Renesas

FINANCIAL REPORT 2021

Fiscal Year Ended December 31, 2021

RENESAS ELECTRONICS CORPORATION

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Independent Auditor's Report

The following section, Management's Discussion and Analysis of Operations, provides an overview of the consolidated financial statements of Renesas Electronics Corporation (hereafter "the Company") and its consolidated subsidiaries (hereafter "the Group"), as of and for the fiscal year ended December 31, 2021.

Introduction

Financial Position, Operating Results and Cash Flow Analysis

Forward-looking statements concerning financial position, operating results and cash flow are prepared using the Group's judgment as of December 31, 2021.

(1) Significant Accounting Policies and Estimates

The Group's consolidated financial statements are prepared in accordance with International Financial Reporting Standards (hereafter "IFRS") and in accordance with Article 93 of the "Ordinance on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements". In preparing these consolidated financial statements, estimates and assumptions deemed necessary are made based on reasonable standards. Significant accounting policies, assumptions for the future and uncertainties involved in the estimates used in the consolidated financial statements are listed under "Note 3. Significant Accounting Policies, Note 4. Significant Accounting Estimates and Judgments" in the Financial Section.

(2) Consolidated Financial Position

	As of December 31, 2020	As of December 31, 2021	Increase (Decrease)
	Billion yen	Billion yen	Billion yen
Total assets	1,609.0	2,406.2	797.3
Total equity	619.7	1,161.5	541.8
Equity attributable to owners of parent	616.7	1,158.1	541.4
Equity ratio attributable to owners of parent (%)	38.3	48.1	9.8
Interest-bearing liabilities	693.7	830.9	137.2
Debt to Equity ratio	1.12	0.72	(0.40)

Total assets at December 31, 2021 were 2,406.2 billion yen, a 797.3 billion yen increase from December 31, 2020. This was mainly due to an increase in goodwill owing to the acquisitions of Dialog Semiconductor Plc (hereafter "Dialog"), Celeno Communications Inc. (hereafter "Celeno"). Total equity was 1,161.5 billion yen, a 541.8 billion yen increase from December 31, 2020. This was mainly due to: increases in share capital and capital surplus as a result of the issuance of new shares mainly through public offering; an increase in other components of equity from an increase in exchange differences on translation of foreign operations following fluctuations in the exchange rate; and an increase in retained earnings through profit.

Equity attributable to owners of parent increased by 541.4 billion yen from December 31, 2020, and Equity ratio attributable to owners of parent was 48.1%. In addition, Interest-bearing liabilities increased by 137.2 billion yen from December 31, 2020, mainly due to the issuance of bonds. Consequently, Debt to equity ratio was 0.72.

(3) Overview of Financial Results

The Group discloses consolidated business results in terms of both its internal measures which the management relies upon in making decisions (hereinafter the "Non-GAAP" financial measures) and those under IFRS.

Non-GAAP gross profit and Non-GAAP operating profit are gross profit and operating profit under IFRS (hereinafter "IFRS gross profit" and "IFRS operating profit") after excluding or adjusting non-recurring items and other adjustments following a certain set of rules. The Group believes providing non-GAAP forecasts will help to better understand the Group's constant business results. Non-recurring items include depreciation of intangible assets recognized from acquisitions, other purchase price allocation (hereinafter "PPA") adjustments and stock-based compensation as well as other non-recurring expenses and income the Group believes to be applicable.

The Group consists of "Automotive Business" and "Industrial/Infrastructure/IoT Business" and those are the Group's reportable segments. For details, please refer to "Note 6. Business Segments" in the Financial Section.

(Note): For disclosure of Non-GAAP financial measures, the Group refers to the rules specified by the U.S. Securities and Exchange Commission but does not fully comply with such rules.

A) Overview of the current financial operation (Non-GAAP basis)

	Year ended December 31, 2020 I (Jan 1 – Dec 31, 2020) (J		Increase (Decrease)	
	Billion yen	Billion yen	Billion yen	% Change
Revenue	715.7	994.4	278.7	38.9%
Automotive	341.0	462.3	121.3	35.6%
Industrial/Infrastructure/IoT	363.6	515.5	151.9	41.8%
Non-GAAP Gross Profit Non-GAAP Gross Margin	338.7 47.3%	528.9 53.2%	190.1 5.9pts	56.1%
Automotive	128.5 37.7%	214.6 46.4%	86.1 8.7pts	67.0%
Industrial/Infrastructure/IoT	209.1 57.5%	312.3 60.6%	103.2 3.1pts	49.3%
Non-GAAP Operating Profit Non-GAAP Operating Margin	137.5 19.2%	296.6 29.8%	159.0 10.6pts	115.6%
Automotive	48.4 14.2%	122.4 26.5%	74.1 12.3pts	153.2%
Industrial/Infrastructure/IoT	89.7 24.7%	167.1 32.4%	77.4 7.7pts	86.3%
	Yen	Yen		
Exchange rate (USD) Exchange rate (EUR)	107 121	109 130	-	-

Summary of Consolidated Financial Results for the Fiscal Year ended December 31, 2021 (Non-GAAP basis)

Note 1: For details on the above, please refer to "Note 6. Business Segments" in the Financial Section.

Note 2: Exchange rates are the average of each month's rates used for the conversion of revenues and expenses.

Note 3: Consolidated revenue for the years ended December 31, 2020 and 2021 are based on IFRS and do not include non-GAAP adjustments.

The financial results for the year ended December 31, 2021 are as follows:

<Revenue>

Consolidated revenue for the year ended December 31, 2021 was 994.4 billion yen, a 38.9% increase year on year. This was mainly due to an increase in revenue in the Automotive Business as a result of the recovery from the reduced vehicle production caused by the COVID-19 pandemic mostly during the first half of the fiscal year ended 2020, in addition to an increase in revenue capturing demand expansion in the Industrial/Infrastructure/IoT Business and a sales increase effect from the consolidation of Dialog following the completion of the acquisition on August 31, 2021. It should be noted that as of September 14, 2021, Dialog has changed its company name to Dialog Semiconductor Limited.

<Non-GAAP Gross Profit (Margin)>

Non-GAAP gross profits for the year ended December 31, 2021 was 528.9 billion yen, a 190.1 billion yen increase year on year. This was mainly due to increases in revenue for both Automotive and Industrial/Infrastructure/IoT Businesses as well as an increase in gross margin mainly from improvements in product mix and the factory utilization rate. As a result, non-GAAP gross margin for the year ended December 31, 2021 was 53.2%, an increase by 5.9 points year on year.

<Non-GAAP Operating Profit (Margin)>

Non-GAAP operating profit for the year ended December 31, 2021 was 296.6 billion yen, a 159.0 billion yen increase year on year. This was mainly due to an increase in gross profit as well as an effort to streamline non-GAAP adjusted selling, general and administrative expenses. As a result, non-GAAP operating margin for the year ended December 31, 2021 was 29.8%, an increase by 10.6 points year on year.

The revenue breakdown of the business segments for the year ended December 31, 2021 are as follows:

Automotive Business

The Automotive Business includes the product categories "Automotive Control," comprising semiconductor devices for controlling automobile engines and bodies, and "Automotive Information," comprising of semiconductor devices used in sensing systems for detecting environments inside and outside the vehicle as well as Automotive Information devices such as in-vehicle infotainment (IVI) and instrument panels used to give various information to the driver of the vehicle. The Group mainly supplies microcontrollers (MCUs), system-on-chips (SoCs), analog semiconductor devices and power semiconductor devices in each of these categories.

Revenue of the Automotive Business for the year ended December 31, 2021 was 462.3 billion yen, a 35.6% increase year on year. This was mainly due to increases in sales for both the "Automotive Control" and "Automotive Information"

categories following the recovery from the reduced vehicle production.

Non-GAAP gross profit of the Automotive Business for the year ended December 31, 2021 was 214.6 billion yen, an 86.1 billion yen increase year on year. This was due to an increase in gross margin mainly from product mix improvements in addition to an increase in revenue.

Non-GAAP operating profit of the Automotive Business for the year ended December 31, 2021 was 122.4 billion yen, a 74.1 billion yen increase year on year, due to the sales increase effect as well as an increase in profits from gross margin improvements.

Industrial/Infrastructure/IoT Business

The Industrial/Infrastructure/IoT Business includes the categories "Industrial," "Infrastructure" and "IoT" which support a smart society. The Group mainly supplies MCUs and SoCs in each of these categories.

Revenue of the Industrial/Infrastructure/IoT Business for the year ended December 31, 2021 was 515.5 billion yen, a 41.8 % increase year on year. This was mainly due to an increase in revenues in the "Industrial," "Infrastructure," and "IoT" categories in addition to revenue increase from the consolidation of Dialog. Main contributors were devices for factory automation, data centers, mobile phone base stations, and OA devices such as PCs.

Non-GAAP gross profit of the Industrial/Infrastructure/IoT Business for the year ended December 31, 2021 was 312.3 billion yen, a 103.2 billion yen increase year on year. This was mainly due to an increase in gross margin from product mix improvements in addition to an increase in revenue.

Non-GAAP operating profit of the Industrial/Infrastructure/IoT Business for the year ended December 31, 2021 was 167.1 billion yen, a 77.4 billion yen increase year on year, due to the sales increase effect as well as an increase in profits from gross margin improvements.

The Group announced the "Mid-Term Growth Strategy" and "Financial Model" on February 17, 2020. The Group set as a long-term target of achieving sales growth exceeding that of the market through concentrated investment of management resources in markets on which the Group is focusing its attention. The Group also targets to optimize production efficiency, improve the product mix and realize synergies from the integrations of the former IDT, Dialog and Celeno. The Group updated its existing financial model on September 29, 2021, targeting to achieve a 50-55% Non-GAAP gross margin and a 25-30% Non-GAAP operating margin.

The targets in the "Mid-Term Growth Strategy" and "Financial Model" are the Group's long-term management objectives as of the date of filing and we cannot guarantee that they will be achieved. Results may be affected by a number of risk factors and other changes in the external environment, including the matters described under "Risk Factors" in the Management's Discussion and Analysis of Operations.

B) Reconciliation of Non-GAAP gross profit to IFRS gross profit and Non-GAAP operating profit to IFRS operating profit

		(Billion yen)
	Year ended December 31, 2020 (Jan 1 – Dec 31, 2020)	Year ended December 31, 2021 (Jan 1 – Dec 31, 2021)
Non-GAAP gross profit Non-GAAP gross margin	338.7 47.3%	528.9 53.2%
Amortization of purchased intangible assets and depreciation of property, plant and equipment	(1.5)	(0.8)
Market valuation of inventories		(13.4)
Stock-based compensation	(1.2)	(1.4)
Other reconciliation items in non-recurring expenses and adjustments	(0.3)	(16.9)
IFRS gross profit IFRS gross margin	335.7 46.9%	496.4 49.9%
Non-GAAP operating profit Non-GAAP operating margin	137.5 19.2%	296.6 29.8%
Amortization of purchased intangible assets and depreciation of property, plant and equipment	(55.5)	(57.6)
Market valuation of inventories		(13.4)
Stock-based compensation	(14.6)	(14.9)
Other reconciliation items in non-recurring expenses and adjustments	(2.4)	(27.1)
IFRS operating profit IFRS operating margin	65.1 9.1%	183.6 18.5%

(Note) "Other reconciliation items in non-recurring expenses and adjustments" includes the non-recurring items related to acquisitions and other adjustments as well as non-recurring profits or losses the Group believes to be applicable.

C) Overview of the current financial operation (IFRS)

	Year ended December 31, 2020 (Jan 1 – Dec 31, 2020)	Year ended December 31, 2021 (Jan 1 – Dec 31, 2021)	Incre (Decre	
	Billion yen	Billion yen	Billion yen	% Change
Revenue	715.7	994.4	278.7	38.9%
Gross Profit Gross Margin	335.7 46.9%	496.4 49.9%	160.7 3.0 pts	47.9%
Operating Profit Operating Margin	65.1 9.1%	183.6 18.5%	118.5 9.4 pts	181.8%

Summary of Consolidated Financial Results for the Year ended December 31, 2021 (IFRS basis)

D) Overview of production, orders and sales

The Group manufactures and sells a wide variety of products and even if the products are of the same type, their performance, structure, and format are not necessarily uniform. In addition, there are many products that do not take the form of built-to-order production. Accordingly, the Group does not disclose the scale of production or the scale of orders received for each product category in terms of value or quantity.

Therefore, the status of production, orders received, and sales is shown in relation to the revenue segment in "Management's Discussion and Analysis."

Sales to major customers and the ratio to total sales are as follows.

	Business Segments	Decembe	ended r 31, 2020 c 31, 2020)	Year ended December 31, 2021 (Jan 1 – Dec 31, 2021)		
		Million yen	%	Million yen	%	
Ryosan Company, Limited	Automotive and Industrial/Infrastructure/IoT Business	73,599	10.3	141,325	14.21	
WT Microelectronics Co.,Ltd	Automotive and Industrial/Infrastructure/IoT Business	50,374	7.0	127,845	12.86	

(Note): Tax is not included in the amounts written above.

(4) Cash Flows

	Year ended December 31, 2020 (Jan 1 – Dec 31, 2020)	Year ended December 31, 2021 (Jan 1 – Dec 31, 2021)
	Billion yen	Billion yen
Net cash provided by (used in) operating activities Net cash provided by (used in) investing activities	223.9 (40.2)	307.4 (663.1)
Free cash flows (Note)	183.7	(355.7)
Net cash provided by (used in) financing activities	(104.5)	340.9
Cash and cash equivalents at the beginning of period Cash and cash equivalents at the end of period	146.5 219.8	219.8 221.9

Note: As defined as a total of net cash flows provided by (used in) operating and investing activities.

(Net cash provided by (used in) operating activities)

Net cash provided by operating activities for the year ended December 31, 2021 was 307.4 billion yen. This was mainly due to a recording of 152.5 billion yen in profit before tax as well as adjustments in non-cash items such as depreciation.

(Net cash provided by (used in) investing activities)

Net cash used in investing activities for the year ended December 31, 2021 was 663.1 billion yen. This was mainly due to the acquisitions of shares of Dialog and Celeno.

The foregoing resulted in negative free cash flows of 355.7 billion yen for the year ended December 31, 2021.

(Net cash provided by (used in) financing activities)

Net cash provided by financing activities for the year ended December 31, 2021 was 340.9 billion yen. This was mainly due to proceeds from the issuance of new shares mainly through public offering as well as the issuance of bonds.

(5) Liquidity and Capital Resources

The Group's basic financial policy is to secure adequate liquidity and capital resources for its operations and to maintain a strong balance sheet. On January 15, 2019, the Company entered into a syndicated loan agreement for a total of 897.0 billion yen with its primary financial institutions, MUFG Bank, Ltd., Mizuho Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited, and others, in order to procure capital necessary for the acquisition of the former IDT and to renew an existing loan for the purpose of securing mid- to long-term working capital. The Company drew down 698.0 billion yen as a term-loan under the aforementioned agreement in March 2019. In addition, the Company repaid an existing term-loan in June 2019 and executed a 149.0-billion-yen term-loan agreement.

Based on the resolution of the Board of Directors meeting held on May 28, 2021, the Group conducted a public offering with a payment date of June 15, 2021 and a third-party allotment with a payment date of June 28, 2021. As a result, common stock and capital surplus increased by 111.9 billion yen and 111.1 billion yen, respectively. In addition, on August 31, 2021, the Company borrowed term loans with a total amount of 270 billion yen from Mitsubishi UFJ Bank, Ltd. and Mizuho Bank, Ltd., to finance the acquisition of Dialog.

On December 23, 2021, with the purpose of refinancing the remaining 240 billion yen of the existing loan of 270 billion yen to mid- to long-term funds, after having repaid 30 billion yen, the Company concluded a syndicated loan agreement with MUFG Bank, Ltd., Mizuho Bank, Ltd., Sumitomo Mitsui Trust Bank, and other financial institutions for the total of 96 billion yen. On the same day, the Company concluded a JBIC loan agreement with JBIC (Japan Bank for International Cooperation) for a total of 144 billion yen.

The Company decided on November 19, 2021, to issue US dollar-denominated senior notes in multiple tranches. The Company issued 500 million of US dollar-denominated senior notes due 2024 and 850 million of US dollar-denominated senior notes due 2026, for total proceeds of 1,350 million US dollars. The yen-converted amount of the outstanding balance of the Company's bonds at the end of the fiscal year ended December 31, 2021 was 154.6 billion yen.

As of December 31, 2021, the total amount of borrowings was 659.5 billion yen. As of December 31, 2021, the Group had 221.9 billion yen in cash and cash equivalents.

(6) Off-balance Sheet Arrangements

The Group conducts liquidation of accounts receivable on a regular basis. As of December 31, 2021, the balance of liquidated accounts receivable was 14.0 billion yen.

Risk Factors

The Group's operations and financial results are subject to various risks and uncertainties, including those described below, that could significantly affect investors' judgment. In addition, the following statements include matters which might not necessarily fall within the scope of such significant risks but are deemed important for investors' judgment from a standpoint of affirmative disclosure.

Statements regarding the future in the following paragraphs are based on the Group's understanding of the information available as of March 30, 2022.

1) Market Fluctuations

Semiconductor market fluctuations, which are caused by factors such as economic cycles in each region and shifts in demand of end customers, affect the Group. Although the Group carefully monitors changes in market conditions, it is difficult to completely avoid the impact of market fluctuations due to economic cycles in countries around the world and changes in the demand for end products. Market downturns, therefore, could lead to decline in product demand and increase in production and inventory amounts, as well as lower sales prices. Consequently, market downturns could reduce the Group's sales, as well as lower fab utilization rates, which may in turn result in lower gross margins, ultimately leading to deterioration in profits.

2) Fluctuations in foreign exchange and interest rates

The Group engages in business activities in all parts of the world and in a wide range of currencies. The Group continues to engage in hedging transactions and other arrangements to minimize exchange rate risks, but it is possible for our consolidated business results and financial condition, including our sales amount in foreign currencies, our materials costs in foreign currencies, our production costs at overseas manufacturing sites, and other items, to be influenced if exchange rates change significantly. Also, the Group's assets, liabilities, income, and costs can change greatly by presenting our assets and debts that are denominated in foreign currencies by converting the amounts in Japanese yen, and these can also change when financial statements in foreign currencies at our overseas subsidiaries are converted to and presented in Japanese yen.

Since expenses as well as asset and debt values associated with the Group's business operation are influenced by fluctuations in interest rates, it is also possible for the Group's businesses, performance, and financial condition to be adversely influenced by these fluctuations.

3) Natural Disasters

Natural disasters such as earthquakes, tsunamis, typhoons, and floods, accidents such as fires, power outages, and system failures, acts of terror, war, infectious diseases and other unpredictable factors could adversely affect the Group's business operation. In particular, as the Group owns key facilities and equipment in areas where earthquakes occur at a frequency higher than the global average, the effects of earthquakes and other events could damage the Group's facilities and equipment and force a halt to manufacturing and other operations, and such events could consequently cause severe damage to the Group's business. Similar situations may also occur due to other types of natural disasters, accidents such as fires, power outages, and system failures, acts of terror, war, infectious diseases, and other similar events. For example, in March 2021, a fire occurred at some processes of a Group subsidiary's semiconductor manufacturing plant (N3 building (300mm line)), causing the production and shipment of products at the plant to cease temporarily. However, in the future, the Group's business, results of operations and financial condition could be materially adversely affected by, among other things, the burden of costs to restore damaged plant facilities and equipment, a decrease in sales and operating income due to a decrease in plant utilization or stop, and a deterioration in gross margins.

In preparation for these risks, the Group sets and manages the BCP (Business Continuity Plan), which defines preventive plans and contingency plans etc., and also purchase various insurances; however, such plans and insurances may not fully hedge the risks or cover the losses and damages from events we could not anticipate. Also, the current spread of COVID-19 infections worldwide and the continuing unstable social, economic, fiscal, and working environments have affected the Group's business performance and business activities. The Group puts top priority to ensure the health and safety of employees, customers, and other related parties, and strives to develop a system that allows the Group to continue its business even in the face of various difficulties caused by the pandemic. However, the spread of the COVID-19 pandemic is not a factor the Group can directly control, so development of such countermeasures does not guarantee the Group's business continuity. In addition, since there is no clear prospect of the COVID-19 pandemic subsiding, and since the timing and future impact of the end of the pandemic remain uncertain at this stage, it is not possible to predict with certainty the final impact of the COVID-19 pandemic on the Group, including whether or not there are any other impacts. If the COVID-19 situation becomes more serious or prolonged in the future, the Group's business, results of operations and financial condition may be significantly adversely affected.

4) Competition

The semiconductor industry is extremely competitive, and the Group is exposed to fierce competition from competitors around the world in areas such as product performance, structure, pricing and quality. In particular, certain competitors have pursued acquisitions, consolidations, and business alliances, etc. in recent years and there is a possibility that such actions will be taken in the future as well. As a result, the competitive environment surrounding the Group may further intensify. To maintain and improve competitiveness, the Group takes various measures including development of leading- edge technologies, standardizing design, cost reduction, and consideration of strategic alliances with third parties or possibility of further acquisitions. In the event that the Group cannot maintain its competitiveness, the Group's market share may decline, which may negatively impact the Group's financial results.

In addition, fierce market competition has subjected the products of the Group to sharp downward pressure on prices, for which measures to improve profitability, such as price negotiations and efforts at cost price reduction, have been unable to fully compensate. This raises the possibility of a worsening of the Group's gross margin. Furthermore, in cases where customers for the Group's products for which the gross margin is low have difficulty switching to other products or require a

certain amount of time to secure replacements, it may be difficult for the Group to halt or reduce production in a timely manner. This may result in a reduction in the profitability of the Group.

5) Implementation of Management Strategies

The Group is implementing a variety of business strategies and structural measures, including the development of a "Mid-Term Growth Strategy" and reforming the organizational structure of the Group, to strengthen the foundations of its profitability. Implementing these business strategies and structural measures requires a certain level of cost and due to changes in economic conditions and the business environment, factors for which the future is uncertain, as well as additional unforeseeable factors, it is possible that some of those reforms may become difficult to carry out and others may not achieve the originally planned results. Furthermore, additional costs, which are higher than originally expected, may arise. Thus, these issues may adversely influence the Group's performance and financial condition.

6) Business Activities Worldwide

The Group conducts business worldwide, which can be adversely affected by factors such as barriers to long-term relationships with potential customers and local enterprises, restrictions on investment and imports/exports tariffs, fair trade regulations, political, social and economic risk including changes in trade policies, trade barriers and heightened trade conflicts among countries, outbreaks of illness or disease, exchange rate fluctuations, rising wage levels, and transportation delays. As a result, the Group may fail to achieve its initial targets regarding business in overseas markets, which could have a negative impact on the business growth and performance of the Group.

7) Strategic Alliance and Corporate Acquisition

For business expansion and strengthening of competitiveness, the Group may engage in strategic alliances, including joint investments, and corporate acquisitions. For example, in February 2017, the Group acquired Intersil Corporation, in March 2019, the US based semiconductor company IDT, and in August 2021, the UK-based semiconductor company Dialog. With regard to such alliances and acquisitions, the Group examines the likely return on investment and profitability from a variety of perspectives. However, in cases where there is a mismatch with the prospective alliance partner or acquisition target in areas of management strategy such as capital procurement, technology management, and product development, or there are financial or other problems affecting the business of the prospective collaboration partner or acquisition target, in addition to the time and expense required for integration of aspects such as business execution, technology, products, personnel, systems and response to antitrust laws and other regulations of the relevant authorities, there is a possibility that the alliance relationship or capital ties will not be sustainable, or in the case of acquisitions for which the anticipated return on investment or profitability cannot be realized. Furthermore, there is a possibility that the anticipated synergies or other advantages cannot be realized due to an inability to retain or secure the main customers or key personnel of the prospective alliance partner or acquisition target. Thus, there is no certainty that an alliance or acquisition will achieve the goals initially anticipated.

