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

FORM 6-K

**REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 OR 15d-16 UNDER
THE SECURITIES EXCHANGE ACT OF 1934**

Report on Form 6-K dated August 3, 2023

Commission File Number: 1-13546

STMicroelectronics N.V.

(Name of Registrant)

WTC Schiphol Airport
Schiphol Boulevard 265
1118 BH Schiphol Airport
The Netherlands

(Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F T Form 40-F £

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Yes £ No T

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Yes No T

Indicate by check mark whether the registrant by furnishing the information contained in this form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934:

Yes No T

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82- _____

Enclosure: STMicroelectronics N.V.'s Second Quarter and Six Months ended July 1, 2023:

- Operating and Financial Review and Prospects;
 - Unaudited Interim Consolidated Statements of Income, Statements of Comprehensive Income, Balance Sheets, Statements of Cash Flows, and Statements of Equity and related Notes for the three and six months ended July 1, 2023; and
 - Certifications pursuant to Sections 302 (Exhibits 12.1 and 12.2) and 906 (Exhibit 13.1) of the Sarbanes-Oxley Act of 2002, submitted to the Commission on a voluntary basis.
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OPERATING AND FINANCIAL REVIEW AND PROSPECTS

Overview

The following discussion should be read in conjunction with our Unaudited Interim Consolidated Statements of Income, Statements of Comprehensive Income, Balance Sheets, Statements of Cash Flows and Statements of Equity for the three and six months ended July 1, 2023 and Notes thereto included elsewhere in this Form 6-K, and our annual report on Form 20-F for the year ended December 31, 2022 as filed with the U.S. Securities and Exchange Commission (the “Commission” or the “SEC”) on February 23, 2023 (the “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 “Business Overview” and “Liquidity and Capital Resources—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” included in the Form 20-F. We assume no obligation to update the forward-looking statements or such risk factors.

Our Management’s Discussion and Analysis of Financial Position and Results of Operations (“MD&A”) is provided in addition to the accompanying Unaudited Interim Consolidated Financial Statements (“Consolidated Financial Statements”) and Notes to assist readers in understanding our results of operations, financial condition and cash flows. Our MD&A is organized as follows:

- Critical Accounting Policies using Significant Estimates.
- Business Overview, a discussion of our business and overall analysis of financial and other relevant highlights for the three and six months ended July 1, 2023, designed to provide context for the other sections of the MD&A, including our expectations for selected financial items for the third quarter of 2023.
- Other Developments.
- Results of Operations, containing a year-over-year and sequential analysis of our financial results for the three and six months ended July 1, 2023, as well as segment information.
- Legal Proceedings.
- Discussion on the impact of changes in exchange rates, interest rates and equity prices on our activity and financial results.
- Liquidity and Capital Resources, presenting an analysis of changes in our balance sheets and cash flows, and discussing our financial condition and potential sources of liquidity.
- Impact of Recently Issued U.S. Accounting Standards.
- Backlog and Customers, discussing the level of backlog and sales to our key customers.
- Disclosure Controls and Procedures.
- Other reviews.
- Cautionary Note Regarding Forward-Looking Statements.

At STMicroelectronics N.V. (“ST” or the “Company”), 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 and connectivity. We are committed to achieving our goal to become carbon neutral on scope 1 and 2 and partially scope 3 by 2027.

Critical Accounting Policies Using Significant Estimates

There were no material changes in the first six months of 2023 to the information provided under the heading “Critical Accounting Policies Using Significant Estimates” included in our Form 20-F for the year ended December 31, 2022, as described in Note 5, Recent Accounting Pronouncements, of the Consolidated Financial Statements for the three and six months ended July 1, 2023.

Fiscal Year

Under Article 35 of our Articles of Association, our fiscal year extends from January 1 to December 31. The first quarter of 2023 ended on April 1 and the second quarter ended on July 1. The third quarter will end on September 30 and the fourth quarter will end on December 31, 2023. 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 2023 and 2022.

	Q1	Q2	Q3	Q4
	Days			
2022	92	91	91	91
2023	91	91	91	92

Business Overview

Our results of operations for each period were as follows:

	Three Months Ended			% Variation	
	July 1, 2023	April 1, 2023	July 2, 2022	Sequential	Year Over Year
	(In millions, except per share amounts)				
Net revenues	\$ 4,326	\$ 4,247	\$ 3,837	1.9 %	12.7 %
Gross profit	2,119	2,110	1,819	0.5	16.5
Gross margin (as percentage of net revenues)	49.0 %	49.7 %	47.4 %	-70 bps	160 bps
Operating income	1,146	1,201	1,004	(4.5)	14.2
Operating margin	26.5 %	28.3 %	26.2 %	-180 bps	30 bps
Net income attributable to parent company	1,001	1,044	867	(4.1)	15.5
Diluted earnings per share	\$ 1.06	\$ 1.10	\$ 0.92	(3.6)%	15.2 %

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 World Semiconductor Trade Statistics (“WSTS”), on a sequential basis, semiconductor industry revenues in the second quarter of 2023 increased by approximately 4% for our TAM and increased by approximately 5% for our SAM to reach approximately \$125 billion and \$72 billion, respectively. On a year-over-year basis, our TAM decreased by approximately 17% and our SAM increased by approximately 1%.

Our second quarter 2023 net revenues amounted to \$4,326 million, increasing 1.9% sequentially, about 110 basis points better than the mid-point of our released guidance. On a sequential basis, Automotive and Discrete Group (ADG) revenues increased 8.2%, mainly driven by higher sales in both Power Discrete and Automotive. Analog, Micro-Electro-Mechanical Systems (“MEMS”) and Sensors Group (AMS) revenues decreased 11.9%, driven by lower revenues from MEMS, Imaging and Analog. Microcontrollers and Digital ICs Group (MDG) revenues increased 4.3%, with all subgroups contributing to the increase.

On a year-over-year basis, second quarter net revenues increased 12.7% with higher sales in ADG and MDG, while AMS revenues decreased. ADG revenues increased 34.4% with both Automotive and Power Discrete

contributing to the increase. AMS revenues decreased 15.7%, mainly driven by Analog and MEMS. MDG revenues increased 13.0% driven by higher sales in RF Communications and General-Purpose Microcontrollers.

Our revenue performance was below the SAM on a sequential basis and above the SAM on a year-over-year basis.

Our effective average exchange rate for the second quarter of 2023 was \$1.08 for €1.00, compared to \$1.06 in the first quarter of 2023 and \$1.12 for €1.00 in the second quarter of 2022. 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 second quarter of 2023 gross profit was \$2,119 million and gross margin was 49.0%, in line with the mid-point of our guidance. On a sequential basis, gross margin decreased 70 basis points, mainly due to higher manufacturing costs. Gross margin increased 160 basis points year-over-year, mainly due to product mix, favorable pricing, positive currency effects, net of hedging, partially offset by higher manufacturing costs.

Our aggregated selling, general & administrative (“SG&A”) and research & development (“R&D”) expenses amounted to \$969 million, compared to \$900 million and \$855 million in the prior and year-ago quarters, respectively. On a sequential and a year-over-year basis, operating expenses increased mainly due to higher cost of labor and negative non-recurring non-cash items.

Other income and expenses, net, amounted to \$4 million expense, decreasing by \$5 million sequentially. On a year-over-year basis, other income and expenses, net, decreased by \$44 million from \$40 million income in the comparative period, mainly due to higher start-up costs mainly related to our Agrate 300mm fab.

In the second quarter of 2023, our operating income was \$1,146 million, equivalent to 26.5% of net revenues, compared to \$1,201 million in the previous quarter (28.3% of net revenues), and to \$1,004 million (26.2% of net revenues) in the year-ago quarter. On a sequential basis, operating income was mainly impacted by negative non-recurring non-cash items amounting to \$34 million included in operating expenses. On a year-over-year basis, the increase was mainly driven by the combined effect of higher revenues and improved gross margin profitability, partially offset by higher operating expenses.

In the second quarter of 2023, our net cash from operating activities amounted to \$1,311 million. Our net cash used in investing activities was at \$1,615 million with capital expenditure payments, net of proceeds from sales, capital grants and other contributions at \$1,072 million compared to \$1,090 million and \$809 million during prior and year-ago quarters respectively.

Our free cash flow, a non-U.S. GAAP measure, amounted to \$209 million in the second quarter of 2023 compared to \$230 million in the second quarter of 2022. 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.

Looking at the third quarter, we expect a revenue increase of approximately 1.1% sequentially, plus or minus 350 basis points. Gross margin is expected to be approximately 47.5%, plus or minus 200 basis points.

This outlook is based on an assumed effective currency exchange rate of approximately \$1.10 = €1.00 for the third quarter of 2023 and includes the impact of existing hedging contracts. The third quarter will close on September 30, 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” in our Form 20-F as may be updated from time to time in our SEC filings.

Other Developments

During the quarter, Orio Bellezza, President, Quality, Manufacturing, Technology and Supply Chain, and member of ST's Executive Committee, announced his retirement from the Company. Mr. Bellezza will remain Managing Director of the Company's Italian subsidiary until the expiration of his mandate. Fabio Gualandris, ST's Executive Vice President, Head of Back-End Manufacturing & Technology, and Deputy to Mr. Bellezza, was appointed President, Quality, Manufacturing and Technology. Following our CEO's proposal, ST's Supervisory Board approved the appointment of Mr. Gualandris to the Company's Executive Committee.

On June 7, we signed an agreement with Sanan Optoelectronics, a market leader in compound semiconductors in China, to create a new 200mm silicon carbide ("SiC") device manufacturing Joint Venture ("JV") in Chongqing, China. This JV will support rising demand for the ST's SiC devices in China for car electrification and industrial power and energy applications. Sanan will build separately a 200mm SiC substrate manufacturing facility to fulfill the JV's needs.

On June 5, we announced the conclusion of the agreement with GlobalFoundries, to create a new 300mm, jointly operated, high-volume semiconductor manufacturing facility in Crolles, France.

On May 24, following the conclusion of our Annual General Meeting of Shareholders ("AGM"), our Supervisory Board announced that it had appointed Mr. Nicolas Dufourcq as the Chairman, and Mr. Maurizio Tamagnini as the Vice-Chairman, of the Supervisory Board, respectively, for a 3-year term to expire at the end of the 2026 AGM.

On May 24, we held our AGM in Schiphol, 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, 2022, prepared in accordance with International Financial Reporting Standards (IFRS) and filed with the Netherlands Authority for the Financial Markets (AFM) on March 23, 2023;
- 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 2023 and first quarter of 2024;
- The reappointment, for a three-year term expiring at the 2026 AGM, of Mr. Frédéric Sanchez and Mr. Maurizio Tamagnini, as members of the Supervisory Board;
- The reappointment, for a two-year term expiring at the 2025 AGM, of Ms. Ana de Pro Gonzalo, as member of the Supervisory Board;
- The reappointment, for a one-year term expiring at the 2024 AGM, of Mr. Yann Delabrière, as member of the Supervisory Board;
- The appointment of Mr. Paolo Visca, as member of the Supervisory Board, for a three-year term expiring at the 2026 AGM, in replacement of Mr. Alessandro Rivera whose mandate will expire at the end of the 2023 AGM;
- The appointment of Ms. Hélène Vletter-van Dort, as member of the Supervisory Board, for a two-year term expiring at the end of the 2025 AGM, in replacement of Ms. Heleen Kersten whose mandate will expire at the end of the 2023 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 2024 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 2024 AGM;
- The discharge of the sole member of the Managing Board; and
- The discharge of the members of the Supervisory Board.

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.

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, start-up and phase-out 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.

