of the convertible bonds, reported on the line Long-term debt of the consolidated balance sheet, is incremented up to its nominal value over the amortization pattern of the \$6 million unamortized debt issuance costs. The Company also determines the dilutive effect of the convertible bonds by applying the if-converted method, which results in the fully dilutive effect of the convertible bonds for the total 33,825,000 number of underlying shares.

In November 2021, the FASB issued new guidance on disclosures about government assistance, to increase the transparency in reporting government assistance, including the disclosure of (1) the types of assistance, (2) an entity's accounting for the assistance, and (3) the effect of the assistance on an entity's financial statements. The new guidance was effective for public companies for annual periods beginning after December 15, 2021, with early adoption permitted in fiscal years beginning after December 15, 2020. The guidance became effective for the Company on January 1, 2022, with no significant impact on its annual disclosures. Relevant disclosures are included in Note 7.

*(b) Accounting pronouncements expected to impact the Company's operations that are not yet effective and have not been early adopted by the Company*

The Company's financial statements and operations are not expected to be significantly impacted by any accounting pronouncements that are not yet effective and not early adopted by the Company.

### 3. SHORT-TERM DEPOSITS AND MARKETABLE SECURITIES

To optimize the return yield on its short-term investments, the Company invested \$581 million of available cash in short-term deposits as of December 31, 2022, compared to \$291 million as of December 31, 2021. These short-term deposits represent liquid assets with original maturity beyond three months and no significant risk of changes in fair value.

Changes in the fair value of marketable securities are detailed in the tables below:

	December 31, 2021	Purchase	Accretion	Proceeds at maturity	Change in fair value included in OCI*	December 31, 2022
U.S. Treasury debt securities	—	687	8	—	(16)	679
<b>Total</b>	<b>—</b>	<b>687</b>	<b>8</b>	<b>—</b>	<b>(16)</b>	<b>679</b>

\* Other Comprehensive Income

	December 31, 2020	Purchase	Accretion	Proceeds at maturity	Change in fair value included in OCI*	December 31, 2021
U.S. Treasury debt securities	133	—	—	(132)	(1)	—
<b>Total</b>	<b>133</b>	<b>—</b>	<b>—</b>	<b>(132)</b>	<b>(1)</b>	<b>—</b>

\* Other Comprehensive Income

In 2022, the Company invested \$687 million available cash in U.S. Treasury bonds. The debt securities have an average rating of Aaa/AA+/AAA from Moody's, S&P and Fitch, respectively, with a weighted average maturity of 3.5 years. The debt securities are reported as current assets on the line "Marketable securities" on the consolidated balance sheet as of December 31, 2022, since they represented investments of funds available for current operations. The Company does not intend to sell the investments and it is not more likely than not that the Company will be required to sell the investments before recovery of the amortized cost basis. The bonds are classified as available-for-sale financial assets and recorded at fair value as of December 31, 2022. The fair value measurement corresponds to a Level 1 fair value hierarchy measurement. The aggregate amortized cost basis of these securities totaled \$695 million as of December 31, 2022.

Marketable securities totaling \$750 million at principal amount were transferred to financial institutions as part of short-term securities lending transactions, in compliance with corporate policies. The Company, acting as the securities lender, does not hold any collateral in this unsecured securities lending transaction. The Company retains effective control on the transferred securities.

The Company did not hold debt securities as of December 31, 2021.

### 4. TRADE ACCOUNTS RECEIVABLE, NET

Trade accounts receivable, net consisted of the following:

	December 31, 2022	December 31, 2021
Trade accounts receivable	1,991	1,778
Current expected credit losses allowance ("CECLA")	(21)	(19)
<b>Total</b>	<b>1,970</b>	<b>1,759</b>

The Company uses a lifetime expected losses allowance for all trade receivables based on failure rates, as applied to the gross amounts of trade accounts receivable. The allowance also includes reasonable assumptions about future credit trends. The historical loss rates are adjusted to reflect current and forward-looking information on macro-economic factors affecting the ability of the Company's customers to settle the receivables. In addition to the factors already embedded in the failure rates, as applied on trade accounts receivable, the Company has identified cyclicality and uncertainties around continued growth for the semiconductor industry and its serviceable available market to be the most relevant factors. These macro-

economic factors are weighted into different economic scenarios, in line with estimates and methodologies applied by other business entities, including financial institutions.

On that basis, the changes in reported CECLA for the year ended December 31, 2022 are presented below:

<b>CECLA As of December 31, 2021</b>	<b>(19)</b>
Current-period adjustment to CECLA	(2)
<b>CECLA As of December 31, 2022</b>	<b>(21)</b>

Adjustments to the expected credit losses allowance are reported in the line “Selling, general and administrative” in the consolidated statements of income.

There were no significant write-offs in 2022, 2021 and 2020.

## 5. INVENTORIES

Inventories consisted of the following:

	December 31, 2022	December 31, 2021
Raw materials	349	223
Work-in-process	1,490	1,235
Finished products	744	514
<b>Total</b>	<b>2,583</b>	<b>1,972</b>

Reserve for obsolescence is estimated for excess uncommitted inventories based on history of sales, backlog of orders and production plans.

## 6. OTHER CURRENT ASSETS

Other current assets consisted of the following:

	December 31, 2022	December 31, 2021
Public funding receivables	190	296
Taxes and other government receivables	270	119
Advances and prepayments	125	118
Loans and deposits	10	8
Interest receivable	22	1
Derivative instruments	56	6
Other current assets	61	33
<b>Total</b>	<b>734</b>	<b>581</b>

Derivative instruments are further described in Note 27.

The Company applies a current expected credit losses model on all financial assets measured at amortized cost, including deposits, loans and receivables. The major portion of other current assets to which this model applies corresponds to government receivables. Due to the existing history of zero-default on receivables originated by governments, the expected credit losses are assumed to be not significant as of December 31, 2022 and December 31, 2021. Other current assets presented in the table above within the lines “Loans and deposits” and “Other current assets” are composed of individually insignificant amounts at exposure of default. Consequently, no significant loss allowance was reported on those current assets as of December 31, 2022 and December 31, 2021.

Public funding receivables are described in Note 7.

Taxes and other government receivables include receivables related to value-added tax, primarily in European tax jurisdictions.

## 7. PUBLIC FUNDING

The Company receives public funding mainly from French, Italian and other European Union governmental entities. Such funding is usually provided to encourage research and innovation activities, industrialization and other local economic development. Government assistance is generally available to all companies, regardless of their ownership structure or country of incorporation. The conditions for the receipt of government funding may include restrictions on eligible expenditures, approval by European Union authorities, annual budget appropriations, compliance with European Union regulations, royalties or contingent return provisions as well as specifications regarding objectives and results. Certain specific contracts may imply compliance with extensive regulatory requirements. They may also set forth conditions relating to the funded programs, including penalties in case certain conditions are not fulfilled, or repayment obligations.

The main government assistance received by the Company are classified under four general categories: funding for Research and Development (R&D), R&D and Innovation activities (RDI), funding for First Industrial Deployment activities (FID) and capital investments for pilot lines and other industrial activities.

The Company also benefits from research tax credits and other tax incentives to foster research and innovation activities, together with capital investments in certain tax jurisdictions, primarily in France and Italy. These research tax credits and tax incentive schemes are further described in Note 23. French research tax credits (“Crédit Impôt Recherche”) and Italian research tax credits (“Credito d’Imposta Ricerca & Sviluppo”) are deemed to be grants in substance. The Italian research tax credit scheme ended in 2019. The French research tax credits are to be paid in cash by the taxing authorities within three years in case they are not deducted from income tax payable during this period of time. The Italian tax credits were compensated against payroll-related social charges. French and Italian tax credits are reported as a reduction of “Research and development” in the consolidated statements of income.

Receivables related to public funding totaled \$346 million as of December 31, 2022, of which \$190 million reported on the line “Other current assets” and \$156 million reported on the line “Other non-current assets”, as collection is expected beyond 12 months. Research tax credit receivables totaled \$294 million and were reported on the line “Other non-current assets” of the consolidated balance sheet as of December 31, 2022.

Liabilities related to public funding totaled \$88 million as of December 31, 2022, of which \$37 million advances from grants reported on the line “Other payables and accrued liabilities” and \$51 million reported on the line “Other long-term liabilities” of the consolidated balance sheet. Long-term liabilities related to public funding included \$46 million grants received mainly as part of the Nano2017 program with the French government, which is subject to a financial return and depends on future cumulative sales of a certain product group over a five-year period.

Additionally, \$95 million capital investment grants were reported as a reduction of Property, plant and equipment, net as of December 31, 2022. Tax incentives reducing the carrying amount of Property, plant and equipment are further described in Note 10 and in Note 23.

For the year ended December 31, 2022, the Company recorded \$177 million of public funding related to R&D and innovation activities, reported on the line “Other income and expenses, net” of the consolidated statement of income. The research tax credit received in France totaled \$106 million and was reported as a reduction of “Research and development” in the consolidated statement of income for the year ended December 31, 2022. The Company reported as a reduction of cost of sales in the consolidated statement of income for the year ended December 31, 2022 a total \$59 million amount related to capital investment and industrialization funding programs.

The impact on depreciation expense of tax incentives received in certain tax jurisdictions and reducing the carrying amount of “Property, plant and equipment, net”, are further described in Note 10 and in Note 23.



## 8. GOODWILL

Goodwill allocated to reportable segments as of December 31, 2022 and 2021 and changes in the carrying amount of goodwill during the years ended December 31, 2022 and 2021 are as follows:

	ADG	AMS	MDG	Total
<b>December 31, 2020</b>	<b>91</b>	<b>2</b>	<b>237</b>	<b>330</b>
Measurement period adjustment	—	—	1	1
Foreign currency translation	(8)	—	(10)	(18)
<b>December 31, 2021</b>	<b>83</b>	<b>2</b>	<b>228</b>	<b>313</b>
Measurement period adjustment	—	—	—	—
Foreign currency translation	(9)	—	(7)	(16)
<b>December 31, 2022</b>	<b>74</b>	<b>2</b>	<b>221</b>	<b>297</b>

In 2022, 2021 and 2020, no impairment loss was recorded by the Company.

## 9. OTHER INTANGIBLE ASSETS, NET

Other intangible assets, net consisted of the following:

	Gross Amount	Accumulated Amortization	Net Amount
<b>December 31, 2022</b>			
Technologies & licenses	1,064	(795)	269
Purchased & internally developed software	609	(514)	95
Technologies in progress	41	—	41
<b>Total</b>	<b>1,714</b>	<b>(1,309)</b>	<b>405</b>
<b>December 31, 2021</b>			
Technologies & licenses	1,050	(746)	304
Purchased & internally developed software	567	(485)	82
Technologies in progress	52	—	52
<b>Total</b>	<b>1,669</b>	<b>(1,231)</b>	<b>438</b>

The line “Technologies in progress” in the table above also includes internally developed software under construction and software not ready for their intended use.

Amortization expense related to intangible assets subject to amortization was \$103 million, \$93 million and \$79 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Estimated future amortization expense related to intangible assets as of December 31, 2022 is as follows:

<b>Year</b>	
2023	112
2024	98
2025	72
2026	42
2027	20
Thereafter	61
<b>Total</b>	<b>405</b>

In 2022, the Company recorded a \$38 million impairment loss reported in the line “Research and development” of the consolidated statements of income. The impairment loss was related to certain technologies acquired as part of one of the Company’s recent business combinations.

In 2021 and 2020, the Company impaired \$1 million and \$4 million, respectively, of acquired licenses and technologies with no alternative future use.

**10. PROPERTY, PLANT AND EQUIPMENT, NET**

Property, plant and equipment, net consisted of the following:

December 31, 2022	Gross Amount	Accumulated Depreciation	Net Amount
Land	83	—	83
Buildings	1,116	(563)	553
Facilities & leasehold improvements	3,877	(2,895)	982
Machinery and equipment	18,751	(14,023)	4,728
Computer and R&D equipment	398	(319)	79
Operating lease right-of-use assets	311	(118)	193
Finance lease right-of-use assets	57	(2)	55
Other tangible assets	169	(95)	74
Construction in progress	1,454	—	1,454
<b>Total</b>	<b>26,216</b>	<b>(18,015)</b>	<b>8,201</b>

December 31, 2021	Gross Amount	Accumulated Depreciation	Net Amount
Land	84	—	84
Buildings	951	(562)	389
Facilities & leasehold improvements	3,490	(2,936)	554
Machinery and equipment	17,085	(13,786)	3,299
Computer and R&D equipment	395	(333)	62
Operating lease right-of-use assets	314	(114)	200
Other tangible assets	147	(97)	50
Construction in progress	1,022	—	1,022
<b>Total</b>	<b>23,488</b>	<b>(17,828)</b>	<b>5,660</b>

The line “Construction in progress” in the table above includes property, plant and equipment under construction and equipment under qualification and not ready for their intended use.

In 2022, the Company transferred from construction in progress to definitive long-lived assets, approximately \$650 million corresponding to assets dedicated to its new 300mm fab in Agrate, Italy, where operations started in December 2022.

The depreciation charge was \$1,113 million, \$952 million and \$844 million in 2022, 2021 and 2020, respectively.

Tax incentives and capital investment funding reported as a reduction of capital expenditures totaled \$25 million, \$13 million and \$10 million for the years ended December 31, 2022, 2021 and 2020, respectively. Tax incentives and public funding reduced depreciation charges by \$56 million, \$61 million and \$59 million in 2022, 2021 and 2020, respectively.

Capital investment public funding is described in Note 7. Tax incentives related to capital expenditures is further described in Note 23.

For the years ended December 31, 2022, 2021 and 2020, the Company sold property, plant and equipment for cash proceeds of \$4 million, \$2 million and \$4 million, respectively.

There was no significant impairment recognized for the years ended December 31, 2022, 2021 and 2020.

**11. LEASES**

The Company leases land, buildings, cars and certain equipment (including IT equipment) which have remaining lease terms between less than one year and 47 years.