8) Financing

While the Group has been procuring business funds by methods such as borrowing from financial institutions and other sources, in the future it may become necessary to procure additional financing to implement business and investment plans, expand manufacturing capabilities, acquire technologies and services, and repay debts. It is possible that the Group may face limitations on its ability to raise funds due to a variety of reasons, including the fact that the Group may not be able to acquire required financing in a timely manner or may face increasing financing costs due to the worsening business environment in the semiconductor industry, worsening conditions in the financial and stock markets, and changes in the financing policies of lenders. In addition, the Company may also finance acquisitions when conducting acquisitions from financial institutions. For example, for the purpose of raising funds for the acquisition of Dialog, which we announced in February 2021, the Company entered into a loan agreement (maximum total loan amount: 665.4 billion yen, including a Facilities Agreement and further amendments) with financial institutions, and as of August 2021 we had borrowed a total of 270 billion yen based on this agreement. Similarly to the loan agreement, in order to finance the acquisition of Dialog, in June 2021 the Company completed a public offering and third-party allocation of new shares to Daiwa Securities Co. Ltd., raising a total of approximately 222.6 billion yen. In addition, in order to refinance the above loan to medium- to long-term funds, we entered into a syndicated loan agreement (total loan amount: 96 billion) with financial institutions including Mitsubishi UFJ Bank, Ltd., Mizuho Bank, Ltd., and Sumitomo Mitsui Trust Bank, Ltd. and entered into a term loan agreement (total loan amount: 144 billion yen) with the Japan Bank for International Cooperation. In addition to these, in November of the same year, as part of raising funds and diversifying financing methods, we issued US dollar-denominated unsecured corporate bonds (including some green bonds), for a total of 1.35 billion US dollars. However, regardless of whether or not the Company raises funds through the issuance of new shares, the Company will bear a large amount of interest-bearing liabilities by financing for company acquisitions, including the acquisition of Dialog. If the initially expected cash flow generation, the Group's financial condition will deteriorate, credit ratings may be lowered, which may also increase funding costs or constrain the Group's financing. In addition, some of the borrowing contracts executed between the Group and some financial institutions stipulate articles of financial covenants. If the Group breaches these articles due to reasons such as a deterioration of the Group's financial condition, the Group may lose the benefit of term on the contract, and it may adversely influence the Group's business performance and financial conditions.

9) Notes on Additional Financing

After implementation of the allocation of new shares to a third party based on a decision at the Meeting of the Board of Directors held on December 10, 2012, we received an offer from the former Innovation Network Corporation of Japan (business name changed to Japan Investment Corporation as of September 25, 2018) that they are willing to provide additional investments or loans with an upper limit of 50 billion yen. However, former Innovation Network Corporation of Japan underwent restructuring, forming a separate subsidiary entity as of September 21, 2018, leading to the new subsidiary, INCJ, Ltd., to take over the contract initially undertaken with the former Innovation Network Corporation of Japan. Currently,

no specific details regarding the timing of or conditions associated with these additional investments or loans have been determined, and there is no guarantee that these additional investments or loans will actually be implemented. If investments occur based on this offer, further dilution of existing stock will occur, and this may adversely impact existing shareholders. In addition, if loans are made under this offer, the Group's outstanding interest-bearing liabilities will increase, and this may impose restrictions on some of our business activities. Furthermore, if fluctuations in interest rates occur in the future, the Group's businesses, performance, and financial condition may be adversely affected.

10) Relationship with Largest Shareholder, INCJ

As a result of the allocation of common stock to the former Innovation Network Corporation of Japan and others by way of third-party allotment on September 30, 2013, the former Innovation Network Corporation of Japan now holds a majority share of voting rights held in association with Renesas Electronics' share. From June 2017 onward, the former Innovation Network Corporation of Japan gradually divested itself of its holdings of common stock in the Company, and as of September 21, 2018, formed a separate subsidiary entity. As a result of this restructuring, all shares owned by the former Innovation Network Corporation of Japan were passed on to the new subsidiary, INCJ, Ltd., which is presently the largest shareholder in the Company. Thus, the business operations of the Group are potentially subject to a substantial influence through the exercise by INCJ of its voting rights at General Meetings of Shareholders. In addition, should INCJ at some future date sell all or part of Renesas Electronics' share which is currently held for investment purpose, this could potentially have a substantial effect on the market value of Renesas Electronics' share, depending on factors such as the market climate at the time of the sale.

11) Rapid Technological Evolutions and Other Issues

The semiconductor market in which the Group does business is characterized by rapid technological changes and rapid evolution of technological standards. Therefore, if the Group is not able to carry out appropriate research and development, the Group's businesses, performance, and financial condition may all be adversely affected by product obsolescence and the existence of competing products in the marketplace.

12) Product Production

A. Production Process Risk

Semiconductor products require extremely complex production processes. In an effort to increase yields (defined as the ratio of non-defective products from the materials used), the Group takes steps to properly control production processes and seeks ongoing improvements. However, the emergence of defects in these production processes could lead to lower yields. These defects, in turn, could trigger shipment delays, reductions in shipment volume, or, at worst, the halting of shipments.

B. Procurement of Raw Materials, Components, and Production Facilities

The timely procurement of necessary raw materials, components and production facilities is critical to semiconductor production. To avoid supply problems related to these essential raw materials, components and production facilities, the Group works diligently to develop close relationships with multiple suppliers. Some necessary materials, however, are available only from specific suppliers. Consequently, insufficient supply capacity amid tight demand for these materials as well as events including natural disasters, accidents, acts of terror, war, worsening of business conditions, and withdrawal from the business by suppliers could preclude their timely procurement, or may result in sharply higher prices for these essential materials upon procurement. Furthermore, defects in procured raw materials or components could adversely influence the Group's manufacturing operations and additional costs may be incurred by the Group.

C. Risks Associated with Outsourced Production

The Group outsources the manufacturing of certain semiconductor products to external foundries (contract manufacturers) and other entities. In doing so, the Group selects its trusted outsourcers, rigorously screened in advance based on their technological capabilities, supply capacity, and other relevant traits; however, there is some possibility of delivery delays, product defects and other production-side risks stemming from outsourcers. In particular, inadequate production capacity among outsourcers or operation shutdown of the outsourcers as a result of a natural disaster, could result in the Group being unable to supply enough products.

D. Maintenance of Production Capacity at an Appropriate Level

The semiconductor market is sensitive to fluctuations in the business climate, and it is difficult to predict future product demand accurately. Thus, it is not always possible for the Group to maintain production capacity at an appropriate level that matches product demand. Unanticipated events such as fires, power outages or system failures at manufacturing plants could also significantly reduce the Group's production capacity for a given period of time. In addition, even if the Group engages in capital investment to boost production capacity, there is generally a certain amount of time required before the actual increase in production capacity takes place.

Therefore, if demand for specific products substantially exceeds the Group's production capacity at a certain point and the state of excess demand continues over time, there is a possibility that the Group will be unable to supply customers with the products they desire, that opportunities to sell the products in question will be lost, that the Group will lose market share as customers switch to competing products, and that the relationship of the Group and its customers will suffer.

On the other hand, if in response to a rise in demand for specific products the Group undertakes capital investment with the aim of increasing production capacity, there is no guarantee that demand for the products in question will remain strong once production capacity actually increases and afterward. There is a possibility that actual product demand may turn out to be less than anticipated, in which case it may not be possible to recover the capital investment with the anticipated earnings.

13) Product Quality

Although the Group makes an effort to improve the quality of semiconductor products, they may contain defects, anomalies or malfunctions that are undetectable at the time of shipment due to increased sophistication of technologies, the diversity of ways in which the Group's products are used by customers and defects in procured raw materials or components. These defects, anomalies or malfunctions could be discovered after the Group products were shipped to customers, resulting in the return or exchange of the Group's products, claims for compensatory damages, or discontinuation of the use of the Group's products, which could negatively impact the profits and operating results of the Group. To prepare for such events, the Group has insurance such as product liability insurance and recall insurance, but it is not guaranteed that the full costs of reimbursements would be covered by these.

14) Product Sales

A. Reliance on Key Customers

The Group relies on certain key customers for a significant portion of its product sales to customers. The decision by these key customers to cease adoption of the Group's products, or to dramatically reduce order volumes, could negatively impact the Group's operating results.

B. Changes in production plans by customers of custom products

The Group receives orders from customers for the development of specific semiconductor products in some cases. There is the possibility that, after the Group received the orders, the customers decide to postpone or cancel the launch of the end products in which the ordered product is scheduled to be embedded. There is also the possibility that the customers cancel its order if the functions and quality of the product do not meet the customer requirements. Further, the weak sales of end products in which products developed by the Group are embedded may cause customers to reduce their orders, or to postpone delivery dates. Such changes in production plans, order reductions, postponements and other actions from the customers concerning custom products may cause declines in the Group sales and profitability.

C. Reliance on Authorized Sales Agents

In Japan and Asia, the Group sells the majority of its products via independent authorized sales agents and relies on certain major authorized sales agents for a significant portion of these sales. The inability of the Group to provide these authorized sales agents with competitive sales incentives or margins, or to secure sales volumes that the authorized sales agents consider appropriate, could result in a decision by such agents to review their sales network of the Group's products, including the reduction of the network, etc., which could cause a downturn in the Group sales.

15) Securing Human Resources

The Group works hard to secure superior human resources for management, technology development, sales, and other areas when deploying business operations. However, since such superbly talented people are of limited number, there is fierce competition in the hiring of human resources. Under the current conditions, it may not be possible for the Group to secure the talented human resources it requires.

16) Defined Benefit Obligations

Net defined benefit liability and net defined benefit asset are calculated based on actuarial assumptions, such as discount rates or returns on assets. However, the Group performance and financial condition may be adversely affected either if discrepancies between actuarial assumptions and business performance arise due to changing interest rates or a fall in the stock market and defined benefit obligations increase or our plan assets decrease and there is an increase in the pension funding deficit in the retirement benefit obligations system.

17) Capital Expenditures and Fixed Cost Ratio

The semiconductor business in which the Group is engaged requires substantial capital investment. The Group undertakes capital investment in an ongoing manner, and this requires it to bear the associated amortization costs. In addition, if there is a decrease in demand due to changes in the market climate and the anticipated scale of sales cannot be achieved, or if excess supply causes product prices to fall, there is a possibility that a portion or the entirety of the capital investment will not be recoverable or will take longer than anticipated to be recovered, and as a result it may have an adverse effect on the business performance and the financial condition of the Group.

Furthermore, the majority of the expenses of the Group are accounted for by fixed costs such as production costs associated with factory maintenance and R&D expenses, in addition to the abovementioned amortization costs accompanying capital investment. Even if there is a decline in sales due to a reduction in orders from the Group's main customers or a drop in product demand, or if the factory operating rate decreases, it may be difficult to reduce fixed costs to compensate. As a result, a relatively small-scale drop in sales can have an adverse effect on the profitability of the Group.

18) Impairment Loss on Long-term Assets

The Group owns substantial long-term assets, consisting of both property, plant and equipment such as plant facilities and intangible assets such as goodwill obtained through the acquisition of the former Intersil Corporation and the former IDT. In addition, although the purchase price allocation for the acquisition of Dialog, etc. has not been completed at this time, fixed assets, including goodwill, may be recorded depending on the outcome. When there are indications of impairment, the Group examines the possibility of recovering the book value of assets based on the future cash flow to be generated from the assets. It may be necessary to recognize impairment of such assets if insufficient cash flow is generated.

19) Information Systems

Information systems are of growing importance in the Group's business activities. Although the Group makes an effort to manage stable operation of information systems, there is a likelihood that customer confidence and social trust would deteriorate, resulting in a negative effect on the Group's performance if there is a significant problem with the Group's

information systems caused by factors such as natural disasters, accidents, computer viruses and unauthorized accesses.

20) Information Management

The Group has in its possession a great deal of confidential information and personal information relating to its business activities. While such confidential information is managed according to law and internal regulations specifically designed for that purpose, there is always the risk that information may leak due to unforeseen circumstances. Should such an event occur, there is a likelihood that leaks of confidential information may result in damages to our competitive position and customer confidence and social trust would deteriorate, resulting in a negative effect on the Group's performance.

21) Legal Restrictions

The Group is subject to a variety of legal restrictions in the various countries and regions. These include requirements for approval for businesses and investments, antitrust laws and regulations, export restrictions, customs duties and tariffs, accounting standards and taxation, and environment laws. In future, it is possible that the Group's businesses, performance, and financial condition may be adversely affected by increased costs and restrictions on business activities associated with the strengthening of local laws.

The Group makes use of an internal regulation system to ensure legal compliance and appropriate financial reporting. However, since by its nature an internal regulation system is inherently limited, there is no guarantee that it will accomplish its goals completely. Consequently, the possibility is not nonexistent that legal violations, etc., may occur in future. Should a violation of the law or other regulations occur, the Group could be subject to administrative penalties such as fines, legal penalties, or claims for compensatory damages, or there could be a negative impact on the social standing of the Group. This could have an adverse effect on the businesses, business performance, and financial condition of the Group.

22) Environmental Factors

The Group strives to decrease its environmental impact with respect to diversified and complex environmental issues such as global warming, air pollution, industrial waste, tightening of hazardous substance regulation, and soil pollution. There is the possibility that, regardless of whether there is negligence in its pursuit of business activities, the Group could bear legal or social responsibility for environmental problems. Should such an event occur, the burden of expenses for resolution could potentially be high, and the Group could suffer erosion in social trust.

23) Intellectual Property

While the Group seeks to protect its intellectual property, it may not be adequately protected in certain countries and areas. In addition, there are cases that the Group's products are developed, manufactured and sold by using licenses received from third parties. In such cases, there is the possibility that the Group could not receive necessary licenses from third parties, or the Group could only receive licenses under terms and conditions that are less favorable than before.

With regard to the intellectual property rights related to the Group's products, it is possible that a third party might file a lawsuit against the Group or its customers claiming patent infringement, or the like, and that as a result the manufacture and sale of the affected products might not be possible in certain countries or regions. It is also possible that the Group could be liable for damages to a third party or to a customer of the Group.

24) Legal Issues

Details are listed under "Note 36. Commitments and Contingent Liabilities, (4) Others" in the Financial Section.

FINANCIAL SECTION

- 1. Basis of Preparation of the Consolidated Financial Statements
 - (1) The consolidated financial statements of Renesas Electronics Corporation (hereafter "the Company") and its consolidated subsidiaries (hereafter "the Group") have been prepared in accordance with International Financial Reporting Standards (hereafter "IFRS") pursuant to the provisions of Article 93 of the "Ordinance on Terminology, Forms and Preparation Methods of Consolidated Financial Statements" (Ministry of Finance Ordinance No. 28, 1976, hereafter "Ordinance on Consolidated Financial Statements").
 - (2) The non-consolidated financial statements of the Company were prepared in accordance with the Ministry of Finance Ordinance No. 59, 1963, "Ordinance on Terminology, Forms and Preparation Methods of Consolidated Financial Statements, etc." (hereafter "Ordinance on Financial Statements").

As a company submitting financial statements prepared in accordance with special provisions of the Ordinance of Financial Statements, the Company prepares its financial statements in accordance with Article 127 of the Ordinance of Financial Statements.

- (3) In the consolidated financial statements and the non-consolidated financial statements, figures are presented by rounding them to the nearest million yen.
- 2. Audit Certification

The consolidated financial statements for the fiscal year ended December 31, 2021 (from January 1, 2021 to December 31, 2021) and the non-consolidated financial statements for the fiscal year ended December 31, 2021 (from January 1, 2021 to December 31, 2021) were audited by PricewaterhouseCoopers Aarata LLC in accordance with Article 193-2, Section 1, of the Financial Instruments and Exchange Act.

- 3. Special Measures for Preparing Fairly Stated Financial Statements These measures involve attaining a thorough understanding of accounting standards and developing a system for addressing changes made to these standards. To this end, the Company has registered with the Financial Accounting Standards Foundation, and participates in seminars.
- 4. Development of a System to Appropriately Prepare Consolidated Financial Statements Based on IFRS

To appropriately prepare its consolidated financial statements in accordance with IFRS, the Company obtains press releases and accounting standards issued by the International Accounting Standards Board as required to understand the latest standards and analyze the impact. The Company has also prepared the Group accounting policies or "Global Rule Book" in accordance with IFRS and formulates accounting treatments based on the Group accounting policies. In addition, the Company makes efforts to accumulate in-house expertise by participating in seminars, etc. hosted by the Financial Accounting Standards Foundation and audit corporations, etc.

1. Consolidated Financial Statements

(1) Consolidated Financial Statements(i) Consolidated Statement of Financial Position

(I) Consolidated Statement of Financial Position			(In millions of yen)
	Notes	As of December 31, 2020	As of December 31 2021
Assets			
Current assets			
Cash and cash equivalents	8	219,786	221,924
Trade and other receivables	9, 33	82,318	140,478
Inventories	10	89,761	137,925
Other current financial assets	16, 33	605	737
Income taxes receivable		2,190	4,395
Other current assets	11	8,162	12,352
Total current assets		402,822	517,811
Non-current assets			
Property, plant and equipment	12, 14, 15, 19	187,354	195,729
Goodwill	7, 13, 15	590,459	1,234,600
Intangible assets	13, 15	364,764	371,969
Other non-current financial assets	16, 33	18,101	34,633
Deferred tax assets	17	40,600	42,414
Other non-current assets	11	4,885	9,091
Total non-current assets		1,206,163	1,888,436
Total assets		1,608,985	2,406,247

	Neter	As of December 31,	(In millions of yen) As of December 31
	Notes	2020	2021
Liabilities and equity			
Liabilities			
Current liabilities			
Trade and other payables	18, 33, 38	114,235	204,330
Bonds and borrowings	19, 33	93,181	121,105
Other current financial liabilities	20, 33	4,036	11,505
Income taxes payable		10,337	22,050
Provisions	21	6,383	11,185
Other current liabilities	11	58,873	77,235
Total current liabilities		287,045	447,410
Non-current liabilities			
Trade and other payables	18, 33	25,177	15,100
Bonds and borrowings	19, 33	586,563	692,983
Other non-current financial liabilities	20, 33	10,241	11,536
Income taxes payable		4,084	3,792
Retirement benefit liability	22	30,012	27,926
Provisions	21	3,033	3,795
Deferred tax liabilities	17	38,680	36,229
Other non-current liabilities	11	4,489	6,016
Total non-current liabilities		702,279	797,377
Total liabilities		989,324	1,244,787
Equity			
Share capital	23	28,971	147,133
Capital surplus	23	208,253	337,989
Retained earnings	23	449,975	578,017
Treasury shares	23	(11)	(11
Other components of equity		(70,487)	95,015
Total equity attributable to owners of parent		616,701	1,158,143
Non-controlling interests		2,960	3,317
Total equity		619,661	1,161,460
Total liabilities and equity		1,608,985	2,406,247

			(In millions of yen)
	Notes	The year ended December 31, 2020	The year ended December 31, 2021
Revenue	6, 24	715,673	994,418
Cost of sales	37, 38	(379,984)	(498,017)
Gross profit	_	335,689	496,401
Selling, general and administrative expenses	25, 37	(266,268)	(307,698)
Other income	26	4,036	8,031
Other expenses	27	(8,315)	(13,133)
Operating profit	_	65,142	183,601
Finance income	28	7,623	4,140
Finance costs	28	(7,549)	(35,278)
Profit before tax	_	65,216	152,463
Income tax expense	17	(19,490)	(25,051)
Profit	_	45,726	127,412
Profit attributable to			
Owners of parent		45,626	127,261
Non-controlling interests		100	151
Profit	=	45,726	127,412
Earnings per share	30		
Basic earnings per share (yen)		26.54	68.96
Diluted earnings per share (yen)		25.97	67.44

(ii) Consolidated Statement of Profit or Loss and Consolidated Statement of Comprehensive Income Consolidated Statement of Profit or Loss

Consolidated Statement of Comprehensive Income

			(In millions of yen)
	Notes	The year ended December 31, 2020	The year ended December 31, 2021
Profit		45,726	127,412
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Remeasurements of defined benefit plans		(334)	902
Equity instruments measured at fair value through other comprehensive income		(330)	(311)
Total of items that will not be reclassified to profit or loss	_	(664)	591
Items that may be reclassified subsequently to profit or loss			
Exchange differences on translation of foreign operations		(64,290)	169,312
Cash flow hedges		—	(4,022
Cost of hedges		—	(153)
Total of items that may be reclassified subsequently to profit or loss	_	(64,290)	165,137
Total other comprehensive income	29	(64,954)	165,728
Total comprehensive income	_	(19,228)	293,140
Comprehensive income attributable to			
Owners of parent		(19,239)	292,783
Non-controlling interests	_	11	357
Total comprehensive income	_	(19,228)	293,140

(iii) Consolidated Statement of Changes in Equity The year ended December 31, 2020

(In millions of yen)

			Equity attributable to owners of parent								
						Othe	her components of equity				
Note	Notes	Share capital	Capital surplus	Retained earnings	Treasury shares	Share acquisition rights	Remeasurements of defined benefit plans	Equity instruments measured at fair value through other comprehensive income			
Balance as of January 1, 2020		22,213	201,588	403,857	(11)	16,053	-	(1,131)			
Profit		-	-	45,626	-	-	—	—			
Other comprehensive income		_	_	—	—	—	(334)	(330)			
Total comprehensive income		_	_	45,626	_	-	(334)	(330)			
Issuance of new shares	23	6,758	6,665	_	-	-	-	_			
Share-based payment transactions	32	_	-	_	-	1,062	-	_			
Transfer to retained earnings		_	_	492	_	(1,156)	334	330			
Total transactions with owners		6,758	6,665	492	_	(94)	334	330			
Balance as of December 31, 2020		28,971	208,253	449,975	(11)	15,959	_	(1,131)			

			Equity attributable to owners of parent					
			Other	components of e	quity			
	Notes Exchange differences on translation of foreign operations	Cash flow hedges	Cost of hedges	Total	Total equity attributable to owners of parent	Non-controlling interests	Total equity	
Balance as of January 1, 2020		(21,114)	_	_	(6,192)	621,455	2,949	624,404
Profit		—	—	—	-	45,626	100	45,726
Other comprehensive income		(64,201)	—	—	(64,865)	(64,865)	(89)	(64,954)
Total comprehensive income		(64,201)	—	_	(64,865)	(19,239)	11	(19,228)
Issuance of new shares	23	-	_	_	-	13,423	_	13,423
Share-based payment transactions	32	-	—	—	1,062	1,062	—	1,062
Transfer to retained earnings		-	—	—	(492)	_	—	_
Total transactions with owners		_	_		570	14,485	_	14,485
Balance as of December 31, 2020		(85,315)	_	_	(70,487)	616,701	2,960	619,661

The year ended December 31, 2021

(In millions of yen)

						Othe	er components of e	quity
	Notes	Share capital	Capital surplus	Retained earnings	Treasury shares	Share acquisition rights	Remeasurements of defined benefit plans	Equity instruments measured at fair value through other comprehensive income
Balance as of January 1, 2021		28,971	208,253	449,975	(11)	15,959	—	(1,131)
Profit		-	—	127,261	-	-	—	—
Other comprehensive income		_	_	_	_	_	902	(311)
Total comprehensive income		_	-	127,261	_		902	(311)
Issuance of new shares	23	118,162	117,320	_	_	_	_	_
Share-based payment transactions	32	_	12,416	_	_	(2,843)	_	_
Transfer to retained earnings		_	—	781	_	154	(902)	(33)
Reclassification to non-financial assets	7	_	_	_	_	_	_	_
Total transactions with owners		118,162	129,736	781	_	(2,689)	(902)	(33)
Balance as of December 31, 2021		147,133	337,989	578,017	(11)	13,270	_	(1,475)

		Equity attributable to owners of parent						
			Other compor	nents of equity				
Notes	Notes	difforences on	Cash flow hedges	Cost of hedges	Total	Total equity attributable to owners of parent	Non-controlling interests	Total equity
Balance as of January 1, 2021		(85,315)			(70,487)	616,701	2,960	619,661
Profit		—	—	—	—	127,261	151	127,412
Other comprehensive income		169,106	(4,022)	(153)	165,522	165,522	206	165,728
Total comprehensive income		169,106	(4,022)	(153)	165,522	292,783	357	293,140
Issuance of new shares	23	_	-	-	-	235,482	_	235,482
Share-based payment transactions	32	—	_	_	(2,843)	9,573	—	9,573
Transfer to retained earnings		—	_	_	(781)	-	—	_
Reclassification to non-financial assets	7	_	3,604	_	3,604	3,604	_	3,604
Total transactions with owners		_	3,604	_	(20)	248,659	_	248,659
Balance as of December 31, 2021		83,791	(418)	(153)	95,015	1,158,143	3,317	1,161,460

(iv) Consolidated Statement of Cash Flows

			(In millions of yen)
	Notes	The year ended December 31, 2020	The year ended December 31, 2021
Cash flows from operating activities			
Profit before tax		65,216	152,463
Depreciation and amortization		141,527	136,496
Impairment losses		2,070	135
Finance income and finance costs		5,221	6,973
Share-based payment expenses		14,564	14,899
Foreign exchange loss (gain)		(3,780)	22,861
Loss (gain) on sales of property, plant and equipment, and intangible assets		(717)	(5,557
Decrease (increase) in inventories		79	(5,552
Decrease (increase) in trade and other receivables		1,228	(9,237
Decrease (increase) in other financial assets		(7,413)	(9,699
Increase (decrease) in trade and other payables		10,192	50,154
Increase (decrease) in retirement benefit liability		194	(2,572)
Increase (decrease) in provisions		(1,713)	3,847
Increase (decrease) in other current liabilities		3,675	(20,435
Other		2,931	(4,466
Subtotal		233,274	330,31
Interest received		307	242
Dividends received		240	30
Income taxes paid		(9,932)	(23,468
Net cash flows from operating activities	_	223,889	307,384
Cash flows from investing activities			
Purchase of property, plant and equipment		(22,261)	(36,938
Proceeds from sales of property, plant and equipment		960	8,408
Purchase of intangible assets		(15,925)	(15,408
Purchase of other financial assets		(568)	(1,416
Proceeds from sales of other financial assets		430	579
Payments for acquisitions of subsidiaries	7	—	(614,816
Other		(2,799)	(3,535
Net cash flows from investing activities	_	(40,163)	(663,126
Cash flows from financing activities			
Proceeds from short-term borrowings	31	—	270,000
Repayments of short-term borrowings	31	_	(270,000
Proceeds from long-term borrowings	31	_	240,000
Repayments of long-term borrowings	31	(93,295)	(262,777
Proceeds from issuance of bonds	31	(/ 	154,35
Proceeds from issuance of shares	23	_	223,799
Payments for share issuance costs	20	_	(1,179
	21	(1 010)	
Repayments of lease liabilities	31	(4,840) (6,264)	(4,571
Interest paid Other		, ,	(8,682
	_	(71)	(34
Net cash flows from financing activities	_	(104,470)	340,915

Effect of exchange rate changes on cash and cash equivalents		(5,938)	16,965
Net increase (decrease) in cash and cash equivalents		73,318	2,138
Cash and cash equivalents at beginning of the period	8	146,468	219,786
Cash and cash equivalents at end of the period	8	219,786	221,924

Notes to Consolidated Financial Statements

1. Reporting Entity

Renesas Electronics Corporation (hereafter "the Company") is a public company established under the Companies Act of Japan and domiciled in Japan. The accompanying consolidated financial statements of the Company and its consolidated subsidiaries (hereafter "the Group") are composed of the Company, its subsidiaries and interests of the Group in its associates, with December 31, 2021 as the closing date. The Group engages in research, design, development, manufacturing, sales and services related to various kinds of semiconductors as a manufacturer specializing in semiconductors. For details of the Group's major business, please refer to "Note 6. Business Segments."