Second Quarter 2023 vs. First Quarter 2023 and Second Quarter 2022

The following table sets forth certain financial data from our Unaudited Interim Consolidated Statements of Income:

	Three Months ended					
	July 1, 2023		April 1, 2023		July 2, 2022	
	\$ million	% of net revenues	\$ million	% of net revenues	\$ million	% of net revenues
Net sales	\$ 4,320	99.9 %	\$ 4,241	99.9 %	\$ 3,830	99.8 %
Other revenues	6	0.1	6	0.1	7	0.2
Net revenues	4,326	100.0	4,247	100.0	3,837	100.0
Cost of sales	(2,207)	(51.0)	(2,137)	(50.3)	(2,018)	(52.6)
Gross profit	2,119	49.0	2,110	49.7	1,819	47.4
Selling, general and administrative	(414)	(9.6)	(395)	(9.3)	(366)	(9.5)
Research and development	(555)	(12.8)	(505)	(11.9)	(489)	(12.7)
Other income and expenses, net	(4)	(0.1)	(9)	(0.2)	40	1.0
Operating income	1,146	26.5	1,201	28.3	1,004	26.2
Interest income, net	33	0.8	37	0.9	6	0.2
Other components of pension benefit costs	(5)	(0.1)	(5)	(0.1)	(2)	(0.1)
Income before income taxes and noncontrolling interest	1,174	27.1	1,233	29.0	1,008	26.3
Income tax expense	(171)	(4.0)	(187)	(4.4)	(139)	(3.6)
Net income	1,003	23.2	1,046	24.6	869	22.6
Net income attributable to noncontrolling interest	(2)	—	(2)	—	(2)	—
Net income attributable to parent company	\$ 1,001	23.1 %	\$ 1,044	24.6 %	\$ 867	22.6 %

Net revenues

	Three Months Ended			% Variation	
	July 1, 2023	April 1, 2023	July 2, 2022	Sequential	Year Over Year
	(In millions)				
Net sales	\$ 4,320	\$ 4,241	\$ 3,830	1.9 %	12.8 %
Other revenues	6	6	7	3.6	(20.5)
Net revenues	4,326	4,247	3,837	1.9 %	12.7 %

Sequentially, our second quarter 2023 net revenues increased 1.9%, 110 basis points better than the mid-point of our released guidance. The sequential increase mainly resulted from higher average selling prices of approximately 5%, driven by a more favorable product mix, partially offset by lower volumes of approximately 3%.

On a year-over-year basis, net revenues increased 12.7% mainly as a result of higher average selling prices of approximately 28%, driven by a more favorable product mix and sales price increase, partially offset by lower volumes of approximately 15%.

Net revenues by product group

	Three Months Ended			% Variation	
	July 1, 2023	April 1, 2023	July 2, 2022	Sequential	Year Over Year
	(In millions)				
ADG	\$ 1,955	\$ 1,807	\$ 1,454	8.2 %	34.4 %
AMS	940	1,068	1,115	(11.9)	(15.7)
MDG	1,427	1,368	1,263	4.3	13.0
Others	4	4	5	—	—
Total consolidated net revenues	\$ 4,326	\$ 4,247	\$ 3,837	1.9 %	12.7 %

On a sequential basis, ADG revenues increased 8.2%, driven by higher average selling prices of approximately 12%, due to a more favorable product mix, partially offset by lower volumes of approximately 4%. AMS revenues decreased 11.9%, due to lower volumes of approximately 7% and lower average selling prices of approximately 5%. MDG revenues increased 4.3%, driven by higher average selling prices of approximately 3%, mainly due to a more favorable product mix, and higher volumes of approximately 1%.

On a year-over-year basis, ADG revenues increased 34.4%, driven by higher average selling prices of approximately 55%, due to a better product mix and higher selling prices, partially offset by lower volumes of approximately 21%. AMS revenues decreased 15.7% compared to the year-ago period, mainly driven by lower volumes of approximately 15%. MDG revenues increased 13.0%, due to higher average selling prices of approximately 16%, due to a better product mix, partially offset by lower volumes of approximately 3%.

Net Revenues by Market Channel ⁽¹⁾

	Three Months ended		
	July 1, 2023	April 1, 2023	July 2, 2022
OEM	64 %	64 %	65 %
Distribution	36	36	35
Total consolidated net revenues	100 %	100 %	100 %

(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 second quarter net revenues in distribution amounted to 36% of our total consolidated net revenues, consistent with the prior quarter and increasing from 35% in the year-ago quarter.

Net Revenues by Location of Shipment ⁽¹⁾

	Three Months Ended			% Variation	
	July 1, 2023	April 1, 2023	July 2, 2022	Sequential	Year Over Year
	(In millions)				
Europe, Middle East, Africa ("EMEA")	\$ 1,244	\$ 1,186	\$ 826	4.9 %	50.6 %
Americas	698	687	562	1.6	24.2
Asia Pacific	2,384	2,374	2,449	0.4	(2.7)
Total consolidated net revenues	\$ 4,326	\$ 4,247	\$ 3,837	1.9 %	12.7 %

(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.

On a sequential basis, EMEA revenues grew 4.9%, mainly due to higher sales in Automotive. Americas revenues grew 1.6%. Asia Pacific revenues increased 0.4%.

On a year-over-year basis, EMEA revenues grew 50.6%, mainly driven by higher sales in Automotive and Microcontrollers. Americas revenues increased 24.2%, mainly due to higher sales in RF Communications and Power Discrete. Asia Pacific revenues decreased 2.7%, mainly due to lower sales in Analog and MEMS.

Gross profit

	Three Months Ended			Variation	
	July 1, 2023	April 1, 2023	July 2, 2022	Sequential	Year Over Year
	(In millions)				
Gross profit	\$ 2,119	\$ 2,110	\$ 1,819	0.5 %	16.5 %
Gross margin (as percentage of net revenues)	49.0 %	49.7 %	47.4 %	-70 bps	160 bps

In the second quarter of 2023, gross margin was 49.0%, in line with the mid-point of our guidance. On a sequential basis, gross margin decreased 70 basis points, mainly due to higher manufacturing costs.

Gross margin increased 160 basis points year-over-year, mainly due to product mix, favorable pricing, positive currency effects, net of hedging, partially offset by higher manufacturing costs.

Operating expenses

	Three Months Ended			Variation	
	July 1, 2023	April 1, 2023	July 2, 2022	Sequential	Year Over Year
	(In millions)				
Selling, general and administrative	\$ (414)	\$ (395)	\$ (366)	(4.8) %	(12.9) %
Research and development	(555)	(505)	(489)	(10.0)	(13.5)
Total operating expenses	\$ (969)	\$ (900)	\$ (855)	(7.7) %	(13.3) %
As percentage of net revenues	22.4 %	21.2 %	22.3 %	120 bps	10 bps

On a sequential and a year-over-year basis, operating expenses increased mainly due to higher cost of labor and negative non-recurring non-cash items.

As a percentage of net revenues, our operating expenses amounted to 22.4% in the second quarter of 2023, increasing compared to 21.2% in the prior quarter and 22.3% in the year-ago quarter.

R&D expenses were net of research tax credits, which amounted to \$36 million in the second quarter of 2023, compared to \$30 million and \$27 million, in the prior and year-ago quarters, respectively.

Other income and expenses, net

	Three Months Ended		
	July 1, 2023	April 1, 2023	July 2, 2022
	(In millions)		
Public funding	\$ 27	\$ 25	\$ 39
Exchange gains (losses), net	3	—	5
Start-up and phase-out costs	(34)	(33)	(1)
Patent costs	(2)	(2)	(1)
Gain on sale of non-current assets	4	1	2
COVID-19 incremental costs	—	—	(3)
Other, net	(2)	—	(1)
Other income and expenses, net	\$ (4)	\$ (9)	\$ 40
As percentage of net revenues	(0.1) %	(0.2) %	1.0 %

Other income and expenses, net, amounted to \$4 million expense, decreasing by \$5 million sequentially.

On a year-over-year basis, other income and expenses, net, decreased by \$44 million from \$40 million income in the comparative period, mainly due to higher start-up costs mainly related to our Agrate 300mm fab.

Operating income

	Three Months Ended		
	July 1, 2023	April 1, 2023	July 2, 2022
	(In millions)		
Operating income	\$ 1,146	\$ 1,201	\$ 1,004
As percentage of net revenues	26.5 %	28.3 %	26.2 %

In the second quarter of 2023, operating income was \$1,146 million, compared to an operating income of \$1,201 million and \$1,004 million in the prior and year-ago quarters, respectively.

On a sequential basis, operating income was mainly impacted by negative non-recurring non-cash items amounting to \$34 million included in operating expenses.

On a year-over-year basis, the increase was mainly driven by the combined effect of higher revenues and improved gross margin profitability, partially offset by higher operating expenses.

Operating income by product group

	Three Months Ended					
	July 1, 2023		April 1, 2023		July 2, 2022	
	\$ million	% of net revenues	\$ million	% of net revenues	\$ million	% of net revenues
ADG	\$ 624	31.9 %	\$ 577	32.0 %	\$ 359	24.7 %
AMS	139	14.8	218	20.4	269	24.1
MDG	505	35.4	495	36.2	425	33.6
Total operating income of product groups	1,268	29.3	1,290	30.4	1,053	27.5
Others ⁽¹⁾	(122)	—	(89)	—	(49)	—
Total consolidated operating income	\$ 1,146	26.5 %	\$ 1,201	28.3 %	\$ 1,004	26.2 %

(1) 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, start-up and phase-out 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.

For the second quarter of 2023, ADG operating income was \$624 million, increasing sequentially by \$47 million mainly driven by higher profitability in Automotive and Power Discrete. AMS operating income was \$139 million, decreasing sequentially by \$79 million, due to lower profitability in MEMS, Imaging and Analog. MDG operating income increased by \$10 million sequentially, reaching \$505 million.

ADG operating income increased by \$265 million year-over-year reflecting higher profitability in both Automotive and Power Discrete. AMS operating income decreased by \$130 million, with MEMS, Imaging and Analog contributing to the decrease. MDG operating income increased by \$80 million, driven by Microcontrollers and RF Communications higher profitability.

Reconciliation to consolidated operating income

	Three Months Ended		
	July 1, 2023	April 1, 2023	July 2, 2022
	(In millions)		
Total operating income of product groups	\$ 1,268	\$ 1,290	\$ 1,053
Impairment loss on intangible assets acquired through business combinations	(36)	—	—
Start-up and phase-out costs	(34)	(33)	—
Unused capacity charges	(15)	(1)	(13)
Contingent consideration fair value remeasurement	5	—	2
Other unallocated manufacturing results	(9)	(52)	(33)
Gain on sale of non-current assets	3	1	2
Strategic and R&D programs and other non-allocated provisions ⁽¹⁾	(36)	(4)	(7)
Total operating income (loss) of Others	(122)	(89)	(49)
Total consolidated operating income	\$ 1,146	\$ 1,201	\$ 1,004

(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.

Interest income, net

	Three Months Ended		
	July 1, 2023	April 1, 2023	July 2, 2022
	(In millions)		
Interest income, net	\$ 33	\$ 37	\$ 6

In the second quarter of 2023, we recorded a net interest income of \$33 million, compared to a net interest income of \$37 million in the prior quarter and a net interest income of \$6 million in the year-ago quarter. Net interest income was composed of \$51 million of interest income, partially offset by interest expense on borrowings and banking fees of \$18 million. The year-over-year increase in interest income was mainly due to higher U.S dollar interest yields.

Income tax expense

	Three Months Ended		
	July 1, 2023	April 1, 2023	July 2, 2022
	(In millions)		
Income tax expense	\$ (171)	\$ (187)	\$ (139)

During the second quarter of 2023, we registered an income tax expense of \$171 million, reflecting a 15.0% estimated annual effective tax rate before discrete items at consolidated level, applied to the first six months of 2023 consolidated income before income tax, consistent with the actual annual tax rate of 2022.

Net income attributable to parent company

	Three Months Ended		
	July 1, 2023	April 1, 2023	July 2, 2022
	(In millions)		
Net income attributable to parent company	\$ 1,001	\$ 1,044	\$ 867
As percentage of net revenues	23.1 %	24.6 %	22.6 %

For the second quarter of 2023, we reported net income of \$1,001 million, representing diluted earnings per share of \$1.06, compared to \$1.10 in the prior quarter and \$0.92 in the prior-year quarter.