Operating and finance leases consisted of the following:

	December 31, 2022	December 31, 2021
<b>Right-of-use assets</b>		
Operating leases	193	200
Finance Leases	55	—
<b>Total right-of-use assets</b>	<b>248</b>	<b>200</b>
<b>Lease liabilities</b>		
Current	59	55
Operating leases	52	55
Finance Leases	7	—
Non-current	191	148
Operating leases	141	148
Finance Leases	50	—
<b>Total lease liabilities</b>	<b>250</b>	<b>203</b>

Maturities of operating lease liabilities are as follows:

	Operating Leases	Finance Leases	December 31, 2022
2023	57	8	65
2024	40	5	45
2025	27	5	32
2026	19	5	24
2027	12	28	40
Thereafter	86	23	109
<b>Total future undiscounted cash outflows</b>	<b>241</b>	<b>74</b>	<b>315</b>
Effect of discounting	(48)	(17)	(65)
<b>Total operating lease liabilities</b>	<b>193</b>	<b>57</b>	<b>250</b>

Operating and finance lease terms and discount rates are as follows:

	December 31, 2022	December 31, 2021
Weighted average remaining lease term (in years) – operating leases	9.46	9.38
Weighted average remaining lease term (in years) – finance leases	9.89	—
Weighted average discount rate – operating lease	3.12%	2.69%
Weighted average discount rate – finance lease	3.86%	—

Operating and finance lease cost and cash paid are as follows:

	2022	2021
<b>Operating lease cost</b>	<b>62</b>	<b>68</b>
<b>Finance lease cost</b>		
Amortization of right-of-use assets	2	—
Interest	1	—
<b>Operating lease cash paid</b>	<b>63</b>	<b>67</b>
<b>Finance lease cash paid</b>	<b>—</b>	<b>—</b>

Right-of-use assets obtained in exchange for new operating lease liabilities are as follows:

	<u>2022</u>	<u>2021</u>
Operating leases	60	80
Finance leases	55	—

## 12. LONG-TERM INVESTMENTS

	<u>December 31, 2022</u>	<u>December 31, 2021</u>
Long-term investments	11	10
<b>Total</b>	<b>11</b>	<b>10</b>

Long-term investments are equity securities with no readily determinable fair value for which the Company has elected to apply the cost method as a measurement alternative. It includes principally the Company's investment in DNP Photomask Europe S.p.A ("DNP"). The Company has identified DNP as a VIE but has determined that it is not the primary beneficiary. The significant activities of DNP revolve around creation of masks and development of high level mask technology. The Company does not have the power to direct these activities. The Company's current maximum exposure to losses as a result of its involvement with DNP is limited to its investment. The Company has not provided additional financial support to DNP in 2022 and 2021 and has no current requirement or intent to provide further financial support to DNP.

## 13. OTHER NON-CURRENT ASSETS

Other non-current assets consisted of the following:

	<u>December 31, 2022</u>	<u>December 31, 2021</u>
Equity securities	26	29
Receivables from government agencies	156	124
French research tax credit receivable	294	376
Defined benefit plans	9	15
Prepayments and deposits to third parties	107	21
Derivative instruments	13	—
Other non-current assets	56	74
<b>Total</b>	<b>661</b>	<b>639</b>

Long-term receivables from government agencies, including the French research tax credit scheme, which is considered to be, in substance, public funding, are described in Note 7.

Prepayments and deposits to third parties include receivables related to long-term supply agreements involving purchase of raw materials, capacity commitments, cloud-hosting arrangements, and other services.

In 2022 and 2021, and 2020, the Company entered into factoring transactions to accelerate the realization in cash of certain long-term receivables. The Company sold without recourse \$110 million and \$118 million of these receivables in the years ended December 31, 2022 and 2021 respectively, with a financial cost of \$1 million for both years.

The major portion of other non-current assets to which the expected credit loss model applies are long-term State receivables. Due to the existing history of zero-default on receivables originated by governments, the expected credit losses are assumed to be negligible as of December 31, 2022, and December 31, 2021. Other non-current assets presented in the table above on the line "Other non-current assets" are composed of individually not significant amounts not deemed to have exposure of default. Consequently, no significant expected credit loss allowance was reported on other non-current assets at reporting date.

#### 14. OTHER PAYABLES AND ACCRUED LIABILITIES

Other payables and accrued liabilities consisted of the following:

	December 31, 2022	December 31, 2021
Employee related liabilities	599	536
Employee compensated absences	196	181
Taxes other than income taxes	68	58
Advances from customers	225	25
Advances from grants	37	34
Derivative instruments	35	43
Defined benefit and contribution plans	39	34
Royalties	32	29
Current operating lease liabilities	52	55
Deferred and contingent consideration on business combinations	—	27
Others	102	79
<b>Total</b>	<b>1,385</b>	<b>1,101</b>

Derivative instruments are further described in Note 27.

Defined benefit and defined contribution plans and other long-term employee benefits are further described in Note 16.

Lease liabilities are described in Note 11. In 2022, the Company paid \$25 million of deferred and contingent consideration related to business acquisitions.

Liabilities related to public funding are described in Note 7.

Advances from customers are primarily related to multi-annual capacity reservation and volume commitment agreements signed in 2022 with certain customers. Some of these arrangements include take-or-pay clauses, according to which the Company is entitled to receive the full amount of the contractual committed fees in case of non-compliant orders from those customers. Certain agreements include penalties in case the Company is not able to fulfill its contractual obligations. No significant provision for those penalties was reported on the consolidated balance sheet as of December 31, 2022.

## 15. LONG-TERM DEBT

Long-term debt consisted of the following:

	December 31, 2022	December 31, 2021
<b>Funding program loans from European Investment Bank ("EIB"):</b>		
2.67% due 2028, floating interest rate at Euribor + 0.589%	163	202
1.20% due 2029, floating interest rate at Euribor + 0.564%	183	222
1.31% due 2031, floating interest rate at Euribor + 0.583%	322	379
0.89% due 2031, floating interest rate at Euribor + 0.660%	159	187
<b>Credit Facility from Cassa Depositi e Prestiti SpA ("CDP")</b>		
3.15% due 2027, floating interest rate at Euribor + 0.690%	120	156
1.85% due 2027, floating interest rate at Euribor + 0.550%	107	—
2.15% due 2027, floating interest rate at Euribor + 0.850%	107	—
<b>Dual tranche senior unsecured convertible bonds</b>		
Zero-coupon, due 2025 (Tranche A)	748	713
Zero-coupon, due 2027 (Tranche B)	747	674
<b>Finance leases:</b>		
3.86% due 2027, fixed interest rate	38	—
3.78% due 2042, fixed interest rate	19	—
<b>Other funding program loans:</b>		
0.32% (weighted average), due 2023-2028, fixed interest rate	4	6
<b>Total long-term debt</b>	<b>2,717</b>	<b>2,539</b>
Less current portion	(175)	(143)
<b>Total long-term debt, less current portion</b>	<b>2,542</b>	<b>2,396</b>

Long-term debt is denominated in the following currencies:

	December 31, 2022	December 31, 2021
U.S. dollar	1,495	1,387
Euro	1,222	1,152
<b>Total</b>	<b>2,717</b>	<b>2,539</b>

On August 4, 2020, the Company issued a \$1.5 billion principal amount of dual tranche senior unsecured convertible bonds (Tranche A and Tranche B for \$750 million each tranche), due 2025 and 2027, respectively. Tranche A bonds were issued at 105.8% as zero-coupon bonds while Tranche B bonds were issued at 104.5% as zero-coupon bonds. The conversion price at issuance was \$43.62 for Tranche A equivalent to a 47.5% conversion premium and \$45.10 for Tranche B, equivalent to a 52.5% conversion premium. These conversion features correspond to an equivalent of 4,585 shares per each Tranche A bond \$200,000 par value and an equivalent of 4,435 shares per each Tranche B bond \$200,000 par value. The bonds are convertible by the bondholders or are callable by the issuer upon certain conditions, on a net-share settlement basis, except if the issuer elects a full-cash or full-share conversion as an alternative settlement. The net proceeds from the bond offering were \$1,567 million, after deducting issuance costs paid by the Company.

On January 1, 2022, the Company adopted the new guidance on distinguishing liabilities from equity to simplify an issuer's accounting for convertible instruments by eliminating the cash conversion and beneficial conversion

feature models in ASC 470-20. The Company adopted the new guidance by applying the modified retrospective method on instruments outstanding at transition date. These instruments correspond solely to the dual-tranche senior unsecured convertible bonds issued on August 4, 2020, which are convertible instruments with cash conversion features in the scope of the new guidance.

Under previous guidance, proceeds were allocated between debt and equity by measuring first the liability component and then determining the equity component as a residual amount. The fair value of the liability component at initial recognition totaled \$1,362 million before the allocation of issuance costs and deferred tax effect. An amount of \$215 million, before the allocation of \$1 million issuance costs and a \$30 million deferred tax effect, was recorded in equity as the value of the conversion features of the instruments. Under the new guidance, the Company is no longer required to separately present in equity the cash conversion features embedded in the convertible bonds. Instead, the convertible bonds are wholly accounted for as debt and thus, are stated at principal amount less unamortized debt issuance costs. The new guidance does not affect the separation model for embedded conversion features of convertible debt instruments issued with substantial premium, for which the premium is required to be recorded as additional paid-in capital. The premium received by the Company upon issuance of the convertible bonds remains therefore in equity and amounts to \$77 million, net of the corresponding deferred tax effect. The impact upon adoption on the Company's consolidated financial statements was a \$107 million increase in Long-term debt, to reflect the convertible debt at its \$1,500 million nominal value, less \$6 million of unamortized debt issuance costs, and a \$15 million decrease in Long-term deferred tax liabilities, with a corresponding \$92 million decrease in equity (composed of a \$117 million decrease in Additional paid-in capital and a \$25 million increase in Retained earnings).

As of December 31, 2022, the Company stock price did not exceed the conversion prices of the dual-tranche senior unsecured convertible bonds issued on August 4, 2020.

On July 3, 2017, the Company issued a \$1.5 billion principal amount of dual tranche senior unsecured convertible bonds (Tranche A and Tranche B for \$750 million each tranche), due 2022 and 2024, respectively. Tranche A bonds were issued at 101.265% as zero-coupon bonds, while Tranche B bonds were issued at par and bear a 0.25% per annum nominal interest, payable semi-annually. The conversion price at issuance was \$20.54, equivalent to a 37.5% premium on both tranches, which corresponded to 9,737 equivalent shares per each \$200,000 bond par value. The bonds were convertible by the bondholders or were callable by the issuer upon certain conditions, on a net-share settlement basis, except if the issuer elected a full-cash or full-share conversion as an alternative settlement. The net proceeds from the bond offering were \$1,502 million, after deducting issuance costs payable by the Company. Based on the former applicable guidance, proceeds were allocated between debt and equity by measuring first the liability component and then determining the equity component as a residual amount. The liability component was measured at fair value based on a discount rate adjustment technique (income approach), which corresponded to a Level 3 fair value hierarchy measurement. The fair value of the liability component at initial recognition totaled \$1,266 million before allocation of issuance costs and was estimated by calculating the present value of cash flows using a discount rate of 2.70% and 3.28% (including 0.25% per annum nominal interest), respectively, on each tranche, which were determined to be consistent with the market rates at the time for similar instruments with no conversion rights. An amount of \$242 million, net of allocated issuance costs of \$1 million, was recorded in equity as the value of the conversion features of the instruments.

The call option available to the Company for the early redemption of Tranche A was exercised in July 2020. As a consequence, bondholders exercised their conversion rights on Tranche A. As the Company elected to net share settle the bonds, each conversion exercised by the bondholders followed the process defined in the original terms and conditions of the senior unsecured convertible bonds, which determined the actual number of shares to be transferred upon each conversion. The Company settled the bonds upon conversion, by redeeming through cash the \$750 million principal amount, and by settling the residual consideration through the delivery of 11.4 million treasury shares. The Company allocated the total consideration transferred between debt and equity by measuring at fair value the liability component of Tranche A prior to settlement, then determining the equity component as a residual amount. The liability component was measured at fair value based on a discount rate adjustment technique (income approach), which corresponded to a Level 3 fair value hierarchy measurement and consisted in calculating the present value of cash flows using an average estimated discount rate of 0.8%, which approximated current market rates for similar bonds with no conversion rights. The fair value of the liability component as measured prior to extinguishment was \$739 million for Tranche A, which generated a loss amounting to \$25 million reported on the line "Loss on financial instruments, net" in the consolidated statement of income for the year ended December 31, 2020.

The call option available to the Company for the early redemption of Tranche B was exercised in July 2021. As a consequence, bondholders exercised their conversion rights on the full Tranche B. Each conversion exercised by the bondholders followed the process defined in the original terms and conditions of the convertible bonds, which determined the actual consideration to be transferred to bondholders upon each conversion. Out of the 3,750 bonds composing Tranche B, the Company elected to settle 1,238 bonds on a net-share basis for a total consideration of \$479 million, through the payment of the \$248 million nominal value in cash and the delivery of approximately 5.8 million treasury shares. The remaining 2,512 bonds were settled on a full cash basis for a total consideration of \$1,015 million. The Company allocated the total consideration transferred between debt and equity by measuring at fair value the liability component of Tranche B prior to settlement, then determining the equity component as a residual amount. The liability component was measured at fair value based on a discount rate adjustment technique (income approach), which corresponded to a Level 3 fair value hierarchy measurement and consisted in calculating the present value of cash flows using an average estimated discount rate of 1.1%, which approximated current market rates for similar bonds that have no conversion rights. The fair value of the liability component as measured prior to extinguishment was \$689 million for the full Tranche B, which generated a loss amounting to \$44 million, in addition to \$1 million write-off of unamortized debt issuance costs, reported on the line “Loss on financial instruments, net” in the consolidated statement of income for the year ended December 31, 2021.

Aggregate future maturities of total long-term debt (including current portion) at principal amount are as follows:

	December 31, 2022
2023	175
2024	172
2025	922
2026	172
2027	908
Thereafter	373
<b>Total</b>	<b>2,722</b>

The difference between the total aggregated future maturities in the preceding table and the total carrying amount of long-term debt is due to unamortized issuance costs on the dual tranche senior unsecured convertible bonds.

#### *Credit facilities*

The Company’s long-term debt contained standard conditions but does not impose minimum financial ratios. The Company had unutilized committed medium-term credit facilities with core relationship banks totalling \$1,281 million as of December 31, 2022.