The consolidated financial statements for the year ended December 31, 2021 were approved on March 30, 2022 by Hidetoshi Shibata, President and CEO, and Shuhei Shinkai, Executive Vice President, Member of the Board and CFO.

2. Basis for Preparation

(1) Compliance with IFRS

Because the Group meets the requirements for "Specified Companies Complying with Designated International Accounting Standards" stated in Article 1-2 of Ordinance on Consolidated Financial Statements, the Group has adopted the provisions of Article 93 of the Ordinance. The consolidated financial statements of the Group have been prepared in accordance with IFRS.

(2) Basis of measurement

The consolidated financial statements of the Group have been prepared based on the accounting policies separately described in "Note 3. Significant Accounting Policies." Assets and liabilities are measured at a historical cost basis unless otherwise stated.

(3) Functional currency and presentation currency

The consolidated financial statements are presented in Japanese yen (rounded to the nearest million yen), which is the functional currency of the Company.

(4) Changes in accounting policy

(Consolidated Statement of Cash Flows)

Within "Cash flows from operating activities" category, "Foreign exchange loss (gain)" and "Decrease (increase) in other financial assets," which were disclosed in "Other" for the prior fiscal year, have been presented separately from the current fiscal year due to the increase in its materiality. Also, Loss (gain) on sales and valuation of investment securities, which was disclosed in "Other" for the prior fiscal year, has been classified to "Finance income and finance costs" from the current fiscal year.

In order to reflect those changes in presentation, Consolidated Statement of Cash Flows for the prior fiscal year has been reclassified. Consequently, within "Cash flows from operating activities" category, (10,035) million yen of "Other" has been classified to (3,780) million yen of "Foreign exchange loss (gain)", (7,413) million yen of "Decrease (increase) in other financial assets", 2,931 million yen of "Other" and (1,773) million yen of "Finance income and finance costs."

3. Significant Accounting Policies

The significant accounting policies of the Group are as follows and are applied to all the periods presented in the consolidated financial statements.

(1) Basis of consolidation

A. Subsidiaries

Subsidiaries are entities controlled by the Group. Control refers to a case in which the Group has power over an entity, is exposed to variable returns from involvement with the entity and has the ability to affect those returns through its power over the entity.

The financial statements of subsidiaries are included in the consolidated financial statements from the date when control is obtained until the date when control is lost. In the event that the Group disposes of some of its ownership interest in a subsidiary that does not result in a loss of control, the change in ownership interest of the Group is accounted for as an equity transaction, and the difference between the adjustment of non-controlling interests and the fair value of the consideration is directly recognized in equity as equity attributable to owners of parent.

If the closing dates of a subsidiary and that of the consolidated financial statements are different, financial statements prepared with a provisional closing date, which is same as that of consolidated financial statements, are used.

B. Associates

Associates are entities over which the Group has a significant influence over the decisions on financial and operating policies but does not have control. Investments in associates are accounted for using the equity method.

Investments in associates are initially recognized at cost. Ownership interests of the Group in profit or loss and other comprehensive income of the associate from the date when the Group obtains significant influence until the date when the Group loses significant influence are recognized as changes in the amount of investments in associates.

C. Transactions eliminated on consolidation

Inter-company balances of receivables and payables, transactions and unrealized gains or losses resulting from inter-company transactions are eliminated on consolidation.

(2) Business combinations

Business combinations are accounted for using the acquisition method. Consideration transferred in a business combination is measured as the sum of the acquisition-date fair value of the assets transferred, liabilities assumed, and equity instruments issued by the Company in exchange for control over the acquiree.

Any excess of the consideration for acquisition, the non-controlling interests in the acquiree and the fair value of assets of the acquiree that the acquirer previously held over the net amount of identifiable assets and liabilities as of the date of acquisition is recognized as goodwill. Conversely, if the consideration for acquisition is lower than the net amount of identifiable assets and liabilities as of the date of acquisition, it is immediately recognized in profit or loss. Acquisition-related costs are recognized in profit or loss. The additional acquisition of non-controlling interests after obtaining control is accounted for as an equity transaction, and no corresponding goodwill is recognized.

If the initial accounting treatment of a business combination is not completed by the end of the fiscal year when the business combination took place, provisional amounts for the items for which accounting is incomplete are reported, and such provisional amounts that were recognized as of the date of acquisition are adjusted retrospectively during the measurement period within one year from the date of acquisition.

(3) Foreign currency translation

A. Functional currency and presentation currency

The financial statements of the Group entities are prepared in their respective functional currency. The consolidated financial statements of the Group are presented in Japanese yen, which is the functional currency of the Company.

B. Foreign currency transactions

Foreign currency transactions are translated into the functional currency at the spot exchange rate or a rate approximate to the spot exchange rate on the date of the transaction. Monetary items denominated in a foreign currency at the end of the reporting period are translated into the functional currency using the closing rate, while non-monetary items denominated in a foreign currency that are measured at historical cost are translated using the exchange rate in effect on the date of the initial transaction, and those that are measured at fair value are translated using the exchange rate in effect on the date when the fair value was calculated.

Exchange differences from translation or settlement are recognized in profit or loss during the period when they arise. However, exchange differences arising from equity instruments and cash flow hedges measured through other comprehensive income are recognized in other comprehensive income.

C. Foreign operations

In preparing the consolidated financial statements, the assets and liabilities of a foreign operation are translated into Japanese yen at the exchange rate as of the closing date of the consolidated financial statements, and profit or loss and cash flows of the foreign operation are translated into Japanese yen at the exchange rate on the date of the transaction or the average exchange rate for the period that is approximate to the exchange rate on the date of the transaction. Exchange differences are recognized in other comprehensive income, and the cumulative amount thereof is recognized in other components of equity.

On disposal of the entire ownership interest in a foreign operation or part of the interest that results in a loss of control or significant influence, the exchange differences of the foreign operation that were recognized in other comprehensive income and accumulated in equity are reclassified from equity to profit or loss when the related gains

or losses on disposal are recognized.

(4) Financial instruments

A. Financial assets other than derivatives

(a) Initial recognition and measurement

Trade and other receivables are initially recognized at their transaction price on that date, and all other financial assets are initially recognized on the date of the transaction when the Company becomes the contracting party to the financial assets.

At the time of initial recognition, financial assets are classified as financial assets measured at amortized cost or financial assets measured at fair value.

(i) Financial assets measured at amortized cost

Financial assets are classified as financial assets measured at amortized cost if both of the following conditions are met.

- Assets are held within a business model that aims to hold assets to collect contractual cash flows.
- The contract terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.
- (ii) Financial assets measured at fair value through other comprehensive income
- Debt instruments measured at fair value through other comprehensive income

If both of the following conditions are met, financial assets are classified as debt instruments measured at fair value through other comprehensive income.

- Assets are held within a business model whose objective is achieved by both the collection and sale of contractual cash flows.
- The contract terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.
- Equity instruments measured at fair value through other comprehensive income When an irrevocable election at the time of initial recognition is made, subsequent changes in fair value are recognized in other comprehensive income and such equity instruments are classified as financial assets measured at fair value through other comprehensive income.
- (iii) Financial assets measured at fair value through profit or loss

Financial assets that do not meet the criteria for either (i) or (ii) above are classified into financial assets measured at fair value through profit or loss.

Financial assets are recognized initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial assets. Transaction costs for financial assets measured at fair value through profit or loss are recognized in profit or loss.

(b) Subsequent measurement

After the initial recognition, financial assets are measured as follows according to their classification.

(i) Financial assets measured at amortized cost

Financial assets measured at amortized cost are measured at amortized cost using the effective interest method. (ii) Financial assets measured at fair value through other comprehensive income

· Debt instruments measured at fair value through other comprehensive income

The amount of changes in the fair value of debt instruments measured at fair value through other comprehensive income is recognized in other comprehensive income, except for impairment gains or losses and foreign exchange gain or loss, until the financial assets are derecognized. If the financial assets are derecognized, gains or losses accumulated in other comprehensive income are reclassified to profit or loss.

Equity instruments measured at fair value through other comprehensive income
The amount of changes in the fair value of equity instruments measured at fair value through other
comprehensive income is recognized in other comprehensive income. If the financial assets are derecognized,
or if the fair value has declined significantly, gains or losses accumulated in other comprehensive income are
directly reclassified to retained earnings. Dividend income from the financial assets is recognized as finance
income in profit or loss.

- (iii) Financial assets measured at fair value through profit or loss
 - Financial assets measured at fair value through profit or loss are measured at fair value after the initial recognition, and changes in fair value are recognized in profit or loss.

(c) Impairment of financial assets

For impairment of financial assets measured at amortized cost, the Group recognizes an allowance for expected credit losses of financial assets. On each reporting date, the Group assesses whether the credit losses of the financial instruments have increased significantly subsequent to the initial recognition.

If the credit losses of financial instruments have not increased significantly after the initial recognition, the loss allowance of the financial instruments is measured at the amount of 12-month expected credit losses, and if the credit losses of the financial instruments have increased significantly after the initial recognition, the loss allowance of the financial instruments is measured at the amount of lifetime expected credit losses.

However, for trade receivables, etc., the loss allowance is always measured at the amount of lifetime expected credit losses.

Expected credit losses of the financial instruments are estimated in a way that reflects:

• An unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes

· The time value of money

Reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions

Changes in the amount of the measurement are recognized in profit or loss.

(d) Derecognition

The Group derecognizes financial assets if the contractual rights to the cash flows from the financial assets expire, or if substantially all risks and rewards associated with ownership of the financial assets are transferred as a result of assigning the contractual right to receive cash flows from the financial assets.

B. Financial liabilities other than derivatives

(a) Initial recognition and measurement

At the time of initial recognition, financial liabilities are classified as financial liabilities measured at amortized cost or financial liabilities measured at fair value through profit or loss. Although all financial liabilities are initially measured at fair value, financial liabilities measured at amortized cost are measured at an amount obtained by deducting directly attributable transaction costs.

(b) Subsequent measurement

(i) Financial liabilities measured at amortized cost

Financial liabilities measured at amortized cost are measured at amortized cost using the effective interest method.

(ii) Financial liabilities measured at fair value through profit or loss

Financial liabilities measured at fair value through profit or loss are measured at fair value after the initial recognition, and the changes are recognized in profit or loss.

(c) Derecognition

The Group derecognizes financial liabilities when they are extinguished, for example when then obligations specified in the contract are discharged, cancelled or expired.

C. Derivatives and hedge accounting

The Group holds derivative financial instruments for the purpose of hedging the risk of exchange rate fluctuations, etc. The Group has a policy of not conducting speculative derivative transactions.

Derivatives are initially recognized at fair value, related transaction costs and the difference between the fair value at the time of initial recognition and the transaction price are recognized in profit or loss when they are incurred. After the initial recognition, derivatives are remeasured at fair value, and changes in the fair value are accounted for as described below, depending on whether the derivative financial instruments that are designated as hedging instruments meet the requirements for hedge accounting. The Group designates the derivatives that meet the requirements for hedge accounting and applies hedge accounting. In addition, at the inception of a hedge, the Group formally documents the risk management objective, the relationship between hedging instruments and the hedged items, along with strategies when executing hedging transactions, the nature of the risk being hedged and the method of assessing hedge effectiveness.

(i) Cash flow hedges

Of gains or losses from hedging instruments, the effective portion of the hedge is recognized in other comprehensive income, and the ineffective portion is recognized in profit or loss.

When applying cash flow hedges to currency swap contracts, the portion excluding the currency basis spread is designated as the hedging instrument, and for the currency basis spread portion, the amount of change in fair value is recognized as hedging cost through other components of equity and included in the comprehensive income. The amount accumulated in other components of equity is transferred to profit or loss during the same period in which the cash flows to be hedged affect profit or loss. If the hedged item is the acquisition of a non-financial asset, the amount accumulated in other components of equity will be treated as an adjustment to the initial acquisition cost of the non-financial asset.

When the Group recognizes hedging cost for a derivative transaction entered in order to hedge a time-period related hedged item, it transfers the cumulative costs of hedging accumulated in other components of equity to profit or loss on a systematic and rational basis over the period during which the hedge adjustment from the hedging instrument affects profit or loss.

The amount of hedging instruments that is recorded in other comprehensive income is reclassified to profit or loss at the time when the underlying hedged transactions affect profit or loss. If the hedged items give rise to the recognition of non-financial assets or non-financial liabilities, the amount that is recognized in other comprehensive income is reclassified as an adjustment to the initial carrying amount of non-financial assets or non-financial liabilities.

For cash flow hedges other than the above, the amount is reclassified from other comprehensive income to profit or loss in the same period or periods during which the hedged expected future cash flows affect profit or loss. However, if the accumulated amount is a loss and if all or part of the loss is not expected to be recovered in the future, the amount that is not expected to be recovered is immediately reclassified to profit or loss.

When hedge accounting is terminated, this accumulated amount remains in other comprehensive income until the expected future cash flows occur, and if the forecast transaction is no longer expected to occur, this amount is immediately reclassified to profit or loss.

(ii) Derivatives that do not meet requirements for hedge accounting Changes in fair value are recognized in profit or loss. (5) Cash and cash equivalents

Cash and cash equivalents consist of cash on hand, deposits that can be withdrawn at any time and short-term investments with a maturity of 3 months or less when purchased that can be easily converted to cash and are subject to an insignificant risk of changes in value.

(6) Inventories

The acquisition cost of inventories comprises all costs of purchase, costs of conversion and all other costs incurred in bringing the inventories to their present location and condition.

After the initial recognition, inventories are measured at the lower of cost and net realizable value, but if cost exceeds net realizable value, the inventories are written down to net realizable value. The net realizable value is calculated by deducting the estimated costs of completion and the estimated costs necessary to make the sale from the estimated selling price in the ordinary course of business.

The cost is also calculated using the following methods:

Merchandise and finished goods

Custom-made products: Specific identification method

Mass products: Average method

Work in progress

Custom-made products: Specific identification method

Mass products: Average method

Raw materials and supplies: Mainly average method

(7) Property, plant and equipment (other than leased assets)

The acquisition cost of property, plant and equipment includes costs directly related to the acquisition of assets, dismantling, disposal and restoration costs and borrowing costs that meet the requirements for capitalization.

The cost model is used in the measurement of property, plant and equipment, and they are presented at the carrying value obtained by deducting accumulated depreciation and accumulated impairment losses from the acquisition cost.

Except for land and construction in progress, the acquisition cost of each asset after deducting the residual value is depreciated over the estimated useful life using the straight-line method.

The estimated useful life, the residual value and the depreciation method are reviewed at the end of each fiscal year, and any changes are applied to the period when the estimated are changed and future periods prospectively as a change in the accounting estimate. The impact of the change of these estimates is recognized in the period when the estimates are changed and future periods.

The estimated useful lives of major assets are as follows.						
Buildings and structures	10 to 45 years					
Machinery, equipment and vehicles	2 to 8 years					
Tools, furniture and fixtures	2 to 10 years					

(8) Goodwill and intangible assets

A. Goodwill

The measurement of goodwill at the time of initial recognition is as stated in "(2) Business combinations." After initial recognition, goodwill is not amortized and is measured at cost less any accumulated impairment losses.

Goodwill is allocated to each of the acquirer's cash-generating units that are expected to benefit from the synergies of the business combination, and an impairment test is performed for the cash-generating units to which goodwill was allocated at a certain time each fiscal year and whenever there is an indication of impairment. Impairment losses on goodwill are recognized in profit or loss and are not reversed in a subsequent period.

B. Intangible assets

The cost model is used for intangible assets, and they are presented at cost less any accumulated amortization and accumulated impairment losses.

(a) Intangible assets acquired separately

Intangible assets acquired separately are measured at cost at the time of initial recognition.

(b) Intangible assets acquired in a business combination

For intangible assets acquired in a business combination, their acquisition cost is measured at fair value as of the date of acquisition. Intangible assets acquired in a business combination are comprised primarily of developed technology, customer relationships, and in-process research and development.

(Developed technology)

Intangible assets that represent future excess earnings power expected to arise from the technology and that have been already developed as of the date of acquisition with the acquiree are recognized as Developed technology. (Customer relationships)

Intangible assets related to future excess earnings power expected to arise from the existing customers as of the date of acquisition with the acquiree are recognized as Customer relationships.

(In-process research and development)

Intangible assets in an intermediate stage of identifiable research and development assets meeting the asset requirements are recognized as in-process research and development.

The details for intangible assets acquired in a business combination, see "Note 13. Goodwill and Intangible Assets."

(c) Internally-generated intangible assets (Capitalized development cost)

For internally-generated intangible assets, the expenditure is recorded as an expense, except for development costs that meet the following requirements for capitalization:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale;
- · The intention of an entity to complete the intangible asset and use or sell it;
- The ability to use or sell the intangible asset;
- A method for the intangible asset to generate probable future economic benefits,
- The availability of adequate technical, financial and other resources necessary for completing the development of the intangible asset and using or selling it; and
- The ability to measure the expenditure attributable to the intangible asset during its development reliably These internally generated intangible assets are amortized using the straight-line method from the time when they are provided for use in business operations based on estimated useful life (5 years) for which they are expected to provide net cash inflows. Expenditure on research and development that does not meet the requirements for capitalization above is recognized in profit or loss at the time of occurrence.

Intangible assets with finite useful lives are amortized over their respective estimated useful life using the straightline method, and an impairment test is performed if any indications of impairment exist. For intangible assets with finite useful lives, their useful lives and amortization method are reviewed at the end of each fiscal year. A change in the useful life or the amortization method is applied prospectively as a change in accounting estimate.

Commercial software products are mainly amortized using a method based on the expected sales volume over the expected sales period (3 years or less), and software for internal use is mainly amortized using the straight-line method based on the expected available period (5 years) for internal use. Technical assets are mainly amortized using the straight-line method based on the available period (12 years or less) in business activities. Customer relationships are mainly amortized using the straight-line method based on the estimated useful life (14 years or less).

Intangible assets with indefinite useful life and intangible assets that are not yet available for use are not amortized, and an impairment test is performed at a certain time each fiscal year or whenever any indication of impairment exists.

(9) Leases

A. Overall

(a) Identification of a lease

At inception of a contract, the Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Group reviews the following to assess whether a contract conveys the right to control the use of an identified asset.

(i) The use of the identified asset in a contract is directed.

(ii)The lessee has the right to obtain substantially all of the economic benefits from use of the identified asset throughout the period of use.

(iii)The lessee has the right to direct the use of an asset. Also, in case that the determination of how and for what purpose the asset is used are predetermined, if applicable to any of the following, it is determined that the lessee has the right to direct the use of an asset.

- The lessee has the right to operate the asset.
- The lessee designed the asset in a way that predetermines how and for what purpose the asset will be used.

(b) Lease term

The lease term is defined as the non-cancellable period for which a lessee has the right to use an underlying asset, together with both:

· periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option; and

• periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option.

B. Leases as Lessee

(a) Separable components of a contract

The Group allocates the consideration in contract for a building lease to lease and non-lease components on the basis of the relative stand-alone price of each lease component. In addition, the Group elects not to separate non-lease components from lease components, and instead accounts for each lease component and any associated non-lease components as a single lease component for the lease other than a building lease.

(b) Right-of-use assets

The Group recognizes the right-of-use assets and the lease liabilities at the date of initial application. The right-of-use assets are measured initially at cost. This cost is calculated by deducting any lease incentives received from the sum of the amounts of the initial measurement of the lease liabilities, any lease payments made at or before the commencement date, any initial direct costs and an estimate of costs to be incurred in dismantling and removing the underlying assets, restoring the underlying asset or restoring the site on which it is located. After the commencement date, the right-of-use asset is measured using a cost model by deducting any accumulated depreciation and any accumulated impairment losses from the cost.

The right-of-use assets are depreciated using the straight-line method over the period which is the earlier of the useful life of the underlying asset or the lease term. If it is reasonably certain that the Group will exercise a purchase option, depreciation is based on the useful life of the underlying asset.

(c) Lease liabilities

Lease liabilities are measured initially at the present value of unpaid lease payments discounted using the interest rate implicit in the lease. If the interest rate implicit in the lease cannot be readily determined, the Group's incremental

borrowing rate is used. The Group typically uses our incremental borrowing rate as the discount rate.

The lease payments in the measurement of lease liabilities includes the fixed payments, the amount of payments for the lease in any optional period if it is considered to be reasonable certain to exercise an extension option, and the payments of penalties for terminating the lease if the lease term reflects the lessee exercising an option to terminate the lease.

If there is a change in future lease payments resulting from a change in an index or rate, there is a change in the amounts expected to be payable under a residual value guarantee, or there is a change in determining whether purchase, extension and termination option is reasonably certain to exercise, lease liabilities are remeasured.

When lease liabilities are remeasured, the carrying amount of the right-of-use assets is adjusted or the remaining remeasurement is recognized in profit or loss if the carrying amount of the right-of-use assets is reduced to zero.

(d) Short-term leases within 12 months and leases of low-value assets

The Group elects not to recognize right-of-use assets and lease liabilities for short-term leases within 12 months and leases of low-value assets including IT equipment and recognizes these lease payments as expenses over the lease term using the straight-line method.

(10) Impairment of non-financial assets

The Group determines whether there is any indication that an asset (except for inventories, deferred tax assets and retirement benefit assets) may be impaired each fiscal year, and if such indication exists, an impairment test is performed. However, for goodwill or intangible assets with indefinite useful life or that are not yet available for use, an impairment test is performed at a certain time each fiscal year and when indicators of impairment are identified. or when any signs of impairment are identified.