Six Months of 2023 vs. Six Months of 2022

The following table sets forth certain financial data from our Unaudited Interim Consolidated Statements of Income:

	Six Months ended			
	July 1, 2023		July 2, 2022	
	\$ million	% of net revenues	\$ million	% of net revenues
Net sales	\$ 8,561	99.9 %	\$ 7,370	99.8 %
Other revenues	12	0.1	13	0.2
Net revenues	8,573	100.0	7,383	100.0
Cost of sales	(4,344)	(50.7)	(3,909)	(52.9)
Gross profit	4,229	49.3	3,474	47.1
Selling, general and administrative	(808)	(9.4)	(723)	(9.8)
Research and development	(1,060)	(12.4)	(966)	(13.1)
Other income and expenses, net	(14)	(0.2)	96	1.3
Operating income	2,347	27.4	1,881	25.5
Interest income, net	70	0.8	7	0.1
Other components of pension benefit costs	(9)	(0.1)	(5)	(0.1)
Income before income taxes and noncontrolling interest	2,408	28.1	1,883	25.5
Income tax expense	(359)	(4.2)	(268)	(3.6)
Net income	2,049	23.9	1,615	21.9
Net income attributable to noncontrolling interest	(4)	—	(1)	—
Net income attributable to parent company	\$ 2,045	23.9 %	\$ 1,614	21.9 %

Net revenues

	Six Months ended			% Variation
	July 1, 2023	July 2, 2022		
	(In millions)			
Net sales	\$ 8,561	\$ 7,370	16.2 %	
Other revenues	12	13	(13.0)	
Net revenues	\$ 8,573	\$ 7,383	16.1 %	

Our first six months 2023 net revenues increased 16.1% compared to the year-ago period, as a result of an approximate 28% increase in average selling prices, due to a more favorable product mix and higher selling prices, partially offset by a decrease in volumes of approximately 12%.

Net revenues by product group

	Six Months ended		% Variation
	July 1, 2023	July 2, 2022	
	(In millions)		
ADG	\$ 3,763	\$ 2,710	38.8 %
AMS	2,008	2,192	(8.4)
MDG	2,794	2,471	13.1
Others	8	10	—
Total consolidated net revenues	\$ 8,573	\$ 7,383	16.1 %

By product group, ADG revenues were up 38.8%, with higher average selling prices of approximately 54%, due to more favorable product mix and higher selling prices, partially offset by a decrease in volumes of approximately 15%. AMS revenues decreased 8.4%, due to lower volumes of approximately 13%, partially offset by more favorable average selling prices of approximately 5%. MDG revenues increased 13.1% compared to the prior year period, driven by higher average selling prices of approximately 16%, due to more favorable product mix, partially offset by lower volumes of approximately 3%.

Net Revenues by Market Channel ⁽¹⁾

	Six Months ended	
	July 1, 2023	July 2, 2022
OEM	64 %	66 %
Distribution	36	34
Total	100 %	100 %

(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, distribution reached a 36% share of total revenues in the first six months of 2023, increasing compared to 34% in the first six months of 2022.

Net Revenues by Location of Shipment⁽¹⁾

	Six Months ended		% Variation
	July 1, 2023	July 2, 2022	
	(In millions)		
Europe, Middle East, Africa ("EMEA")	\$ 2,430	\$ 1,617	50.3 %
Americas	1,385	1,055	31.3
Asia Pacific	4,758	4,711	1.0
Total consolidated net revenues	\$ 8,573	\$ 7,383	16.1 %

(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 50.3%, mainly driven by higher sales in Automotive and Microcontrollers. Americas revenues increased 31.3%, mainly due to higher sales in RF Communications, Power Discrete and Microcontrollers. Asia Pacific revenues increased 1.0%.

Gross profit

	Six Months ended		Variation
	July 1, 2023	July 2, 2022	
	(In millions)		
Gross profit	\$ 4,229	\$ 3,474	21.7 %
Gross margin (as percentage of net revenues)	49.3 %	47.1 %	220 bps

Gross margin was 49.3% for the first six months of 2023, increasing by approximately 220 basis points compared to the year-ago period, mainly due to higher selling prices and a more favorable product mix, partially offset by higher manufacturing costs.

Operating expenses

	Six Months ended		Variation
	July 1, 2023	July 2, 2022	
	(In millions)		
Selling, general and administrative	\$ (808)	\$ (723)	11.7 %
Research and development	(1,060)	(966)	9.7
Total operating expenses	\$ (1,868)	\$ (1,689)	(10.6) %
As percentage of net revenues	21.8 %	22.9 %	-110 bps

Our operating expenses increased compared to the year-ago period, mainly due to higher cost of labor and negative non-recurring non-cash items, partially offset by positive currency effect.

As a percentage of net revenues, our operating expenses amounted to 21.8% decreasing from 22.9% in the year-ago period.

Total R&D expenses were net of research tax credits, which amounted to \$66 million in the first six months of 2023 compared to \$54 million in the first six months of 2022.

Other income and expenses, net

	Six Months ended		Variation
	July 1, 2023	July 2, 2022	
	(In millions)		
Public funding	\$ 52	\$ 102	
Exchange gains (losses), net	3	7	
Start-up and phase-out costs	(67)	(1)	(1)
Patent costs	(5)	(4)	(4)
Gain on sale of non-current assets	5	2	2
COVID-19 incremental costs	—	(8)	(8)
Other, net	(2)	(2)	(2)
Other income and expenses, net	\$ (14)	\$ 96	
As percentage of net revenues	(0.2) %	1.3 %	

In the first six months of 2023, other income and expenses, net, amounted to a \$14 million expense, decreasing by \$110 million from \$96 million income during the first six months of 2022, mainly due to higher start-up costs mainly related to our Agrate 300mm fab and lower income from public funding.

Operating income

	Six Months ended	
	July 1, 2023	July 2, 2022
	(In millions)	
Operating income	\$ 2,347	\$ 1,881
As percentage of net revenues	27.4 %	25.5 %

Operating income in the first six months of 2023 increased by \$466 million to \$2,347 million, compared to the prior year period, mainly due to the combination of increased revenues and improved gross margin profitability, partially offset by increased operating expenses.

Operating income by product group

	Six Months ended			
	July 1, 2023		July 2, 2022	
	\$ million	% of net revenues	\$ million	% of net revenues
ADG	\$ 1,201	31.9 %	\$ 595	21.9 %
AMS	357	17.8	514	23.5
MDG	1,000	35.8	832	33.6
Total operating income of product groups	2,558	29.9	1,941	26.3
Others ⁽¹⁾	(211)	—	(60)	—
Total consolidated operating income	\$ 2,347	27.4 %	\$ 1,881	25.5 %

(1) 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, start-up and phase-out 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 the first six months of 2023, ADG operating income increased by \$606 million to \$1,201 million, with higher profitability in both Automotive and Power Discrete. AMS operating income was \$357 million, decreasing by \$157 million with Analog and MEMS contributing to the decrease. MDG operating income was \$1,000 million and increased by \$168 million due to higher profitability from Microcontrollers and RF Communications.

Reconciliation to consolidated operating income

	Six Months ended	
	July 1, 2023	July 2, 2022
	(In millions)	
Total operating income of product groups	\$ 2,558	\$ 1,941
Impairment loss on intangible assets acquired through business combinations	(36)	—
Start-up and phase-out costs	(67)	—
Unused capacity charges	(16)	(22)
Contingent consideration fair value remeasurement	5	2
Other unallocated manufacturing results	(61)	(50)
Gain on sale of non-current assets	4	2
Strategic and R&D programs and other non-allocated provisions ⁽¹⁾	(40)	8
Total operating income (loss) of Others	(211)	(60)
Total consolidated operating income	\$ 2,347	\$ 1,881

(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.

Interest income, net

	Six Months ended	
	July 1, 2023	July 2, 2022
	(In millions)	
Interest income, net	\$ 70	\$ 7

In the first six months of 2023, we recorded a net interest income of \$70 million, compared to \$7 million of net interest income in the year-ago period. The first six months of 2023 net interest income was composed of \$98 million of interest income, partially offset by interest expense on borrowings and banking fees of \$28 million. The increase in interest income was mainly due to higher U.S dollar interest yields.

Income tax expense

	Six Months ended	
	July 1, 2023	July 2, 2022
	(In millions)	
Income tax expense	\$ (359)	\$ (268)

During the first six months of 2023, we registered an income tax expense of \$359 million, reflecting a 15.0% estimated annual effective tax rate before discrete items at consolidated level, applied to the first six months of 2023 consolidated income before income tax.

In the first six months of 2022, we registered an income tax expense of \$268 million.

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 estimates on our tax provisions. Our income tax amounts and rates also depend on our loss carry-forwards and their relevant valuation allowance, which are based on estimated projected plans and available tax planning strategies. In the case of material changes in these plans, the valuation allowance could be adjusted accordingly, with an impact on our income tax expense (benefit). In addition, our annual income tax expense includes the estimated impact of provisions related to potential tax positions which have been considered as uncertain.

Net income attributable to parent company

	Six Months ended	
	July 1, 2023	July 2, 2022
	(In millions)	
Net income attributable to parent company	\$ 2,045	\$ 1,614
As percentage of net revenues	23.9 %	21.9 %

For the first six months of 2023, we reported net income of \$2,045 million, representing diluted earnings per share of \$2.16, compared to a net income of \$1,614 million in the prior period, representing diluted earnings per share of \$1.70.

Legal Proceedings

For a discussion of legal proceedings, see Note 27 Contingencies, Claims and Legal Proceedings to our Unaudited Interim Consolidated Financial Statements.

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 Unaudited Interim Consolidated Statement of Income for the six months ended July 1, 2023 included income and expense items translated at the average U.S. dollar exchange rate for the period, plus the impact of the hedging contracts settled during the period. Our effective average exchange rate for the second quarter of 2023 was \$1.08 for €1.00, compared to \$1.06 for €1.00 in the first quarter of 2023 and \$1.12 for €1.00 in the second quarter of 2022. 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 July 1, 2023, the outstanding hedged amounts were €1,739 million to cover manufacturing costs and €753 million to cover operating expenses, at an average exchange rate of approximately \$1.11 for €1.00 (considering the collars at upper strike), maturing from July 5, 2023 to August 28, 2024. As of July 1, 2023, measured in respect to the exchange rate at period closing of about \$1.09 to €1.00, these outstanding hedging contracts and certain settled contracts covering manufacturing expenses capitalized in inventory resulted in a deferred unrealized gain of approximately \$7 million before tax, recorded in "Accumulated other comprehensive income (loss)" in the Consolidated Statement of Equity, compared to a deferred unrealized gain of approximately \$17 million before tax on December 31, 2022.

We also hedge certain manufacturing costs denominated in Singapore dollars (SGD); as of July 1, 2023, the outstanding hedged amounts were SGD 248 million at an average exchange rate of approximately SGD 1.34 to \$1.00 maturing from July 6, 2023 to May 30, 2024. As of July 1, 2023, these outstanding hedging contracts resulted in a deferred unrealized loss of approximately \$1 million before tax, recorded in "Accumulated other comprehensive income (loss)" in the Consolidated Statement of Equity, compared to a deferred unrealized gain of \$6 million dollars on December 31, 2022.

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 the second quarter of 2023, as a result of our cash flow hedging, we recycled to earnings a gain of \$14 million, of which approximately \$8 million impacted cost of sales, \$5 million impacted R&D and \$1 million impacted SG&A expenses, while in the comparable quarter of 2022, we recorded a loss of \$48 million.

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 \$3 million recorded in “Other income and expenses, net” in our Consolidated Statement of Income for the second quarter of 2023.

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. These currency translation effects 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 July 1, 2023, our outstanding indebtedness was denominated mainly in U.S. dollars and in Euros.

For a more detailed discussion, see Item 3. “Key Information — Risks Related to Our Operations” in our Form 20-F, which may be updated from time to time in our public filings.

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, net, as reported in our Unaudited Interim 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 SpA”) Floating Rate Loans at Euribor plus variable spreads. See Note 22 to our Unaudited Interim Consolidated Financial Statements.

As of July 1, 2023, our total financial resources, including cash and cash equivalents, short-term deposits and marketable securities generated an average annual interest rate of 4.77%. At the same date, the average annual interest rate on our outstanding debt was 1.65%.

Impact of Changes in Equity Prices

As of July 1, 2023, 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 19 and Note 21 to our Unaudited Interim 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, 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" in our Form 20-F, which may be updated from time to time in our public filings.

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 generated from operating activities.