The EIB Loans are comprised of three long-term amortizing credit facilities as part of R&D funding programs. The first one, signed in August 2017, is a €500 million loan in relation to R&D and capital expenditures in the European Union for the years 2017 and 2018. The entire amount was fully drawn in Euros corresponding to \$346 million outstanding as of December 31, 2022. The second one, signed in 2020, is a €500 million credit facility agreement with EIB to support R&D and capital expenditure programs in Italy and France. The amount was fully drawn in Euros representing \$481 million outstanding as of December 31, 2022. In 2022, the Company signed a third long-term amortizing credit facility with EIB of €600 million, out of which, no amount had been drawn as of December 31, 2022.

The CDP loans are comprised of two long-term credit facilities. The first, signed in 2021, is a €150 million loan, fully drawn in Euros, of which \$120 million were outstanding as of December 31, 2022. The second one, signed in 2022, is a €200 million loan, fully drawn in Euros, of which \$214 million was outstanding as of December 31, 2022.



## 16. POST-EMPLOYMENT AND OTHER LONG-TERM EMPLOYEES BENEFITS

The Company and its subsidiaries have a number of defined benefit pension plans, mainly unfunded, and other long-term employees' benefits covering employees in various countries. The defined benefit plans provide pension benefits based on years of service and employee compensation levels. The other long-term employees' plans provide benefits due during the employees' period of service after certain seniority levels. The Company uses December 31 as measurement date for its plans. Eligibility is generally determined in accordance with local statutory requirements. For Italian termination indemnity plan ("TFR"), generated before July 1, 2007, the Company measures the vested benefits to which Italian employees are entitled as if the amounts were immediately due as of December 31, 2022, in compliance with U.S. GAAP guidance on determining vested benefit obligations for defined benefit pension plans.

The changes in benefit obligation and plan assets were as follows:

	Pension Benefits		Other Long-Term Benefits	
	December 31, 2022	December 31, 2021	December 31, 2022	December 31, 2021
<b>Change in benefit obligation:</b>				
<b>Benefit obligation at beginning of year</b>	<b>1,165</b>	<b>1,216</b>	<b>94</b>	<b>101</b>
Service cost	33	36	17	13
Interest cost	27	21	1	1
Employee contributions	4	4	—	—
Benefits paid	(22)	(25)	(6)	(5)
Effect of settlement	(14)	(8)	—	—
Business combination	—	3	—	—
Actuarial (gain) loss	(260)	(48)	(15)	—
Foreign currency translation and other adjustments	(47)	(34)	(5)	(16)
<b>Benefit obligation at end of year</b>	<b>886</b>	<b>1,165</b>	<b>86</b>	<b>94</b>
<b>Change in plan assets:</b>				
<b>Plan assets at fair value at beginning of year</b>	<b>743</b>	<b>718</b>	<b>—</b>	<b>—</b>
Return on plan assets	(157)	32	—	—
Employer contributions	25	17	—	—
Employee contributions	4	4	—	—
Benefits paid	(9)	(12)	—	—
Effect of settlement	(14)	(8)	—	—
Business combination	—	2	—	—
Foreign currency translation and other adjustments	(25)	(10)	—	—
<b>Plan assets at fair value at end of year</b>	<b>567</b>	<b>743</b>	<b>—</b>	<b>—</b>
<b>Funded status</b>	<b>(319)</b>	<b>(422)</b>	<b>(86)</b>	<b>(94)</b>

The actuarial gains in 2022 were primarily due to an increase in discount rates applied against future expected benefit payments and resulted in a decrease of the benefit obligation mainly for the plans located in France, in the United States and Switzerland. The actuarial gains in 2021 were primarily due to an increase in discount rates applied against future expected benefit payments and resulted in a decrease of the benefit obligation mainly for the plans located in France, in the United Kingdom and in the United States.

Net amount recognized in the consolidated balance sheets consisted of the following:

	Pension Benefits		Other Long-Term Benefits	
	December 31, 2022	December 31, 2021	December 31, 2022	December 31, 2021
Non-current assets	9	15	—	—
Current liabilities	(11)	(11)	(5)	(4)
Long-term liabilities	(317)	(426)	(81)	(90)
<b>Net amount recognized</b>	<b>(319)</b>	<b>(422)</b>	<b>(86)</b>	<b>(94)</b>

Pension plans net assets are reported in the Company's consolidated balance sheets in the line "Other non-current assets" while current and non-current liability positions are reported in the lines "Other payables and accrued liabilities" and "Post-employment benefit obligations" respectively.

Other long-term benefits current and non-current net liability positions are reported in our consolidated balance sheets in the lines "Other payables and accrued liabilities" and "Other long-term liabilities" respectively.

The components of accumulated other comprehensive loss (income) before tax effects were as follows:

	Actuarial (gains)/losses	Prior service cost	Total
<b>Accumulated other comprehensive loss as of December 31, 2020</b>	<b>216</b>	<b>3</b>	<b>219</b>
Net amount generated/arising in current year	(56)	—	(56)
Amortization	(12)	(1)	(13)
Foreign currency translation adjustment	(6)	—	(6)
<b>Accumulated other comprehensive loss as of December 31, 2021</b>	<b>142</b>	<b>2</b>	<b>144</b>
Net amount generated/arising in current year	(84)	—	(84)
Amortization	(3)	(1)	(4)
Foreign currency translation adjustment	(10)	—	(10)
<b>Accumulated other comprehensive loss as of December 31, 2022</b>	<b>45</b>	<b>1</b>	<b>46</b>

The accumulated benefit obligations were as follows:

	Pension Benefits		Other Long-Term Benefits	
	December 31, 2022	December 31, 2021	December 31, 2022	December 31, 2021
Accumulated benefit obligations	778	1,004	25	79

For pension plans and other long-term benefits with accumulated benefit obligations in excess of plan assets, the accumulated benefit obligation and fair value of plan assets were \$409 million and \$139 million, respectively, as of December 31, 2022 and \$528 million and \$134 million, respectively, as of December 31, 2021.

For pension plans with projected benefit obligations in excess of plan assets, the benefit obligation and fair value of plan assets were \$839 million and \$427 million, respectively, as of December 31, 2022 and \$1,030 million and \$499 million, respectively, as of December 31, 2021.

The components of the net periodic benefit cost included the following:

	Pension Benefits			Other Long-term Benefits		
	Year ended December 31, 2022	Year ended December 31, 2021	Year ended December 31, 2020	Year ended December 31, 2022	Year ended December 31, 2021	Year ended December 31, 2020
Service cost	33	36	31	17	13	11
Interest cost	27	21	21	1	1	1
Expected return on plan assets	(23)	(24)	(23)	—	—	—
Amortization of actuarial net loss (gain)	6	12	12	(14)	—	3
Amortization of prior service cost	1	1	1	—	—	—
Effect of settlement	—	—	1	—	—	—
<b>Net periodic benefit cost</b>	<b>44</b>	<b>46</b>	<b>43</b>	<b>4</b>	<b>14</b>	<b>15</b>

Pension benefits components other than service cost, recognized outside of Operating income in "Other components of pension benefit costs" in the Company's consolidated statements of income, were \$11 million, \$10 million and \$12 million in the years ended December 31, 2022, 2021 and 2020, respectively.

The weighted average assumptions used in the determination of the benefit obligation and the plan assets for the pension plans and the other long-term benefits were as follows:

<b>Assumptions</b>	<b>2022</b>	<b>2021</b>
Discount rate	4.18%	1.84%
Salary increase rate	2.31%	2.27%
Expected long-term rate of return on funds for the pension expense of the following year	2.66%	3.19%

The weighted average assumptions used in the determination of the net periodic benefit cost for the pension plans and the other long-term benefits were as follows:

<b>Assumptions</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>
Discount rate	1.84%	1.45%	1.95%
Salary increase rate	2.27%	2.43%	2.48%
Expected long-term rate of return on funds for the pension expense of the year	3.19%	3.44%	4.04%

The discount rate was determined by reference to market yields on high quality long-term corporate bonds applicable to the respective country of each plan, with terms consistent with the terms of the benefit obligations. In developing the expected long-term rate of return on assets, the Company modelled the expected long-term rates of return for broad categories of investments held by the plan against a number of various potential economic scenarios.

The Company's pension plan asset allocation as of December 31, 2022 and December 31, 2021 is as follows:

<b>Asset Category</b>	<b>Percentage of Plan Assets as of December 31,</b>	
	<b>2022</b>	<b>2021</b>
Cash and cash equivalents	1%	1%
Equity securities	17%	17%
Government debt securities	10%	12%
Corporate debt securities	21%	22%
Investments in funds(a)	16%	21%
Real estate	1%	1%
Other (mainly insurance assets – contracts and reserves)	34%	26%
<b>Total</b>	<b>100%</b>	<b>100%</b>

- (a) As of December 31, 2022, investments in funds were composed of commingled and multi-strategy funds invested in diversified portfolios of fixed income (79%) - mainly corporate bonds, time deposits and money market (11%) and other instruments (10%). As of December 31, 2021, investments in funds were composed of commingled and multi-strategy funds invested in diversified portfolios of fixed income (73%) - mainly corporate bonds, equity (15%) and other instruments (12%).

As of December 31, 2022, the Company's plan asset allocation was in line with the targets set for each plan.

The Company's detailed pension plan asset allocation including the fair-value measurements of those plan assets as of December 31, 2022 is as follows:

	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents	4	4	—	—
Equity securities	95	1	94	—
Government debt securities	59	—	59	—
Corporate debt securities	120	—	98	22
Investment funds	87	1	86	—
Real estate	6	—	6	—
Other (mainly insurance assets – contracts and reserves)	194	—	38	156
<b>TOTAL</b>	<b>565</b>	<b>6</b>	<b>381</b>	<b>178</b>

The Company's detailed pension plan asset allocation including the fair-value measurements of those plan assets as of December 31, 2021 is as follows:

	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents	5	5	—	—
Equity securities	130	2	128	—
Government debt securities	87	—	87	—
Corporate debt securities	164	—	139	25
Investment funds	156	1	155	—
Real estate	10	—	10	—
Other (mainly insurance assets – contracts and reserves)	191	—	49	142
<b>TOTAL</b>	<b>743</b>	<b>8</b>	<b>568</b>	<b>167</b>

The fair value of insurance contracts is based on the value of the assets held by the provider. The approach is consistent with prior years.

For plan assets measured at fair value using significant unobservable inputs (Level 3), the reconciliation between January 1, 2022 and December 31, 2022 is presented as follows:

	Fair Value Measurements using Significant Unobservable Inputs (Level 3)
January 1, 2022	167
Contributions (employer and employee)	21
Net benefit payments (a)	9
Settlements	(14)
Foreign currency translation adjustment	(5)
<b>December 31, 2022</b>	<b>178</b>

(a) Net cash flows between benefits paid from the insurance contracts and benefits transferred into the insurance contracts by employees.

For plan assets measured at fair value using significant unobservable inputs (Level 3), the reconciliation between January 1, 2021 and December 31, 2021 is presented as follows:

	Fair Value Measurements using Significant Unobservable Inputs (Level 3)
January 1, 2021	162
Contributions (employer and employee)	15
Actual return on plan assets	2
Net benefit payments (a)	1
Settlements	(8)
Foreign currency translation adjustment	(5)
<b>December 31, 2021</b>	<b>167</b>

(a) Net cash flows between benefits paid from the insurance contracts and benefits transferred into the insurance contracts by employees.

The Company's investment strategy for its pension plans is to optimize the long-term investment return on plan assets in relation to the liability structure to maintain an acceptable level of risk while minimizing the cost of providing pension benefits and maintaining adequate funding levels in accordance with applicable rules in each jurisdiction. The Company's practice is to periodically conduct a review of its asset allocation strategy, in such a way that the asset allocation is in line with the targeted asset allocation within reasonable boundaries. The Company's asset portfolios are managed in such a way as to achieve adapted diversity. The Company does not manage any assets internally.

After considering the funded status of the Company's defined benefit plans, movements in the discount rate, investment performance and related tax consequences, the Company may choose to make contributions to its pension plans in any given year in excess of required amounts. The Company's contributions to plan assets were \$25 million in 2022 and \$17 million in 2021 and the Company expects to contribute \$30 million to plan assets in 2023.

The Company's estimated future benefit payments as of December 31, 2022 are as follows:

Years	Pension Benefits	Other Long-term Benefits
2023	41	5
2024	46	6
2025	57	9
2026	70	8
2027	51	9
From 2028 to 2032	319	43

The Company has certain defined contribution plans, which accrue benefits for employees on a pro-rata basis during their employment period based on their individual salaries. The Company's accrued benefits related to defined contribution pension plans for \$24 million as of December 31, 2022 and \$23 million as of December 31, 2021. The annual cost of these plans amounted to approximately \$100 million in 2022, \$101 million in 2021 and \$91 million in 2020.

**17. OTHER LONG-TERM LIABILITIES**

Other long-term liabilities consisted of the following:

	December 31, 2022	December 31, 2021
Non-current operating lease liabilities	141	148
Contingent consideration on business combinations	31	70
Other long-term employee benefits	81	90
Long-term liabilities related to public funding	51	44
Long-term advances from customers	73	—
Derivative instruments	4	—
Others	73	64
<b>Total</b>	<b>454</b>	<b>416</b>

Lease liabilities are described in Note 11.

Deferred and contingent consideration related to business acquisitions are further described in Note 27.

Other long-term employee benefits are described in Note 16.

Long-term liabilities related to public funding are described in Note 7.

Advances from customers are described in Note 14 and Note 19.

Derivative instruments are described in Note 27.

Other long-term liabilities also include individually not significant amounts as of December 31, 2022 and December 31, 2021, presented cumulatively in the line “Others”.

**18. SHAREHOLDERS' EQUITY****18.1 Outstanding shares**

The authorized share capital of the Company is Euro 1,810 million consisting of 1,200,000,000 common shares and 540,000,000 preference shares, each with a nominal value of €1.04. As of December 31, 2022, the number of shares of common stock issued was 911,281,920 shares (911,276,920 as of December 31, 2021).

As of December 31, 2022, the number of shares of common stock outstanding was 903,865,763 (906,518,057 as of December 31, 2021).