In the impairment test, a recoverable amount is estimated, and the carrying amount and the recoverable amount are compared. The recoverable amount of assets or cash-generating units is calculated at the higher of the value in use and the fair value less costs of disposal. The value in use is calculated by discounting the estimated future cash flows to the present value, using the pre-tax discount rate that reflects the time value of money and risks specific to the asset.

If the recoverable amount of assets or cash-generating units is lower than the carrying amount as a result of the impairment test, an impairment loss is recognized. When the impairment loss of a cash-generating unit including goodwill is recognized, an allocation is made first to reduce the carrying amount of goodwill that is allocated to the cash-generating unit, and then an allocation is made to proportionally reduce the carrying amount of other assets in the cash-generating unit.

The impairment loss is reversed if there is any indication that the impairment loss recognized in a prior period may no longer exist or may have decreased and if the estimated recoverable amount exceeds the carrying amount. The upper limit of the reversal shall not exceed the carrying amount that would have been determined had no impairment loss been recognized in prior years, net of depreciation or amortization. The impairment loss on goodwill is not reversed.

(11) Provisions

The Group recognizes a provision if the Group has assumed a legal or constructive obligation as a result of a past event, if it is probable that an outflow of economic benefits will be required to settle the obligation and if a reliable estimate can be made of the amount of the obligation.

If the time value of the money of the provision is significant, the estimated future cash flows are discounted to the present value using a pre-tax discount rate that reflects the time value of the money and risks specific to the liability. The unwinding of the discount amount due to the passage of time are recognized as a finance cost.

(12) Levies

For levies that are an outflow of resources embodying economic benefits required by the government to the Group in accordance with laws and regulations, an expected payment is recognized as a liability when the obligation event that triggers the payment of levies prescribed by laws and regulations occurs.

(13) Employee benefits

A. Short-term employee benefits

A short-term employee benefit is an employee benefit that will be settled within 12 months from the end of the fiscal year in which the employee renders the related service, and the Group recognizes an amount expected to be paid in exchange for the services rendered during a certain accounting period. Short-term employee benefits in the Group include bonuses and benefits related to paid leave.

The expected costs of employee benefits related to accumulating paid leave are recognized when an employee renders the service that will increase the entitlement to future paid leave. In addition, the Group measures the expected cost of accumulating paid leave as an additional amount that the Group is expected to pay as a result of the unused entitlement that has accumulated as of the end of the fiscal year.

Bonuses are recognized as a liability if the Group has a legal or constructive obligation to pay as a result of the provision of service by the employee in the past and if the obligation can be estimated reliably.

B. Post-employment benefits

For post-employment benefit plans, the Group has adopted defined benefit plans and defined contribution plans.

(a) Defined contribution plans

Contributions to defined contribution plans are recognized as an expense when they are incurred unless they are included in inventories or property, plant and equipment. If contributions already paid exceed contributions due for services provided before the end of the fiscal year, the Group recognizes the excess as an asset to the extent to

which the prepayment becomes the reduction of future payments or a future refund.

(b) Defined benefit plans

The net amount of assets or liabilities of the defined benefit plan is the amount obtained by deducting the fair value of the plan assets (including the upper limit of the assets and adjustments to minimum funding requirements, if necessary) from the present value of defined benefit obligations, and it is recognized in the consolidated financial statements as an asset or a liability. The defined benefit obligations are calculated using the projected unit credit method, and the present value of defined benefit obligations is calculated by applying a discount rate to the expected payment amount in the future. The discount rate is calculated based on market yields at the end of the reporting period on high quality corporate bonds corresponding to the discount period which is determined based on the period until the future expected benefit payment date in each reporting period.

Service costs and net interest expense for the net amount of assets or liabilities related to the defined benefit plans are recognized in profit or loss.

Actuarial gains or losses and fluctuations in the return on the plan assets excluding the portion included in the net interest expense and change in the impact of the asset ceiling are recognized in other comprehensive income as "Remeasurements of defined benefit plans" in the corresponding period and are immediately transferred from other components of equity to retained earnings. Past service costs are recognized in profit or loss when the plan is revised or curtailed, or when related restructuring costs or termination benefits are recognized, whichever is earlier.

C. Other long-term employee benefits

As long-term employee benefit plans other than post-employment benefits, the Group has a special leave and a reward plan based on the number of service years. The obligations regarding other long-term employee benefits are measured at the amount obtained by discounting the estimated amount of future benefits that the employees have earned as consideration for services rendered in the previous and current fiscal years to the present value.

(14) Government grants

Government grants are recognized at fair value when there is reasonable assurance that the Group complies with the required conditions and that the grants will be received. Grants related to revenue are recognized in profit or loss. Grants recognized as profit or loss are deducted from the corresponding expenses when they are directly based on the incurred expenses. Grants received based on other conditions are shown in other income.

(15) Treasury shares

When treasury shares are acquired, the amount of the consideration paid, including directly attributable transaction costs, is recognized at cost and deducted from equity. If treasury shares are sold, the consideration received is recognized as an increase in equity, and the difference between the carrying amount and the consideration received is recognized in the capital surplus account.

(16) Share-based payments

The Group has adopted share-based payment plans as incentive plans for directors, senior vice presidents and employees.

Restricted Stock Unit (RSU) and Performance Share Unit (PSU) are share-based payment plans with share issuance in the future. RSU is vested subject to continued employment with a Group Company and PSU is vested in response to the extent of the growth rate of total shareholder return. The payments are measured with reference to the fair value of the Company's stock, recognized as an expense in profit or loss, and the same amount is recognized as an increase in equity.

Stock options are estimated at fair value on the grant date and recognized as an expense over the vesting period, taking into account the number of stock options that are expected to eventually vest, and the same amount is recognized as an increase in equity. The fair value of granted options is calculated by taking the terms and conditions of the options into account. If it is determined that the number of stock options that will be vested will differ from the prior estimate due to subsequent information, the estimate of the number of stock options that will be vested is revised as necessary.

(17) Revenue recognition

The Group recognizes revenue based on the following five-step model.

- Step 1: Identify the contract with a customer
- Step 2: Identify the performance obligations in the contract
- Step 3: Determine the transaction price
- Step 4: Allocate the transaction price to the performance obligations in the contract
- Step 5: Recognize revenue when the entity satisfies a performance obligation

The Group engages in research, design, development, manufacturing, sales and services related to various kinds of semiconductors as a manufacturer specializing in semiconductors. Revenue is mainly recognized when the goods are delivered as the ownership of these goods has been transferred to the customer and the performance obligations are identified at the time of delivery.

Also, revenue is measured at the fair value of the consideration received after deducting discounts, rebates and returns.

Sales to specific distributors may be subject to the following various sales promotion programs.

Ship and debit is a program designed to assist specific distributors on their sales to end customers through pricing adjustments. Under this program, the selling prices will be adjusted when the specific distributors sell the products to

the end customers. At the time we record sales to the specific distributors, we accrue for refund liabilities and deduct the same amounts from revenue based on the estimate of the variable consideration resulting from the possible application of the ship and debit program upon the future sales by the distributors. In addition, the related balance of accounts receivable-trade is transferred to long-term accounts receivable in order to reduce specific distributors' financial burden caused by a time lag, and will be reversed in the future based on the contract.

Stock rotation is a program whereby on a semiannual basis, specific distributors are allowed to return, for credit, inventories equal to a certain percentage of their purchases for the previous six months. We accrue for refund liabilities related to the stock rotation program on a quarterly basis and deduct the same amount from revenue.

(18) Finance income and Finance costs

Finance income consists of dividend income, interest income, foreign exchange gain, gains on sales of financial assets, gains on hedging financial instruments that are recognized in profit or loss, and the transfer of amounts previously recognized in other comprehensive income. Interest income is recognized at the time of occurrence using the effective interest method. Dividend income is usually recognized on the date when the Group's right to receive payment is established.

Finance costs consist of interest expenses for corporate bonds, borrowings and interest expenses for lease liabilities, foreign exchange loss, losses on sales of financial assets, losses from hedging financial instruments that are recognized in profit or loss, and the transfer of amounts previously recognized in other comprehensive income. Acquisitions or construction of qualifying assets, or borrowing costs not directly attributable to the production, are recognized at the time of occurrence using the effective interest method. Lease payments are allocated to finance costs and the repayment portion of the liability balance, and finance costs are allocated over the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

(19) Income taxes

Current taxes and deferred taxes are presented as income tax expense in the consolidated statement of profit or loss, except for those related to business combinations and items that are recognized in other comprehensive income or that are directly recognized in equity.

Current taxes and deferred taxes related to items that are recognized in other comprehensive income are recognized in other comprehensive income.

A. Current taxes

Current taxes are measured at the amount paid to tax authorities or the amount expected to be refunded from tax authorities. The tax rates and the tax law used for the calculation of the tax amount are those established or substantively established by the closing date.

B. Deferred taxes

Deferred taxes are calculated based on temporary differences between the tax base amount and the carrying amount for accounting purposes of assets and liabilities at the end of the fiscal year. Deferred tax assets are recognized for deductible temporary differences, unused tax credits and unused tax losses are expected to arise to the extent to which it is probable that taxable profits will be available against which they can be utilized, and deferred tax liabilities are recognized for taxable temporary differences, in principle.

- Neither a deferred tax asset nor a deferred tax liability is recognized for the following temporary differences:
- · Temporary difference arising from the initial recognition of goodwill
- Temporary difference arising from the initial recognition of an asset and a liability arising from a transaction (excluding business combination transactions) that does not have an impact on accounting profits and taxable profits
- A case where the timing for eliminating a taxable temporary difference for an investment in a subsidiary or an associate and an interest in the arrangement of joint control can be controlled and where it is probable that the difference will not be eliminated in the foreseeable future
- A case where it is improbable that a deductible temporary difference for an investment in a subsidiary or an associate and an interest in the arrangement of joint control will be eliminated in the foreseeable future, or a case where it is improbable that a taxable profit that will be available for the temporary difference will be earned

Deferred tax assets and liabilities are measured at a tax rate (and based on tax law) that is expected to be applied in the period when assets are realized or liabilities are settled based on the statutory tax rate (and based on tax law) that is established or substantively established by the closing date.

Deferred tax assets and deferred tax liabilities are offset if the Group has the legally enforceable right to offset current tax assets and current tax liabilities, and if any of the following cases applies:

· Income tax expense is imposed on the same taxable entity by the same tax authority

• Although income tax expense is imposed on different taxable entities, these taxable entities intend to settle current tax assets and current tax liabilities on a net basis or intend to settle current tax liabilities at the same time as realizing current tax assets.

The carrying amount of deferred tax assets is reviewed at the end of each fiscal year. If it becomes improbable that taxable profits sufficient to realize part or all of the benefits of deferred tax assets will be earned, the carrying amount of deferred tax assets is reduced to that extent. In addition, the amount of the write-down is reversed to the extent to which it becomes probable that sufficient taxable profits will be earned.

The Group recognizes tax assets and liabilities at a reasonably estimated amount where there is an uncertain tax position.

(20) Earnings per share

Basic earnings per share are calculated by dividing profit attributable to owners (ordinary shareholders) of the parent by the weighted average number of ordinary shares outstanding, net of treasury shares, during each fiscal year. Diluted basic earnings per share are calculated, adjusted for the effects of all dilutive potential ordinary shares.

(21) Non-current assets held for sale and discontinued operations

A. Non-current assets held for sale

For assets or asset groups that are not in continuing use and for which recovery through sale is expected, that are highly likely to be sold within one year, and that the execution of sales plan is confirmed by management and can be sold in their current condition, assets held for sale and liabilities directly related to assets held for sale are classified into disposal groups separately from other assets and liabilities and recorded in the consolidated statement of financial position.

Non-current assets classified as assets held for sale are measured at the lower of the carrying amount and the fair value after deducting the costs for sale. Assets classified as assets held for sale are not depreciated or amortized.

B. Discontinued operations

A component of an entity that has either been disposed of or is classified as held for sale is recognized as a discontinued operation if any of the following applies:

- A separate major line of business or geographical area of operations;
- Part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or
- A subsidiary acquired exclusively with a view to resale.

If an operation is classified as a discontinued operation, the consolidated statement of profit or loss and the consolidated statement of comprehensive income for a comparative period are restated on the assumption that the operation was discontinued on the commencement date of the comparative period.

4. Significant Accounting Estimates and Judgments

In preparing the consolidated financial statements, management of the Group makes judgements, accounting estimates and assumptions that could have an impact on the application of accounting policies and the reporting amounts of assets, liabilities, revenue and expenses. These estimates and assumptions are based on the best judgment of management, taking into account various factors that are deemed reasonable on the closing date in light of past experience and available information. However, figures based on these estimates and assumptions may differ from the actual results due to their nature.

Estimates and underlying assumptions are reviewed continuously. The results of the review of these estimates are reflected in the period when the estimates are revised and for the future periods.

The Group considers the impact of the spread of COVID-19 when making estimates and assumptions (such as judgments regarding the potential impairment of goodwill and collectability of deferred tax assets), to a reasonable extent based on available information.

These estimates and assumptions may be affected depending on the future events of the spread of COVID-19.

(1) Impairment of non-financial assets

The Group performs an impairment test for non-financial assets (excluding inventories, deferred tax assets and retirement benefit asset) if there is any indication that the recoverable amount will be less than the carrying amount. However, for goodwill or intangible assets with indefinite useful life or that are not yet available for use, an

impairment test is performed at a certain time each fiscal year and when any signs of impairment exist.

The impairment test is performed by comparing the carrying amount and the recoverable amount of the assets, and if the recoverable amount falls below the carrying amount, an impairment loss is recorded. The recoverable amount is calculated mainly using the discounted cash flow model, where certain assumptions, including, but not limited to, the useful life of the asset, future cash flows, sales revenue, gross margin, discount rate, and long-term growth rate, are made. These assumptions are determined based on the best estimates and judgments of management but could be influenced by fluctuations in uncertain future economic conditions. If a revision becomes necessary, it could have a significant impact on the amounts that will be recognized in the consolidated financial statements of subsequent periods.

The calculation method of the recoverable amount is stated in "Note 15. Impairment of Non-financial Assets."

(2) Post-employment benefits

The Group has a variety of post-employment benefit plans, including a defined benefit plan.

The present value of the defined benefit obligation of each plan and related service costs are calculated based on actuarial assumptions. For the actuarial assumptions, estimates and judgments on a range of variables such as the discount rate are required.

The actuarial assumptions are determined based on the best estimates and judgments of management but could be affected by fluctuations in uncertain future economic conditions. If a revision becomes necessary, it could have a significant impact on the amounts that will be recognized in the consolidated financial statements of subsequent periods.

These actuarial assumptions and related sensitivities are stated in "Note 22. Employee Benefits."

(3) Provisions

The Group records multiple provisions in the consolidated statement of financial position, including the provision for product warranties and asset retirement obligations, among others.

These provisions are recorded based on the best estimate of expenditure required for the settlement of the obligations, considering risks and uncertainties related to the obligations on the closing date.

The amount of expenditure required for the settlement of the obligations is calculated by comprehensively considering results that could arise in the future, but it could be affected by the occurrence of unforeseeable events and changes in the situation. If the actual amount of expenditure differs from the estimate, it could have a significant impact on amounts recognized in the consolidated financial statements of subsequent periods.

The nature and amounts of provisions are stated in "Note 21. Provisions."

(4) Recoverability of deferred tax assets

When deferred tax assets are recognized, the time and amount of taxable profits that will be earned in the future based on a business plan are estimated and calculated based on judgment of the possibility that taxable profits will arise. Because the timing and amount of taxable profits are affected by the future business performance of the Group, if the actual timing and amount differ from the estimate, it could have a significant impact on the amounts recognized in the consolidated financial statements of subsequent periods.

Details and amounts of deferred tax assets are stated in "Note 17. Income Tax."

(5) Inventories

Inventories are measured at cost, but if the net realizable value at the end of the fiscal year falls below the acquisition cost, inventories are measured at the net realizable value, and the difference from the acquisition cost is recognized in the cost of sales, in principle. For slow moving inventory that is outside of the operating cycle process, the net realizable value is calculated reflecting the future demand and market trends. If the net realizable value declines significantly due to the greater-than-expected deterioration of the market environment, a loss could arise.

(6) Measurement method of the fair value of financial instruments

When the Group evaluates the fair value of certain financial instruments, the Group uses valuation techniques that use inputs that are not observable in the market. These unobservable inputs could be affected by fluctuations in uncertain future economic conditions, and if a revision becomes necessary, it could have a significant impact on the consolidated financial statements in subsequent periods.

The details and amounts of the fair value of financial instruments are stated in "Note 3. Significant Accounting Policies, (4) Financial instruments" and "Note 33. Financial Instruments."

(7) Income taxes

The Group recognizes tax assets and liabilities at a reasonably estimated amount based on the interpretation of tax laws where there is an uncertain tax position. Deferred taxes of the Group include liabilities related to an uncertain tax position. Tax effects of assets and liabilities explained above are calculated using the expected value method. Estimates are based on the best estimate at the moment. However, differences from the estimates could have a significant impact on the consolidated financial statements in subsequent periods depending on the actual results. For details, please refer to "Note 17. Income Taxes."

5. Standards and Interpretations Not Yet Adopted

Of the new standards and interpretations that were newly issued or revised as of the date of the approval of the consolidated financial statements, the major standards and interpretations that the Group has not yet adopted as of December 31, 2021 are as follows:

IFRS 17 "Insurance Contract"

IFRS 17 "Insurance Contract" was issued as replacement for IFRS4 "Insurance Contracts." The Group will apply the standard from January 1, 2023. The Group has not yet calculated an impact on the consolidated financial statements by adoption of the standards.

6. Business Segments

(1) Overview of reportable segments

The Group's reportable segments are components of the Group for which separate financial information is available that is evaluated regularly by the Board of Directors to determine the allocation of management resources and assess performance.

The Group mainly consists of "Automotive Business" and "Industrial/Infrastructure/IoT Business" and those are the Group's reportable segments. The Automotive Business includes the product categories "Automotive control," comprising semiconductor devices for controlling automobile engines and bodies, and "Automotive information," comprising of semiconductor devices used in sensing systems for detecting environments inside and outside the vehicle as well as automotive information devices such as IVI (In-Vehicle Infotainment) and instrument panels used to give various information to the driver of the vehicle. The Group mainly supplies microcontrollers (MCUs), SoCs (System-on-Chip), analog semiconductor devices and power semiconductor devices in each of these categories. The Industrial/Infrastructure/IoT Business includes the product categories "Industrial," "Infrastructure" and "IoT" which support the smart society. The Group mainly supplies MCUs and SoCs in each of these categories. Additionally, commissioned development and manufacturing from the Group's design and manufacturing subsidiaries are categorized as "Other."

(2) Information on reportable segments

The accounting treatment for the reportable segments is same as described in "Note 3. Significant Accounting Policies." The Group discloses revenue from external customers, segment gross profit, and segment operating profit (which is the segment profit). The Group added segment gross profit as a disclosure item in the business segments from the current fiscal year. This change is reflected to the business segments for the year ended December 31, 2020.

Segment gross profit and segment operating profit are internal key performance indicators which are used by management when making decisions and are calculated by excluding the following items from IFRS gross profit and operating profit (Adjustments 2): amortization of certain tangible and intangible assets related to business combinations; certain share-based payment expenses; and other non-recurring items. Other non-recurring items include costs related to acquisitions and gains and losses the Group believes to be appropriate for deduction. However, certain other non-recurring items the Group believes to be covered by each reportable segment are included in segment gross profit and segment operating profit of each reportable segment (Adjustments 1). The Group's Executive Officers assess the performance after eliminating intragroup transactions, and therefore, there are no transfers between reportable segments included within the segment results.

Information on reportable segments is as follows.

Ine year ended December 31, 2020 (in million							millions of yen)
	Reportabl	e Segments					
	Automotive	Industrial/ Infrastructure/ IoT	Other	Adjustments (Note 1)	Total	Adjustments (Note 2)	Consolidation basis
Revenue from external customers	341,001	363,609	11,063	_	715,673	_	715,673
Segment gross profit	128,489	209,127	1,122	-	338,738	(3,049)	335,689
Segment profit	48,356	89,702	1,177	(1,697)	137,538	(72,396)	65,142
Finance income				· · ·			7,623
Finance costs							(7,549)
Profit before tax							65,216
(Other adjustments)							
Depreciation and amortization	46,174	39,299	236	_	85,709	55,818	141,527

(In millions of yon)

Tho	voor	andad	Decemb	or '	21	2020
	vear	enueu	Decenn	יוסע	J I .	2020

The year ended December 31, 2021 (In m							millions of yen)
	Reportab	le Segments					
	Automotive	Industrial/ Infrastructure/ IoT	Other	Adjustments (Note 1)	Total	Adjustments (Note 2)	Consolidation basis
Revenue from external customers	462,309	515,547	16,562	_	994,418	_	994,418
Segment gross profit	214,573	312,301	1,992		528,866	(32,465)	496,401
Segment profit	122,443	167,071	1,992	5,075	296,581	(112,980)	183,601
Finance income							4,140
Finance costs							(35,278)
Profit before tax							152,463
(Other adjustments)							
Depreciation and amortization	43,468	35,316			78,784	57,712	136,496

(3) Information on products and services

Information on products and services is the same with information on reportable segments and therefore, omitted from this section.

(4) Information on regions and countries The components of revenue and non-current assets from external customers by region and country are as follows. a. Revenue from external customers (In millions of yen)

	The year ended December 31, 2020	The year ended December 31, 2021
Japan	241,186	314,528
China	168,548	231,059
Asia (Excluding Japan and China)	126,614	213,313
Europe	111,908	148,399
North America	65,048	83,584
Others	2,369	3,535
Total	715,673	994,418

(Note) Revenues are categorized into the country or region based on the location of the customers.

b. Non-current assets

Non-current assets include property, plant and equipment, goodwill and intangible assets.

		(In millions of yen)
	The year ended December 31, 2020	The year ended December 31, 2021
Japan	771,228	1,402,065
Malaysia	262,719	242,557
Asia (Excluding Japan and Malaysia)	18,110	22,301
Europe	28,996	46,656
North America	61,524	88,719
Total	1,142,577	1,802,298

(5) Major customers

Revenue from a single external customer accounting for 10% or more of revenue is as follows.

			(In millions of yen)
	Name of related reportable segments	The year ended December 31, 2020	The year ended December 31, 2021
Ryosan Company, Limited	Automotive, Industrial/ Infrastructure/IoT	73,599	141,325
WT Microelectoronics Co.,Ltd	Automotive, Industrial/ Infrastructure/IoT	50,374	127,845

7. Business Combinations

(The year ended December 31, 2021)

(Dialog Semiconductor Plc)

a. Overview of business combination

The Company made an acquisition of the entire issued and to be issued share capital of Dialog on August 31, 2021. Following the completion of the acquisition, Dialog has become a wholly-owned subsidiary of the Company (hereafter "the Dialog Acquisition").

1) Name and overview of the acquiree

Name of the acquiree: Dialog Semiconductor Plc

Business overview: Development, manufacturing and sales of analog ICs such as mixed-signal devices.

2) Date of the acquisition

Áugust 31, 2021. (LONDON, United Kingdom: August 30, 2021)

3) Purpose of the acquisition

Dialog is an innovative provider of highly-integrated and power-efficient mixed-signal ICs for a broad array of customers within IoT, consumer electronics and high-growth segments of automotive and industrial end-markets. Centered around its low-power and mixed-signal expertise, Dialog brings a wide range of product offerings including battery and power management, power conversion, configurable mixed-signal (CMIC), LED drivers, custom mixed-signal ICs (ASICs) and automotive power management ICs (PMICs), wireless charging technology, and more. Dialog also offers broad and differentiated Bluetooth® Low Energy, WiFi and audio system-on-chips (SoCs) that deliver advanced connectivity for a wide range of applications; from smart home/building automation, wearables, to connected medical. All these systems complement and expand Renesas' leadership portfolio in delivering comprehensive solutions to improve performance and efficiency in high-computing electronic systems.