During the first six months of 2023, our cash and cash equivalents decreased by \$147 million. The components of the net cash variation for the first six months of 2023 and the comparable period are set forth below:

	Six Months ended	
	July 1, 2023	July 2, 2022
	(In millions)	
Net cash from operating activities	\$ 2,631	\$ 2,002
Net cash used in investing activities	(2,400)	(1,817)
Net cash used in financing activities	(380)	(377)
Effect of changes in exchange rates	2	(5)
Net cash decrease	\$ (147)	\$ (197)

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 for the first six months of 2023 was \$2,631 million, increasing compared to \$2,002 million in the prior-year period mainly due to higher net income.

Net cash used in investing activities. Investing activities used \$2,400 million of cash in the first six months of 2023, increasing compared to \$1,817 million used in the prior-year period, mainly due to increased payments for net purchase of tangible assets, which totaled \$2,161 million in the first six months of 2023 compared to \$1,650 million in the prior-year period, higher purchases of marketable securities, partially offset by higher net proceeds from short-term deposits. Our net capital expenditures in the first six months of 2023 primarily included investments related to 300mm wafer fabs in Crolles and Agrate, and our silicon carbide activities.

Net cash used in financing activities. Net cash used in financing activities was \$380 million for the first six months of 2023, compared to net cash used in financing activities of \$377 million in the first six months of 2022, and consisted mainly of \$173 million repurchase of common stock, \$105 million of dividends paid to stockholders and \$93 million repayment of financial debt.

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. This definition ultimately results in net cash from operating activities plus payment for purchase (and proceeds from sale) of tangible, intangible and financial assets, proceeds from capital grants and other contributions, and net cash paid for business acquisitions.

We believe Free Cash Flow provides useful information for investors and management because it measures our capacity to generate cash from our operating and investing activities to sustain our operations. Free Cash Flow does not represent total cash flow since it does not include the cash flows from, or used in, financing activities.

Free Cash Flow Cash Flow reconciles with the total cash flow and the net cash increase (decrease) by including the payment for purchases 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. Our definition of Free Cash Flow may differ from definitions used by other companies. Free Cash Flow is determined from our Unaudited Interim Consolidated Statements of Cash Flows as follows:

	Three Months ended		Six Months ended			
	July 1, 2023		July 1, 2023			
			July 2, 2022			
	(In millions)					
Net cash from operating activities	\$	1,311	\$	2,631	\$	2,002
Payment for purchase of tangible assets, net of proceeds from sale and proceeds from capital grants and other contributions		(1,072)		(2,161)		(1,650)
Payment for purchase of intangible assets, net of proceeds from sale		(22)		(46)		(40)
Payment for purchase of financial assets, net of proceeds from sale		(8)		(8)		—
Free Cash Flow (non-U.S. GAAP measure)⁽¹⁾	\$	209	\$	416	\$	312

(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.

Free Cash Flow was positive \$416 million in the first six months of 2023, compared to positive \$312 million in the prior-year period.

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 is determined from our Consolidated Balance Sheets as follows:

	As of		
	July 1, 2023	December 31, 2022	July 2, 2022
	(In millions)		
Cash and cash equivalents	\$ 3,111	\$ 3,258	\$ 3,028
Short-term deposits	106	581	186
Marketable securities	1,346	679	229
Total liquidity	4,563	4,518	3,443
Short-term debt	(176)	(175)	(134)
Long-term debt	(2,473)	(2,542)	(2,385)
Total financial debt	(2,649)	(2,717)	(2,519)
Net Financial Position (non-U.S. GAAP measure)	\$ 1,914	\$ 1,801	\$ 924

Our Net Financial Position as of July 1, 2023, was \$1,914 million, increasing compared to \$1,801 million and \$924 million as of December 31, 2022 and July 2, 2022 respectively.

Cash and cash equivalents amounted to \$3,111 million as of July 1, 2023.

Short-term deposits amounted to \$106 million as of July 1, 2023 and consisted of available liquidity with original maturity over three months.

Marketable securities amounted to \$1,346 million and consisted of U.S. Treasury Bonds classified as available-for-sale financial assets.

Financial debt was \$2,649 million as of July 1, 2023 and was composed of (i) \$176 million of short-term debt and (ii) \$2,473 million of long-term debt. The breakdown of our total financial debt included (i) \$777 million in EIB loans, (ii) \$310 million in CDP SpA loans, (iii) \$1,496 million in our 2020 Senior Unsecured Convertible Bonds, (iv) \$62 million in finance leases, and (v) \$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 \$325 million was outstanding as of July 1, 2023. 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 \$452 million outstanding as of July 1, 2023. 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 July 1, 2023.

The CDP SpA 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 \$109 million were outstanding as of July 1, 2023. The second one, signed in 2022, is a €200 million loan, fully drawn in Euros, of which \$201 million was outstanding as of July 1, 2023.

On August 4, 2020, we issued a \$1.5 billion offering of senior unsecured convertible bonds convertible into new or existing ordinary shares of the Company. The 2020 Senior Unsecured Convertible Bonds were issued in two \$750 million principal amount tranches, Tranche A with a maturity of 5 years (47.5% conversion premium, negative 1.12% yield to maturity, 0% coupon) and Tranche B with a maturity of 7 years (52.5% conversion premium, negative 0.63% yield to maturity, 0% coupon). The conversion price is \$43.62 on Tranche A and \$45.10 on Tranche B. The 2020 Senior Unsecured Convertible Bonds are convertible by the bondholders if certain conditions are satisfied, on a net-share settlement basis, except if we elect a full-cash or a full-share conversion as an alternative settlement. Proceeds from the issuance of the bonds, net of \$10 million transaction costs, amounted to \$1,567 million. Long-term debt as of July 1, 2023, reflects the nominal value of the 2020 senior unsecured convertible bonds less \$4 million unamortized debt issuance costs, at \$1,496 million.

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 \$1,346 million as of July 1, 2023.

As of July 1, 2023, debt payments at redemption value by period were as follows:

	Payments Due by Period						
	Total	2023	2024	2025	2026	2027	Thereafter
	(In millions)						
Long-term debt (including current portion)	\$ 2,654	\$ 176	\$ 175	\$ 925	\$ 174	\$ 897	\$ 307

In the above table, our 2020 Senior Unsecured Convertible Bonds are presented at their nominal value 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 positive outlook; Fitch: “BBB” with stable outlook.

Financial Outlook: Capital Investment

Our policy is to modulate our capital spending according to the evolution of the semiconductor market and our financial performance. 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, for silicon carbide, 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 on scope 1 and 2 and partially scope 3 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.

We will now drive the Company based on a plan for 2023 revenues of \$17.4 billion, plus or minus \$150 million, and a gross margin exceeding 48.0%.

Contractual Obligations, Commercial Commitments and Contingencies

Our contractual obligations, commercial commitments and contingencies are mainly comprised of: long-term purchase commitments for material, equipment and software license, take-or-pay type of agreements to outsource wafers from foundries, commercial agreements with customers, long term debt obligations, pension obligations and other long-term liabilities.

Off-Balance Sheet Arrangements

We had no material off-balance sheet arrangements as of July 1, 2023.

Impact of Recently Issued U.S. Accounting Standards

See Note 5 Recent Accounting Pronouncements to our Unaudited Interim Consolidated Financial Statements.

Backlog and Customers

During the second quarter of 2023, our booking plus net frame orders increased compared to the first quarter of 2023. We entered the third quarter of 2023 with a backlog lower than the level we had when entering in the second quarter of 2023. Backlog (including frame orders) is subject to possible cancellation, push back and lower ratio of frame orders being translated into firm orders and, thus, it is not necessarily indicative of the amount of billings or growth to be registered in subsequent periods.

There is no guarantee that any customer will continue to generate revenues for us at the same levels as in prior periods. If we were to lose one or more of our key customers, or if they were to significantly reduce their bookings, not confirm planned delivery dates on frame orders in a significant manner or fail to meet their payment obligations, our operating results and financial condition could be adversely affected.

Disclosure Controls and Procedures

Evaluation

Our management, including the CEO and CFO, 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 Exchange Act of 1934 (“Disclosure Controls”) as of the end of the period covered by this report. Disclosure Controls are controls and procedures designed to reasonably assure that information required to be disclosed in our reports filed under the Securities Exchange Act of 1934, (as amended, the “Exchange Act”), such as this periodic report, 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 CEO and CFO, as appropriate to allow timely decisions regarding required disclosure. Our quarterly evaluation of Disclosure Controls includes an evaluation of certain components of our internal control over financial reporting, and internal control over financial reporting is also separately evaluated on an annual basis.

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 periodic report. In the course of the controls evaluation, we reviewed identified data errors, errors in process flow or delay in communication, control problems and sought to confirm that appropriate corrective actions, including process improvements, were being undertaken. This type of evaluation is performed at least on a quarterly basis so that the conclusions of management, including the CEO and CFO, concerning the effectiveness of the Disclosure Controls can be reported in our periodic reports on Form 6 K and Form 20 F. The components of our Disclosure Controls are also evaluated on an ongoing basis by our Internal 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 upon the controls evaluation, our CEO and CFO have concluded that, as of the end of the period covered by this periodic report, our Disclosure Controls were effective.

Changes in Internal Control over Financial Reporting

There were no changes to our internal control over financial reporting that occurred during the period covered by this report 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 that the relevant controls may become inadequate due to changes in circumstances or that the degree of compliance with the underlying policies or procedures may deteriorate.

Other Reviews

We have sent this report to our Audit Committee, which had an opportunity to raise questions with our management and independent auditors before we submitted it to the Securities and Exchange Commission.

Cautionary Note Regarding Forward-Looking Statements

Some of the statements contained in this Form 6-K that are not historical facts, particularly in “Business Overview” and in “Liquidity and Capital Resources—Financial Outlook: Capital Investment”, 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 macroeconomic 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 information technology (“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 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 on scope 1 and 2 and partially scope 3 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 risks are set forth and are discussed in more detail in “Item 3. Key Information - Risk Factors” included in our Annual Report on Form 20-F for the year ended December 31, 2022 as filed with the Securities and Exchange Commission (“SEC”) on February 23, 2023. 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 our 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 6-K to reflect subsequent events or circumstances.

Unfavorable changes in the above or other risks or uncertainties listed under “Item 3. Key Information - Risk Factors” from time to time in our SEC filings, could have a material adverse effect on our business.

STMICROELECTRONICS N.V.

UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS

	Pages
<u>Consolidated Statements of Income for the Three and Six months ended July 1, 2023, and July 2, 2022 (unaudited)</u>	F-1
<u>Consolidated Statements of Comprehensive Income for the Three and Six months ended July 1, 2023, and July 2, 2022 (unaudited)</u>	F-3
<u>Consolidated Balance Sheets as of July 1, 2023 (unaudited) and December 31, 2022 (audited)</u>	F-5
<u>Consolidated Statements of Equity for the Three and Six months ended July 1, 2023 and July 2, 2022 (unaudited)</u>	F-6
<u>Consolidated Statements of Cash Flows for the Six months ended July 1, 2023, and July 2, 2022 (unaudited)</u>	F-8
<u>Notes to Interim Consolidated Financial Statements (unaudited)</u>	F-9

STMicroelectronics N.V.
CONSOLIDATED STATEMENTS OF INCOME

In million of U.S. dollars except per share amounts	Three Months Ended (Unaudited)	
	July 1, 2023	July 2, 2022
Net sales	4,320	3,830
Other revenues	6	7
Net revenues	4,326	3,837
Cost of sales	(2,207)	(2,018)
Gross profit	2,119	1,819
Selling, general and administrative expenses	(414)	(366)
Research and development expenses	(555)	(489)
Other income and expenses, net	(4)	40
Operating income	1,146	1,004
Interest income, net	33	6
Other components of pension benefit costs	(5)	(2)
Income before income taxes and noncontrolling interest	1,174	1,008
Income tax expense	(171)	(139)
Net income	1,003	869
Net income attributable to noncontrolling interest	(2)	(2)
Net income attributable to parent company stockholders	1,001	867
Earnings per share (Basic) attributable to parent company stockholders	1.11	0.96
Earnings per share (Diluted) attributable to parent company stockholders	1.06	0.92

The accompanying notes are an integral part of these unaudited consolidated financial statements