**18.2 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.

The Company is a party to an option agreement regarding the preference shares with Stichting Continuïteit ST (the “Stichting”), entered into on January 22, 2007, with a duration of ten years, which agreement was extended for another ten years in October 2016. The Managing Board and Supervisory Board, along with the board of the Stichting, have declared that they are jointly of the opinion that the Stichting is independent of the Company. 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 the Company’s interests, shareholders and other stakeholders and which in the event of a creeping acquisition or offer for the Company’s common shares are not supported by the Company’s Managing Board and Supervisory Board. The preference shares may remain outstanding for no longer than two years. 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 the Company’s Managing Board and

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

There were no preference shares issued as of December 31, 2022 and December 31, 2021 respectively.

### 18.3 Treasury stock

As of December 31, 2022, the Company owned 7,416,157 shares classified as treasury stock in the consolidated statement of equity compared to 4,758,863 shares as of December 31, 2021.

The treasury shares have been originally designated for allocation under the Company's share-based remuneration programs. As of December 31, 2022, 74,520,215 of these treasury shares were transferred to employees under the Company's share-based remuneration programs, of which 6,587,002 during the year ended December 31, 2022.

On July 1, 2021, the Company announced the launch of a share buy-back program of up to \$1,040 million to be executed within a three-year period. During 2022, the Company repurchased approximately 9.2 million shares of its common stock for a total amount of \$346 million.

### 18.4 Unvested share awards for the Supervisory Board

On an annual basis and until the year 2012, the Compensation Committee (on behalf of the Supervisory Board and with its approval) used to grant stock-based awards (options to acquire common shares of the Company) to the members and professionals of the Supervisory Board ("The Supervisory Board Plan"). The awards were granted at the nominal value of the share of €1.04 (exercise price of the option). The options granted under the Supervisory Board Plan vested and became exercisable immediately, while the shares resulting from these awards vested and therefore became available for trade evenly over three years (one third every year), with no market, performance or service conditions.

At the Company's AGM held on June 21, 2013, it was resolved to abolish and terminate the stock-based compensation for the Supervisory Board members and professionals.

The table below summarizes grants under the outstanding stock award plans, as authorized by the Compensation Committee:

<u>Year of grant</u>	<u>Options granted</u>	<u>Options waived at grant</u>
2011	172,500	(30,000)
2012	180,000	(22,500)
Since 2013	No options granted	

A summary of the options' activity by plan for the years ended December 31, 2022 and December 31, 2021 is presented below:

<u>Year of grant</u>	<u>Outstanding as of December 31, 2020</u>	<u>Exercised</u>	<u>Expired / Cancelled</u>	<u>Outstanding as of December 31, 2021</u>	<u>Exercised</u>	<u>Expired / Cancelled</u>	<u>Outstanding as of December 31, 2022</u>
2011	7,500	(7,500)	—	—	—	—	—
2012	50,000	(30,000)	—	20,000	(5,000)	(15,000)	—

The total intrinsic value of options exercised during the year 2022 were not significant, compared to \$2 million in 2021 and \$2 million in 2020. The total intrinsic value of options outstanding was \$1 million as of December 31, 2021.

### 18.5 Unvested share awards for the employees

On an annual basis, the Compensation Committee (on behalf of the Supervisory Board and with its approval) grants stock-based awards to the senior executives and selected employees (the "Employee Plan"). The awards

are granted for services under the Employee Plan. There are two types of unvested shares: (1) shares granted to employees, which are subject only to service conditions and vest over the requisite service period, and (2) shares granted to senior executives, whose vesting is subject to performance conditions.

For plans 2019 and 2020, the performance conditions consisted of two external targets (sales evolution and operating income compared to a basket of competitors) weighting for two thirds of the total number of awards granted and of one internal target (return on net assets compared to the previous period), weighting for one third of the total number of awards granted. For plans 2021 and 2022, the performance conditions consisted of two external targets (sales evolution and operating income compared to a basket of competitors) weighting for two thirds of the total number of awards granted and of one internal target (Company's sustainability and diversity performance), weighting for one third of the total number of awards granted.

Stock awards usually vest over a three-year service period (32% as of the first anniversary of the grant, 32% as of the second anniversary of the grant and 36% as of the third anniversary of the grant). In addition, for each of the years 2019 and 2020, a Special Bonus was granted to the Company's CEO.

The table below summarizes grants under the outstanding stock award plans in 2022, as authorized by the Compensation Committee:

Date of grant	Plan name	Number of shares granted	Number of shares waived	Number of shares lost on performance conditions
May 23, 2019	2019 CEO Special Bonus	34,960	—	—
July 24, 2019	2019 Employee Plan	7,752,940	—	(1,161,966)
December 26, 2019	2019 Employee Plan	246,750	—	(17,013)
June 17, 2020	2020 CEO Special Bonus	16,000	—	—
July 23, 2020	2020 Employee Plan	7,437,580	—	—
December 24, 2020	2020 Employee Plan	562,350	—	—
July 28, 2021	2021 Employee Plan	6,327,205	—	(920,263)
December 21, 2021	2021 Employee Plan	213,270	—	(60,483)
July 27, 2022	2022 Employee Plan	6,243,670	—	(*)
December 22, 2022	2022 Employee Plan	287,675	—	(*)

(\*) As of the date of issuance of these consolidated financial statements, a final decision by the Compensation Committee of the Supervisory Board on the achievement of the performance conditions had not been made yet.

A summary of the unvested share activity by plan for the year ended December 31, 2022 is presented below:

Unvested Shares	Unvested as at December 31, 2021	Granted	Forfeited / waived	Cancelled on failed vesting conditions	Vested	Unvested as at December 31, 2022
2019 CEO Special Bonus	11,652	—	—	—	(11,652)	—
2019 Employee Plan	2,356,399	—	(10,988)	—	(2,345,411)	—
2020 CEO Special Bonus	10,667	—	—	—	(5,333)	5,334
2020 Employee Plan	5,325,666	—	(52,350)	—	(2,492,520)	2,780,796
2021 Employee Plan	6,497,505	—	(65,958)	(980,746)	(1,751,287)	3,699,514
2022 Employee Plan	—	6,531,345	(34,820)	—	—	6,496,525
<b>Total</b>	<b>14,201,889</b>	<b>6,531,345</b>	<b>(164,116)</b>	<b>(980,746)</b>	<b>(6,606,203)</b>	<b>12,982,169</b>

The grant date fair value of unvested shares granted to the CEO under the 2019 CEO Special Bonus Plan was \$14.97, which was based on the market price of the shares at the date of the grant.

The grant date weighted average fair value of unvested shares granted to employees under the 2019 Employee Plan was \$19.28. On March 25, 2020, the Compensation Committee approved the statement that with respect to the shares subject to performance conditions, two performance conditions were fully met. Consequently, the compensation expense recorded on the 2019 Employee Plan reflects the statement that – for the portion of shares subject to performance conditions – two thirds of the awards granted will fully vest, as far as the service condition is met.



The grant date fair value of unvested shares granted to the CEO under the 2020 CEO Special Bonus Plan was \$26.64, which was based on the market price of the shares at the date of the grant.

The grant date weighted average fair value of unvested shares granted to employees under the 2020 Employee Plan was \$30.17. On March 24, 2021, the Compensation Committee approved the statement that with respect to the shares subject to performance conditions, all three performance conditions were fully met. Consequently, the compensation expense recorded on the 2020 Employee Plan reflects the statement that – for the portion of shares subject to performance conditions – 100% of the awards granted will fully vest, as far as the service condition is met.

The grant date weighted average fair value of unvested shares granted to employees under the 2021 Employee Plan was \$39.20. On March 23, 2022, the Compensation Committee approved the statement that with respect to the shares subject to performance conditions, two performance conditions were fully met. Consequently, the compensation expense recorded on the 2021 Employee Plan reflects the statement that – for the portion of shares subject to performance conditions – two thirds of the awards granted will fully vest, as far as the service condition is met.

The grant date weighted average fair value of unvested shares granted to employees under the 2022 Employee Plan was \$35.92. Moreover, for the portion of the shares subject to performance conditions (2,705,521 shares) the Company estimated the number of awards expected to vest by assessing the probability of achieving the performance conditions. As of the date of issuance of these consolidated financial statements, a final determination by the Compensation Committee of the Supervisory Board of the achievement of the performance conditions had not been made yet by the Compensation Committee of the Supervisory Board. The Company estimated that 100% of the awards subject to performance conditions are expected to vest. Consequently, the compensation expense recorded for the 2022 Employee Plan reflects the vesting of the 100% of the awards granted with performance conditions, subject to the service condition being met. The assumption of the expected number of awards to be vested upon achievement of the performance conditions is subject to changes based on the final measurement of the conditions, which is expected to occur in the first half of 2023.

The following table illustrates the classification of pre-payroll tax and social contribution stock-based compensation expense included in the consolidated statements of income for the years ended December 31, 2022, 2021 and 2020:

	December 31, 2022	December 31, 2021	December 31, 2020
Cost of sales	34	34	25
R&D	69	70	51
SG&A	112	117	79
<b>Total pre-payroll tax and social contribution compensation</b>	<b>215</b>	<b>221</b>	<b>155</b>

The grant date fair value of the shares that vested in 2022 was \$189 million compared to \$181 million in 2021 and \$141 million in 2020.

Stock-based compensation, excluding payroll tax and social contribution, capitalized as part of inventory was \$11 million as of December 31, 2022, compared to \$9 million as of December 31, 2021 and \$6 million as of December 31, 2020. As of December 31, 2022, there was \$228 million of total unrecognized compensation cost related to the grant of unvested shares, which is expected to be recognized over a weighted average period of approximately 9 months.

The total deferred income tax benefit recognized in the consolidated statements of income related to unvested share-based compensation expense amounted to \$15 million, \$14 million and \$10 million for the years ended December 31, 2022, 2021 and 2020, respectively.

### 18.6 Accumulated other comprehensive income (loss) attributable to parent company stockholders

The table below details the changes in AOCI attributable to the company's stockholders by component, net of tax, for the years ended December 31, 2022, 2021 and 2020:

	Gains (Losses) on Cash Flow Hedges	Gains (Losses) on Available- For-Sale Securities	Defined Benefit Pension Plan Items	Foreign Currency Translation Adjustments ("CTA")	Total
<b>December 31, 2019</b>	<b>(3)</b>	<b>1</b>	<b>(223)</b>	<b>646</b>	<b>421</b>
<b>Cumulative tax impact</b>	<b>—</b>	<b>—</b>	<b>54</b>	<b>—</b>	<b>54</b>
<b>December 31, 2019, net of tax</b>	<b>(3)</b>	<b>1</b>	<b>(169)</b>	<b>646</b>	<b>475</b>
OCI before reclassifications	64	—	(22)	203	245
Amounts reclassified from AOCI	—	—	14	—	14
OCI for the year ended December 31, 2020	64	—	(8)	203	259
Cumulative tax impact	(8)	—	(3)	—	(11)
OCI for the year ended December 31, 2020, net of tax	56	—	(11)	203	248
<b>December 31, 2020</b>	<b>61</b>	<b>1</b>	<b>(231)</b>	<b>849</b>	<b>680</b>
<b>Cumulative tax impact</b>	<b>(8)</b>	<b>—</b>	<b>51</b>	<b>—</b>	<b>43</b>
<b>December 31, 2020, net of tax</b>	<b>53</b>	<b>1</b>	<b>(180)</b>	<b>849</b>	<b>723</b>
OCI before reclassifications	(90)	(1)	56	(189)	(224)
Amounts reclassified from AOCI	(19)	—	13	—	(6)
OCI for the year ended December 31, 2021	(109)	(1)	69	(189)	(230)
Cumulative tax impact	14	—	(11)	—	3
OCI for the year ended December 31, 2021, net of tax	(95)	(1)	58	(189)	(227)
<b>December 31, 2021</b>	<b>(48)</b>	<b>—</b>	<b>(162)</b>	<b>660</b>	<b>450</b>
<b>Cumulative tax impact</b>	<b>6</b>	<b>—</b>	<b>40</b>	<b>—</b>	<b>46</b>
<b>December 31, 2021, net of tax</b>	<b>(42)</b>	<b>—</b>	<b>(122)</b>	<b>660</b>	<b>496</b>
OCI before reclassifications	(126)	(16)	80	(149)	(211)
Amounts reclassified from AOCI	197	—	4	—	201
OCI for the year ended December 31, 2022	71	(16)	84	(149)	(10)
Cumulative tax impact	(9)	2	(19)	—	(26)
OCI for the year ended December 31, 2022, net of tax	62	(14)	65	(149)	(36)
<b>December 31, 2022</b>	<b>23</b>	<b>(16)</b>	<b>(78)</b>	<b>511</b>	<b>440</b>
<b>Cumulative tax impact</b>	<b>(3)</b>	<b>2</b>	<b>21</b>	<b>—</b>	<b>20</b>
<b>December 31, 2022, net of tax</b>	<b>20</b>	<b>(14)</b>	<b>(57)</b>	<b>511</b>	<b>460</b>

Items reclassified out of Accumulated Other Comprehensive Income for the years ended December 31, 2022, 2021, 2020 are listed in the table below:

Details about AOCI components	Amounts reclassified from AOCI in the year ended December 31, 2022	Amounts reclassified from AOCI in the year ended December 31, 2021	Amounts reclassified from AOCI in the year ended December 31, 2020	Affected line item in the statement where net income (loss) is presented
<b>Gains (Losses) on Cash Flow</b>				
<b>Hedges</b>				
Foreign exchange derivative contracts	(129)	15	(3)	Cost of sales
Foreign exchange derivative contracts	(15)	1	1	Selling, general and administrative
Foreign exchange derivative contracts	(53)	3	2	Research and development
	27	(3)	—	Income tax benefit (expense)
	(170)	16	—	Net of tax
<b>Defined Benefit Pension Plan Items</b>				
Amortization of actuarial gains (losses)	(3)	(12)	(13)	Other components of pension benefit costs
Amortization of prior service cost	(1)	(1)	(1)	Other components of pension benefit costs
	1	2	3	Income tax benefit (expense)
	(3)	(11)	(11)	Net of tax
<b>Total reclassifications for the year</b>	<b>(173)</b>	<b>5</b>	<b>(11)</b>	
<b>Attributable to noncontrolling interest</b>	<b>—</b>	<b>—</b>	<b>—</b>	
<b>Attributable to the parent company stockholders</b>	<b>(173)</b>	<b>5</b>	<b>(11)</b>	

### 18.7 Dividends

The AGM held on May 25, 2022, authorized 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 2022 and first quarter of 2023. An amount of \$55 million corresponding to the first installment, \$54 million corresponding to the second installment and \$48 million corresponding to the third installment were paid as of December 31, 2022. The amounts of \$6 million corresponding to the remaining portion of the third installment and \$54 million corresponding to the last installment were presented in the line "Dividends payable to stockholders" in the consolidated balance sheet as of December 31, 2022.