The Dialog acquisition demonstrates Renesas' continued and unwavering commitment to further advance its solution offering. The complementary nature of the companies' technological assets and the scale of the combined portfolios will enable Renesas to build more robust and comprehensive solutions to serve high-growth segments of the loT and automotive markets. Renesas believes there is a compelling strategic rationale for the Dialog acquisition because it:

(i) Scales Renesas' IoT sector capabilities with Dialog's low-power technologies

Dialog has a differentiated portfolio of low-power mixed-signal products, decades of experience in developing custom and configurable solutions for the world's largest customers and expertise in low-power connectivity that are highly complementary to Renesas. The Dialog acquisition of these low-power technologies enhances Renesas' product portfolio and expands horizons in addressing high-growth markets in the IoT field.

(ii) Unlocks further differentiation to Renesas system solution with connectivity

Bringing together Renesas and Dialog will extend the Group's reach to a broader customer base and open up additional growth potential in the key growth segments: industrial infrastructure, IoT and automotive. Dialog's BLE, WiFi and audio SoCs are highly complementary to Renesas' microcontroller (MCU)-based solutions. Combining Dialog's innovative low-power Wi-Fi and Bluetooth® SoC and expertise with Renesas' technologies will enable Renesas to further differentiate its system solution offering and extend its footprint in high-growth segments, including contactless IoT applications for smart home/building automation and healthcare. Renesas' automotive solutions will also be enriched with connectivity for a wide range of security and safety applications.

4) Acquisition Method

Renesas implemented a scheme of arrangement pursuant to UK law. The scheme of arrangement is a method of acquisition whereby with the agreement of Dialog, the Dialog acquisition can be executed by obtaining approvals from Dialog shareholders and the Court.

b. Consideration for the acquisition and its breakdown

Consideration		(In millions of yen) Amount
Cash		623,892
Restricted stock units		7,183
Total	А	631,075

Expenses related to the acquisition were 4,589 million yen, which were recorded in "Selling, general and administrative expenses" for the year ended December 31, 2021. Details of the consideration for acquisition in restricted stock units are described in "Note 32. Share-based Payments."

c. Fair value of assets acquired, liabilities assumed and goodwill

		(In millions of yen)
		Date of acquisition (August 31, 2021)
Current assets	-	
Cash and cash equivalents		40,450
Trade and other receivables (Note 2)		39,808
Inventories		34,748
Other		8,842
Total current assets		123,848
Non-current assets		
Property, plant and equipment		10,771
Intangible assets		40,303
Other	-	2,376
Total non-current assets	_	53,450
Total assets		177,298
Current liabilities		
Trade and other payables		14,825
Other	-	36,848
Total current liabilities		51,673
Non-current liabilities		
Other non-current financial liabilities		2,881
Deferred tax liabilities		4,445
Other	-	3,238
Total non-current liabilities	_	10,564
Total liabilities		62,237
Net assets	B	115,061
Basis adjustment (Note 3)	С	3,604
Goodwill (Note 4)	A-B+C	519,618

(Note 1) As of December 31, 2021, the acquisition was accounted for using provisional amounts determined based on reasonable information currently available, and since the recognition and fair value measurement of the identifiable assets acquired and liabilities assumed at the acquisition date have not been finalized, the purchase price allocation is still preliminary. Currently the valuation of property, plant and equipment and additional recognition of intangible assets, among other assets and liabilities, have not been completed, except for certain inventories for which the valuation was able to be completed. As a result, goodwill was provisionally recognized as the total amount of the excess of the consideration transferred over the net amount of the assets acquired and liabilities assumed. The identifiable intangible assets are tentatively recorded at the book value as carried

by Dialog.

- (Note 2) The total contract amount is the same as the fair value, and there are no receivables that are expected to be unrecoverable.
- (Note 3) The Company has entered into currency options and forward exchange contracts to hedge the foreign exchange risk against EUR-denominated acquisition consideration payments and adopted hedge accounting. The hedging instruments were settled in cash at the fair value on the acquisition date. The basis adjustment is the amount of change in the fair value of the hedging instruments recorded in other comprehensive income on the acquisition date and were added to the amount of goodwill.
- (Note 4) Goodwill reflects future excess earning power expected from synergies between the Company and Dialog. No amount of goodwill is expected to be deductible for tax purposes.

d. Payments for acquisition of subsidiaries

	(In millions of yen)
Item	Amount
Consideration for acquisition in cash	623,892
Cash and cash equivalents held by the acquiree at the time of obtaining control	(40,450)
Amount of cash paid for the acquisition of subsidiaries	583,442
Basis adjustment	3,604
Amount of cash paid for the acquisition of subsidiaries (net amount)	587,046

e. Impact on revenue and profit as though the date of the acquisition had been as of the beginning of the fiscal year (unaudited information)

Assuming that the date of the acquisition of Dialog was at the beginning of the fiscal year, revenue and profit for the year ended December 31, 2021 would be 1,093,258 million yen and 156,593 million yen, respectively. As of December 31, 2021, the recognition and fair value measurement of the identifiable assets acquired and liabilities assumed at the acquisition date have not been finalized. As a result, the adjustments such as amortization of intangible assets are not reflected in the aforementioned revenue and profit figures. The pro forma information is not necessarily indicative of events that may happen in the future.

In addition, in order to prepare this information, Dialog's past financial information has been adjusted for significant differences to comply with the Company's accounting policies.

f. Revenue and profit / loss of the acquired company

From the acquisition date to December 31, 2021, the Company recorded the revenue of Dialog of 66,757 million yen and profit of 4,545 million yen in the Consolidated Statement of Profit or Loss and Consolidated Statement of Comprehensive Income.

(Celeno Communications Inc.)

a. Overview of business combination

On December 20, 2021, the Company made an acquisition of the entire issued share capital of Celeno, a semiconductor company in the United States of America which mainly operates its business in Israel. Following the completion of the acquisition, Celeno has become a wholly-owned subsidiary of the Company (hereafter "the Celeno Acquisition").

1) Name and overview of the acquiree

Name of the acquiree: Celeno Communications Inc. Business overview: Development and sale of connectivity devices such as Wi-Fi 5, Wi-Fi 6 and IoT chipsets.

2) Date of the acquisition December 20, 2021.

3) Purpose of the acquisition Headquartered in Israel, Celeno offers a wide range of wireless communication solutions, including advanced Wi-Fi chipsets and software solutions, for high-performance home networks, smart buildings, enterprise and industrial markets. Its industry's most compact chipset offerings for Wi-Fi 6 and 6E deliver exceptional Wi-Fi network performance and increased security with low latency and low power consumption. Celeno's breakthrough Wi-Fi Doppler Imaging technology, a Wi-Fi based, high-resolution imaging technology is ideal for home elderly care and assisted living, home security, safe driving and digital and connected factories. It depicts, tracks and analyzes the motion, behavior and location of people and objects using standard Wi-Fi, eliminating the need for multiple cameras or sensors in home environments and commercial buildings. As the world's No 1 embedded processor supplier. Renesas offers a breadth

environments and commercial buildings. As the world's No.1 embedded processor supplier, Renesas offers a breadth of low-power MCU/MPU/SoC processors, wireless ICs, sensors and power management technologies. Celeno's fieldproven Wi-Fi and software capabilities are highly complementary to Renesas. The combination creates a comprehensive, end-to-end embedded solutions for addressing the fast-growing markets for low-power connectivity in IoT, infrastructure, industrial and automotive applications.

In addition to expanding the solution offering, the Celeno Acquisition also increases Renesas' engineering and design scale with Celeno's design center in Israel and by welcoming R&D staff based in Israel, Ukraine, India, China, Taiwan

and more. This further strengthens Renesas' global engineering and software development talent base, allowing Renesas to bring more seamless and expanded services to customers around the globe.

4) Acquisition Method

For the purpose of the Celeno Acquisition, Renesas established a wholly-owned subsidiary ("Acquisition Subsidiary") in Delaware, the United States of America which merged with Celeno in a reverse triangular merger. Celeno was the surviving company following the merger. The Company paid cash to Celeno's shareholders as consideration for the merger. The shares of the Acquisition Subsidiary owned by Renesas were converted into outstanding shares in Celeno, making Celeno a wholly-owned subsidiary of Renesas.

b. Consideration for the acquisition and its breakdown

·		(In millions of yen)
Consideration		Amount
Cash		28,037
Contingent consideration		4,681
Total	Α	32,718

Expenses related to the acquisition were 508 million yen, which were recorded in "Selling, general and administrative expenses" for the year ended December 31, 2021.

c. Fair value of assets acquired, liabilities assumed and goodwill

		(In millions of yen) Date of acquisition (December 20, 2021)
Current assets		
Cash and cash equivalents		267
Trade and other receivables (Note 2)		375
Inventories		3,024
Other		396
Total current assets		4,062
Non-current assets		
Property, plant and equipment		103
Intangible assets		844
Other		2
Total non-current assets		949
Total assets		5,011
Current liabilities		
Trade and other payables		2,715
Bonds and borrowings		2,185
Other		1,586
Total current liabilities		6,486
Non-current liabilities		
Total non-current liabilities		
Total liabilities		6,486
Net assets	В	(1,475)
Goodwill (Note 3)	A-B	34,193

(Note 1) As of December 31 the acquisition was accounted for using provisional amounts determined based on reasonable information currently available, and since the recognition and fair value measurement of the identifiable assets acquired and liabilities assumed at the acquisition date have not been finalized, the purchase price allocation is still preliminary. Currently the valuation of property, plant and equipment and additional recognition of intangible

assets, among other assets and liabilities, have not been completed, except for certain inventories for which the valuation was able to be completed. As a result, goodwill was provisionally recognized as the total amount of the excess of the consideration transferred over the net amount of the assets acquired and liabilities assumed. The identifiable intangible assets are tentatively recorded at the book value as carried by Celeno.

(Note 2) The total contract amount is the same as the fair value, and there are no receivables that are expected to be unrecoverable.

(Note 3) Goodwill reflects future excess earning power expected from synergies between the Company and Celeno. No amount of goodwill is expected to be deductible for tax purposes.

d. Payments for acquisition of subsidiaries

	(In millions of yen)
Item	Amount
Consideration for acquisition in cash	28,037
Cash and cash equivalents held by the acquiree at the time of obtaining control	(267)
Amount of cash paid for the acquisition of subsidiaries (net amount)	27,770

The acquisition consideration may change due to price adjustments in response to changes in working capital.

e. Impact on revenue and profit as though the date of the acquisition had been as of the beginning of the fiscal year (unaudited information)

Assuming that the date of the acquisition of Celeno was at the beginning of the fiscal year, the pro forma information is not stated since the impact on the consolidated revenue and profit for the year ended December 31, 2021 would not be material.

f. Revenue and profit / loss of the acquired company

For the year ended December 31, 2021, the revenue and profit of Celeno from the acquisition date to the year of December 31, 2021 had no significant impact in the consolidated financial statements.

g. Contingent consideration

Contingent consideration includes \$45 million which will be paid when certain conditions related to Celeno's future product development and mass production progress are met.

The fair value of the contingent consideration is calculated as the present value of the amount that may be paid to Celeno, with consideration of the probability of occurrence.

The level of the fair value hierarchy for the contingent consideration is level 3. Since the fluctuation after the acquisition date of the contingent consideration classified in Level 3 is negligible, the reconciliation table is not presented. Of the amount of change in fair value related to contingent consideration, the portion based on fluctuations in the time value of money is recorded in "financial expenses", and the portion based on fluctuations other than the time value of money is recorded in "other income" or "other expenses".

8. Cash and Cash Equivalents

The components of cash and cash equivalents are as described below. The balance of "Cash and cash equivalents" in the consolidated statement of financial position and the balance of "Cash and cash equivalents" in the consolidated statement of cash flows as of December 31, 2020 and December 31, 2021 are the same.

		(In millions of yen)
	As of December 31, As of Decem 2020 2021	
Cash and deposits	190,513	216,364
Short-term investments	29,273	5,560
Total	219,786	221,924

(Note) Cash and cash equivalents are classified as financial assets measured at amortized cost.

9. Trade and Other Receivables

The components of trade and other receivables are as follows.

	(In millions of yen)	
	As of December 31, As of Dec 2020 20	
Notes and trade receivables	77,686	136,810
Other receivables	4,751	3,737
Loss allowance	(119)	(69)
Total	82,318	140,478

(Note) Trade and other receivables are classified as financial assets measured at amortized cost.

10. Inventories

The components of inventories are as follows.

The components of inventories are		(In millions of yen)
	As of December 31, 2020	As of December 31, 2021
Merchandise and finished goods	26,411	38,420
Work in progress	58,138	90,186
Raw materials and supplies	5,212	9,319
Total	89,761	137,925

(Note) The amount of inventories recognized as expenses approximates "Cost of sales." For write-downs of inventories previously recognized as an expense as a result of declining profitability, using the reversal method (figures in parentheses represent reversals) (2,116) million yen and (3,916) million yen were included in "Cost of sales" in the prior fiscal year and the current fiscal year, respectively.

11. Other Assets and Other Liabilities The components of other current assets and other non-current assets are as follows. (In millions of y

·		(In millions of yen)
	As of December 31, 2020	As of December 31, 2021
Prepaid expenses	8,004	16,060
Consumption taxes receivable	1,708	1,766
Other	3,335	
Total	13,047	21,443
Current assets	8,162	12,352
Non-current assets	4,885	9,091

The components of other current liabilities and other non-current liabilities are as follows. (In millions of yen)

		(In millions of yen)
	As of December 31, 2020	As of December 31, 2021
Accrued expenses	46,138	57,177
Paid leave payables	9,391	11,280
Advances received	818	881
Other	7,015	13,913
Total	63,362	83,251
Current liabilities	58,873	77,235
Non-current liabilities	4,489	6,016

12. Property, Plant and Equipment

(1) Movement during the fiscal year
The changes in acquisition cost, accumulated depreciation and impairment losses, and the carrying amounts of property, plant and equipment are as follows.
A. Acquisition Cost

•	•					(In n	nillions of yen
	Buildings and structures	Machinery, equipment and vehicles	Tools, furniture and fixtures	Right-of-use assets	Land	Construction in progress	Total
Balances as of January 1, 2020	216,772	677,031	132,445	22,768	23,850	12,878	1,085,744
Acquisition	190	1,732	2,265	5,593	_	16,366	26,146
Acquisition due to business combination	_	_	_	_	_	_	_
Sales or disposal Transfer from	(703)	(5,756)	(8,258)	(7,619)	(205)	(92)	(22,633)
construction in progress	748	10,990	4,963	—	—	(16,701)	—
Exchange differences	(1,014)	(3,539)	(4)	(114)	(156)	(61)	(4,888)
Other	(154)	(373)	(718)	188	4	(190)	(1,243)
Balances as of December 31, 2020	215,839	680,085	130,693	20,816	23,493	12,200	1,083,126
Acquisition	197	2,960	2,629	2,781	—	44,605	53,172
Acquisition due to business combination	987	2,983	2,908	3,856	_	140	10,874
Sales or disposal	(31,327)	(81,196)	(8,189)	(2,923)	(118)	(572)	(124,325)
Transfer from construction in progress	1,008	36,479	8,392	_	_	(45,879)	_
Exchange differences	3,047	15,363	3,157	1,316	297	171	23,351
Other	(62)	(476)	(528)	(169)	_	472	(763)
Balances as of December 31, 2021	189,689	656,198	139,062	25,677	23,672	11,137	1,045,435

B. Accumulated depreciation and impairment losses

						(In m	illions of yen)
	Buildings and structures	Machinery, equipment and vehicles	Tools, furniture and fixtures	Right-of-use assets	Land	Construction in progress	Total
Balances as of January 1, 2020	(153,996)	(580,702)	(107,919)	(9,026)	(1,465)	(57)	(853,165)
Depreciation	(5,224)	(41,683)	(13,368)	(4,974)	_	_	(65,249)
Impairment losses	(384)	(147)	(135)	(891)	—	(513)	(2,070)
Sales or disposal	623	5,674	8,173	6,693	114	—	21,277
Exchange differences	234	2,432	(95)	38	—	—	2,609
Other	26	233	640	(73)	—	—	826
Balances as of December 31, 2020	(158,721)	(614,193)	(112,704)	(8,233)	(1,351)	(570)	(895,772)
Depreciation	(4,982)	(38,285)	(11,222)	(4,255)		—	(58,744)
Impairment losses	(1)	(64)	(64)	(17)	_	—	(146)
Sales or disposal	28,804	80,878	8,137	2,477	26	570	120,892
Exchange differences	(1,340)	(12,256)	(2,577)	(492)	—	—	(16,665)
Other	90	(494)	965	168	—	—	729
Balances as of December 31, 2021	(136,150)	(584,414)	(117,465)	(10,352)	(1,325)		(849,706)

C. Carrying amount

						(in mi	lions of yen)
	Buildings and structures	Machinery, equipment and vehicles	Tools, furniture and fixtures	Right-of-use assets	Land	Construction in progress	Total
Balances as of January 1, 2020	62,776	96,329	24,526	13,742	22,385	12,821	232,579
Balances as of December 31, 2020	57,118	65,892	17,989	12,583	22,142	11,630	187,354
Balances as of December 31, 2021	53,539	71,784	21,597	15,325	22,347	11,137	195,729

(Note) 1. The amount of property, plant and equipment under construction is presented as construction in progress.

2. For property, plant and equipment on which a mortgage is placed as collateral for liabilities, see "Note 19. Bonds and Borrowings."

(In millions of yon)

3. For commitments to the acquisition of property, plant and equipment, see "Note 36. Commitments and Contingent Liabilities."

4. Depreciation is included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statement of profit or loss.

5. Impairment losses are included in "Other expenses" in the consolidated statement of profit or loss. For details on impairment losses, see "Note 15. Impairment of Non-financial Assets."

6. There are no borrowing costs included in the cost of property, plant and equipment.

7. For details on right-of-use assets, see "Note 14. Leases."

13. Goodwill and Intangible Assets

(1) Movement during the fiscal year
The changes in acquisition cost, accumulated amortization and impairment losses, and the carrying amounts of goodwill and intangible assets are as follows.
A. Acquisition cost

						(In millio	ons of yen)
				Intangible	assets		
	Goodwill	Software	Capitalized development costs	Developed technology	Customer relationships	Other	Total
Balances as of January 1, 2020	625,030	77,990	8,301	355,058	102,575	110,386	654,310
Internally developed	—	1,122	1,840	—	—	—	2,962
Acquisitions	_	2,566	_	_	_	39,245	41,811
Acquisition due to business combination	_	_	—	_	—	—	_
Reclassification	_	_	_	11,049	_	(11,049)	_
Sales or disposal	_	(485)	(1,714)	(1)	_	(27,587)	(29,787
Exchange differences	(34,571)	(42)	_	(18,993)	(5,090)	(1,083)	(25,208
Other	_	66	_	_	_	(307)	(241
Balances as of December 31, 2020	590,459	81,217	8,427	347,113	97,485	109,605	643,847
Internally developed		1,298	933	_	—	—	2,23
Acquisitions	_	1,632	_	—	_	6,024	7,65
Acquisition due to business combination	553,811	140	—	11,739	23,561	5,707	41,147
Reclassification	—	—	—	8,293	—	(8,293)	_
Sales or disposal	—	(4,605)	(2,230)	(51)	_	(23,027)	(29,913
Exchange differences	90,330	527	_	36,485	10,333	5,635	52,980
Other	_	6	_	_	_	121	12
Balances as of December 31, 2021	1,234,600	80,215	7,130	403,579	131,379	95,772	718,07

B. Accumulated amortization and impairment losses

(In millions of yen)

		Intangible assets					i
	Goodwill	Software	Capitalized development costs	Developed technology	Customer relationships	Other	Total
Balances as of January 1, 2020	_	(59,068)	(4,353)	(81,705)	(17,671)	(76,931)	(239,728)
Amortization	—	(6,626)	(1,736)	(46,494)	(6,578)	(14,022)	(75,456)
Impairment losses	—	—	_	—	—	—	—
Sales or disposal	_	463	1,714	1	_	27,586	29,764
Exchange differences	_	12	—	4,762	626	621	6,021
Other	—	1	_	—	_	315	316
Balances as of December 31, 2020	_	(65,218)	(4,375)	(123,436)	(23,623)	(62,431)	(279,083)
Amortization	_	(6,188)	(1,638)	(48,396)	(6,682)	(14,067)	(76,971)
Impairment losses	—	(17)	_	—	—	—	(17)
Sales or disposal	_	4,367	2,230	51	_	23,022	29,670
Exchange differences	_	(418)	—	(14,370)	(2,389)	(2,436)	(19,613)
Other	—	8	—	_	—	(100)	(92)
Balances as of December 31, 2021	_	(67,466)	(3,783)	(186,151)	(32,694)	(56,012)	(346,106)

C. Carrying amount

, ,						(In millio	ons of yen)
				Intangible	assets		
	Goodwill	Software	Capitalized development costs	Developed technology	Customer relationships	Other	Total
Balances as of January 1, 2020	625,030	18,922	3,948	273,353	84,904	33,455	414,582
Balances as of December 31, 2020	590,459	15,999	4,052	223,677	73,862	47,174	364,764
Balances as of December 31, 2021	1,234,600	12,749	3,347	217,428	98,685	39,760	371,969

(Note) 1. For software in intangible assets, the carrying amount classified as internally generated assets was 711 million yen as of December 31, 2020 and 636 million yen as of December 31, 2021.

2. Construction in progress related to software is included in "Software" under intangible assets.

3. For other in intangible assets, the carrying amount of intangible assets acquired through software license contracts (as license fees) was 36,189 million yen as of December 31, 2020 and 29,761 million yen as of December 31, 2021. In addition, the balances are mainly amortized using the straight-line method based on the available license period (5 years or less).

4. There are no intangible assets with restrictions on ownership or intangible assets on which a mortgage is placed as collateral for liabilities.

5. For commitments related to the acquisition of intangible assets, see "Note 36. Commitments and Contingent Liabilities."

6. Amortization of intangible assets is included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statement of profit or loss.

7. Impairment losses are included in "Other expenses" in the consolidated statement of profit or loss. For details on impairment losses, see "Note 15. Impairment of Non-financial Assets."

(2) Significant intangible assets

Major intangible assets are developed technology acquired in the business combination with former Intersil in February 2017, former IDT in March 2019 and Dialog in August 2021. The carrying amount of developed technology acquired in the business combination was223,677 million yen as of December 31, 2020 and 217,428 million yen as of December 31, 2021, and the remaining amortization period as of December 31, 2021 is 2 to 9 years. The carrying amount of customer relationships was 73,862 million yen as of December 31, 2020 and 98,685 million yen as of December 31, 2021, and the remaining amortization period as of December 31, 2021 is 9 to 11 years. The intangible assets acquired in the business combination of Dialog are preliminarily recorded at the book value of Dialog.

(3) Intangible assets not yet available for use

The carrying amount of intangible assets not yet available for use is included in "Other" and was 9,522 million yen as

of December 31, 2020 and 4,509 million yen as of December 31, 2021 and represents in-process research and development. In-process research and development is reclassified as "Developed technology" and starts to be amortized when the development has been completed and the related technology has been put in operational use. The amount of reclassification was 11,049 million yen for the year ended December 31, 2020 and 8,293 million yen for the year ended December 31, 2020 and 8,293 million yen for the year ended December 31, 2021.

14. Leases

(1) Leases as lessee

A. Lease expenses, income and cash flows Lease expenses, income and cash flows are as follows.

		(In millions of yen)
	The year ended	The year ended
	December 31, 2020	December 31, 2021
Depreciation charge for right-of-use assets by class of underlying asset		
Land	93	92
Buildings	2,861	2,766
Machinery, equipment and vehicles	1,892	1,268
Tools, furniture and fixtures	128	129
Total	4,974	4,255
Interest expense on lease liabilities	226	272
Expense relating to short-term leases	2,548	2,734
Expense relating to leases of low-value assets (excluding short-term leases)	437	349
Expense relating to variable lease payments which are not reflected in the measurement of lease liabilities	_	_
Income from subleasing right-of-use assets	_	_
Total cash outflows for leases	8,071	7,926
Gain (loss) from sale and leaseback transactions		

B. Right-of-use assets which are included in the carrying amount of property, plant and equipment The carrying amount and the increase/decrease in carrying amount of right-of-use assets which are included in the carrying amount of property, plant and equipment are as follows.