STMicroelectronics N.V.
CONSOLIDATED STATEMENTS OF INCOME

In million of U.S. dollars except per share amounts	Six Months ended (Unaudited)	
	July 1, 2023	July 2, 2022
Net sales	8,561	7,370
Other revenues	12	13
Net revenues	8,573	7,383
Cost of sales	(4,344)	(3,909)
Gross profit	4,229	3,474
Selling, general and administrative expenses	(808)	(723)
Research and development expenses	(1,060)	(966)
Other income and expenses, net	(14)	96
Operating income	2,347	1,881
Interest income, net	70	7
Other components of pension benefit costs	(9)	(5)
Income before income taxes and noncontrolling interest	2,408	1,883
Income tax expense	(359)	(268)
Net income	2,049	1,615
Net income attributable to noncontrolling interest	(4)	(1)
Net income attributable to parent company stockholders	2,045	1,614
Earnings per share (Basic) attributable to parent company stockholders	2.27	1.78
Earnings per share (Diluted) attributable to parent company stockholders	2.16	1.70

The accompanying notes are an integral part of these unaudited consolidated financial statements



STMicroelectronics N.V.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

In million of U.S. dollars	Three Months Ended (Unaudited)	
	July 1, 2023	July 2, 2022
Net income	1,003	869
Other comprehensive income (loss), net of tax :		
Currency translation adjustments arising during the period	(3)	(146)
Foreign currency translation adjustments	(3)	(146)
Net unrealized gains (losses) on available-for-sale debt securities arising during the period	(14)	—
Less: reclassification adjustment for (gains) losses included in net income	—	—
Net unrealized gains (losses) on debt securities	(14)	—
Net unrealized gains (losses) on derivatives arising during the period	(16)	(115)
Less: Reclassification adjustment for (gains) losses included in net income	(10)	42
Net unrealized gains (losses) on derivatives	(26)	(73)
Net gains (losses) on defined benefit pension plans arising during the period	—	—
Less: Amortization of actuarial gains and losses	2	1
Defined benefit pension plans	2	1
Other comprehensive income (loss), net of tax	(41)	(218)
Comprehensive income	962	651
Less: comprehensive income (loss) attributable to noncontrolling interest	2	2
Comprehensive income (loss) attributable to the company's stockholders	960	649

The accompanying notes are an integral part of these unaudited consolidated financial statements



CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

In million of U.S. dollars	Six Months ended (Unaudited)	
	July 1, 2023	July 2, 2022
Net income	2,049	1,615
Other comprehensive income (loss), net of tax :		
Currency translation adjustments arising during the period	61	(210)
Foreign currency translation adjustments	61	(210)
Net unrealized gains (losses) on available-for-sale debt securities arising during the period	(5)	(1)
Less: reclassification adjustment for (gains) losses included in net income	—	—
Net unrealized gains (losses) on debt securities	(5)	(1)
Net unrealized gains (losses) on derivatives arising during the period	11	(147)
Less: Reclassification adjustment for (gains) losses included in net income	(27)	67
Net unrealized gains (losses) on derivatives	(16)	(80)
Net gains (losses) on defined benefit pension plans arising during the period	—	—
Less: Amortization of actuarial gains and losses	5	3
Defined benefit pension plans	5	3
Other comprehensive income (loss), net of tax	45	(288)
Comprehensive income	2,094	1,327
Less: comprehensive income (loss) attributable to noncontrolling interest	4	1
Comprehensive income (loss) attributable to the company's stockholders	2,090	1,326

The accompanying notes are an integral part of these unaudited consolidated financial statements



STMicroelectronics N.V.
CONSOLIDATED BALANCE SHEETS

In million of U.S. dollars, except share amounts	July 1, 2023 (Unaudited)	December 31, 2022 (Audited)
ASSETS		
Current assets:		
Cash and cash equivalents	3,111	3,258
Short-term deposits	106	581
Marketable securities	1,346	679
Trade accounts receivable, net	1,984	1,970
Inventories	3,045	2,583
Other current assets	1,215	734
Total current assets	10,807	9,805
Goodwill	297	297
Other intangible assets, net	356	405
Property, plant and equipment, net	9,303	8,201
Non-current deferred tax assets	545	602
Long-term investments	21	11
Other non-current assets	572	661
Total assets	21,901	19,982
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term debt	176	175
Trade accounts payable	1,990	2,122
Other payables and accrued liabilities	1,454	1,385
Dividends payable to stockholders	173	60
Accrued income tax	248	95
Total current liabilities	4,041	3,837
Long-term debt	2,473	2,542
Post-employment benefit obligations	340	331
Long-term deferred tax liabilities	56	60
Other long-term liabilities	418	454
Total liabilities	7,328	7,224
Commitment and contingencies		
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, 905,475,035 shares outstanding as of July 1, 2023)	1,157	1,157
Additional paid-in-capital	2,743	2,631
Retained earnings	10,340	8,713
Accumulated other comprehensive income	505	460
Treasury stock	(241)	(268)
Total parent company stockholders' equity	14,504	12,693
Noncontrolling interest	69	65
Total stockholders' equity	14,573	12,758
Total liabilities and stockholders' equity	21,901	19,982

The accompanying notes are an integral part of these unaudited consolidated financial statements



STMicroelectronics N.V.
CONSOLIDATED STATEMENTS OF EQUITY

In million of U.S. dollars

	Common Stock	Additional Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Non controlling Interest	Total Equity
Balance as of April 2, 2022 (Unaudited)	1,157	2,472	(286)	5,995	426	63	9,827
Repurchase of common stock			(87)				(87)
Stock-based compensation expense		48	224	(224)			48
Comprehensive income:							
Net income				867		2	869
Other comprehensive income (loss), net of tax					(218)		(218)
Comprehensive income							651
Dividends, \$0.24 per share				(217)			(217)
Balance as of July 2, 2022 (Unaudited)	1,157	2,520	(149)	6,421	208	65	10,222

	Common Stock	Additional Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Non controlling Interest	Total Equity
Balance as of April 1, 2023 (Unaudited)	1,157	2,693	(352)	9,754	546	67	13,865
Repurchase of common stock			(86)				(86)
Stock-based compensation expense		50	197	(197)			50
Comprehensive income:							
Net income				1,001		2	1,003
Other comprehensive income (loss), net of tax					(41)		(41)
Comprehensive income							962
Dividends, \$0.24 per share				(218)			(218)
Balance as of July 1, 2023 (Unaudited)	1,157	2,743	(241)	10,340	505	69	14,573

The accompanying notes are an integral part of these unaudited consolidated financial statements



STMicroelectronics N.V.
CONSOLIDATED STATEMENTS OF EQUITY

In million of U.S. dollars

	Common Stock	Additional Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Non controlling Interest	Total Equity
Balance as of December 31, 2021 (Audited)	1,157	2,533	(200)	5,223	496	64	9,273
Repurchase of common stock			(173)				(173)
Transition effect of update in accounting standard		(117)		25			(92)
Stock-based compensation expense		104	224	(224)			104
Comprehensive income:							
Net income				1,614		1	1,615
Other comprehensive income (loss), net of tax					(288)		(288)
Comprehensive income							1,327
Dividends, \$0.24 per share				(217)			(217)
Balance as of July 2, 2022 (Unaudited)	1,157	2,520	(149)	6,421	208	65	10,222

	Common Stock	Additional Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Non controlling Interest	Total Equity
Balance as of December 31, 2022 (Audited)	1,157	2,631	(268)	8,713	460	65	12,758
Repurchase of common stock			(173)				(173)
Stock-based compensation expense		112	200	(200)			112
Comprehensive income:							
Net income				2,045		4	2,049
Other comprehensive income (loss), net of tax					45		45
Comprehensive income							2,094
Dividends, \$0.24 per share				(218)			(218)
Balance as of July 1, 2023 (Unaudited)	1,157	2,743	(241)	10,340	505	69	14,573

The accompanying notes are an integral part of these unaudited consolidated financial statements



CONSOLIDATED STATEMENTS OF CASH FLOWS

In million of U.S. dollars	Six Months ended	
	(Unaudited)	
	July 1, 2023	July 2, 2022
Cash flows from operating activities:		
Net income	2,049	1,615
Items to reconcile net income and cash flows from operating activities:		
Depreciation and amortization	751	573
Interest and amortization of issuance costs on convertible bonds	1	1
Non-cash stock-based compensation	112	104
Other non-cash items	(28)	(59)
Deferred income tax	72	67
Changes in assets and liabilities:		
Trade receivables, net	(27)	(338)
Inventories	(437)	(399)
Trade payables	(79)	191
Other assets and liabilities, net	217	247
Net cash from operating activities	2,631	2,002
Cash flows used in investing activities:		
Payment for purchase of tangible assets	(2,204)	(1,656)
Proceeds from capital grants and other contributions	37	4
Proceeds from sale of tangible assets	6	2
Payment for purchase of marketable securities	(660)	(229)
Net proceeds from (investment in) short-term deposits	475	102
Payment for purchase of intangible assets	(46)	(40)
Payment for purchase of financial assets	(8)	—
Net cash used in investing activities	(2,400)	(1,817)
Cash flows from (used in) financing activities:		
Repayment of current portion of long-term debt	(93)	(79)
Repurchase of common stock	(173)	(173)
Dividends paid to stockholders	(105)	(103)
Payment for withholding tax on vested shares	(7)	(7)
Payment for deferred consideration on business acquisitions	—	(15)
Other financing activities	(2)	—
Net cash used in financing activities	(380)	(377)
Effect of changes in exchange rates	2	(5)
Net cash decrease	(147)	(197)
Cash and cash equivalents at beginning of the period	3,258	3,225
Cash and cash equivalents at end of the period	3,111	3,028

The accompanying notes are an integral part of these unaudited consolidated financial statements

STMicroelectronics N.V.

Notes to Interim Consolidated Financial Statements (Unaudited)

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. Fiscal Year

The Company’s fiscal year ends on December 31. Interim periods are established for accounting purposes on a thirteen-week basis.

The Company’s first quarter ended on April 1, its second quarter ended on July 1, its third quarter will end on September 30, and its fourth quarter will end on December 31.

3. Basis of Presentation

The accompanying unaudited interim consolidated financial statements of the Company have been prepared in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”), consistent in all material respects with those applied for the year ended December 31, 2022. The interim financial information is unaudited but reflects all normal adjustments which are, in the opinion of management, necessary to provide a fair statement of results for the periods presented. The results of operations for the interim period are not necessarily indicative of the results to be expected for the entire year.

All balances and values in the current and prior periods are in millions of U.S. dollars, except share and per-share amounts.

The accompanying unaudited interim consolidated financial statements do not include certain footnotes and financial disclosures normally required on an annual basis under U.S. GAAP. Therefore, these unaudited interim consolidated financial statements should be read in conjunction with the audited consolidated financial statements included in the Company’s Annual Report on Form 20-F for the year ended December 31, 2022, as filed with the U.S. Securities and Exchange Commission (the “SEC”) on February 23, 2023.

4. 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 net defined pension benefit 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.

5. Recent Accounting Pronouncements

The Company did not adopt in 2023 any new accounting guidance that would have a material impact on its financial position and results of operations. The Company’s financial statements are not expected to be significantly impacted by any accounting pronouncements that are not yet effective and not early adopted by the Company.

6. Other Income and Expenses, Net

Other income and expenses, net consisted of the following:

	Three Months ended		Six Months ended	
	July 1, 2023	July 2, 2022	July 1, 2023	July 2, 2022
Public funding	27	39	52	102
Start-up and phase-out costs	(34)	(1)	(67)	(1)
Exchange gains (losses), net	3	5	3	7
Patent costs	(2)	(1)	(5)	(4)
Gain on sale of non-current assets	4	2	5	2
COVID-19 incremental costs	—	(3)	—	(8)
Other, net	(2)	(1)	(2)	(2)
Total	(4)	40	(14)	96

The Company receives public funding from governmental bodies in several jurisdictions.

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 a subsidiary’s functional currency and the changes in fair value of derivative instruments which are not designated as hedges, as described in Note 28.

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. Starting January 1, 2023, the Company no longer reports Covid-19 related expenses as a component of the line “Other income and expenses, net” in the consolidated statement of income.