The AGM held on May 27, 2021 authorized 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 2021 and first quarter of 2022. The amounts of \$54 million corresponding to the first installment, \$55 million corresponding to the second installment and \$54 million corresponding to the third installment were paid as of December 31, 2021. An amount of \$55 million corresponding to the fourth installment was paid in 2022.

The AGM held on June 17, 2020 authorized the distribution of a cash dividend of \$0.168 per outstanding share of the Company's common stock, to be distributed in quarterly installments of \$0.042 in each of the second, third and fourth quarters of 2020 and first quarter of 2021. An amount of \$37 million corresponding to the first installment, \$38 million corresponding to the second installment and \$34 million corresponding to the third installment were paid as of December 31, 2020. The remaining \$4 million portion of the third installment and the fourth installment of \$38 million, were paid in 2021.

The AGM held on May 31, 2019 authorized 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 2019 and first quarter of 2020. The amounts of \$53 million corresponding to the first installment, \$53 million corresponding to the second installment and \$48 million corresponding to the third installment were paid as of December 31, 2019. The remaining portion of \$6 million related to the third installment and the last installment of \$54 million were paid in 2020.

## **19. REVENUES**

### **19.1 Nature of goods and services**

The Company 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 Company participates in the manufacturing value chain of smartcard products, which includes the production and sale of both silicon chips and smartcards.

The principal activities – separated by reportable segments – from which the Company generates its revenues are described in Note 20.

Other revenues consist of license revenue, service revenue related to transferring licenses, patent royalty income, sale of scrap materials and manufacturing by-products.

While the majority of the Company’s sales agreements contain standard terms and conditions, the Company may, from time to time, enter into agreements that contain multiple performance obligations or terms and conditions. Those agreements concern principally the revenues from services, where the performance obligation is satisfied over time. The objective when allocating the transaction price is to allocate the transaction price to each performance obligation (or distinct good or service) in an amount that depicts the amount of consideration to which the Company expects to be entitled in exchange for transferring the promised goods or services to the customer.

### **19.2 Revenue recognition and disaggregation**

The Company recognizes revenue from products sold to a customer, including distributors, when it satisfies a performance obligation at a point in time by transferring control over a product to the customer. This usually occurs at the time of shipment. The performance obligations linked to the sale of goods contracts usually have original expected length of less than one year. The transaction price is determined based on the contract terms, adjusted for price protection, if applicable. The revenues from services are usually linked to performance obligations transferred over time and are recognized in line with the contract terms.

In 2022, the Company signed several multi-annual capacity reservation and volume commitment arrangements with certain customers. These agreements constitute a binding commitment for the customers to purchase and for the Company to supply allocated commitment volumes in exchange for additional consideration. The consideration related to commitment fees is reported as revenues from sale of products as it is usually based on delivered quantities. Advances from customers received as part of those agreements are described in Note 14 and Note 17.

The payment terms typically range between 30 and 90 days.

The Company's consolidated net revenues disaggregated by reportable segment are presented in Note 20. The following tables present the Company's consolidated net revenues disaggregated by geographical region of shipment, nature and market channel:

	Year ended		
	December 31, 2022	December 31, 2021	December 31, 2020
<b>Net revenues by geographical region of shipment<sup>(1)</sup></b>			
EMEA	3,619	2,557	1,966
Americas	2,310	1,525	1,165
Asia Pacific	10,199	8,679	7,088
<b>Total net revenues</b>	<b>16,128</b>	<b>12,761</b>	<b>10,219</b>
<b>Net revenues by nature</b>			
Revenues from sale of products	15,953	12,560	10,049
Revenues from sale of services	130	169	132
Other revenues	45	32	38
<b>Total net revenues</b>	<b>16,128</b>	<b>12,761</b>	<b>10,219</b>
<b>Net revenues by market channel<sup>(2)</sup></b>			
Original Equipment Manufacturers ("OEM")	10,764	8,486	7,411
Distribution	5,364	4,275	2,808
<b>Total net revenues</b>	<b>16,128</b>	<b>12,761</b>	<b>10,219</b>

(1) Net revenues by geographical region 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 Company, among the different periods, may be affected by shifts in shipments from one location to another, as requested by customers.

(2) Original Equipment Manufacturers ("OEM") are the end-customers to which the Company provides direct marketing application engineering support, while Distribution refers to the distributors and representatives that the Company engages to distribute its products around the world.

The Company does not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which the Company recognizes revenue at the amount to which the Company has the right to invoice for services performed.

In 2022, 2021 and 2020, the Company's largest customer, Apple represented 16.8%, 20.5% and 23.9% of consolidated net revenues, respectively, reported in the ADG, AMS and MDG segments.

## 20. SEGMENT INFORMATION

The Company designs, develops, manufactures and markets a broad range of products, including discrete and standard commodity components ASICs, full custom devices and semi-custom devices and ASSPs for analog, digital, and mixed-signal applications. In addition, the Company further participates in the manufacturing value chain of smartcard products, which includes the production and sale of both silicon chips and smartcards.

The Company's reportable segments are as follows:

- *Automotive and Discrete Group (ADG)*, comprised of dedicated automotive integrated circuits ("ICs"), and discrete and power transistor products.
- *Analog, MEMS and Sensors Group (AMS)*, comprised of analog, smart power, MEMS sensors and actuators, and optical sensing solutions.
- *Microcontrollers and Digital ICs Group (MDG)*, comprised of general-purpose microcontrollers and microprocessors, connected security products (e.g. embedded secured elements and NFC readers), memories (e.g. serial and page EEPROM) and RF and Communications products.

Effective July 1, 2022, the Low Power RF business unit was transferred from AMS (within the Analog sub-group) to MDG (within the Microcontrollers and Memories sub-group) with no significant impact on the Company's segment reporting. Prior year periods have been adjusted accordingly.

For the computation of the segments' internal financial measurements, the Company uses certain internal rules of allocation for the costs not directly chargeable to the segments, including cost of sales, SG&A expenses and a part of R&D expenses. In compliance with the Company's internal policies, certain costs are not allocated to the segments, but reported in "Others". Those comprise unused capacity charges, including reduced manufacturing activity due to COVID-19 and incidents leading to power outage, impairment, restructuring charges and other related closure costs, management reorganization expenses, phase-out and start-up costs of certain manufacturing facilities, and other unallocated income (expenses) such as: strategic or special R&D programs, certain corporate-level operating expenses, patent claims and litigations, and other costs that are not allocated to product groups, as well as operating earnings of other products. 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 cost of sales. Finally, public grants are allocated to the Company's segments proportionally to the incurred expenses on the sponsored projects.

Wafer costs are allocated to the segments based on actual cost. From time to time, with respect to specific technologies, wafer costs are allocated to segments based on market price.

The following tables present the Company's consolidated net revenues and consolidated operating income by reportable segment.

Net revenues by reportable segment:

	December 31, 2022	December 31, 2021	December 31, 2020
ADG	5,969	4,350	3,284
AMS <sup>(1)</sup>	4,911	4,587	3,858
MDG <sup>(1)</sup>	5,228	3,802	3,064
<b>Total net revenues of product segments</b>	<b>16,108</b>	<b>12,739</b>	<b>10,206</b>
Others	20	22	13
<b>Total consolidated net revenues</b>	<b>16,128</b>	<b>12,761</b>	<b>10,219</b>

(1) Effective July 1, 2022, the Low Power RF business unit was transferred from AMS to MDG with no significant impact on segment reporting. Prior year periods have been adjusted accordingly.

Operating income by reportable segment:

	December 31, 2022	December 31, 2021	December 31, 2020
ADG	1,469	512	182
AMS <sup>(1)</sup>	1,237	1,022	816
MDG <sup>(1)</sup>	1,830	908	498
<b>Total operating income of product segments</b>	<b>4,536</b>	<b>2,442</b>	<b>1,496</b>
Others <sup>(2)</sup>	(97)	(23)	(173)
<b>Total consolidated operating income</b>	<b>4,439</b>	<b>2,419</b>	<b>1,323</b>

(1) Effective July 1, 2022, the Low Power RF business unit was transferred from AMS to MDG with no significant impact on segment reporting. Prior year periods have been adjusted accordingly.

(2) Operating income (loss) of "Others" includes items such as unused capacity charges, including reduced manufacturing activity due to COVID-19 and incidents leading to power outage, impairment, restructuring charges and other related closure costs, management reorganization costs, phase-out and start-up costs of certain manufacturing facilities, and other unallocated income (expenses) such as: strategic or special R&D programs, certain corporate-level operating expenses, patent claims and litigations, and other costs that are not allocated to product groups, as well as operating earnings of other products.

The reconciliation of operating income of reportable segments to the total consolidated operating income is presented in the below table:

	December 31, 2022	December 31, 2021	December 31, 2020
Total operating income of reportable segments	4,536	2,442	1,496
Impairment, restructuring charges and other related closure costs	—	(2)	(11)
Start-up and phase-out costs	(13)	—	—
Unused capacity charges	(22)	(16)	(153)
Other unallocated manufacturing results	(57)	1	(8)
Gain on sale of non-current assets	2	3	11
Strategic and other research and development programs and other non-allocated provisions <sup>(1)</sup>	(7)	(9)	(12)
<b>Total operating loss Others</b>	<b>(97)</b>	<b>(23)</b>	<b>(173)</b>
<b>Total consolidated operating income</b>	<b>4,439</b>	<b>2,419</b>	<b>1,323</b>

(1) Includes unallocated income and expenses such as certain corporate-level operating expenses and other income (costs) that are not allocated to the product segments.

The following is a summary of operations by entities located within the indicated geographic areas for 2022, 2021 and 2020. Net revenues represent sales to third parties from the country in which each subsidiary is domiciled. The Company is incorporated under Dutch law with head offices located in the Netherlands while the Company's operational office and headquarters are located in Switzerland. Long-lived assets consist of property, plant and equipment, net. A significant portion of property, plant and equipment expenditures is attributable to front-end and back-end facilities, located in the different countries in which the Company operates. As such, the Company mainly allocates capital spending resources according to geographic areas rather than along product segment areas.

#### Net revenues

	December 31, 2022	December 31, 2021	December 31, 2020
Switzerland	4,569	3,282	2,795
France	153	126	89
Italy	47	56	52
USA	1,981	1,253	976
Singapore	8,604	7,442	5,817
Japan	758	586	479
Other countries	16	16	11
<b>Total net revenues</b>	<b>16,128</b>	<b>12,761</b>	<b>10,219</b>

#### Property, plant and equipment, net

	December 31, 2022	December 31, 2021
Netherlands	2,753	1,476
France	1,774	1,154
Italy	1,683	1,469
Other European countries	161	136
USA	52	36
Singapore	880	671
Malaysia	365	221
Other countries	533	497
<b>Total property, plant and equipment, net</b>	<b>8,201</b>	<b>5,660</b>

**21. OTHER INCOME AND EXPENSES, NET**

Other income and expenses, net consisted of the following:

	Year ended December 31, 2022	Year ended December 31, 2021	Year ended December 31, 2020
Public funding	177	162	231
Start-up and phase-out costs	(13)	—	(8)
Exchange gain (loss), net	15	7	8
Patent costs	(8)	(10)	(11)
Gain on sale of non-current assets	2	5	14
COVID-19 incremental costs	(10)	(19)	(32)
Other, net	(4)	(4)	—
<b>Total</b>	<b>159</b>	<b>141</b>	<b>202</b>

The Company receives public funding from governmental bodies in several jurisdictions. Public funding is further described in Note 7.

Start-up costs represent costs incurred in the ramp-up phase of the Company's newly integrated manufacturing facilities. Phase-out costs are costs incurred during the closing stage of a Company's manufacturing facility.

Exchange gains and losses, net represent the portion of exchange rate changes on transactions denominated in currencies other than an entity's functional currency and the changes in fair value of derivative instruments which are not designated as hedges, as described in Note 27.

Patent costs mainly include legal and attorney fees and payment for claims, patent pre-litigation consultancy and legal fees. They are reported net of settlements, if any, which primarily include reimbursements of prior patent litigation costs.

COVID-19 incremental costs are mainly composed of incremental expenses primarily related to sanitary measures undertaken to protect employees.

**22. INTEREST INCOME (EXPENSE), NET**

Interest income (expense), net consisted of the following:

	Year ended December 31, 2022	Year ended December 31, 2021	Year ended December 31, 2020
Income	71	13	34
Expense	(13)	(42)	(54)
<b>Total</b>	<b>58</b>	<b>(29)</b>	<b>(20)</b>

Interest income recorded in 2022 was composed of \$71 million of interest income, partially offset by interest expense on borrowings and banking fees of \$13 million.

Interest income is related to cash and cash equivalents, short-term deposits and marketable securities held by the Company.

On January 1, 2022, the Company adopted the new U.S. GAAP reporting guidance on distinguishing liabilities from equity and EPS. The new guidance was adopted by applying the modified retrospective method, under which prior year periods are not restated. Interest expense recorded in 2021 and 2020 included a charge of \$34 million and \$42 million respectively, related to the outstanding senior unsecured convertible bonds, mainly resulting from the non-cash accretion expense, as recorded under the previous accounting guidance. With the adoption of the new guidance, the finance cost of the convertible debt instruments outstanding at the date of adoption is limited to the amortization expense of debt issuance costs.



No borrowing cost was capitalized in 2022, 2021 and 2020. Interest income on U.S. Treasury Bonds classified as available-for-sale marketable securities amounted to \$1 million for the year ended December 31, 2022, \$1 million for the year ended December 31, 2021 and \$3 million for the year ended December 31, 2020.