		(In millions of yen)
	Balance as of December 31, 2020	Balance as of December 31, 2021
Land	175	118
Buildings	8,759	12,110
Machinery, equipment and vehicles	3,513	2,871
Tools, furniture and fixtures	136	226
Total	12,583	15,325

(Note) The increased amount of right-of-use assets for the fiscal year ended December 31, 2021 was 2,781 million yen.

C. Nature of the leasing activities

The Group leases land, building, machinery, equipment and vehicles.

The terms of lease contracts are negotiated individually and include a wide variety of the terms of contracts.

D. Options of extension and termination

The options of extension and termination are included in many lease contracts for buildings, machinery and equipment. The lease term for office buildings is mainly from 3 to 10 years and for machinery and equipment, its term is from 3 to 5 years. Some contracts include an option to extend the lease for a period of one year or the same lease years for the current lease contract after the termination date. In addition, some contracts include an option for early termination when the lesse notifies the lessor between six months to one year before the termination date.

These options will be utilized to maximize operational flexibility from the point of asset management used in the Group's businesses.

15. Impairment of Non-financial Assets

The Group recorded impairment losses for the assets below. Impairment losses are included in "Other expenses" in the consolidated statement of profit or loss.

The components of assets for which the impairment losses are recorded are as follows.

The year ended December 31, 2020

			(In millions of yen)
	Reportabl		
	Automotive	Industrial/ Infrastructure/IoT	Total
Property, plant and equipment	1,275	5 795	2,070
Total	1,275	5 795	2,070

The year ended December 31, 2021

			(In millions of yen)
	Reportab		
	Automotive	Industrial/ Infrastructure/IoT	Total
Property, plant and equipment	7	6 42	118
Intangible assets		3 9	17
Total	8	4 51	135

(Note) 1.Impairment losses recognized as for right-of-use assets are included in the impairment losses of property, plant and equipment. The amount included in the impairment losses of property, plant and equipment was 891 million yen for the year ended December 31, 2020 and 17 million yen for the year ended December 31, 2021.

2. The impairment losses (28 million yen) due to the fire which occurred in the current fiscal year are not included in the table above.

(2) Impairment losses

The Group assesses impairment at the grouping level of a smallest identifiable group that generates cash inflows that are largely independent, based on the categories used for business management. The Group assesses impairment by each individual asset for significant assets to be disposed of and idle assets.

For the year ended December 31, 2020

(Assets to be disposed of)

For the Automotive and Industrial/Infrastructure/IoT business, the Group performs impairment tests as independent cash-generating units for the assets that have been decided to be disposed and writes down the carrying amount of assets to their recoverable amount. As a result, the Group has recorded impairment losses of 168 million yen.

The recoverable amount is measured at the fair value after deducting disposal costs. The fair value after deducting disposal costs is set at zero for assets difficult to sell or the selling amount is estimated and the hierarchy level of the fair value is 3.

(Idle assets)

For the Automotive and Industrial/Infrastructure/IoT business, the Group performs impairment tests as independent cash-generation units, writes down the carrying amount of idle assets that are unlikely to be used to their recoverable amount, and recorded impairment losses of 1,902 million yen.

The recoverable amount is measured at the fair value after deducting disposal costs. The fair value after deducting disposal costs is set at zero because it is difficult to sell these assets, and the hierarchy level of the fair value is 3.

For The year ended December 31, 2021

(Assets to be disposed of)

For the Automotive and Industrial/Infrastructure/IoT business, the Group performs impairment tests as independent cash-generating units for the assets that have been decided to be disposed and writes down the carrying amount of assets to their recoverable amount. As a result, the Group has recorded impairment losses of 82 million yen.

The recoverable amount is measured at the fair value after deducting disposal costs. The fair value after deducting disposal costs is set at zero for assets difficult to sell or the selling amount is estimated and the hierarchy level of the fair value is 3.

(Idle assets)

For the Automotive and Industrial/Infrastructure/IoT business, the Group performs impairment tests as independent cash-generation units, writes down the carrying amount of idle assets that are unlikely to be used to their recoverable amount, and recorded impairment losses of 53 million yen.

The recoverable amount is measured at the fair value after deducting disposal costs. The fair value after deducting disposal costs is set at zero because it is difficult to sell these assets, and the hierarchy level of the fair value is 3.

(2) Impairment test of goodwill and intangible assets not yet available for use

The Group performs impairment tests for cash-generating units to which goodwill and intangible assets not yet available for use are allocated at a certain time each fiscal year and whenever there is any indication of impairment. Goodwill recorded in the consolidated statement of financial position was recognized when the Company merged with former Intersil for the fiscal year ended December 31, 2017 and former IDT for the fiscal year ended December 31, 2019 and it is allocated to the cash-generating units of the Group expected to provide future excess earning power arising from synergies of these business combinations.

In the impairment test, goodwill and intangible assets not yet available for use that were allocated to the cashgenerating units of the Group are as follows.

				(In millions of yen)
	Reportable segments	Cash-generating units	As of December 31, 2020	As of December 31, 2021
	Automotive	Automotive	231,401	257,157
Goodwill	Industrial/ Infrastructure/IoT	Industrial/ Infrastructure/IoT	359,058	399,022
In-process	Automotive	Automotive	2,070	2,300
research and development	Industrial/ Infrastructure/IoT	Industrial/ Infrastructure/IoT	7,452	230

(Note) In the current fiscal year, goodwill (578,421 million yen) and intangible assets not yet available for use (1,979 million yen) recognized in connection with the acquisitions of Dialog and Celeno were not included in the table above since the recognition and fair value measurement of the identifiable assets acquired and liabilities assumed at the acquisition date have not been finalized. For details, please refer to "Note 7. Business Combinations."

The recoverable amount of the cash-generating units is measured at the value in use. The value in use is calculated by discounting the cash flows, which is estimated based on the five-year business plan approved by management and the estimated permanent growth rate for the period thereafter, to the present value using the pretax discount rate. Significant assumptions which have an impact to the calculation of the value in use include gross margin in the business plan, permanent growth rate, discount rate and others. These assumptions are determined in the consideration of past experiences and external information.

Additionally, the Group includes the estimated impact of COVID-19 to estimates and assumptions which are based on information available and management believes to be reasonable at the moment.

For cash flows in a period beyond the target period of the future business plan approved by management, the value in use is calculated using the permanent growth rate as 1.7% the current fiscal year (2.0% in the prior fiscal year). The approved permanent growth rate is determined based on the estimated inflation rate of the market to which the cash-generating units belong.

The discount rates are the weighted average capital cost before tax. The discount rates used for the calculation of the value in use are 10.1% in the Automotive Business in the current fiscal year (11.7% in the prior fiscal year) and 10.8% in the Industrial/Infrastructure/IoT Business in the current fiscal year (11.2% in the prior fiscal year).

Because the recoverable amount of cash-generating units sufficiently exceeds the carrying amount in the current fiscal year, management believes that it is unlikely that the recoverable amount of the cash-generating units will be lower than the carrying amount even if the major assumptions (Gross margin/ Permanent growth rate/ Discount rate before tax) used in the impairment test are changed in a reasonable range.

Major assumptions	Cash-generating units	Prior fiscal year	Current fiscal year
Cross margin	Automotive	35~45%	35~45%
Gross margin	Industrial/ Infrastructure/IoT	50~60%	50~60%
Dermonant growth rate	Automotive	1.5~2.5%	1.2~2.2%
Permanent growth rate	Industrial/ Infrastructure/IoT	1.5~2.5%	1.2~2.2%
Discount rate before	Discount rate before Automotive		8.1~12.1%
tax	Industrial/ Infrastructure/IoT	10.2~12.2%	9.8~11.8%

The following table shows the range of reasonably expected fluctuation of the major assumptions (Gross margin/ Permanent growth rate/ Discount rate before tax) used in the impairment test.

The Group recognized no impairment losses during the current year and the prior year since the value in use of the cash generating units exceeded the carrying amount as a result of the impairment test.

16. Other Financial Assets

(1) Components of other financial assets

The components of other financial assets are as follows.

		(In millions of yen)
	As of December 31, 2020	As of December 31, 2021
Stocks (Note 1)	4,740	8,849
Investment trust (Note 2)	4,160	5,475
Long-term accounts receivable (Note 3)	8,350	18,794
Other (Note 4)	1,456	2,252
Total	18,706	35,370
Current assets	605	737
Non-current assets	18,101	34,633

(Note) 1. Stocks are classified either as equity instruments measured at fair value through other comprehensive income or financial assets measured at fair value through profit or loss (see "Note 33. Financial Instruments").

2. Investment trust is classified as financial assets measured at fair value through profit or loss.

3. "Long-term accounts receivable" mainly includes financial assets measured at amortized cost which are recorded in accordance with the ship and debit programs. For details on the ship and debit programs, please refer to "Note 33. Financial Instruments."

4. Term deposits with a deposit term of more than three months and security deposits are included in "Other." These assets are classified as financial assets measured at amortized cost.

(2) Equity instruments measured at fair value through other comprehensive income

Name of major equity instruments and their fair value, etc. measured at fair value through other comprehensive income are as follows.

		(In millions of yen)
Company name	As of December 31, 2020	As of December 31, 2021
LeddarTech Inc.	1,035	1,150

(3) Derecognized equity instruments measured at fair value through other comprehensive income The fair value and cumulative losses (before tax) as of the date of derecognition of equity instruments measured at fair value through other comprehensive income that were derecognized during the period are as follows.

tair value through other com	prenensive income that were derecognized du	nsive income that were derecognized during the period are as follows. (In millions of yen)			
	As of December 31, 2020	As of December 31, 2021			
Fair value	_				
Cumulative losses	(429)	_			
(Note) When equity instruments m	neasured at fair value through other comprehen	sive income are derecognized, cumulative			

(Note) When equity instruments measured at fair value through other comprehensive income are derecognized, cumulative losses (after tax) previously recognized in other comprehensive income are reclassified to retained earnings. Such amount reclassified to retained earnings was 330 million yen in the prior fiscal year.

17. Income Taxes

(1) Components of and changes in deferred tax assets and deferred tax liabilities
 The components of and changes in deferred tax assets and deferred tax liabilities by major causes of their occurrence are as follows.

The year ended December 31, 2020

				(In r	millions of yer
	As of January 1, 2020	Recognized in profit or loss	Recognized in other comprehensive income	Business combination	As of December 37 2020
Deferred tax assets					
Inventories	5,825	(494)	_	_	5,331
Property, plant and equipment and other	5,448	1,476	_	—	6,924
Research and development expense	1,415	(692)	_	_	723
Accrued expenses	10,884	619	_	—	11,503
Retirement benefit liability	6,505	(1,540)	162	_	5,127
Carryforward of unused tax losses	29,950	(14,359)	_	_	15,59 ⁻
Carryforward of unused tax credits	5,098	4,004	_	_	9,102
Other	12,189	2,066	_	_	14,255
Subtotal	77,314	(8,920)	162	_	68,556
Deferred tax liabilities					
Intangible assets and other	(64,857)	9,910	_	_	(54,947
Tax on undistributed earnings	(5,987)	(163)	_	_	(6,150
Total income from specified foreign subsidiaries, etc.	(912)	(201)	_	_	(1,113
Other	(2,765)	(1,760)	99	_	(4,426
Subtotal	(74,521)	7,786	99		(66,636
Net deferred tax assets (liabilities)	2,793	(1,134)	261		1,92
		-			

The year ended December 31, 2021

(In millions of yen)

				(millions of yerry
	As of January 1, 2021	Recognized in profit or loss	Recognized in other comprehensive income	Business combination	As of December 31, 2021
Deferred tax assets					
Inventories	5,331	(1,104)	_	_	4,227
Property, plant and equipment and other	6,924	407	_	—	7,331
Research and development expense	723	1,506	—	—	2,229
Accrued expenses	11,503	3,670	_	_	15,173
Retirement benefit liability	5,127	(660)	452	_	4,919
Carryforward of unused tax losses	15,591	(381)	_	4,336	19,546
Carryforward of unused tax credits	9,102	(2,108)	_	1,996	8,990
Other	14,255	161	_	681	15,097
Subtotal	68,556	1,491	452	7,013	77,512
Deferred tax liabilities					
Intangible assets and other	(54,947)	4,881		(6,887)	(56,953)
Tax on undistributed earnings	(6,150)	(2,526)	_	—	(8,676)
Total income from specified foreign subsidiaries, etc.	(1,113)	(346)	_	_	(1,459)
Other	(4,426)	3,171	285	(3,269)	(4,239)
Subtotal	(66,636)	5,180	285	(10,156)	(71,327)
Net deferred tax assets (liabilities)	1,920	6,671	737	(3,143)	6,185

(Note) The Group considers the possibility that a portion of, or all of, the deductible temporary differences or carryforward of unused tax losses can be utilized against future taxable profits in the recognition of deferred tax assets.

Deferred tax liabilities related to intangible assets and other include those that are related to an uncertain tax position at an overseas subsidiary and calculated using the expected value method.

The Group reflects the impact of COVID-19 to estimates and assumptions to a reasonable extent based on available information. The Group reflects the impact in estimating collectability of deferred tax assets.

The differences between total amount recognized in profit or loss and total amount of the deferred tax expenses are due to changes in foreign exchange rate.

(2) Deductible temporary differences, etc. for which no deferred tax assets are recognized The amounts of deductible temporary differences, carryforward of unused tax losses and carryforward of unused tax credits for which no deferred tax assets are recognized are as follows.

		(In millions of yen)
	As of December 31, 2020	As of December 31, 2021
Deductible temporary differences	_	2,639
Carryforward of unused tax losses	210,142	25,076
Carryforward of unused tax credits	16,178	18,154
Total	226,320	45,869

(Note) Deductible temporary differences and carryforward of unused tax losses are measured on an income basis, and carryforward of unused tax credits is measured on a tax amount basis.

The expiration schedule of the carryforward of unused tax losses for which no deferred tax assets are recognized is as follows.

		(In millions of yen)
	As of December 31, 2020	As of December 31, 2021
First year	197,441	—
Second year	7,531	—
Third year	—	—
Fourth year	—	—
Fifth year or thereafter	5,170	25,076
Total	210,142	25,076

The expiration schedule of the carryforward of unused tax credits for which no deferred tax assets are recognized is as follows.

		(In millions of yen)
	As of December 31,	As of December 31,
	2020	2021
First year	_	_
Second year	—	—
Third year	—	_
Fourth year	—	—
Fifth year or thereafter	16,178	18,154
Total	16,178	18,154

The Group adopts the consolidated taxation system in Japan. The above figures do not include the amount of the carryforward of unused tax losses for which no deferred tax asset is recognized for local taxes (residential tax and business tax) that are not subject to the consolidated taxation system in Japan. The amount of the carryforward of unused tax losses for local taxes (residential tax and business tax) was 11,755 million yen for residential tax and 265,151 million yen for business tax in the prior fiscal year (as of December 31, 2020) and 17,185 million yen for residential tax and 97,101 million yen for business tax in the current fiscal year (as of December 31, 2021).

(3) Components of income tax expense

The components of income tax expense are as follows.

(In millions of yen) The year ended The year ended December 31, 2021 December 31, 2020 Current tax expense Current tax expense 14.493 34,228 Tax expense from previous periods 1,835 1,177 Total current tax expense 16,328 35,405 Deferred tax expense Origination and reversal of temporary differences 3,385 3,706 Effects from tax regulation changes (5)(62)Revaluation of deferred tax assets 294 (13, 821)Other (512) (177)Total deferred tax expense 3,162 (10.354)Total income tax expense 19,490 25,051

(Note) 1. Current tax expense includes the amount of previously unrecognized tax loss, tax credits or temporary differences of a prior period, and decreases by 6,008 million yen and 16,226 million yen in the prior fiscal year and the current fiscal year, respectively.

2. Current deferred tax expense decreases by 2,369 million yen in the current fiscal year includes the amount of previously unrecognized tax loss, tax credits or temporary differences of a prior period. Current deferred tax expense in the prior fiscal year does not include the amount of previously unrecognized tax loss, tax credits or temporary differences of a prior period.

3. Current deferred tax expense includes the amount of previously unrecognized tax loss, tax credits or temporary differences of a prior period and increases by 4,900 million yen in the prior fiscal year and decreases by 2,369 million yen in the current fiscal year.

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(4) Reconciliation of the statutory effective tax rate and the average effective tax rate

The reconciliation of the statutory effective tax rate and the average effective tax rate is as follows.

		(%)
	The year ended December 31, 2020	The year ended December 31, 2021
Statutory effective tax rate (Note)	31.5	31.5
Changes in unrecognized deferred tax assets	(1.4)	(10.7)
Permanent differences	1.2	(1.9)
Foreign tax rate differences	2.0	(1.9)
Tax credits	(6.8)	(3.7)
Tax on undistributed earnings	0.2	1.7
Other	3.1	1.6
Average effective tax rate	29.8	16.4

(Note) The applicable statutory effective tax rate is the sum of 24.4% for national taxes and 7.1% for local taxes. Major taxes imposed on the Company and its subsidiaries in Japan are income tax, residential tax and business tax. The applicable statutory effective tax rate in Japan is 31.5% in the prior fiscal year and current fiscal year. Income taxes for overseas subsidiaries are calculated based on local tax rates applicable in their jurisdictions.

18. Trade and Other Payables The components of trade and other payables are as follows.

ayables are as follows.	(In millions of yen)
As of December 31, 2020	As of December 31, 2021
67,008	104,775
47,433	59,262
7,852	14,808
17,119	40,585
139,412	219,430
114,235	204,330
25,177	15,100
	As of December 31, 2020 67,008 47,433 7,852 17,119 139,412 114,235

Trade and other payables are classified as financial liabilities measured at amortized cost. (Note)

19. Bonds and Borrowings

(1) The components of bonds are as follows.

				(In millions of yen)
Issuance da	te Maturity date	Interest rate	As of December 31, 2020	As of December 31, 2021
November 26, 2021	November 26, 2024	1.543%	_	57,170
November 26, 2021	November 25, 2026	2.170%	_	97,189
			11	13
			11	154,372
				179
			11	13
				154,538
	November 26, 2021 November	November 26, 2021 26, 2024 November November	Issuance dateMaturity daterateNovemberNovember1.543%26, 202126, 20241.543%NovemberNovember2 170%	Issuance date Maturity date rate 2020 November November 1.543% — November November 26, 2024 1.543% — November November 2.170% — 11 11 11

Note 1. Bonds are classified as financial liabilities measured at amortized cost.

2. For the balance of bonds by maturity, see "Note 33. Financial Instruments."

3. On November 19, 2021, the Company has decided to issue senior notes denominated in USD in multiple tranches (One of the tranches of the notes will be green bonds, proceeds from which will be used solely for projects that are expected to contribute to the global environment). The Company issued USD-denominated Senior Notes due 2024 (Green Bonds, Principal amount: USD 500million, Interest rate: 1.543%, Maturity Date: November 26, 2024) and USD-denominated Senior Notes due 2026 (Principal amount: USD 850million, Interest rate: 2.170%, Maturity Date: November 25, 2026) on November 26, 2021, raising a total of USD 1,350 million.

To reduce the risk of foreign exchanges in the USD-denominated Senior Notes, the Group uses currency swaps. The currency swap is designated as a hedge. For details on hedge accounting, see "Note 33. Financial Instruments." 4. Convertible bonds that former IDT issued in 2015 were substantially repaid in 2019.

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(2) The components of borrowings are as follows.

				(In millions of yen)
	Maturity	Average interest rate	As of December 31, 2020	As of December 31, 2021
Syndicated loan A (Note 4)	From Mar.2019 to Mar.2024	0.807%	302,803	44,632
Syndicated loan B (Note 4)	From Mar.2019 to Mar.2024	0.807%	232,150	232,150
Syndicated loan C (Note 4)	From Jun.2019 to Jun.2024	0.807%	148,850	144,260
Loan contract on December 23, 2021 (Note 5)	From Dec.2021 to Dec.2026	0.807%	_	96,000
JBIC loan contract on December 23, 2021 (Note 5)	From Dec.2021 to Dec.2026	0.250%	_	144,000
Others (Note 6)			—	1,095
Total			683,803	662,137
Less: Arrangement fee			(4,070)	(2,600)
Current liabilities			93,170	121,092
Non-current liabilities			586,563	538,445

(Note) 1. Borrowings are classified as financial liabilities measured at amortized cost.

2. For the balance of borrowings by maturity, see "Note 33. Financial Instruments."

3. Our borrowings have financial covenants that require us to maintain a certain level of net assets, operating profit / loss, and profit / loss, and the ratio of interest-bearing debt to EBITDA should not exceed a certain level. We comply with the financial covenants.

4. In order to refinance the existing borrowings to finance partial funds necessary for the acquisition of former IDT and working capital as the medium-and-long term funds, the Company has entered into a syndicated loan

agreement with the total amount of 897,000 million yen on January 15, 2019. During the year ended December 31, 2019, 698,000 million yen of term Ioan with availability period (Syndicated Ioan A and B, Implementation date: March 28, 2019, Repayment date: March 28, 2024, participating financial institutions: MUFG Bank, Ltd., Mizuho Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited and other 5 financial institutions) has been executed. In addition, During the year ended December 31, 2019, borrowings of 149,000 million yen of term Ioan (Syndicated Ioan C, Implementation date: June 28, 2019, Repayment date: June 28, 2024, participating financial institutions: MUFG Bank, Ltd., Mizuho Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited and other 5 financial institutions) has been executed. In addition, During the year ended December 31, 2019, borrowings of 149,000 million yen of term Ioan (Syndicated Ioan C, Implementation date: June 28, 2019, Repayment date: June 28, 2024, participating financial institutions: MUFG Bank, Ltd., Mizuho Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited) have been conducted to refinance the existing term Ioan.

On November 10, 2021, the Company made the following changes on this loan contract. (1) Setting the installment repayment date of Syndicated Loan B, (2) Early payment of Syndicated Loan A upon the issuance of US Dollar-Denominated Senior Notes, and (3) Cancellation of guaranteed contract and stock collateral for Syndicated Loans A and B.

5. To raise a portion of the funds for the Dialog acquisition, the Company entered into a loan agreement (Facilities Agreement) with MUFG Bank, Ltd. and Mizuho Bank, Ltd. with a borrowing limit of 735,400 million yen on February 8, 2021.

The Company also has entered into an amendment agreement (the "Amendment Agreement") with MUFG Bank, Ltd. and Mizuho Bank, Ltd. to partially amend the Facilities Agreement on June 30, 2021. Both net proceeds from the fundraising through the issuance of new shares in June 2021, and Renesas' cash on hand are appropriated for the funds of the Dialog acquisition. Among the loan facilities, the amount has been amended in the Amendment Agreement. The borrowing limit has been reduced for part of the loan agreement as the planned currency hedge has been completed. Following the Amendment, the borrowing limit has changed from the initial amount of 735,400 million yen to 665,400 million yen.

On August 31, 2021, the Company had borrowed 270,000 million yen from MUFG Bank, Ltd. and Mizuho Bank, Ltd. under the Amended Agreement with the last repayment date of February 7, 2022, and interest rate of 0.835%. With the purpose of refinancing 240,000 million yen of the above loans (after the repayment of 30,000 million yen) to mid- to long-term funds, on December 23, 2021, the Company has entered into the syndicate loan agreement (Loan amount: 96,000 million yen, Execution date of agreement: December 23, 2021, Borrowing date: December 30, 2021, Repayment date: End of December, 2026, Participating financial institutions: MUFG Bank, Ltd., Mizuho Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited., Resona Bank, Limited., Aozora Bank, Ltd., Shinkin Central Bank, The Norinchukin Bank, Bank of America NA Tokyo Branch) and a JBIC loan agreement (Loan amount: 144,000 million yen, Execution date of agreement: December 23, 2021, Borrowing date: December 30, 2021, Repayment date: End of December, 2026, Participating financial institutions: Japan Bank of International Cooperation). On December 30, 2021, the Company borrowed a total of 240,000 million yen under these agreements and fully repaid the remaining amount of the loans dated August 31, 2021.

6. Others mainly include short-term borrowings of overseas subsidiaries.

(3) Assets pledged as collateral and corresponding liabilities as of each fiscal year end are as follows. A. Assets pledged as collateral

		(In millions of yen)
	As of December 31, 2020	As of December 31, 2021
Buildings and structures	35,480	31,190
Machinery, equipment and vehicles	33,708	36,691
Land	16,720	16,628
Total	85,908	84,509

(Note) Other than the above, stock of subsidiary (1,148,461 million yen for December 31, 2020 and 638,826 million yen for December 31, 2021) which are eliminated on the Consolidated Statement of Financial Position, are collateralized.