7. Interest Income, Net

Interest income, net consisted of the following:

	Three Months ended		Six Months ended	
	July 1, 2023	July 2, 2022	July 1, 2023	July 2, 2022
Income	51	9	98	12
Expense	(18)	(3)	(28)	(5)
Total	33	6	70	7

Interest income is related to cash and cash equivalents, short-term deposits, and marketable securities held by the Company.

Interest expense included the financial cost of the convertible bonds issued by the Company in 2020, which is limited to the amortization expense of debt issuance costs. The amortization expense of debt issuance costs recorded in the first six months of 2023 was \$1 million compared to \$1 million in the first six months of 2022.

8. Income Taxes

Income tax expense is as follows:

	Three Months ended		Six Months ended	
	July 1, 2023	July 2, 2022	July 1, 2023	July 2, 2022
Income tax expense	(171)	(139)	(359)	(268)

The annual estimated effective tax rate method was applied, as management believes it provides a reliable estimate of the expected yearly income tax expense on an interim basis. The Company registered an income tax expense of \$171 million and \$359 million during the second quarter and first six months of 2023, respectively, reflecting a 15.0% estimated annual effective tax rate before discrete items at consolidated level, applied to the consolidated profit before tax.

At each reporting date, the Company assesses the recoverability of deferred tax assets and all material open income tax positions in all tax jurisdictions to determine any uncertain tax position. 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 one, only tax positions with a sustainability threshold higher than 50% are recognized. In step two, the Company determines the amount of recognizable tax benefit. The measurement methodology in step two 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 tax authorities.

9. Earnings per Share

Basic earnings per share (“EPS”) is computed by dividing net income attributable to parent company stockholders by the weighted average number of common stock outstanding during the reporting period. Diluted EPS is computed using the weighted average number of common stock outstanding and the dilutive effect of equity instruments, such as employee stock awards and the shares underlying the Company’s convertible bonds. The following table shows the computation of basic and diluted EPS.

	Three Months ended		Six Months ended	
	July 1, 2023	July 2, 2022	July 1, 2023	July 2, 2022
Basic EPS				
Net income attributable to parent company as reported	1,001	867	2,045	1,614
Weighted average number of shares outstanding	902,233,792	905,073,119	902,573,767	905,212,243
Basic EPS	1.11	0.96	2.27	1.78
Diluted EPS				
Net income attributable to parent company as adjusted	1,001	867	2,045	1,614
Weighted average number of shares outstanding	902,233,792	905,073,119	902,573,767	905,212,243
Dilutive effect of stock awards	8,423,346	7,867,002	8,643,807	8,553,524
Dilutive effect of convertible bonds	33,825,000	33,825,000	33,825,000	33,825,000
Number of shares used in calculating diluted EPS	944,482,138	946,765,121	945,042,574	947,590,767
Diluted EPS	1.06	0.92	2.16	1.70

10. Accumulated Other Comprehensive Income (“AOCI”)

The table below details the changes in AOCI attributable to the Company’s stockholders by component, net of tax, for the six months ended July 1, 2023:

	Gains (Losses) on Cash Flow Hedges	Gains (Losses) on Available- For-Sale Securities	Defined Benefit Pension Plan Items	Foreign Currency Translation Adjustments (“CTA”)	Total
December 31, 2022	23	(16)	(78)	511	440
Cumulative tax impact	(3)	2	21	—	20
December 31, 2022, net of tax	20	(14)	(57)	511	460
OCI before reclassifications	13	(6)	—	61	68
Amounts reclassified from AOCI	(31)	—	6	—	(25)
OCI for the six months ended July 1, 2023	(18)	(6)	6	61	43
Cumulative tax impact	2	1	(1)	—	2
OCI for the six months ended July 1, 2023, net of tax	(16)	(5)	5	61	45
July 1, 2023	5	(22)	(72)	572	483
Cumulative tax impact	(1)	3	20	—	22
July 1, 2023, net of tax	4	(19)	(52)	572	505

Items reclassified out of Accumulated Other Comprehensive Income for the six month period ended July 1, 2023 are listed in the table below:

Details about AOCI components	Amounts reclassified from AOCI	Affected line item in the statement where net income (loss) is presented
Gains (losses) on cash flow hedge derivatives		
Foreign exchange derivative contracts	21	Cost of sales
Foreign exchange derivative contracts	2	Selling, general and administrative
Foreign exchange derivative contracts	8	Research and development
	(4)	Income tax benefit (expense)
	27	Net of tax
Defined benefit pension plan items		
Amortization of actuarial gains (losses)	(6)	Other components of pension benefit costs ⁽¹⁾
	1	Income tax benefit (expense)
	(5)	Net of tax
Total reclassifications for the period attributable to the Company’s stockholders	22	Net of tax

(1) These items are included in the computation of net periodic pension cost, as described in Note 23.

11. Short-Term Deposits and Marketable Securities

To optimize the return yield on its short-term investments, the Company had invested \$106 million of available cash in short-term deposits as of July 1, 2023. 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 balance of marketable securities, as reported in current assets on the consolidated balance sheets as of July 1, 2023, are detailed in the table below:

	December 31, 2022	Purchase	Accretion	Change in fair value included in OCI* for available-for-sale marketable securities	July 1, 2023
U.S. Treasury debt securities	679	660	13	(6)	1,346
Total	679	660	13	(6)	1,346

* Other Comprehensive Income

In the first six months of 2023, the Company invested \$660 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 1.9 years. The debt securities are reported as current assets on the line "Marketable securities" on the consolidated balance sheet as of July 1, 2023, since they represent investments of funds available for current operations. The bonds are classified as available-for-sale financial assets and recorded at fair value as of July 1, 2023. The fair value measurement corresponds to a Level 1 fair value hierarchy measurement. The aggregate amortized cost basis of these securities totaled \$1,368 million as of July 1, 2023.

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 these unsecured securities lending transactions. The Company retains effective control on the transferred securities.

12. Trade Accounts Receivable, Net

Trade accounts receivable, net consisted of the following:

	As of July 1, 2023	As of December 31, 2022
Trade accounts receivable	2,005	1,991
Current expected credit losses allowance ("CECLA")	(21)	(21)
Total	1,984	1,970

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 historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic 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 to trade accounts receivable, the Company has identified cyclical and uncertainties around continued growth for the semiconductor industry and its serviceable available market to be the most relevant factors. These macroeconomic factors are weighted into different economic scenarios, in line with estimates and methodologies applied by other business entities, including financial institutions.

Adjustments to the expected credit losses allowance, if any, are reported in the line "Selling, general and administrative" in the consolidated statements of income. The Company did not report any significant changes to the expected credit losses allowance during the first six months of 2023 and 2022.

13. Inventories

Inventories consisted of the following:

	As of July 1, 2023	As of December 31, 2022
Raw materials	318	349
Work-in-process	1,954	1,490
Finished products	773	744
Total	3,045	2,583

Reserve for obsolescence is estimated for excess uncommitted inventories based on history of sales, backlog of orders and production plans.

14. Other Current Assets

Other current assets consisted of the following:

	July 1, 2023	December 31, 2022
Public funding receivables	653	190
Taxes and other government receivables	211	270
Advances and prepayments	175	125
Loans and deposits	11	10
Interest receivable	18	22
Derivative instruments (Note 28)	26	56
Other current assets	121	61
Total	1,215	734

Receivables related to public funding included \$312 million of capital grants associated with the frame agreement signed with the European and French authorities during the second quarter of 2023 as part of the capacity expansion project for the 300mm wafer fab in Crolles, France. As of July 1, 2023, other current assets also include \$54 million of contribution from a third party as part of a collaborative agreement associated with the same capital investment project.

Taxes and other government receivables include receivables related to value-added tax, primarily in European tax jurisdictions.

Advances and prepayments include prepaid amounts associated with multi-annual supply and service agreements.

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 were assumed to be not significant as of July 1, 2023 and December 31, 2022. 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 July 1, 2023 and December 31, 2022.

15. Goodwill

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

	ADG	AMS	MDG	Total
December 31, 2022	74	2	221	297
Foreign currency translation	(2)		2	—
July 1, 2023	72	2	223	297

16. Other Intangible Assets, net

Other intangible assets, net consisted of the following:

July 1, 2023	Gross Value	Accumulated Amortization	Net Amount
Technologies & licenses	1,030	(817)	213
Purchased & internally developed software	624	(535)	89
Technologies in progress	54	—	54
Total	1,708	(1,352)	356

December 31, 2022	Gross Value	Accumulated Amortization	Net Amount
Technologies & licenses	1,064	(795)	269
Purchased & internally developed software	609	(514)	95
Technologies in progress	41	—	41
Total	1,714	(1,309)	405

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 \$52 million and \$51 million for the first six months of 2023 and 2022, respectively.

Estimated future amortization expense related to intangible assets as of July 1, 2023, is as follows:

Year	
Remainder of 2023	49
2024	103
2025	75
2026	43
2027	20
Thereafter	66
Total	356

The Company recorded a \$25 million impairment loss reported in the line “Research and development” and a \$17 million impairment loss reported in the line “Cost of sales” of the consolidated statement of income for the first six months of 2023.

17. Property, Plant and Equipment, net

Property, plant and equipment, net consisted of the following:

July 1, 2023	Gross Value	Accumulated Depreciation	Net Amount
Land	117	—	117
Buildings	1,175	(581)	594
Facilities & leasehold improvements	4,118	(3,006)	1,112
Machinery and equipment	19,939	(14,555)	5,384
Computer and R&D equipment	408	(327)	81
Operating lease right-of-use assets	344	(130)	214
Finance lease right-of-use assets	64	(4)	60
Other tangible assets	164	(96)	68
Construction in progress	1,673	—	1,673
Total	28,002	(18,699)	9,303

December 31, 2022	Gross Value	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
Total	26,216	(18,015)	8,201

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.

The depreciation charge was \$699 million and \$522 million for the first six months of 2023 and 2022, respectively.

In the second quarter of 2023, the Company also recorded a \$9 million impairment loss on tangible assets identified with no alternative future use, following the decision to phase-out an R&D activity.

In the second quarter of 2023, the Company signed a frame agreement with the European and French authorities for a public funding program associated with the capacity expansion in one of its manufacturing facilities in France. The Company reported \$312 million capital grants as a reduction of “Property, plant and equipment, net” on the consolidated balance sheet as of July 1, 2023, as part of this funding program. No significant income was recognized as compensation of depreciation expense for the first six months of 2023.

18. 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:

	July 1, 2023	December 31, 2022
Right-of-use assets		
Operating leases	214	193
Finance Leases	60	55
Total right-of-use assets	274	248
Lease liabilities		
Current	63	59
Operating leases	57	52
Finance leases	6	7
Non-current	212	191
Operating leases	156	141
Finance leases	56	50
Total lease liabilities	275	250

Lease liability maturities as of July 1, 2023 were as follows (in millions):

	Operating Leases	Finance Leases	July 1, 2023
2023	34	5	39
2024	53	6	59
2025	37	6	43
2026	24	6	30
2027	17	28	45
Thereafter	97	30	127
Total future undiscounted cash outflows	262	81	343
Effect of discounting	(49)	(19)	(68)
Total lease liabilities	213	62	275

Operating and finance lease terms and discount rates are as follows:

	July 1, 2023	December 31, 2022
Weighted average remaining lease term (in years) – operating leases	8.94	9.46
Weighted average remaining lease term (in years) – finance leases	10.38	9.89
Weighted average discount rate – operating lease	3.40%	3.12%
Weighted average discount rate – finance lease	3.87%	3.86%

Operating and finance lease cost and cash paid are as follows:

	Six Months ended	
	July 1, 2023	July 2, 2022
Operating lease cost	34	38
Finance lease cost		
Amortization of right-of-use assets	3	—
Interest	2	—
Operating lease cash paid	34	39
Finance lease cash paid	3	—

Right-of-use assets obtained in exchange for new operating and finance lease liabilities in the first six months of 2023 and 2022 are as follows:

	Six Months ended	
	July 1, 2023	July 2, 2022
Operating leases	57	16
Finance leases	7	37

19. Long-Term Investments

	As of July 1, 2023	As of December 31, 2022
Long-term investments	21	11
Total	21	11

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. Long-term investments include a \$9 million interest 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 as of July 1, 2023.