### 23. INCOME TAX

Income (loss) before income tax is comprised of the following:

	Year ended December 31, 2022	Year ended December 31, 2021	Year ended December 31, 2020
Income (loss) recorded in the Netherlands	(22)	(20)	(19)
Income (loss) from foreign operations	4,508	2,357	1,286
<b>Income (loss) before income tax benefit (expense)</b>	<b>4,486</b>	<b>2,337</b>	<b>1,267</b>

STMicroelectronics N.V. and its subsidiaries are individually liable for income taxes in their jurisdictions.

Income tax benefit (expense) is comprised of the following:

	Year ended December 31, 2022	Year ended December 31, 2021	Year ended December 31, 2020
The Netherlands taxes - current	—	—	—
Foreign taxes - current	(510)	(285)	(171)
<b>Total current taxes</b>	<b>(510)</b>	<b>(285)</b>	<b>(171)</b>
The Netherlands taxes - deferred	—	—	—
Foreign taxes - deferred	(10)	(46)	12
<b>Total deferred taxes</b>	<b>(10)</b>	<b>(46)</b>	<b>12</b>
<b>Income tax expense</b>	<b>(520)</b>	<b>(331)</b>	<b>(159)</b>
<b>Effective tax rate</b>	<b>12%</b>	<b>14%</b>	<b>13%</b>

The principal items comprising the differences in income taxes computed at the Netherlands statutory rate of 25.8% in 2022, 25% in 2021 and 25% in 2020, and the effective income tax rate are the following:

	Year ended December 31, 2022	Year ended December 31, 2021	Year ended December 31, 2020
Income tax benefit (expense) computed at statutory rate	(1,158)	(584)	(316)
Non-deductible and non-taxable permanent differences, net	22	4	(1)
Valuation allowance adjustments	140	(2)	11
Effect on deferred taxes of changes in enacted tax rates	6	6	(5)
Current year credits	30	39	40
Other tax and credits	(51)	(22)	(40)
Benefits from tax holidays	60	49	37
Net impact of changes to uncertain tax positions	(12)	(8)	(1)
Earnings of subsidiaries taxed at different rates	443	187	116
<b>Income tax benefit (expense)</b>	<b>(520)</b>	<b>(331)</b>	<b>(159)</b>

The variation on the valuation allowance is related to the assessment of the recoverability of the deferred tax assets in France, Malta and the US following the improved stability of profits of the Group.

The increase in the benefit from tax holidays between 2021 and 2022 is the result of the increase in profit in the countries where tax holidays are applicable.

The tax holidays represent a tax exemption period aimed to attract foreign technological investment in certain tax jurisdictions. The effect of the tax benefits, from tax holidays for countries which are profitable, on basic earnings per share was \$0.07, \$0.05 and \$0.04 for the years ended December 31, 2022, 2021 and 2020, respectively. These agreements are present in various countries and include programs that reduce up to and including 100% of taxes in years affected by the agreements. The Company's tax holidays expire at various dates through the year ending December 31, 2029. In certain countries, tax holidays can be renewed depending on the Company still meeting certain conditions at the date of expiration of the current tax holidays.

### Component of the Net Deferred Tax Asset and Liability

Deferred tax assets and liabilities consisted of the following:

	December 31, 2022	December 31, 2021
Tax loss carryforwards and investment credits	520	707
Less unrecognized tax benefit	(25)	(81)
Tax loss carryforwards net of unrecognized tax benefit	495	626
Inventory valuation	42	28
Impairment and restructuring charges	4	4
Fixed asset depreciation in arrears	55	52
Increased depreciation incentives	83	128
Capitalized development costs	79	121
Receivables for government funding	121	64
Tax credits granted on past capital investments	218	213
Pension service costs	62	82
Stock awards	17	14
Operating lease liabilities	50	39
Commercial accruals	27	12
Other temporary differences	23	25
<b>Total deferred tax assets</b>	<b>1,276</b>	<b>1,408</b>
Valuation allowances	(416)	(576)
<b>Deferred tax assets, net</b>	<b>860</b>	<b>832</b>
Accelerated fixed asset depreciation	(37)	(32)
Acquired intangible assets	(23)	(22)
Advances of government funding	(177)	(115)
Operating lease right-of-use assets	(50)	(39)
Other temporary differences	(31)	(36)
<b>Deferred tax liabilities</b>	<b>(318)</b>	<b>(244)</b>
<b>Net deferred income tax asset</b>	<b>542</b>	<b>588</b>

For a particular tax-paying component of the Company and within a particular tax jurisdiction, all deferred tax liabilities and assets are offset and presented as a single amount. The Company does not offset deferred tax liabilities and assets attributable to different tax-paying components or to different tax jurisdictions.

A valuation allowance is provided for deferred tax assets when management considers it is more likely than not that they will not be realized.

**Deferred tax asset expiration**

As of December 31, 2022, the Company and its subsidiaries have gross deferred tax assets on tax loss carryforwards and investment credits that expire starting from 2023.

<b>Year</b>	<b>December 31, 2022</b>
2023	3
2024	2
2025	2
2026	2
2027	5
Thereafter	506
<b>Total</b>	<b>520</b>

The majority of the amount reported on the line “Thereafter” has no expiration date.

The “Tax credits granted on past capital investments” is mainly related to a 2003 agreement granting the Company certain tax credits for capital investments purchased through the year ending December 31, 2006. Any unused tax credits granted under the agreement will be impacted yearly by a legal inflationary index (currently 2.56% per annum). The credits may be utilized depending on the Company meeting certain program criteria and have no expiration date. In addition to this agreement, starting from 2007 the Company continues to receive tax credits on the yearly capital investments, which may be used to offset that year’s tax liabilities and increases by the legal inflationary rate. However, pursuant to the inability to utilize these credits currently and in future years, the Company did not recognize any deferred tax asset on such tax allowance. As a result, there is no financial impact to the net deferred tax assets of the Company.

**Deferred Tax expense recognized through Other Comprehensive Income**

In 2022, we recognized a deferred tax expense of \$26 million as a component of other comprehensive income (loss), compared to a deferred tax income of \$3 million in 2021. They were related primarily to the tax effects of the recognized unfunded status on defined benefits plan.

**Deferred tax on undistributed Earnings from foreign subsidiaries**

The cumulative amount of distributable earnings related to the Company’s investments in foreign subsidiaries and corporate joint ventures was \$7,140 million and \$4,148 million as of December 31, 2022 and December 31, 2021, respectively. Due to the Company’s legal and tax structure, with the parent company established in the Netherlands, there is no significant tax impact from the distribution of earnings for \$6,612 million from investments in foreign subsidiaries and corporate joint ventures. This is because there is no tax impact on dividends paid up to a Dutch holding company by qualifying investments. The amount of distributable earnings becoming taxable upon repatriation amount to \$528 million. An amount of \$308 million is indefinitely reinvested by the foreign subsidiaries. As of December 31, 2022, a deferred tax liability is recognized for \$22 million on the amount of earnings expected to be repatriated in a foreseeable future.

## Unrecognized Tax Benefits

A reconciliation of 2022, 2021 and 2020 beginning and ending amounts of unrecognized tax benefits is as follows:

	December 31, 2022	December 31, 2021	December 31, 2020
<b>Balance at beginning of year</b>	118	48	48
Additions based on tax positions related to the current year	4	72	1
Additions based on acquisitions related to the current year	—	—	—
Additions for tax positions of prior years	13	1	1
Reduction for tax positions of prior years	(69)	(1)	(2)
Settlements	(2)	—	(1)
Foreign currency translation	(3)	(2)	1
<b>Balance at end of year</b>	<b>61</b>	<b>118</b>	<b>48</b>

In addition, as of December 31, 2022, \$25 million of unrecognized tax benefits were classified as a reduction of deferred tax assets (as of December 31, 2021, the amount was \$81 million). It is reasonably possible that certain of the uncertain tax positions disclosed in the table above could increase or decrease within the next 12 months due to ongoing tax audits. The Company is not able to make an estimate of the range of the reasonably possible change impacting the annual effective tax rate.

Additionally, the Company elected to classify accrued interest and penalties related to uncertain tax positions as components of income tax expense in the consolidated statements of income. They were less than \$1 million in 2022, less than \$1 million in 2021 and \$1 million in 2020. Accrued interest and penalties amounted to \$6 million as of December 31, 2022 and \$7 million as of December 31, 2021.

The tax years that remain open for review in the Company's major tax jurisdictions, including France, Italy, United States and India, are from 1997 to 2022.

## 24. EARNINGS PER SHARE

For the years ended December 31, 2022, 2021 and 2020, earnings per share ("EPS") was calculated as follows:

	Year ended December 31, 2022	Year ended December 31, 2021	Year ended December 31, 2020
<b>Basic EPS</b>			
Net income attributable to parent company as reported	3,960	2,000	1,106
Weighted average number of shares outstanding	905,606,885	904,332,429	894,578,477
<b>Basic EPS</b>	<b>4.37</b>	<b>2.21</b>	<b>1.24</b>
<b>Diluted EPS</b>			
Net income attributable to parent company as reported	3,960	2,000	1,106
add-back interest expense, net of income tax effect	2	—	—
Net income attributable to parent company as adjusted	3,962	2,000	1,106
Weighted average shares outstanding	905,606,885	904,332,429	894,578,477
Dilutive effect of stock awards	6,789,662	9,107,124	8,860,216
Dilutive effect of convertible bonds	33,825,000	11,402,645	16,291,279
Number of shares used in calculating diluted EPS	946,221,547	924,842,198	919,729,972
<b>Diluted EPS</b>	<b>4.19</b>	<b>2.16</b>	<b>1.20</b>

On January 1, 2022, the Company adopted the new guidance on distinguishing liabilities from equity and EPS by applying the modified retrospective method, under which prior year periods are not restated.

Under the previous guidance, the Company applied the treasury stock method to determine the dilutive effect of convertible bonds as past experience, existing stated policies, and the contractual terms of the bonds provided a reasonable basis to expect that the settlement would include cash, shares, or a mix of both.

With the adoption of the new guidance, the treasury stock method is no longer admitted and the application of the if-converted method is mandatory to determine the dilutive effect of convertible bonds. The senior unsecured convertible bonds issued on August 4, 2020 are consequently fully dilutive, with the total underlying shares presented in the line “Dilutive effect of convertible bonds” of the table above for the year ended December 31, 2022.

## 25. COMMITMENTS

The Company’s commitments as of December 31, 2022 were as follows:

In millions of U.S. dollars	Total	2023	2024	2025	2026	2027	Thereafter
Purchase obligations	5,554	4,556	424	287	101	62	124
of which:							
<i>Equipment purchase</i>	3,587	3,584	3	—	—	—	—
<i>Foundry purchase</i>	1,827	872	393	275	101	62	124
<i>Software, design, technologies and licenses</i>	140	100	28	12	—	—	—
Other obligations	1,864	1,072	155	100	56	155	326
<b>Total</b>	<b>7,418</b>	<b>5,628</b>	<b>579</b>	<b>387</b>	<b>157</b>	<b>217</b>	<b>450</b>

Purchase obligations are primarily comprised of purchase commitments for equipment, for outsourced foundry wafers and for software licenses.

Other obligations primarily relate to firm contractual commitments with respect to partnership and cooperation agreements and other service agreements.

## 26. CONTINGENCIES, CLAIMS AND LEGAL PROCEEDINGS

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

The Company 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 Company 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 Company may become involved in costly litigation brought against the Company regarding patents, mask works, copyrights, trademarks or trade secrets. In the event that the outcome of any litigation would be unfavorable to the Company, the Company 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 Company’s results of operations, cash flows, financial position and/or ability to compete.

The Company has contractual commitments to various customers which could require the Company to incur costs to repair or replace defective products it supplies to such customer. The duration of these contractual

commitments varies and, in certain cases, is indefinite. The Company is otherwise also involved in various lawsuits, claims, inquiries, inspections, investigations and/or proceedings incidental to its business and operations. Such matters, even if not meritorious, could result in the expenditure of significant financial or managerial resources. Any of the foregoing could have a material adverse effect on the Company's results of operations, cash flows or its financial position.

The Company 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 Company. 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 Company's interests, or in the event the Company 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 December 31, 2022 and 2021, respectively, provisions for estimated probable losses with respect to claims and legal proceedings were not considered material.

## **27. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT**

### **27.1 Financial risk factors**

The Company is exposed to changes in financial market conditions in the normal course of business due to its operations in different foreign currencies and its ongoing investing and financing activities. The Company'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 Company's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Company's financial performance. The Company uses derivative financial instruments to hedge certain risk exposures.

Financial risk management is carried out by a central treasury department (Corporate Treasury). Additionally, a Treasury Committee, chaired by the Chief Financial Officer, steers treasury activities and ensures compliance with corporate policies. Treasury activities are thus regulated by the Company's policies, which define procedures, objectives and controls. The policies focus on managing 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 Company's subsidiaries. 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 and A- from S&P and Fitch, 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.

#### ***Market risk***

##### ***Foreign exchange risk***

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

Management has set up a policy to require the Company's subsidiaries to hedge their entire foreign exchange risk exposure with the Company through financial instruments transacted or overseen by Corporate Treasury. Subsidiaries use forward contracts and purchased currency options to manage their foreign exchange risk arising from foreign-currency-denominated assets and liabilities. Foreign exchange risk arises when recognized assets and liabilities are denominated in a currency that is not the entity's functional currency. These instruments do

not qualify as hedging instruments for accounting purposes. Forward contracts and currency options, including collars, are also used by the Company to reduce its exposure to U.S. dollar fluctuations in Euro-denominated forecasted transactions that cover a large part of its R&D and corporate costs expenses as well as a portion of its front-end manufacturing costs of semi-finished goods. The Company also hedges through the use of currency forward contracts certain Singapore dollar-denominated manufacturing forecasted transactions. The derivative instruments used to hedge these forecasted transactions meet the criteria for designation as cash flow hedge. The hedged forecasted transactions have a high probability of occurring for hedge accounting purposes.

It is the Company's policy to have the foreign exchange exposures in all the currencies hedged month by month against the monthly standard rate. At each month end, the forecasted flows for the coming month are hedged together with the fixing of the new standard rate. For this reason, the hedging transactions will have an exchange rate very close to the standard rate at which the forecasted flows will be recorded in the following month. As such, the foreign exchange exposure of the Company, which consists of the balance sheet positions and other contractually agreed transactions, is always close to zero and any movement in the foreign exchange rates will therefore not influence the exchange effect on items of the consolidated statement of income. Any discrepancy between the forecasted values and the actual results is constantly monitored and prompt actions are taken, if needed.