B. Liabilities corresponding to assets pledged as collateral

B. Liabilities corresponding to assets pleage		(In millions of yen)
	As of December 31, 2020	As of December 31, 2021
Current portion of long-term borrowings	93,170	120,014
Long-term borrowings (Excluding current portion)	586,563	538,441
Total	679,733	658,455

20. Other Financial Liabilities

The components of other financial liabilities are as follows.

		(In millions of yen)
	As of December 31, 2020	As of December 31, 2021
Derivative liabilities (Note 1)	—	1,550
Lease liabilities	13,977	16,810
Contingent consideration (Note 1, 2)	—	4,681
Other	300	
Total	14,277	23,041
Current liabilities	4,036	11,505
Non-current liabilities	10,241	11,536

(Note) 1 Derivative liabilities are classified as financial liabilities measured at fair value through profit or loss. For details, please refer to "Note 33. Financial Instruments." 2 For details, please refer to "Note 7. Business Combinations."

21. Provisions

The components of provisions and their changes are as follows.

The components of provisions and t	non onangeo are			(In	millions of yen)
	Asset retirement obligations	Provision for business restructuring	Provision for loss on litigation	Other provisions	Total
Balances as of December 31, 2020	2,926	3,381	2,864	245	9,416
Current liabilities	21	3,253	2,864	245	6,383
Non-current liabilities	2,905	128		_	3,033
Increase during the period	39	3,102	4,720	1,101	8,962
Acquisition due to business combination	381	672		202	1,255
Decrease during the period (payment)	(79)	(2,971)	(946)	(146)	(4,142)
Decrease during the period (reversal)	(57)	(730)	(11)	(102)	(900)
Period interest expense in discount calculation	18	—	_	_	18
Other	24	(25)	329	43	371
Balances as of December 31, 2021	3,252	3,429	6,956	1,343	14,980
Current liabilities	95	3,297	6,956	837	11,185
Non-current liabilities	3,157	132		506	3,795
-					

A. Asset retirement obligations

The expected amount related to performing obligations necessary to restore assets to their original state under the real estate lease agreements of offices and plants used by the Group and legal obligations to remove hazardous substances related to non-current assets is recorded as a provision. The amount of asset retirement obligations was computed using an estimated useful life of 3 to 47 years as well as a discount rate of 0.1% to 10.5%, although the timing of payments will be affected by future business plans, and other factors.

B. Provision for business restructuring

Provision for business restructuring is recorded for expected future losses in connection with business structure reform and consolidation. The timing of payments will be affected by future business plans, and other factors.

C. Provision for loss on litigation

The Group records the estimated amount of reasonably calculated losses, considering individual risks, for losses on litigation which could be incurred in the future from lawsuits and disputed cases. For details, please refer to "Note 36. Commitments and Contingent Liabilities, (4) Others."

D. Other provisions

Other provisions include a provision for product warranties and a provision for an onerous contract.

22. Employee Benefits

The Group adopts post-employment benefit plans such as a defined benefit plan and a defined contribution plan, except for some overseas consolidated subsidiaries.

(1) Defined benefit plans

- A. Characteristics of defined benefit plans and related risks
 - The characteristics of defined benefit plans and related risks are as follows.
 - (a) Characteristics of defined benefit plans

The defined benefit plans of the Company and its subsidiaries in the Group include (i) a severance indemnity plan and (ii) a defined benefit corporate pension plan. The Group may also provide extra retirement payments upon the retirement of employees.

- (i) The severance indemnity plan is an unfunded plan to make a lump-sum payment only with an internal reserve without making an external reserve for the obligations of the retirement benefit plans. As the lump-sum payment is paid in an amount based on salaries and number of service years in accordance with the retirement allowance regulations including the rules of employment of each company.
- (ii) The defined benefit corporate pension plan is a defined benefit pension and a funded plan established under the Defined Benefit Corporate Pension Act (enforced in April 2002). It is a fund-type corporate pension, and a lump-sum payment or an annuity is paid from the fund based on salaries and number of service years. In the defined benefit corporate pension plan, administrators of the corporate pension, such as the executive directors of the employer and the fund, abide by laws, regulations and asset management and investment contracts, etc., and their standards of practice such as the prohibition of acts involving conflicts of interest against the participants in the plan have been clearly defined.

In the defined benefit corporate pension plan, the amount of benefits is calculated based on the cumulative number of points granted to employees according to their job classification. The Company and its subsidiaries in Japan adopt a cash balance pension plan for the defined benefit corporate pension plan. Some of the Company's overseas subsidiaries adopt externally funded pension plans such as trust funds for the defined benefit corporate pension plan. Under those pension plans, each participant has an account in which a certain amount calculated by the revaluation rate that is determined based on the current base salary, the job classification and the market interest rate is accumulated. (b) Risks to which an entity is exposed by the plan.

The Group is exposed to actuarial risks such as price fluctuation risk by plan assets and interest rate risk by present value of obligations of the defined benefit plans.

(In millions of yen)

	As of December 31, 2020	As of December 31, 2021
Present value of obligations of the funded defined benefit plans (with plan assets)	124,029	120,091
Fair value of plan assets	(145,862)	(152,382)
Funded status	(21,833)	(32,291)
Impact of asset ceiling	22,767	32,929
Present value of obligations of the unfunded defined benefit plans (without plan assets)	29,078	27,288
Net amount of liabilities (assets) pertaining to defined benefits recognized in the consolidated statement of financial position	30,012	27,926
Retirement benefit liability	30,012	27,926
Retirement benefit asset	_	_

B. Amounts recognized in the consolidated statement of financial position

The amounts recognized in the consolidated statement of financial position are as follows.

As of December 31, 2020, the present value of obligations of the funded defined benefit plans (with and without plan assets) was 124,135 million yen for domestic plans and 28,972 million yen for overseas plans. And the fair value of plan assets was (125,769) million yen for domestic plans and (20,093) million yen for overseas plans.

As of December 31, 2021, the present value of obligations of the funded defined benefit plans (with and without plan assets) was 116,990 million yen for domestic plans and 30,389 million yen for overseas plans. And the fair value of plan assets was (129,925) million yen for domestic plans and (22,457) million yen for overseas plans.

C. Changes in the present value of defined benefit obligation

The changes in the present value of defined benefit obligation are as follows.

(In millions of yen) The year ended The year ended December 31, 2020 December 31, 2021 Present value of defined benefit obligation (beginning) 156,196 153,107 Service cost 2,572 2,360 Interest expenses 969 1,000 Benefits paid (5,981)(10,088)Remeasurements of defined benefit plans Actuarial differences arising from changes in (i) 82 (670) demographic assumptions Actuarial differences arising from changes in (ii) 204 (535)financial assumptions (iii) Revisions to other results (1, 269)(908)Effects of business combination and disposal 525 Exchange differences (132)2,411 Other 466 177

Present value of defined benefit obligation (ending)

The weighted average duration of the defined benefit obligation in each fiscal year is as follows.

	The year ended December 31, 2020	The year ended December 31, 2021
Weighted average duration	12.7 years	12.0 years

153,107

147,379

(In millions of yon)

D. Changes in the fair value of plan assets

Changes in the fair value of plan assets are as follows.

		(In millions of yen)
	The year ended December 31, 2020	The year ended December 31, 2021
Fair value of plan assets (beginning)	144,613	145,862
Interest income	950	1,016
Remeasurement – Return on plan assets	3,319	8,453
Contributions by employer (Note 1)	2,258	2,323
Benefits paid	(4,710)	(7,805)
Effects of business combination and disposal	_	434
Exchange differences	(547)	2,194
Other	(21)	(95)
Fair value of plan assets (ending)	145,862	152,382

(Note) 1. Contributions to the defined benefit plans in the Group are made in consideration of factors such as the financial position of the Group, the funding situation of plan assets and actuarial factors based on laws and regulations. In the fiscal year ending December 31, 2022, 2,068 million yen is planned to be contributed to the defined benefit pension plans.

2. The purpose of the investment of plan assets of the Group is to secure necessary revenue in the long term within the acceptable range of risks in order to provide benefits to beneficiaries reliably in the future. The target rate of return aims to exceed the assumed interest rate required for the financial position of the pension

scheme on a stable basis for the long term.

The Group has set a "policy asset mix" to achieve the investment target and attempts to make an investment to maintain the asset mix based on the policy asset mix. The asset mix is reviewed as necessary and tailored to changes in the situation of the Group and the institution and the environment surrounding the Group.

3. Some consolidated subsidiaries participate in a multi-employer defined benefit pension plan.

E. Changes in the impact of the asset ceiling

The changes in the impact of the asset ceiling are as follows.

	The year ended December 31, 2020	The year ended December 31, 2021
Impact of asset ceiling (beginning)	17,989	22,767
Interest income	149	131
Remeasurement – Changes in the impact of the asset ceiling	4,725	10,042
Exchange differences	(169)	161
Other	73	(172)
Impact of the asset ceiling (ending)	22,767	32,929

(In millions of yen)

(Note) The Group sets the asset ceiling and calculates liabilities in some of its pension plans because economic benefits could not be enjoyed as a result of contributions that will not be reduced or returned in the future.

F. Components of fair value of plan assets by type

The components of the fair value of plan assets by type are as follows.

···· · · · · · · · · · · · · · · · · ·	, ,,	(In millions of yen)
	As of December 31, 2020	As of December 31, 2021
Equity instruments		
Domestic equity securities	18,391	11,750
Foreign equity securities	21,355	25,787
Debt instruments		
Domestic bonds	12,703	12,743
Foreign bonds	26,683	28,368
General accounts of life insurance company	34,280	35,714
Cash and cash equivalents	1,889	5,650
Other	30,561	32,370
Total	145,862	152,382

(Note) Most of plan assets are operated through commingled funds and classified as those with no public market price in active markets. These commingled funds are appropriately diversified into stocks and debts that generally listed in active market based on corporate pension fund code. "General accounts of life insurance company" are the accounts that the life insurance company jointly manages the funds with several contracts and includes a guaranteed interest rate and return of capital. The major components of "Other" represent alternative instruments that are invested using long/short positions and securitized products.

G. Major actuarial assumptions

Major actuarial assumptions (weighted average) are as follows.

	As of December 31, 2020	As of December 31, 2021
Discount rate	0.7%	0.7%

H. Sensitivity analysis

In the calculation of the defined benefit obligation in the sensitivity analysis, the same method as the calculation method for the defined benefit obligation recognized in the consolidated statement of financial position is used. The sensitivity analysis is made based on changes in assumptions that can be reasonably presumed at the end of the reporting period. In addition, although the sensitivity analysis assumes that all actuarial assumptions other than those that are subject to the sensitivity analysis remain constant, changes in those other actuarial assumptions could have an impact in reality. The impact of a 0.5% change in actuarial assumptions on the defined benefit obligation is as follows.

			(In millions of yen)
		As of December 31,	As of December 31,
		2020	2021
Discount rate	0.5% increase	(9,028)	(7,323)
	0.5% decrease	8,348	7,955

(2) Defined contribution plans

The Group has adopted defined contribution pension plans. The amount recognized as an expense in relation to the defined contribution plans, including employee pension premiums paid by the employer under the Employees' Pension Insurance Act, is as follows.

		(In millions of yen)
	The year ended December 31, 2020	The year ended December 31, 2021
Contributions	8,328	8,795

(Note) This amount is included in "Cost of sales" and "Selling, general and administrative expenses" in the consolidated statement of profit or loss.

(3) Employee benefit expenses

The components of the employee benefit expenses are as follows.

		(In millions of yen)
	The year ended December 31, 2020	The year ended December 31, 2021
Personnel expenses	156,486	185,953
Retirement benefit expenses	11,068	11,270
Extra retirement payments etc.	1,873	1,262
Other	1,906	2,409
Total	171,333	200,894

(Note) This amount is included in "Cost of sales", "Selling, general and administrative expenses" and "Other expenses" in the consolidated statement of profit or loss.

23. Share Capital and Other Equity Items

(1) Share capital and treasury shares Ordinary shares

Orainary Sharos			
	Total number of authorized shares (shares)	Total number of issued shares (shares)	Treasury shares (shares)
As of December 31, 2020	3,400,000,000	1,731,898,990	2,581
Changes (Note 2)	-	211,906,785	-
As of December 31, 2021	3,400,000,000	1,943,805,775	2,581

(Note) 1. All the shares issued by the Company are non-par value ordinary shares with no restrictions on rights.

2. Based on the resolution at the Board of Directors' meeting held on May 28, 2021, the Company issued 192,252,800 shares through a public offering with the payment due date on June 15, 2021 and 2,067,600 shares of common stock through a third-party allotment with the payment due date of June 28, 2021. As a consequence, share capital increased by 111,899 million yen and capital surplus increased by 111,092 million yen.

 Changes except the issuance of new shares are due to the exercise of stock options and the vesting of Restricted Stock Unit (RSU). For details on stock options and RSU, see "Note 32. Share-based Payments."

4. Total number of issued shares has been already paid-up.

(2) Surplus

A. Capital surplus

The Companies Act of Japan stipulates that one half or more of the paid-in amount from the issue of shares shall be accounted for as share capital, and the remainder shall be accounted for as capital reserve included in capital surplus. Under the Companies Act, the amount of such capital reserve may be transferred to shared capital by the resolution of a shareholders meeting.

B. Retained earnings

The Companies Act of Japan stipulates that one tenth of the amount of the distributions of surplus shall be accumulated as capital reserve or legal reserve until the sum of the capital reserve and legal reserve reaches one fourth of the share capital. The accumulated retained earnings reserve may be appropriated to cover a loss. The Companies Act also states that the retained earnings reserve may be used by the resolution of a shareholders meeting.

24. Revenue

(1) Disaggregation of revenue

Disaggregation of revenue recognized from contracts with customers are stated in "Note 6. Business Segments, (2) Information on reportable segments and (4) Information on regions and countries." Also, all of the revenue arises from contracts with customers.

The Group engages in research, design, development, manufacturing, sales and services related to various kinds of semiconductors as a manufacturer specializing in semiconductors, and the revenue is mainly due to sales of semiconductor products.

Regarding the sales of these products, the Group recognizes revenue when the customer obtains control over the product which is at the time of delivery of a product because legal title of the product, physical possession of the asset, the significant risks and rewards of ownership are transferred to the customer, and the customer has an obligation to pay for the products at the time of delivery of the product.

Revenue is measured at the amount of promised consideration in contracts with customers.

With regard to sales contract including variable consideration such as rebate and discounts, the transaction price is estimated and determined using the most-likely-amount method based largely on historical data, considering variable prices within a range that will not result in significant deviation between estimate and historical data.

Consideration under sales contracts is recovered mainly within one year from satisfaction of a performance obligation and includes no significant financing components.

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(2) Accounts arising from contracts

		(In millions of yen)
	As of December 31,	As of December 31,
	2020	2021
Contract assets	_	695
Contract liabilities	297	351

(Note) 1. Contract assets are company's rights to the consideration received in exchange for goods or services transferred to the customer by the company, on condition of something other than the passage of time (for example, future performance of the company). Contract assets are transferred to receivables when the right to consideration becomes unconditional. Contract assets are included in trade and other receivables in the consolidated statement of financial position.

- 2. Contract liabilities relate to the payment received in advance of performance under the contract. The contract liabilities are reclassified to revenue when the Group satisfies a performance obligation based on the contract. Contract liabilities are included in other current liabilities in the consolidated statement of financial position.
- 3. The amounts of revenues recognized during the prior fiscal year and the current fiscal year from the performance obligations satisfied in the past periods were immaterial.
- 4. Of the revenues recognized in the prior fiscal year, 244 million yen was included in the balance of contract liabilities as of January 1, 2020. In addition, of the revenues recognized in the current fiscal year, 168 million yen was included in the balance of contract liabilities as of January 1, 2021.
- (3) Transaction price allocated to the remaining performance obligation The Group uses the practical expedient of omitting the disclosure of information on the remaining performance obligations because it has no significant transactions with individual expected contractual terms exceeding one year. In addition, there are no significant amounts in consideration from contracts with customers that are not included in transaction prices.
- (4) Assets recognized from the cost to obtain or fulfill contracts with customers There are no assets recognized from the cost to obtain or fulfill contracts with customers.

25. Selling, General and Administrative Expenses The components of selling, general and administrative expenses are as follows.

		(In millions of yen)
	The year ended December 31, 2020	The year ended December 31, 2021
Research and development expenses	133,237	155,373
Depreciation and amortization	61,982	63,347
Personnel expenses	43,875	53,118
Retirement benefit expenses	2,436	2,780
Other	24,738	33,080
Total	266,268	307,698

(Note) Research and development expenses are included in selling, general and administrative expenses. Related expenses such as outsourcing costs, personnel expenses, depreciation costs and material costs are mainly included in research and development expenses.

26. Other Income

The components of other income are as follows.

		(In millions of yen)
	The year ended December 31, 2020	The year ended December 31, 2021
Gain on sales of property, plant and equipment (Note)	762	5,618
Insurance claim income	2,388	460
Other	886	1,953
Total	4,036	8,031

(Note) Gain on sales of property, plant and equipment recorded in the current fiscal year was mainly due to the sale of Shiga Factory (Otsu, Shiga Prefecture, Japan) of Renesas Semiconductor Manufacturing Co., Ltd., a wholly owned subsidiary of Renesas on August 31, 2021.

27. Other Expenses

The components of other expenses are as follows.

		(In millions of yen)
	The year ended December 31, 2020	The year ended December 31, 2021
Provision for loss on litigation (Note 1)	633	4,737
Business restructuring expenses (Note 2)	4,137	3,934
Impairment losses (Note 3)	2,070	135
Other	1,475	4,327
Total	8,315	13,133

(Note) 1. Provision was recorded for payments such as such as legal proceedings and damage compensations.

2. The Group has reformed its businesses and structures of production to strengthen its financial basis, and the related expenses are shown as business restructuring expenses. The main items of business restructuring expenses were personnel expenses such as additional retirement benefits and expenses related to disposition of property, plant and equipment associated with consolidating the operating bases.

3. For details on impairment losses, see "Note 15. Impairment of Non-financial Assets."

28. Finance Income and Finance Costs

The components of finance income and finance costs are as follows.

(1) Finance income

		(In millions of yen)
	The year ended December 31, 2020	The year ended December 31, 2021
Valuation gain of investment securities		
Financial assets measured at fair value through profit or loss	1,738	3,529
Foreign exchange gain	5,295	—
Other	590	611
Total	7,623	4,140
(2) Finance costs		
		(In millions of yen)
	The year ended December 31, 2020	The year ended December 31, 2021
Interest expenses		
Financial liabilities measured at amortized cost	7,541	9,975
Foreign exchange loss (Note)	_	24,167
Other	8	1,136
Total	7,549	35,278

(Note) Foreign exchange loss include losses on valuation of currency derivatives.

29. Other Comprehensive Income Reclassification adjustments and tax effects of other comprehensive income by component are as follows.

	(In millions of ye				
	The year ended December 31, 2020	The year ended December 31, 2021			
tems that will not be reclassified to profit or loss:					
Remeasurements of defined benefit plans					
Amount incurred during the period	(496)	450			
Tax effect	162	452			
After tax effect	(334)	902			
Equity financial assets measured at fair value through other comprehensive income					
Amount incurred during the period	(429)	(382)			
Tax effect	99	71			
After tax effect	(330)	(311)			
Fotal of items that will not be reclassified to profit or loss	(664)	591			
tems that may be reclassified subsequently to profit or oss:					
Exchange differences on translation of foreign operations					
Amount incurred during the period	(64,290)	(169,312)			
Reclassification	_	—			
Before tax effect	(64,290)	169,312			
Tax effect					
After tax effect	(64,290)	169,312			
Cash flow hedges					
Amount incurred during the period		(3,348)			
Reclassification		(818)			
Before tax effect		(4,166)			
Tax effect	_	144			
After tax effect		(4,022)			
Cost of hedges					
Amount incurred during the period		(226)			
Reclassification		3			
Before tax effect		(223)			
Tax effect	_	70			
After tax effect		(153)			
Fotal of items that may be reclassified subsequently to profit or loss	(64,290)	165,137			
Fotal other comprehensive income	(64,954)	165,728			

30. Earnings Per Share
 Basic earnings per share attributable to owners of parent and diluted earnings per share are as follows.
 (1) Basic earnings per share

	The year ended December 31, 2020	The year ended December 31, 2021
Profit attributable to owners of parent used for the calculation of basic earnings per share (million yen)	45,626	127,261
Weighted average number of ordinary shares during the year (thousands of shares)	1,719,345	1,845,524
Basic earnings per share (yen)	26.54	68.96
(2) Diluted earnings per share		
	The year ended December 31, 2020	The year ended December 31, 2021
Profit attributable to owners of parent used for the calculation of basic earnings per share (million yen)	45,626	127,261
Adjustments on earnings (million yen)	_	_
Profit used for the calculation of diluted earnings per share (million yen)	45,626	127,261
Weighted average number of ordinary shares during the year before dilution (thousands of shares)	1,719,345	1,845,524
Increase in common stock		
Share acquisition rights (thousands of shares)	37,701	35,233
Restricted Stock Unit (thousands of shares)	_	6,239
Weighted average number of ordinary shares during the year after dilution (thousands of shares)	1,757,045	1,886,996
Diluted earnings per share (yen)	25.97	67.44

31. Consolidated Statement of Cash Flows

(1) Changes in liabilities in financing activities

The components of liabilities in financing activities and their changes during the fiscal year are as follows.

(For the year ended December 31, 2020)							
	As of		Non-	cash transaction	S	As of	
	December 31, 2019	Cash flows	Acquisitions	Increase due to business combination	Other (Note 2)	December 31, 2020	
Long-term borrowings (Note 1)	771,747	(93,295)	_	_	1,281	679,733	
Short-term borrowings	—	—	—	—	—	—	
Bonds	12	_	_	_	(1)	11	
Lease liabilities	14,155	(4,840)	5,593	_	(931)	13,977	
Total	785,914	(98,135)	5,593	_	349	693,721	

(For The year ended December 31, 2021)

	As of		Non-	- As of		
	December 31, 2020	Cash flows	Acquisitions	Increase due to business combination	Other (Note 2)	December 31, 2021
Long-term borrowings (Note 1)	679,733	(22,777)	—	71	1,463	658,490
Short-term borrowings		—	—	2,185	(1,138)	1,047
Bonds	11	154,359	—	_	181	154,551
Lease liabilities	13,977	(4,571)	2,781	4,232	391	16,810
Total	693,721	127,011	2,781	6,488	897	830,898

1. Current portion of long-term borrowings are included in long-term borrowings. (Note)

2. Non-cash transactions for long-term borrowings includes the arrangement fees.

(2) Non-cash transactions

Significant non-cash transactions are as follows.

		(In millions of yen)
Туре	The year ended December 31, 2020	The year ended December 31, 2021
Purchase of intangible assets through installment purchase contracts	35,569	435

(3) Principal assets and liabilities of a company that became a consolidated subsidiary due to acquisition of stock

(For the year ended December 31, 2021)

For details of assets and liabilities for Dialog, Celeno and these subsidiaries at time of its consolidation resulting from the acquisition of stock as well as the relationship between the acquisition price of stock and expenditures (net) for its acquisition, see "Note 7. Business Combinations."

32. Share-based Payments

The Group has adopted share-based payment plans as an incentive plan for directors, senior vice presidents and employees.

Share-based payment expenses included in the consolidated statement of profit or loss totaled 1,234 million yen in "Cost of sales" and 13,323 million yen in "Selling, general and administrative expenses" in the previous fiscal year, and 1,392 million yen in "Cost of sales" and 13,511 million yen in "Selling, general and administrative expenses" in the current fiscal year.

(1) Restricted Stock Unit (RSU) and Performance Share Unit (PSU)

A. Overview of RSU and PSU

(a) RSU

RSU is a share-based payment plan in which the Company provides recipients with the number of units that corresponds to the number of years determined by the Board of Directors (basically three years, except one year for the Outside Directors) and annually delivers to the recipients common stock for the number of units that vested (the units vest by one third of total units provided every year after the grant date, except that the units vest after one year for the outside directors), subject to continued employment with the Group.

PSU is a share-based payment plan in which the Company provides the recipients (excluding outside directors) with the number of units determined by the Board of Directors and delivers to the recipients common stock for the number of the units that vested in response to the extent of the growth rate of total shareholder return over the three-year performance period from April 1 of the year when the PSUs are granted.