In the second quarter of 2023, the Company paid \$8 million to acquire a minor equity stake in a start up, valued at \$10M. The investment is related to the development of Silicon Photonics technology for the RF Communications business. The remaining consideration will be paid in the second half of 2023.

20. Other Payables and Accrued Liabilities

Other payables and accrued liabilities consisted of the following:

	July 1, 2023	December 31, 2022
Employee related liabilities	795	795
Taxes other than income taxes	105	68
Advances from customers	228	225
Advances from grants	35	37
Derivative instruments (Note 28)	37	35
Defined benefit and contribution plans (Note 23)	31	39
Royalties	31	32
Current operating lease liabilities (Note 18)	57	52
Others	135	102
Total	1,454	1,385

Advances from customers are primarily related to multi-annual capacity reservation and volume commitment agreements signed in 2022 and 2023 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 commitment 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 July 1, 2023.

21. Other Non-Current Assets

Other non-current assets consisted of the following:

	July 1, 2023	December 31, 2022
Equity securities	28	26
Receivables from government agencies	72	156
Research tax credit receivable	206	294
Defined benefit plans (Note 23)	14	9
Prepayments and deposits to third parties	182	107
Derivative instruments (Note 28)	8	13
Other non-current assets	62	56
Total	572	661

From time to time, the Company enters into factoring transactions to accelerate the realization in cash of some non-current assets. As of July 1, 2023, \$116 million of receivables from government agencies were sold without recourse, with a financial cost of \$5 million, as compared to \$107 million receivables sold without recourse in the year-ago period, with a financial cost of less than \$1 million.

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.

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 July 1, 2023, and December 31, 2022. Other non-current assets presented in the table above on the line "Other non-current assets" are composed of individually insignificant 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.

22. Financial Debt

Financial debt consisted of the following:

	As of July 1, 2023	As of December 31, 2022
Funding program loans from European Investment Bank ("EIB"):		
4.20% due 2028, floating interest rate at Euribor + 0.589%	166	163
3.42% due 2029, floating interest rate at Euribor + 0.564%	159	183
3.64% due 2031, floating interest rate at Euribor + 0.583%	291	322
3.43% due 2031, floating interest rate at Euribor + 0.660%	161	159
Credit Facility from Cassa Depositi e Prestiti SpA ("CDP SpA"):		
4.45% due 2027, floating interest rate at Euribor + 0.690%	109	120
3.90% due 2028, floating interest rate at Euribor + 0.550%	100	107
4.20% due 2029, floating interest rate at Euribor + 0.850%	101	107
Dual tranche senior unsecured convertible bonds:		
Zero-coupon due 2025 (Tranche A)	748	748
Zero-coupon due 2027 (Tranche B)	748	747
Finance leases:		
3.86% due 2027, fixed interest rate	37	38
3.78% due 2042, fixed interest rate	25	19
Other funding program loans:		
0.31% (weighted average), due 2023-2028, fixed interest rate	4	4
Total financial debt	2,649	2,717
Less current portion	(176)	(175)
Total financial debt, less current portion	2,473	2,542

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 with a \$200,000 par value and an equivalent of 4,435 shares per each Tranche B bond with a \$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.

Up until August 2023 for Tranche A and August 2024 for Tranche B, the bonds can be converted by the bondholders with a contingent feature of 130% of the conversion price, measured at quarter-end for the following quarter. After that date, the bondholders will have full conversion rights.

Up until August 2023 for Tranche A and August 2024 for Tranche B, the Company cannot exercise its call rights. After that date, the bonds are callable by the Company with a 130% contingent feature, with the exercise of its call rights being preceded by the release, by the Company, of an Optional Redemption Notice.

As of July 1, 2023, the Company stock price exceeded the conversion price of the senior unsecured convertible bonds. However, the 130% stock price contingent feature was not met.

The convertible debt was reported as Long-term debt in the balance sheet as of July 1, 2023, based on its original maturity, and after having considered several factors, such as the uncertainty around the timing of the potential exercise of the conversion rights by bondholders and the call rights by the Company, and the fact that the 130% contingent feature was not met as of July 1, 2023.

The Company's long-term debt contains standard conditions but does not impose minimum financial ratios. The Company had unutilized committed medium-term credit facilities with core relationship banks totaling \$1,346 million as of July 1, 2023.

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 \$325 million was outstanding as of July 1, 2023. 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 \$452 million outstanding as of July 1, 2023. 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 July 1, 2023.

The CDP SpA 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 \$109 million were outstanding as of July 1, 2023. The second one, signed in 2022, is a €200 million loan, fully drawn in Euros, of which \$201 million was outstanding as of July 1, 2023.

23. Post-Employment and Other Long-Term Employee Benefits

The Company and its subsidiaries have several 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 during the employees' service period after certain seniority levels. The Company uses December 31 as the measurement date for its plans. Eligibility is generally determined in accordance with local statutory requirements. For the Italian termination indemnity plan ("TFR") generated before July 1, 2007, the Company continues to measure the vested benefits to which Italian employees are entitled as if the amounts were immediately due as of each reporting date, in compliance with U.S. GAAP guidance on determining vested benefit obligations for defined benefit pension plans.

The components of the net periodic benefit cost included the following:

	Pension Benefits Three Months ended		Pension Benefits Six Months ended	
	July 1, 2023	July 2, 2022	July 1, 2023	July 2, 2022
Service cost	(7)	(9)	(14)	(17)
Interest cost	(8)	(7)	(18)	(14)
Expected return on plan assets	4	6	13	12
Amortization of actuarial net (loss) gain	—	(1)	(3)	(3)
Settlements	(1)	—	(1)	—
Net periodic benefit cost⁽¹⁾	(12)	(11)	(23)	(22)

(1) Defined benefit plan expense components other than service cost, representing \$9 million and \$5 million in the first six months of 2023 and 2022, respectively, were recognized outside operating income in "Other components of pension benefit costs" in the consolidated statements of income. Service cost was recognized within operating income.

	Other long-term benefits Three Months ended		Other long-term benefits Six Months ended	
	July 1, 2023	July 2, 2022	July 1, 2023	July 2, 2022
Service cost	(1)	(1)	(2)	(2)
Interest cost	—	—	(1)	—
Amortization of actuarial net (loss) gain	—	5	—	5
Net periodic benefit cost	(1)	4	(3)	3

Employer contributions paid and expected to be paid in 2023 are consistent with the amounts disclosed in the consolidated financial statements for the year ended December 31, 2022.

24. Other Long-Term Liabilities

Other long-term liabilities consisted of the following:

	As of July 1, 2023	As of December 31, 2022
Non-current operating lease liabilities (Note 18)	156	141
Contingent consideration on business combinations (Note 29)	26	31
Other long-term employee benefits (Note 23)	87	81
Long-term liabilities related to public funding	48	51
Long-term advances from customers	36	73
Derivative instruments (Note 28)	—	4
Others	65	73
Total	418	454

25. Dividends

The Annual General Meeting of Shareholders (“AGM”) held on May 25, 2023, 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 2023 and first quarter of 2024. An amount of \$45 million corresponding to the first installment was paid during the second quarter of 2023. The remaining portion of the first installment and the \$0.18 per share cash dividend corresponding to the last three installments totaled \$173 million and were reported in the line “Dividends payable to stockholders” in the consolidated balance sheet as of July 1, 2023.

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. The amounts 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 in 2022. An amount of \$6 million corresponding to the remaining portion of the third installment and \$54 million corresponding to the fourth installment were paid during the first half of 2023.

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.

26. Shareholders' Equity

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 July 1, 2023, the number of shares of common stock issued was 911,281,920 shares (911,281,920 as of December 31, 2022).

As of July 1, 2023, the number of shares of common stock outstanding was 905,475,035 (903,865,763 as of December 31, 2022).

As of July 1, 2023, the Company owned 5,806,885 shares classified as treasury stock in the consolidated statement of equity compared to 7,416,157 shares as of December 31, 2022.

The treasury shares have been originally designated for allocation under the Company’s share-based remuneration programs. As of July 1, 2023, 79,943,077 of these treasury shares were transferred to employees under the Company’s share-based remuneration programs, of which 5,422,862 were transferred in the first six months of 2023.

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 the first six months of 2023, the Company repurchased approximately 3.8 million shares of its common stock for a total amount of \$173 million.

27. 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, anti-trust, anti-corruption, competition, other compliance regulations, tax claims beyond assessed uncertain tax positions, environmental damages as well as claims arising out of theft, loss, or misuse of personal data. In determining loss contingencies, the Company considers the likelihood of impairing an asset or the occurrence 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 or insurance policies 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 July 1, 2023 and December 31, 2022, provisions for estimated probable losses with respect to claims and legal proceedings were not considered material.

28. Derivative Instruments and Risk Management

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.

Foreign currency exchange risk

Currency forward contracts and currency options are entered into to reduce exposure to changes in exchange rates on the denomination of certain assets and liabilities in foreign currencies at the Company's subsidiaries and to manage the foreign exchange risk associated with certain forecasted transactions.

Derivative Instruments Not Designated as a Hedge

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 and are marked-to-market at each period-end with the associated changes in fair value recognized in "Other income and expenses, net" in the consolidated statements of income.

Derivative Instruments Designated as a Hedge

To further reduce its exposure to U.S. dollar exchange rate fluctuations, the Company uses currency forward contracts and currency options, including collars, to hedge certain Euro-denominated forecasted transactions that cover 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.

These derivative instruments are designated as and qualify as cash flow hedges. They are reflected at fair value in the consolidated balance sheets. The criteria for designating a derivative as a hedge include the instrument's effectiveness in risk reduction and, in most cases, a one-to-one matching of the derivative instrument to its underlying transaction, which enables the Company to conclude, based on the fact that the critical terms of the hedging instruments match the terms of the hedged transactions, that changes in cash flows attributable to the risk being hedged are expected to be completely offset by the hedging derivatives. Currency forward contracts and currency options, including collars, used as hedges are highly effective at reducing the Euro/U.S. dollar and the Singapore dollar/U.S. dollar currency fluctuation risk and are designated as a hedge at the inception of the contract and on an ongoing basis over the duration of the hedge relationship. Effectiveness on transactions hedged through purchased currency options and collars is measured on the full fair value of the instrument, including the time value of the options. Ineffectiveness appears if the hedge relationship is not perfectly effective or if the cumulative gain or loss on the derivative hedging instrument exceeds the cumulative change on the expected cash flows on the hedged transactions. The whole change in fair value recorded on the hedging instrument is reported as a component of "Accumulated other comprehensive income" in the consolidated statements of equity and is reclassified into earnings in the same period in which the hedged transaction affects earnings, and within the same consolidated statement of income line item as the impact of the hedged transaction.

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.

As of July 1, 2023, the Company had the following outstanding derivative instruments that were entered into to hedge Euro-denominated and Singapore dollar-denominated forecasted transactions:

In millions of Euros	Notional amount for hedge on forecasted R&D and other operating expenses	Notional amount for hedge on forecasted manufacturing costs
Forward contracts	441	1,009
Currency collars	312	730

In millions of Singapore dollars	Notional amount for hedge on forecasted R&D and other operating expenses	Notional amount for hedge on forecasted manufacturing costs
Forward contracts	—	248

Cash flow and fair value interest rate risk

The Company's interest rate risk arises from long-term borrowings. Borrowings issued at floating 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 analyzes its interest rate exposure on a dynamic basis. Various scenarios are simulated taking into consideration refinancing, renewal of existing positions, alternative financing and hedging. The 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.

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 credit quality of the customer, considering its financial position, past experience and other factors. Individual risk limits are set based on internal and external ratings in accordance with limits set by management. The utilization of credit limits is regularly monitored. Sales to customers are primarily settled in cash, which mitigates credit risk. There is no major concentration of credit risk, whether through exposure to individual customers, specific industry sectors, or regions. 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 receivables include receivables towards government bodies. As such, they are investments with immaterial credit loss. Any remaining receivable is of low credit risk or individually not significant. The credit ratings of financial assets carried at amortized cost are monitored for credit deterioration.