#### *Derivative Instruments Not Designated as a Hedge*

The Company enters into foreign currency forward contracts 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 Company's subsidiaries. These include receivables from international sales by various subsidiaries, payables for foreign currency-denominated purchases and certain other assets and liabilities arising from intercompany transactions.

The notional amount of these financial instruments totaled \$931 million, \$505 million and \$897 million on December 31, 2022, 2021 and 2020, respectively. The principal currencies covered at the end of the year 2022 are the Euro, Singapore dollar, the Japanese yen, the China Yuan Renminbi, the Indian rupee, the Swiss franc, the Moroccan dirham, the Malaysian ringgit, the Philippines peso, the Taiwan dollar, the South Korean won and the Swedish krona.

The risk of loss associated with forward contracts is equal to the exchange rate differential from the time the contract is entered into until the time it is settled. The risk of loss associated with purchased currency options is equal to the premium paid when the option is not exercised.

Foreign currency forward contracts not designated as cash flow hedge outstanding as of December 31, 2022 have remaining terms of 4 days to 188 days, maturing on average after 29 days.

#### *Derivative Instruments Designated as a Hedge*

To further reduce its exposure to U.S. dollar exchange rate fluctuations, the Company hedges through the use of currency forward contracts and currency options, including collars, certain Euro-denominated forecasted intercompany transactions that cover at year-end a large part of its R&D and SG&A expenses, as well as a portion of its front-end manufacturing costs of semi-finished goods within cost of sales. The Company also hedges through the use of currency forward contracts certain manufacturing transactions within cost of sales denominated in Singapore dollars.

The principles regulating the hedging strategy for derivatives designated as cash flow hedge are established as follows: (i) for R&D and corporate costs, up to 80% of the total forecasted transactions; (ii) for manufacturing costs, up to 70% of the total forecasted transactions. In order to follow a dynamic hedge strategy, the Company 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 Company could hedge its exposure to the variability of cash flows for forecasted transactions is 24 months.

For the year ended December 31, 2022, the Company recorded an increase in cost of sales of \$129 million and an increase in operating expenses of \$68 million, related to the realized losses incurred on such hedged transactions. For the year ended December 31, 2021, the Company recorded a decrease in cost of sales of \$15 million and a decrease in operating expenses of \$4 million, related to the realized gains incurred on such hedged transactions. For the year ended December 31, 2020, the Company recorded an increase in cost of sales of \$3 million and a decrease in operating expenses of \$3 million, related to the realized losses and gains incurred on such hedged transactions.

The notional amount of foreign currency forward contracts and currency options, including collars, designated as cash flow hedge totaled \$3,192 million, \$2,165 million and \$1,502 million on December 31, 2022, 2021 and 2020, respectively. The forecasted transactions hedged as of December 31, 2022 were determined to have a high probability of occurring.

As of December 31, 2022, \$14 million of deferred gains on derivative instruments included in “Accumulated other comprehensive income (loss)” in the consolidated statements of equity were expected to be reclassified as earnings during the next 12 months based on the monthly forecasted R&D expenses, corporate costs and semi-finished manufacturing costs. Foreign currency forward contracts and collars designated as cash flow hedge outstanding as of December 31, 2022 have remaining terms of 4 days to 20 months, maturing on average after 239 days.

As of December 31, 2022, the Company had the following outstanding derivative instruments that were entered into to hedge Euro-denominated and Singapore dollar-denominated forecasted transactions:

<b>In millions of Euros</b>	<b>Notional amount for hedge on forecasted R&amp;D and other operating expenses</b>	<b>Notional amount for hedge on forecasted manufacturing costs</b>
Forward contracts	540	986
Currency collars	500	791
<b>In millions of Singapore dollars</b>	<b>Notional amount for hedge on forecasted R&amp;D and other operating expenses</b>	<b>Notional amount for hedge on forecasted manufacturing costs</b>
Forward contracts	—	247

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

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

The Company analyses 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 Company invests primarily on a short-term basis and as such the Company’s liquidity is invested in floating interest rate instruments. As a consequence, the Company 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.

#### *Price risk*

As part of its ongoing investing activities, the Company may invest in publicly traded equity securities and be exposed to equity security price risk. In order to hedge the exposure to this market risk, the Company may enter into certain derivative hedging transactions.



Information on fair value of derivative instruments and their location in the consolidated balance sheets as of December 31, 2022 and December 31, 2021 is presented in the table below:

Asset Derivatives	Balance sheet classification	As of December	As of December
		31, 2022	31, 2021
		Fair value	Fair value
<b>Derivatives designated as a hedge:</b>			
Foreign exchange forward contracts	Other current assets	37	2
Foreign exchange forward contracts	Other non-current assets	8	—
Currency collars	Other current assets	10	1
Currency collars	Other non-current assets	5	—
<b>Total derivatives designated as a hedge:</b>		<b>60</b>	<b>3</b>
<b>Derivatives not designated as a hedge:</b>			
Foreign exchange forward contracts	Other current assets	9	3
<b>Total derivatives not designated as a hedge:</b>		<b>9</b>	<b>3</b>
<b>Total Derivatives</b>		<b>69</b>	<b>6</b>

Liability Derivatives	Balance sheet classification	As of December	As of December
		31, 2022	31, 2021
		Fair value	Fair value
<b>Derivatives designated as a hedge:</b>			
Foreign exchange forward contracts	Other payables and accrued liabilities	(23)	(29)
Foreign exchange forward contracts	Other non-current liabilities	(3)	—
Currency collars	Other payables and accrued liabilities	(9)	(13)
Currency collars	Other non-current liabilities	(1)	—
<b>Total derivatives designated as a hedge:</b>		<b>(36)</b>	<b>(42)</b>
<b>Derivatives not designated as a hedge:</b>			
Foreign exchange forward contracts	Other payables and accrued liabilities	(3)	(1)
<b>Total derivatives not designated as a hedge:</b>		<b>(3)</b>	<b>(1)</b>
<b>Total Derivatives</b>		<b>(39)</b>	<b>(43)</b>

The Company entered into currency collars as combinations of two options, which are reported, for accounting purposes, on a net basis. As of December 31, 2022, the fair value of these collars represented assets for a net amount of \$15 million (composed of \$19 million assets offset with a \$4 million liability) and liabilities for a net amount of \$10 million (composed of \$15 million liabilities offset with a \$5 million asset). In addition, the Company entered into other derivative instruments, primarily forward contracts, which are governed by standard International Swaps and Derivatives Association (“ISDA”) agreements and are compliant with Protocols of the European Market Infrastructure Regulation (“EMIR”), which are not offset in the statement of financial position and representing total assets of \$54 million and liabilities of \$29 million as of December 31, 2022.

The effect of derivative instruments designated as cashflow hedge on the consolidated statements of income for the year ended December 31, 2022 and December 31, 2021 and on the “Accumulated other comprehensive income (loss)” (“AOCI”) as reported in the consolidated statements of equity as of December 31, 2022 and December 31, 2021 is presented in the table below:

	Gain (loss) deferred in OCI on derivative		Location of gain (loss) reclassified from OCI into earnings	Gain (loss) reclassified from OCI into earnings	
	December 31, 2022	December 31, 2021		December 31, 2022	December 31, 2021
Foreign exchange forward contracts	14	(20)	Cost of sales	(83)	11
Foreign exchange forward contracts	2	(2)	Selling, general and administrative	(9)	—
Foreign exchange forward contracts	4	(9)	Research and development	(32)	1
Currency collars	1	(11)	Cost of sales	(46)	4
Currency collars	1	(1)	Selling, general and administrative	(6)	1
Currency collars	1	(5)	Research and development	(21)	2
<b>Total</b>	<b>23</b>	<b>(48)</b>		<b>(197)</b>	<b>19</b>

No significant ineffective portion of the cash flow hedge relationships was recorded in earnings for the years ended December 31, 2022 and December 31, 2021. No amount was excluded from effectiveness measurement on foreign exchange forward contracts and collars.

The effect on the consolidated statements of income for the year ended December 31, 2022 and December 31, 2021 of derivative instruments not designated as a hedge is presented in the table below:

	Location of gain (loss) recognized in earnings	Gain (loss) recognized in earnings	
		December 31, 2022	December 31, 2021
Foreign exchange forward contracts	Other income and expenses, net	24	9
Total		24	9

The Company did not enter into any derivative containing significant credit-risk-related contingent features.

#### *Credit risk*

The expected credit loss and impairment methodology applied on each category of financial assets is further described in each respective note. While cash and cash equivalents are also subject to the expected credit loss model, the identified expected credit loss is deemed to be immaterial. The maximum credit risk exposure for all financial assets is their carrying amount.

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. Credit risk typically arises from cash and cash equivalents, contractual cash flows of debt investments carried at amortized cost, the counterparty of derivative financial instruments and deposits with banks and financial institutions, as well as credit exposure to customers, including outstanding receivables.

The Company 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. Credit risk is managed at the Group level. The Company selects banks and/or financial institutions that operate with the group based on the criteria of long-term rating from at least two major Rating Agencies and keeping a maximum outstanding amount per instrument with each bank not to exceed 20% of the total. For derivative financial instruments, management has established limits so that, at any time, the fair value of contracts outstanding is not concentrated with any individual counterparty.

The Company monitors the creditworthiness of its customers to which it grants credit terms in the normal course of business. If certain customers are independently rated, these ratings are used. Otherwise, if there is no independent rating, risk control assesses the customer’s credit quality, considering its financial position, past

experience and other factors. The utilization of credit limits is regularly monitored. Sales to customers are primarily settled in cash, which mitigates credit risk. As of December 31, 2022 and 2021, no customer represented more than 10% of trade accounts receivable, net. Any remaining concentrations of credit risk with respect to trade receivables are limited due to the large number of customers and their dispersion across many geographic areas.

The Company's investments in instruments carried at amortized cost primarily include receivables towards government bodies. As such, they are investments with immaterial expected credit loss. Any remaining receivable is of low credit risk and is individually not significant. The credit ratings of the investments are monitored for credit deterioration.

#### *Liquidity risk*

Prudent liquidity risk management includes maintaining sufficient cash and cash equivalents, short-term deposits and marketable securities, the availability of funding from committed credit facilities and the ability to close out market positions. The Company's objective is to maintain a significant cash position and a low debt-to-equity ratio, which ensures adequate financial flexibility. Liquidity management policy is to finance the Company's investments with net cash from operating activities.

Management monitors rolling forecasts of the Company's liquidity reserve based on expected cash flows.

### **27.2 Capital risk management**

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to create sustainable value, benefits and returns for its stakeholders, as to maintain an optimal capital structure. In order to maintain or adjust its capital structure, the Company may review the amount of dividends paid to shareholders, return capital to shareholders, or issue new shares.

Consistent with other peers in the industry, the Company monitors capital on the basis of the net debt-to-equity ratio. This ratio is calculated as the net financial position of the Company, defined as the difference between total cash position (cash and cash equivalents, short-term deposits, marketable securities and restricted cash, if any) and total financial debt (short-term and long-term debt), divided by total parent company stockholders' equity.

### **27.3 Fair value measurement**

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance sheet date. The quoted market price used for financial assets held by the Company is the bid price. If the market for a financial asset is not active and if no observable market price is obtainable, the Company measures fair value by using significant assumptions and estimates. When measuring fair value, the Company makes maximum use of market inputs and minimizes the use of unobservable inputs.

The table below details financial assets (liabilities) measured at fair value on a recurring basis as of December 31, 2022:

	Fair Value Measurements using			
	December 31, 2022	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Marketable securities – U.S. Treasury debt securities	679	679	—	—
Short-term deposits	581	581	—	—
Equity securities measured at fair value through earnings	26	26	—	—
Derivative assets designated as cash flow hedge	60	—	60	—
Derivative assets not designated as cash flow hedge	9	—	9	—
Derivative liabilities designated as cash flow hedge	(36)	—	(36)	—
Derivative liabilities not designated as cash flow hedge	(3)	—	(3)	—
Contingent consideration on business acquisitions	(31)	—	—	(31)
<b>Total</b>	<b>1,285</b>	<b>1,286</b>	<b>30</b>	<b>(31)</b>

The table below details financial assets (liabilities) measured at fair value on a recurring basis as of December 31, 2021:

	Fair Value Measurements using			
	December 31, 2021	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Short-term deposits	291	291	—	—
Equity securities measured at fair value through earnings	29	29	—	—
Derivative assets designated as cash flow hedge	3	—	3	—
Derivative assets not designated as cash flow hedge	3	—	3	—
Derivative liabilities designated as cash flow hedge	(42)	—	(42)	—
Derivative liabilities not designated as cash flow hedge	(1)	—	(1)	—
Contingent consideration on business acquisitions	(77)	—	—	(77)
<b>Total</b>	<b>206</b>	<b>320</b>	<b>(37)</b>	<b>(77)</b>

For liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3), the reconciliation between January 1, 2022 and December 31, 2022 is presented as follows:

	Fair Value Measurements using Significant Unobservable Inputs (Level 3)
<b>January 1, 2022</b>	<b>77</b>
Changes in fair value measurement	(35)
Currency translation adjustment	(4)
Payments made	(7)
<b>December 31, 2022</b>	<b>31</b>
Amount of total gains (losses) for the period included in earnings attributable to liabilities still held at the reporting date	35

Contingent consideration reported as liabilities on the consolidated balance sheet as of December 31, 2022 and December 31, 2021 is based on the probability that the milestones defining the variable components of the consideration will be achieved. In 2022, the probability of achievement of these variable components was reassessed, resulting in a reduction of \$35 million of the fair value of the contingent consideration related to certain 2020 business acquisitions. The Company reported this change in fair value in the lines “Research and development” and “Cost of Sales” of the consolidated statement of income, for \$33 million and \$2 million respectively.

Contingent consideration is composed of \$31 million reported in the line “Other long-term liabilities” in the consolidated balance sheet as of December 31, 2022, compared to \$7 million reported in the line “Other payables and accrued liabilities” and \$70 million reported in the line “Other long-term liabilities” in the consolidated balance sheet as of December 31, 2021.

For liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3), the reconciliation between January 1, 2021 and December 31, 2021 is presented as follows:

	Fair Value Measurements using Significant Unobservable Inputs (Level 3)
<b>January 1, 2021</b>	<b>123</b>
Changes in fair value measurement	(38)
Currency translation adjustment	(8)
<b>December 31, 2021</b>	<b>77</b>
Amount of total gains (losses) for the period included in earnings attributable to liabilities still held at the reporting date	(2)

No asset (liability) was measured at fair value on a non-recurring basis using significant unobservable inputs (Level 3) as of December 31, 2022 and December 31, 2021.

The Company evaluated in 2022, 2021 and 2020 for impairment the aggregate carrying amount of long-term investments for which the Company applies the cost method as a measurement alternative, as described in Note 2.22. No significant impairment charge was recorded on these investments in 2022, 2021 and 2020.

The following table includes additional fair value information on financial assets and liabilities as of December 31, 2022 and 2021:

	Level	2022		2021	
		Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
<b>Cash equivalents(1)</b>	<b>1</b>	2,996	2,996	2,883	2,883
<b>Short-term, deposits</b>	<b>1</b>	581	581	291	291
<b>Long-term debt</b>					
– Bank loans (including current portion)	<b>2</b>	1,165	1,165	1,152	1,152
– Finance leases (including current portion)	<b>2</b>	57	57	—	—
– Senior unsecured convertible bonds issued on August 4, 2020(2)	<b>1</b>	1,495	1,561	1,387	1,975

(1) Cash equivalents primarily correspond to deposits at call with banks.

(2) The carrying amount as of December 31, 2022, of the senior unsecured convertible bonds as reported above, corresponds to the nominal value of the bonds, net of \$5 million unamortized debt issuance costs, in compliance with the new accounting guidance. The impact of the adoption is described in Note 2 and Note 15. The fair value represented the market price of the bonds trading on the Frankfurt Stock Exchange.

The Company did not report any debt securities that were in an unrealized loss position for more than one year as of December 31, 2022 and December 31, 2021.

The methodologies used to estimate fair value are as follows:

<b>Components</b>	<b>Methodology used to estimate fair value</b>
Debt securities classified as available-for-sale	Quoted market prices for identical instruments
Foreign exchange forward contracts, currency options and collars	Quoted market prices for similar instruments
Equity securities measured at fair value through earnings	Quoted market prices for identical instruments
Equity securities carried at cost as a measurement alternative	Valuation of the underlying investments on a new round of third-party financing or upon liquidation
Long-term debt and current portion of long-term debt	Future cash flows on a borrowing-by-borrowing basis and discounting these future cash flows using the Company's incremental borrowing rates for similar types of borrowing arrangements
Cash and cash equivalents, short-term deposits, accounts receivable, short-term borrowings, and accounts payable	The carrying amounts reflected in the consolidated financial statements are considered as reasonable estimates of fair value due to the relatively short period of time between the origination of the instruments and their expected realization.

## 28. RELATED PARTY TRANSACTIONS

The below table summarizes transactions incurred in 2022, 2021 and 2020 with companies for which certain members of the Company's management perform similar policymaking functions. These include, but are not limited to: Orange and Idemia France.

	December 31, 2022	December 31, 2021	December 31, 2020
Sales & other services	13	8	5
Other purchases	25	19	21
Accounts receivable	5	2	1
Accounts payable	2	—	—

In addition, the Company shares one member of its Supervisory Board with Cassa Depositi e Prestiti SpA (CDP). The Company holds two long-term credit facilities with CDP, which contractual financing terms are described in Note 15.

The Company did not hold any significant equity-method investments as of December 31, 2022, 2021 and 2020. Consequently, the Company did not report any material transaction with this type of investees in the corresponding years.

The Company made a cash contribution of \$1 million for the year ended December 31, 2022 to the ST Foundation, a non-profit organization established to deliver and co-ordinate independent programs in line with its mission. A cash contribution of \$0.5 million was made for each of the years ended December 31, 2021 and 2020. Certain members of the Foundation's Board are senior members of the Company's management.

## STMICROELECTRONICS N.V.

## VALUATION AND QUALIFYING ACCOUNTS

<u>Valuation and qualifying accounts deducted from the related asset accounts</u>	<u>Balance at beginning of period</u>	<u>Translation adjustment</u>	<u>Charged to costs and expenses</u>	<u>Additions/ (Deductions)</u>	<u>Balance at end of period</u>
(Currency—millions of U.S. dollars)					
<b>2022</b>					
Accounts Receivable	19	—	—	2	21
Deferred Tax Assets	576	(19)	(140)	(1)	416
<b>2021</b>					
Accounts Receivable	16	—	—	3	19
Deferred Tax Assets	638	(24)	(2)	(36)	576
<b>2020</b>					
Accounts Receivable	16	—	—	—	16
Deferred Tax Assets	1,534	28	(11)	(913)	638

**Description of Securities Registered under Section 12 of the Securities Exchange Act of 1934 (the “Exchange Act”)**

As of December 31, 2022, STMicroelectronics N.V. (the “Company”, “we”, “us” and “our”) had the following series of securities registered pursuant to Section 12(b) of the Exchange Act:

<b><u>Title of Each Class:</u></b>	<b><u>Trading Symbol(s)</u></b>	<b><u>Name of Each Exchange on Which Registered:</u></b>
<b>Common shares, nominal value €1.04 per share</b>	<b>STM</b>	<b>New York Stock Exchange</b>

Our common shares have a nominal value of €1.04. As of December 31, 2022 our common shares are the only class of securities of the company that are registered under Section 12 of the Exchange Act.

Capital terms used but not defined herein have the meanings given to them in Company’s annual report on Form 20-F for the fiscal year ended December 31, 2022 (the “2022 Form 20-F”).

***Type and Class of Securities (Item 9.A.5 of Form 20-F)***

Each common share has a nominal value of €1.04 per share. As of December 31, 2022, the number of shares of common stock issued was 911,281,920 shares and the number of shares of common stock outstanding was 903,865,763.

Of the 903,865,763 common shares outstanding as of December 31, 2022, 68,905,940, or 7.6%, were registered in the common share registry maintained on our behalf in New York.

***Pre-emptive Rights (Item 9.A.3 of Form 20-F)***

See “Item 10. Additional information — Memorandum and Articles of Association — Share Capital (Articles 4, 5 and 6)” of the 2022 Form 20-F.

***Limitations or Qualifications (Item 9.A.6 of Form 20-F)***

Not applicable.

***Other Rights (Item 9.A.7 of Form 20-F)***

Not applicable.

***Rights of the Common Shares (Item 10.B.3 of Form 20-F)***

See “Item 10. Additional information — Memorandum and Articles of Association” of the 2022 Form 20-F.

***Requirements for Amendments (Item 10.B.4 of Form 20-F)***

See “Item 10. Additional information — Memorandum and Articles of Association” of the 2022 Form 20-F.

***Limitations on the Rights to Own Shares (Item 10.B.6 of Form 20-F)***

Not applicable.

***Provisions Affecting Any Change of Control (Item 10.B.7 of Form 20-F)***

Not applicable.

***Ownership Threshold (Item 10.B.8 of Form 20-F)***

Not applicable.



***Differences Between the Law of Different Jurisdictions (Item 10.B.9 of Form 20-F)***

See the references to Dutch law throughout “Item 10. Additional information — Memorandum and Articles of Association” of the form 2022 20-F.

***Changes in Capital (Item 10.B.10 of Form 20-F)***

Not applicable.

***Debt Securities (Item 12.A of Form 20-F)***

Not applicable.

***Warrants and Rights (Item 12.B of Form 20-F)***

Not applicable.

***Other Securities (Item 12.C of Form 20-F)***

Not applicable.

***American Depositary Shares (Items 12.D.1 and 12.D.2 of Form 20-F)***

Not applicable.

## Subsidiaries and Equity Investments of the Company

The following table lists our consolidated subsidiaries and our percentage ownership as of December 31, 2022:

Legal Seat	Name	Percentage Ownership (Direct or Indirect)
Australia, Sydney	STMicroelectronics PTY Ltd	100
Austria, Vienna	STMicroelectronics Austria GmbH	100
Belgium, Diegem	Proton World International N.V.	100
Brazil, Sao Paulo	STMicroelectronics Ltda	100
Canada, Ottawa	STMicroelectronics (Canada), Inc.	100
China, Beijing	STMicroelectronics (Beijing) R&D Co. Ltd	100
China, Shanghai	STMicroelectronics (China) Investment Co. Ltd	100
China, Shenzhen	Shenzhen STS Microelectronics Co. Ltd	60
China, Shenzhen	STMicroelectronics (Shenzhen) R&D Co. Ltd	100
Czech Republic, Prague	STMicroelectronics Design and Application s.r.o.	100
Denmark, Aarhus	STMicroelectronics A/S	100
Egypt, Cairo	STMicroelectronics Egypt SSC	100
Finland, Nummela	STMicroelectronics Finland OY	100
France, Crolles	STMicroelectronics (Crolles 2) SAS	100
France, Grenoble	STMicroelectronics (Alps) SAS	100
France, Grenoble	STMicroelectronics (Grenoble 2) SAS	100
France, Le Mans	STMicroelectronics (Grand Ouest) SAS	100
France, Montrouge	STMicroelectronics S.A.	100
France, Rousset	STMicroelectronics (Rousset) SAS	100
France, Tours	STMicroelectronics (Tours) SAS	100
Germany, Aschheim-Dornach	STMicroelectronics GmbH	100
Germany, Aschheim-Dornach	STMicroelectronics Application GmbH	100
Hong Kong, Kowloon	STMicroelectronics Ltd	100
India, New Delhi	ST-Ericsson India Pvt Ltd	100
India, Noida	STMicroelectronics Pvt Ltd	100
Israel, Netanya	STMicroelectronics Limited	100
Italy, Agrate Brianza	STMicroelectronics S.r.l.	100
Italy, Naples	STMicroelectronics Services S.r.l.	100
Japan, Tokyo	STMicroelectronics KK	100
Malaysia, Kuala Lumpur	STMicroelectronics Marketing SDN BHD	100
Malaysia, Muar	STMicroelectronics SDN BHD	100
Malta, Kirkop	STMicroelectronics (Malta) Ltd	100
Mexico, Guadalajara	STMicroelectronics Marketing, S. de R.L. de C.V.	100
Morocco, Casablanca	STMicroelectronics (MAROC) SAS, a associé unique	100
The Netherlands, Amsterdam	STMicroelectronics Finance B.V.	100
The Netherlands, Amsterdam	STMicroelectronics Finance II N.V.	100
The Netherlands, Amsterdam	STMicroelectronics International N.V.	100
Philippines, Calamba	STMicroelectronics, Inc.	100
Philippines, Calamba	Mountain Drive Property, Inc.	40
Singapore, Ang Mo Kio	STMicroelectronics Asia Pacific Pte Ltd	100
Singapore, Ang Mo Kio	STMicroelectronics Pte Ltd	100
Slovenia, Ljubljana	STMicroelectronics d.o.o	100
Spain, Barcelona	STMicroelectronics Iberia S.A.	100
Sweden, Jönköping	STMicroelectronics Software A.B.	100
Sweden, Kista	STMicroelectronics A.B.	100
Sweden, Norrköping	STMicroelectronics Silicon Carbide A.B.	100
Switzerland, Geneva	STMicroelectronics RE S.A.	100
Switzerland, Geneva	STMicroelectronics S.A.	100
Taiwan, Taipei City	Exagan Taiwan Ltd.	80
Thailand, Bangkok	STMicroelectronics (Thailand) Ltd	100

<b>Legal Seat</b>	<b>Name</b>	<b>Percentage Ownership (Direct or Indirect)</b>
United Kingdom, Bristol	STMicroelectronics (Research & Development) Limited	100
United Kingdom, Marlow	STMicroelectronics Limited	100
United States, Coppel	STMicroelectronics Inc.	100
United States, Coppel	STMicroelectronics (North America) Holding, Inc.	100

**CERTIFICATION**

I, Jean-Marc Chery, certify that:

1. I have reviewed this annual report on Form 20-F of STMicroelectronics N.V.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: February 23, 2023

By: /s/ Jean-Marc Chery

**Jean-Marc Chery**  
**President and Chief Executive Officer and**  
**Sole Member of our Managing Board**

**CERTIFICATION**

I, Lorenzo Grandi, certify that:

1. I have reviewed this annual report on Form 20-F of STMicroelectronics N.V.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: February 23, 2023

By: /s/ Lorenzo Grandi

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**Lorenzo Grandi**  
**President and Chief Financial Officer,**  
**Purchasing, Enterprise Risk Management (ERM)**  
**and Resilience**

**CERTIFICATION OF JEAN-MARC CHERY, PRESIDENT AND CHIEF EXECUTIVE OFFICER AND SOLE MEMBER OF THE MANAGING BOARD OF STMICROELECTRONICS N.V. AND LORENZO GRANDI, CHIEF FINANCIAL OFFICER AND PRESIDENT, FINANCE, INFRASTRUCTURE AND SERVICES OF STMICROELECTRONICS N.V., PURSUANT TO SECTION 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the annual report of STMicroelectronics N.V. (the "Company") on Form 20-F for the period ending December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned hereby certify that to the best of our knowledge:

1. The Report fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 23, 2023

By: /s/ Jean-Marc Chery  
**Jean-Marc Chery**  
**President and Chief Executive Officer and**  
**Sole Member of our Managing Board**

Date: February 23, 2023

By: /s/ Lorenzo Grandi  
**Lorenzo Grandi**  
**President and Chief Financial Officer, Purchasing, Enterprise Risk Management (ERM) and Resilience**

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-109572) pertaining to the 2001 Stock Option Plan of STMicroelectronics N.V. of our reports dated February 23, 2023, with respect to the consolidated financial statements and financial statements schedule on page S-1 of STMicroelectronics N.V., and the effectiveness of internal control over financial reporting of STMicroelectronics, N.V., included in this Annual Report (Form 20-F) for the year ended December 31, 2022.

/s/ Ernst & Young AG

Lancy – Geneva, Switzerland

February 23, 2023