Other market risk

For a complete description of exposure to market risks, these interim financial statements should be read in conjunction with the consolidated financial statements in the Company's Annual Report on Form 20-F for the year ended December 31, 2022.

Information on fair value of derivative instruments and their classification in the consolidated balance sheets as of July 1, 2023 and December 31, 2022 is presented in the tables below:

Asset Derivatives	Balance sheet classification	As of July 1, 2023 Fair value	As of December 31, 2022 Fair value
Derivatives designated as a hedge:			
Foreign exchange forward contracts	Other current assets	17	37
Foreign exchange forward contracts	Other non-current assets	6	8
Currency collars	Other current assets	8	10
Currency collars	Other non-current assets	2	5
Total derivatives designated as a hedge:		33	60
Derivatives not designated as a hedge:			
Foreign exchange forward contracts	Other current assets	1	9
Total derivatives not designated as a hedge:		1	9
Total Derivatives		34	69

Liability Derivatives	Balance sheet classification	As of July 1, 2023 Fair value	As of December 31, 2022 Fair value
Derivatives designated as a hedge:			
Foreign exchange forward contracts	Other payables and accrued liabilities	(20)	(23)
Foreign exchange forward contracts	Other non-current liabilities	—	(3)
Currency collars	Other payables and accrued liabilities	(4)	(9)
Currency collars	Other non-current liabilities	—	(1)
Total derivatives designated as a hedge:		(24)	(36)
Derivatives not designated as a hedge:			
Foreign exchange forward contracts	Other payables and accrued liabilities	(13)	(3)
Total derivatives not designated as a hedge:		(13)	(3)
Total Derivatives		(37)	(39)

The Company entered into currency collars as combinations of two options, which are reported, for accounting purposes, on a net basis. As of July 1, 2023, the fair value of these collars represented assets for a net amount of \$10 million (composed of \$12 million asset net of a \$2 million liability) and liabilities for a net amount of \$4 million (composed of \$1 million asset net of a \$5 million liability). 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 consolidated balance sheets, and representing total assets of \$24 million and total liabilities of \$33 million as of July 1, 2023.

The effect of derivative instruments designated as cash flow hedge on the consolidated statements of income for the three and six months ended July 1, 2023 and July 2, 2022 and on the “Accumulated other comprehensive income (loss)” (“AOCI”) as reported in the consolidated statements of equity as of July 1, 2023 and December 31, 2022 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			
	As of	As of		Three Months ended		Six Months ended	
	July 1, 2023	December 31, 2022		July 1, 2023	July 2, 2022	July 1, 2023	July 2, 2022
Foreign exchange forward contracts	(2)	14	Cost of sales	8	(20)	18	(32)
Foreign exchange forward contracts	—	2	Selling, general and administrative	1	(3)	2	(4)
Foreign exchange forward contracts	1	4	Research and development	3	(8)	6	(14)
Currency collars	4	1	Cost of sales	—	(9)	3	(15)
Currency collars	1	1	Selling, general and administrative	—	(2)	—	(3)
Currency collars	2	1	Research and development	2	(6)	2	(9)
Total	6	23	Total	14	(48)	31	(77)

A total \$3 million loss deferred in AOCI is expected to be reclassified to earnings within the next twelve months.

No amount was excluded from effectiveness measurement on foreign exchange forward contracts and currency collars. No ineffective portion of the cash flow hedge relationships was recorded on the hedge transactions that were settled in the first six months of 2023 and 2022. No ineffectiveness is to be reported on hedge transactions outstanding as of July 1, 2023.

The effect on the consolidated statements of income for the three and six months ended July 1, 2023 and July 2, 2022, of derivative instruments not designated as a hedge is presented in the table below:

	Location of gain (loss) reclassified from OCI into earnings	Gain (loss) recognized in earnings			
		Three Months ended		Six Months ended	
		July 1, 2023	July 2, 2022	July 1, 2023	July 2, 2022
Foreign exchange forward contracts	Other income and expenses, net	3	8	5	10
Total		3	8	5	10

The Company did not enter into any derivative instrument containing credit-risk-related contingent features.

29. Fair Value Measurements

The table below details financial assets (liabilities) measured at fair value on a recurring basis as of July 1, 2023:

	Fair Value Measurements using			
	July 1, 2023	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	1,346	1,346	—	—
Short-term deposits	106	106	—	—
Equity securities measured at fair value through earnings	28	28	—	—
Derivative assets designated as cash flow hedge	33	—	33	—
Derivative assets not designated as cash flow hedge	1	—	1	—
Derivative liabilities designated as cash flow hedge	(24)	—	(24)	—
Derivative liabilities not designated as cash flow hedge	(13)	—	(13)	—
Contingent consideration for business acquisitions	(26)	—	—	(26)
Total	1,451	1,480	(3)	(26)

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 for business acquisitions	(31)	—	—	(31)
Total	1,285	1,286	30	(31)

For liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3), the reconciliation between January 1, 2023 and July 1, 2023 is presented as follows:

	Fair Value Measurements using Significant Unobservable Inputs (Level 3)
January 1, 2023	31
Changes in fair value measurement	(5)
July 1, 2023	26

For liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3), the reconciliation between January 1, 2022 and July 2, 2022 is presented as follows:

	Fair Value Measurements using Significant Unobservable Inputs (Level 3)
January 1, 2022	77
Changes in fair value measurement	(2)
Currency translation adjustment	(6)
July 2, 2022	69

Contingent consideration reported as non-current liabilities on the consolidated balance sheets as of July 1, 2023 and December 31, 2022 is based on the probability that the milestones defining the variable components of the consideration will be achieved.

No asset (liability) was measured at fair value on a non-recurring basis using significant unobservable inputs (Level 3) as of July 1, 2023 and July 2, 2022, respectively.

The following table includes additional fair value information on other financial assets and liabilities as of July 1, 2023 and December 31, 2022:

	Level	As of July 1, 2023		As of December 31, 2022	
		Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
Cash equivalents⁽¹⁾	1	2,812	2,812	2,996	2,996
Marketable securities	1	1,346	1,346	679	679
Short-term deposits	1	106	106	581	581
Long-term debt					
- Bank loans (including current portion)	2	1,091	1,091	1,165	1,165
- Finance leases (including current portion)	2	62	62	57	57
- Senior unsecured convertible bonds issued on August 4, 2020 ⁽²⁾	1	1,496	1,818	1,495	1,561

(1) Cash equivalents primarily correspond to deposits at call with banks.

(2) The carrying amount as of July 1, 2023 and December 31, 2022 of the senior unsecured convertible bonds as reported above, corresponds to the nominal value of the bonds, net of \$4 million unamortized debt issuance costs. The fair value represented the market price of the bonds trading on the Frankfurt Stock Exchange.

The below table details debt securities that were in an unrealized loss position as of July 1, 2023:

Description	July 1, 2023		July 1, 2023		July 1, 2023	
	Less than 12 months		More than 12 months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Treasury Bonds	627	(13)	182	(9)	809	(22)
Total	627	(13)	182	(9)	809	(22)

Debt securities that were in an unrealized gain position as of July 1, 2023, were reported at a fair value of \$537 million.

The methodologies used to estimate fair values are as follows:

Components	Methodology used to estimate fair value
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, discounted using discount rates applicable to similar types of borrowing arrangements
Cash and cash equivalents, 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

30. Revenues

30.1 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 31.

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.

30.2 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 have the 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.

The Company has 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 committed 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 reported in Note 20 and Note 24.

The payment terms typically range between 30 and 90 days.

The following tables present the Company’s consolidated net revenues disaggregated by geographical region of shipment, nature and market channel:

	Three Months ended		Six Months ended	
	July 1, 2023	July 2, 2022	July 1, 2023	July 2, 2022
Net revenues by geographical region of shipment⁽¹⁾				
EMEA	1,244	826	2,430	1,617
Americas	698	562	1,385	1,055
Asia Pacific	2,384	2,449	4,758	4,711
Total net revenues	4,326	3,837	8,573	7,383
Net revenues by nature				
Revenues from sale of products	4,274	3,803	8,476	7,312
Revenues from sale of services	46	27	85	58
Other revenues	6	7	12	13
Total net revenues	4,326	3,837	8,573	7,383
Net revenues by market channel⁽²⁾				
Original Equipment Manufacturers (“OEM”)	2,760	2,513	5,490	4,836
Distribution	1,566	1,324	3,083	2,547
Total net revenues	4,326	3,837	8,573	7,383

(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.

31. Segment Reporting

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.

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”. Net revenues of “Others” include revenues from sales assembly services and other revenues. 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, start-up and phase-out 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:

	Three Months ended		Six Months ended	
	July 1, 2023	July 2, 2022	July 1, 2023	July 2, 2022
ADG	1,955	1,454	3,763	2,710
AMS	940	1,115	2,008	2,192
MDG	1,427	1,263	2,794	2,471
Total net revenues of product segments	4,322	3,832	8,565	7,373
Others	4	5	8	10
Total consolidated net revenues	4,326	3,837	8,573	7,383

Operating income by reportable segment:

	Three Months ended		Six Months ended	
	July 1, 2023	July 2, 2022	July 1, 2023	July 2, 2022
ADG	624	359	1,201	595
AMS	139	269	357	514
MDG	505	425	1,000	832
Total operating income of product segments	1,268	1,053	2,558	1,941
Others ⁽¹⁾	(122)	(49)	(211)	(60)
Total consolidated operating income	1,146	1,004	2,347	1,881

(1) 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, start-up and phase-out 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:

	Three Months ended		Six Months ended	
	July 1, 2023	July 2, 2022	July 1, 2023	July 2, 2022
Total operating income of reportable segments	1,268	1,053	2,558	1,941
Impairment loss on intangible assets acquired through business combinations	(36)	—	(36)	—
Start-up and phase-out costs	(34)	—	(67)	—
Unused capacity charges	(15)	(13)	(16)	(22)
Contingent consideration fair value remeasurement	5	2	5	2
Other unallocated manufacturing results	(9)	(33)	(61)	(50)
Gain on sale of non-current assets	3	2	4	2
Strategic and other research and development programs and other non-allocated provisions ⁽¹⁾	(36)	(7)	(40)	8
Total operating loss Others	(122)	(49)	(211)	(60)
Total consolidated operating income	1,146	1,004	2,347	1,881

(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.

EXHIBIT INDEX

Exhibit	Description
12.1	<u>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.</u>
12.2	<u>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.</u>
13.1	<u>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.</u>

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: August 3, 2023

STMicroelectronics N.V.

By: /s/ Jean-Marc Chery
Name: **Jean-Marc Chery**
Title: **President and Chief Executive Officer and Sole Member of our Managing Board**

VOLUNTARY CERTIFICATION

I, Jean-Marc Chery, certify that:

1. I have reviewed this report on Form 6-K 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 Unaudited Interim Consolidated Statements of Income, Statements of Comprehensive Income, Balance Sheets, Statements of Cash Flows and Statements of Equity and related Notes, 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 15(d) – 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 report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting;
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: August 3, 2023

By: /s/ Jean-Marc Chery

Name: **Jean-Marc Chery**

Title: **President and Chief Executive Officer and Sole Member of our Managing Board**

VOLUNTARY CERTIFICATION

I, Lorenzo Grandi, certify that:

1. I have reviewed this report on Form 6-K 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 Unaudited Interim Consolidated Statements of Income, Statements of Comprehensive Income, Balance Sheets, Statements of Cash Flows and Statements of Equity and related Notes, 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 15(d) – 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 report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting;
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: August 3, 2023

By: /s/ Lorenzo Grandi

Name: **Lorenzo Grandi**

Title: **President and Chief Financial Officer, Finance,
Purchasing, Enterprise Risk Management (ERM)
and Resilience**

VOLUNTARY 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 Report on Form 6-K of STMicroelectronics N.V. (the "Company") for the period ending July 1, 2023, as submitted to 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: August 3, 2023

By: /s/ Jean-Marc Chery

Name: **Jean-Marc Chery**

Title: **President and Chief Executive Officer and Sole Member of our Managing Board**

Date: August 3, 2023

By: /s/ Lorenzo Grandi

Name: **Lorenzo Grandi**

Title: **President and Chief Financial Officer, Finance, Purchasing, Enterprise Risk Management (ERM) and Resilience**