B. Details for RSU and PSU

The details of RSU and PSU granted in the current fiscal year are as follows.

Doto of grant	Cotogon, and number of grantees	Numbe	r of units	Fair value (Yen)	
Date of grant	Category and number of grantees	RSU	PSU	RSU	PSU
April 9, 2021	Outside directors 2 Director and corporate officer 1 Corporate officers 10 Employees of the Company and subsidiaries 2,862	7,458,400	1,195,800	1,258.0	1,605.2
July 16, 2021	Employees of the Company and subsidiaries 241	487,200	_	1,233.0	_
August 31, 2021 (Note 4, 5)	Corporate officer 1 Employees of subsidiaries 2,192	13,468,700	_	1,189.0	_
October 15, 2021	Employees of subsidiaries 209	630,800	_	1,337.0	_
November 12, 2021	Employees of subsidiaries 1,973	2,491,100	_	1,486.0	_

(Note) 1. The fair value of RSU is calculated based on the Company's stock price on the date of grant.

2. The fair value of PSU is calculated based on the results of comparing the fluctuation rate of the Company's stock with that of stock indexes over a certain period.

3. Our common stock (1 unit = 1 share) is delivered based on the number of units at the time of vesting. There is no payment from Directors, Corporate Officers and employees at the time of delivering the stock.

- 4. Based on the agreements regarding the acquisition of Dialog, the unvested portion of Dialog's Employee Share Plan Award was replaced by Renesas share plans (RSU) as of the acquisition date.
- 5. The rights are based on the vesting conditions originally provided by Dialog except for certain awards that will be vested earlier than scheduled.
- C. Changes of the number of RSU and PSU

Changes of the number of RSU and PSU in the prior fiscal year and the current fiscal year are as follows (1 right = 1 share).

Grant date	Grant date The year ended December 31, 2020			The year ended December 31, 2021		
	RSU	PSU	RSU	PSU		
Beginning balance			_	_		
Granted	—	—	24,536,200	1,195,800		
Forfeited	—	—	(808,615)	(62,600)		
Vested	_	_	(1,838,785)	—		
Ending balance			21,888,800	1,133,200		

(2) Stock option

A. Overview of the stock option plan

Under the stock option plan, warrants have been granted to eligible persons in accordance with the resolution of the Board of Directors of the Company based on the arrangement approved at the shareholders meeting of the Company. The exercise period of the stock options is set by an allotment contract, and if they are not exercised during the exercise

period, the stock options will lapse. In addition, if an eligible person has left the Company before the vesting date, the options will also lapse. However, this does not apply to certain cases addressed in the warrants allotment contract, such as resignation due to the expiration of the term of office.

The stock option plan of the Company is accounted for as equity-settled share-based payments.

B. Details for the stock option plan

The stock option plan in effect during the current fiscal year is as follows.

	Category and number of grantees	Type of stock and number of shares	Grant date	Vesting conditions	Vesting period	Exercise period
Fiscal year 2016 Stock options No.1 No.2 No.3	Directors of the Company 2 Corporate officers and executive officers of the Company 10	Common stock 288,500 shares	August 1, 2016	The rights will vest in stages as follows. One third will vest on August 2, 2017 One third will vest on August 2, 2018 The remaining will vest on August 2, 2019	From August 1, 2016 to August 2, 2019	From August 2, 2016 to August 1, 2026
Fiscal year 2017 Stock options No.1 – 1 No.2 – 1	Directors of the Company 2 Corporate officers and executive officers of the Company 11 Employees of the Company 342 Directors of subsidiaries 20 Employees of subsidiaries 890	Common stock 3,549,500 shares	April 3, 2017	The rights will vest in stages as follows One third will vest on April 4, 2018 One third will vest on April 4, 2019 The remaining will vest on April 4, 2020	From April 3, 2017 to April 4, 2020	From April 4, 2017 to April 3, 2027
Fiscal year 2017 Stock options No.1 – 2 No.2 – 2	Directors of the Company 2 Corporate officers and executive officers of the Company 11 Employees of the Company 78 Directors of subsidiaries 14 Employees of subsidiaries 59	Common stock 2,112,000 shares	April 3, 2017	The Company sets the upper limit number of shares expected to vest by multiplying the number of allocated stock subscription rights with the rate calculated by comparing total shareholder return fluctuation rate of the Company and companies that are the components of PHLX Semiconductor Sector Index and Tokyo Stock Price Index.	From April 3, 2017 to April 3, 2020	From April 4, 2017 to April 3, 2027
Fiscal year 2017 Stock options No.3	Employees of subsidiaries 7	Common stock 30,900 shares	May 11, 2017	The rights will vest in stages as follows One third will vest on April 4, 2018 One third will vest on April 4, 2019 The remaining will vest	From May 11, 2017 to April 4, 2020	From May 12, 2017 to May 11, 2027

				on April 4, 2020		
Fiscal year 2017 Stock options No.4	Employees of subsidiaries 13	Common stock 52,200 shares	July 12, 2017	The rights will vest in stages as follows One third will vest on April 4, 2018 One third will vest on April 4, 2019 The remaining will vest on April 4, 2020	From July 12, 2017 to April 4, 2020	From July 13, 2017 to July 12, 2027
Fiscal year 2017 Stock options No.5 No.6	Employees of subsidiaries 20	Common stock 98,000 shares	September 14, 2017	The rights will vest in stages as follows One third will vest on April 4, 2018 One third will vest on April 4, 2019 The remaining will vest on April 4, 2020	From September 14, 2017 to April 4, 2020	From September 15, 2017 to September 14, 2027
Fiscal year 2017 Stock options No.7	Employees of subsidiaries 16	Common stock 94,000 shares	October 12, 2017	The rights will vest in stages as follows One third will vest on April 4, 2018 One third will vest on April 4, 2019 The remaining will vest on April 4, 2020	From October 12, 2017 to April 4, 2020	From October 13, 2017 to October 12, 2027
Fiscal year 2017 Stock options No.8	Employees of subsidiaries 26	Common stock 117,300 shares	January 15, 2018	The rights will vest in stages as follows Certain amount will vest on April 4, 2018 Certain amount will vest on April 4, 2019 Certain amount will vest on April 4, 2020 The remaining will vest on April 4, 2021	From January 15, 2018 to April 4, 2021	From January 16, 2018 to January 15, 2028
Fiscal year 2018 Stock options No.1 – 1 No.2 – 1	Directors of the Company 3 Corporate officers and executive officers of the Company 10 Employees of the Company 472 Directors of subsidiaries 18 Employees of subsidiaries 743	Common stock 3,607,200 shares	April 2, 2018	The rights will vest in stages as follows One third will vest on April 3, 2019 One third will vest on April 3, 2020 The remaining will vest on April 3, 2021	From April 2, 2018 to April 3, 2021	From April 3, 2018 to April 2, 2028
Fiscal year 2018 Stock options No.1 – 2 No.2 – 2	Directors of the Company 3 Corporate officers and executive officers of the Company 10 Employees of the Company 95	Common stock 2,047,200 shares	April 2, 2018	The Company sets the upper limit number of shares expected to vest by multiplying the number of allocated stock subscription rights with the rate calculated by comparing total shareholder return fluctuation rate of the Company and companies that are the components of PHLX Semiconductor Sector	From April 2, 2018 to April 2, 2021	From April 3, 2018 to April 2, 2028

	Directors of subsidiaries			Index and Tokyo Stock Price Index.		
	13 Employees of subsidiaries 47					
Fiscal year 2018 Stock options No.3 No.4	Employees of the Company 257 Directors of subsidiaries 1 Employees of subsidiaries	Common stock 534,600 shares	July 31, 2018	The rights will vest in stages as follows One third will vest on April 3, 2019 One third will vest on April 3, 2020 The remaining will vest on April 3, 2021	From July 31, 2018 to April 3, 2021	From August 1, 2018 to July 31, 2028
Fiscal year 2018 Stock options No.5	181 Employees of subsidiaries 22	Common stock 182,700 shares	October 31, 2018	The rights will vest in stages as follows Certain amount will vest on April 3, 2019 Certain amount will vest on April 3, 2020 Certain amount will vest on April 3, 2021 The remaining will vest on April 3, 2022	From October 31, 2018 to April 3, 2022	From November 1, 2018 to October 31, 2028
Fiscal year 2019 Stock options No.1 No.2 No.3	Corporate officers and executive officers of the Company 1 Directors of subsidiaries 1 Corporate officers and executive officers of subsidiaries 3 Employees of subsidiaries 1,337	Common stock 57,043,500 shares	April 9, 2019	According to completion of the acquisitions with IDT, the existing stock options for IDT allocated to directors of IDT and its subsidiaries, corporate officers and executive officers of subsidiaries, and employees of subsidiaries are converted into the stock options for the Company and issued. The rights are based on the vesting periods for the stock option originally scheduled in IDT.	From April 9, 2019 to March 15, 2023	From April 9, 2019 to April 8, 2029
Fiscal year 2019 Stock options No.4 – 1 No.5 – 1	Corporate officers and executive officers of the Company 1 Employees of the Company 1 Employees of subsidiaries 32	Common stock 659,800 shares	May 31, 2019	The rights will vest in stages as follows One third will vest on April 1, 2020 One third will vest on April 1, 2021 The remaining will vest on April 1, 2022	From May 31, 2019 to April 1, 2022	From June 1, 2019 to May 31, 2029
Fiscal year 2019 Stock options No.4 – 2 No.5 – 2	Corporate officers and executive officers of the Company 1 Employees of the Company 1	Common stock 364,300 shares	May 31, 2019	The Company sets the upper limit number of shares expected to vest by multiplying the number of allocated stock subscription rights with the rate calculated by comparing total shareholder return fluctuation rate of the	From May 31, 2019 to April 2, 2022	From June 1, 2019 to May 31, 2029

				Company and companies that are the		
				components of PHLX Semiconductor Sector Index and Tokyo Stock Price Index.		
Fiscal year 2019 Stock options No.6 – 1 No.7 – 1	Employees of the Company 486 Directors of subsidiaries 15 Employees of subsidiaries 1,875	Common stock 16,222,700 shares	July 25, 2019	The rights will vest in stages as follows One third will vest on April 1, 2020 One third will vest on April 1, 2021 The remaining will vest on April 1, 2022	From July 25, 2019 to April 1, 2022	From July 26, 2019 to July 25, 2029
Fiscal year 2019 Stock options No.6 – 2 No.7 – 2	Employees of the Company 90 Directors of subsidiaries 10 Employees of subsidiaries 46	Common stock 3,203,800 shares	July 25, 2019	The Company sets the upper limit number of shares expected to vest by multiplying the number of allocated stock subscription rights with the rate calculated by comparing total shareholder return fluctuation rate of the Company and companies that are the components of PHLX Semiconductor Sector Index and Tokyo Stock Price Index.	From July 25, 2019 to April 2, 2022	From July 26, 2019 to July 25, 2029
Fiscal year 2019 Stock options No.8 – 1 No.9 – 1	Directors of the Company 2 Corporate officers and executive officers of the Company 12 Employees of the Company 2	Common stock 985,900 shares	August 23, 2019	The rights will vest in stages as follows One third will vest on April 1, 2020 One third will vest on April 1, 2021 The remaining will vest on April 1, 2022	From August 23, 2019 to April 1, 2022	From August 24, 2019 to August 23, 2029
Fiscal year 2019 Stock options No.8 – 2 No.9 – 2	Directors of the Company 2 Corporate officers and executive officers of the Company 12	Common stock 1,963,800 shares	August 23, 2019	The Company sets the upper limit number of shares expected to vest by multiplying the number of allocated stock subscription rights with the rate calculated by comparing total shareholder return fluctuation rate of the Company and companies that are the components of PHLX Semiconductor Sector Index and Tokyo Stock Price Index.	From August 23, 2019 to April 2, 2022	From August 24, 2019 to August 23, 2029
Fiscal year 2019 Stock options No.10	Employees of subsidiaries 441	Common stock 351,600 shares	September 20, 2019	The rights will vest in stages as follows One third will vest on April 1, 2020 One third will vest on April 1, 2021 The remaining will vest	From September 20, 2019 to April 1, 2022	From September 21, 2019 to September 20, 2029

			on April 1, 2022		
Corporate officers and executive officers of the Company 1 Employees of the Company 122 Employees of subsidiaries 123	Common stock 887,700 shares	October 31, 2019	The rights will vest in stages as follows Certain amount will vest on April 1, 2020 Certain amount will vest on April 1, 2021 Certain amount will vest on April 1, 2022 The remaining will vest on April 1, 2023	From October 31, 2019 to April 1, 2023	From November 1, 2019 to October 31, 2029
Corporate officers and executive officers of the Company 1 Employees of subsidiaries 1	Common stock 73,800 shares	October 31, 2019	The Company sets the upper limit number of shares expected to vest by multiplying the number of allocated stock subscription rights with the rate calculated by comparing total shareholder return fluctuation rate of the Company and companies that are the components of PHLX Semiconductor Sector Index and Tokyo Stock Price Index.	From October 31, 2019 to April 2, 2023	From November 1, 2019 to October 31, 2029
Employees of subsidiaries 15	Common stock 204,800 Shares	December 25, 2019	The rights will vest in stages as follows One third will vest on April 1, 2020 One third will vest on April 1, 2021 The remaining will vest on April 1, 2022	From December 25, 2019 to April 1, 2022	From December 26, 2019 to December 25, 2029
Employees of subsidiaries 23	Common stock 210,000 Shares	January 31, 2020	The rights will vest in stages as follows Certain amount will vest on April 1, 2020 Certain amount will vest on April 1, 2021 Certain amount will vest on April 1, 2022 The remaining will vest	From January 31, 2020 to April 1, 2023	From February 1, 2020 to January 31, 2030
Directors of the Company 4 Corporate officers and executive officers of the Company 10 Employees of the Company 467 Directors of subsidiaries 14 Employees of	Common stock 17,068,000 Shares	June 30, 2020	The rights will vest in stages as follows One third will vest on July 1, 2021 One third will vest on July 1, 2022 The remaining will vest on July 1, 2023	From June 30, 2020 to July 1, 2023	From July 1, 2020 to June 30, 2030
	and executive officers of the Company 1 Employees of the Company 122 Employees of subsidiaries 123 Corporate officers and executive officers of the Company 1 Employees of subsidiaries 1 Employees of subsidiaries 15 Employees of subsidiaries 23 Directors of the Company 4 Corporate officers and executive officers of the Company 4 Corporate officers and executive officers of the Company 10 Employees of the Company 4 Corporate officers and executive officers of the Company 10 Employees of the Company 10 Employees of the Company 10 Employees of the Company 10 Employees of the Company 10	and executive officers of the Companystock 887,700 shares1Employees of the Company 122	and executive officers of the Companystock 887,700 shares31, 20191Employees of the Company 122Common stockOctober 31, 20192Employees of subsidiaries 123Common stock 73,800 sharesOctober 31, 20192Employees of subsidiaries 1Common stock 73,800 sharesOctober 31, 20192Employees of subsidiaries 1Common stock 204,800 SharesDecember 25, 20192Employees of subsidiaries 15Common stock 210,000 SharesDecember 25, 20192Directors of the Company 4Common stock 210,000 SharesJanuary 31, 2020Directors of the Company 4Common stock 210,000 SharesJune 30, 2020Directors of the Company 4Common stock 17,068,000 SharesJune 30, 2020Directors of the Company 467Common stock 17,068,000 SharesJune 30, 2020	and executive officers of the Companystock 887,700 shares31, 2019stages as follows Certain amount will vest on April 1, 2021 Certain amount will vest on April 1, 2022 The remaining will vest on April 1, 2023Employees of subsidiariesCommon stock Tock Tock officers of the CompanyOctober 31, 2019The Company sets the upper limit number of shares expected to vest by multiplying the number of allocated stock and executive of here and executive officers of the Company1Corporate officers and executive officers of the CompanyOctober 31, 2019The Company sets the upper limit number of shares expected to vest by multiplying the number of allocated stock subscription rights with the rate calculated by comparing total shares expected to vest by comparing total shares expected to vest price Index.Employees of subsidiariesCommon stock 204,800 SharesDecember 25, 2019The rights will vest in stages as follows One third will vest on April 1, 2020 Ore third will vest on April 1, 2020 The remaining will vest on April 1, 2022 The remaining will vest on April 1, 2023Directors of the Company 10Common stock and executive of	Corporate officers and executive officers of the CompanyCormon 887,700 sharesOctober 31, 2019The rights will vest in stages as follows on April 1, 2020 Certain amount will vest on April 1, 2022 The remaining will vest on April 1, 2023From Corboer 31, 2019 to April 1, 2020 The remaining will vest on April 1, 2023From Corboer Stages Corboer StagesCorporate officers officers of the Company 11Corporate officers and executive stockOctober stagesThe Company sets the unmber of allocated shares expected to vest by multiplying the number of allocated shares expected to vest by comparing total shares expected to vest by comparing total shares and Tokyo StockFrom Corboer Stock 25, 2019From Corboer company and companies that are the components of PHLX Semiconductor Sector Index and Tokyo Stock Price Index.From December Stock 25, 2019 25, 2019From Stages as follows to April 2, 2023Employees of subsidiaries 15Common stock 210, 2000 SharesJanuary Stages as follows to April 1, 2020 The remaining will vest in stages as follows on April 1, 2021 The remaining will vest in stages as follows on April 1, 2022From January Ja

Fiscal year 2020 Stock options No.1 – 2 No.2 – 2	Directors of the Company 1 Corporate officers and executive officers of the Company 10 Employees of the Company 88 Directors of subsidiaries 9 Employees of subsidiaries 41	Common stock 5,211,600 Shares	June 30, 2020	The Company sets the upper limit number of shares expected to vest by multiplying the number of allocated stock subscription rights with the rate calculated by comparing total shareholder return fluctuation rate of the Company and companies that are the components of PHLX Semiconductor Sector Index and Tokyo Stock Price Index.	From June 30, 2020 to June 30, 2023	From July 1, 2020 to June 30, 2030
Fiscal year 2020 Stock options No.3 No.4	Directors of the Company 1 Corporate officers and executive officers of the Company 8 Employees of the Company 916 Directors of subsidiaries 6 Employees of subsidiaries 1,614	Common stock 4,725,300 Shares	August 31, 2020	The rights will vest in stages as follows One third will vest on August 31, 2020 One third will vest on September 1, 2020 The remaining will vest on October 1, 2020	From August 31, 2020 to October 31, 2020	From August 31, 2020 to August 30, 2030
Fiscal year 2020 Stock options No.5 No.6	Employees of the Company 219 Employees of subsidiaries 161	Common stock 665,800 Shares	August 31, 2020	The rights will vest in stages as follows One third will vest on September 1, 2021 One third will vest on September 1, 2022 The remaining will vest on September 1, 2023	From August 31, 2020 to September 1, 2023	From September 1, 2020 to August 31, 2030
Fiscal year 2020 Stock options No.7 – 1 No.8 – 1	Employees of the Company 3 Employees of subsidiaries 94	Common stock 910,100 Shares	November 30, 2020	The rights will vest in stages as follows Certain amount will vest on July 1, 2021 Certain amount will vest on July 1, 2022 Certain amount will vest on July 1, 2023 The remaining will vest on July 1, 2024	From November 30, 2020 to July 1, 2023	From December 1, 2020 to November 30, 2030
Fiscal year 2020 Stock options No.7 – 2 No.8 – 2	Employees of subsidiaries 10	Common stock 82,000 Shares	November 30, 2020	The rights will vest in stages as follows One third will vest on September 1, 2021 One third will vest on September 1, 2022 The remaining will vest on September 1, 2023	From November 30, 2020 to September 1, 2023	From December 1, 2020 to November 30, 2030

Fiscal year 2020 Stock options No.7 – 3	Employees of the Company 1	Common stock 22,600 Shares	November 30, 2020	The Company sets the upper limit number of shares expected to vest by multiplying the number of allocated stock subscription rights with the rate calculated by comparing total shareholder return fluctuation rate of the Company and companies that are the components of PHLX Semiconductor Sector Index and Tokyo Stock Price Index.	From November 30, 2020 to June 30, 2023	From December 1, 2020 to November 30, 2030
Fiscal year 2021 Stock options No.1 No.2	Employees of the Company 6 Employees of subsidiaries 52	Common stock 320,400 Shares	February 26, 2021	The rights will vest in stages as follows Certain amount will vest on July 1, 2021 Certain amount will vest on July 1, 2022 Certain amount will vest on July 1, 2023 The remaining will vest on July 1, 2024	From February 26, 2021 to July 1, 2024	From February 27, 2021 to February 26, 2031
Fiscal year 2021 Stock options No.3	Employees of subsidiaries 4	Common stock 13,200 Shares	February 26, 2021	The rights will vest in stages as follows One third will vest on September 1, 2021 One third will vest on September 1, 2022 The remaining will vest on September 1, 2023	From February 26, 2021 To September 1, 2023	From February 27, 2021 to February 26, 2031

(Note) 1. Vesting conditions include a requirement for award beneficiaries to provide services to the Company until the stock vesting date. However, this does not apply to certain cases such as mandatory retirement, resignation due to the expiration of the term of office or the other justifiable reasons.

2. Grantees cannot exercise options during the time from the day after the grant date until when the stock is vested. Also, the option will be forfeited if the target retires or resigns from the Company or subsidiary by the vesting date. However, if allowed under the Stock Acquisition Rights Allocation Agreement, those options may be exercised. For example, if awards are not forfeited upon retirement or resignation due to the expiration of terms of office under the Stock Acquisition Rights Allocation Agreement, the said person may exercise the said stock options starting on the day following said loss of eligibility until 13 months after.

3. If grantees forfeit their share acquisition rights, they may not exercise their stock options.

C. Number and weighted average exercise price of stock options

Changes of the number and the weighted average exercise price of stock options granted in the prior fiscal year and the current fiscal year are as follows. The number of stock options is stated by converting them to the number of shares.

	The year ended D	December 31, 2020	The year ended D	ecember 31, 2021
	Number of options (shares)	Weighted average exercise price (yen)	Number of options (shares)	Weighted average exercise price (yen)
Beginning balance of unexercised options	47,457,400	1	49,952,600	1
Granted	28,895,400	1	333,600	1
Exercised	21,622,200	1	15,747,600	1
Forfeited	4,586,700	1	3,756,200	1
Expired	191,300	1	89,500	1
Ending balance of unexercised options	49,952,600	1	30,692,900	1
Ending balance of exercisable options	5,320,000	1	6,520,700	1

(Note) 1. For the stock options exercised during the period, the weight average share price as of the exercise date was 712 yen for the fiscal year ended December 31, 2020 and 1,269 yen for the fiscal year ended December 31, 2021.

2. Remaining weighted average contractual life outstanding as of December 31, 2020 and 2021 was 4 years and 3 years, respectively.

D. Fair value of stock options granted and estimation method of fair value

The valuation techniques used for the stock options granted for the fiscal year ended December 31, 2020 and the fiscal year ended December 31, 2021 are the Binomial model, and the major basic assumptions and estimation method are as follows.

Date of grant	Fair value per share at the grant date (yen)	Share price on date of grant (yen)	Exercise price (yen)	Expected volatility (Note 1)	Expected holding period (Note 2)	Expected dividend (Note 3)	Risk-free interest rate (Note 4)
January 2020	710	711	1	42.040%	5 years	No dividend	(0.182%)
June 2020	550 346 (Note 5)	551	1	50.700%	5 years	No dividend	(0.100%)
August 2020	666	667	1	51.210%	5 years	No dividend	(0.067%)
November 2020	927 583 (Note 5)	928	1	50.393%	5 years	No dividend	(0.105%)
February 2021	1,168	1,169	1	49.744%	5 years	No dividend	(0.048%)

(Note) 1. The expected volatility is calculated using the actual share prices during the expected holding period from the grant date.

grant date. 2. The expected holding period is based on the number of years from the grant date to the last day of the principle exercise period.

3. The expected dividend is calculated based on the actual annual dividend for the year.

4. The risk-free interest rate is the yield on Japanese government bonds for the period that corresponds to the remaining life of the option.

5. For the stock options whose vesting condition is the stock price requirement, the actual rates of granted stocks are reflected on the fair value based on the results of comparing the fluctuation rate of the Company's stock with that of stock indexes over a certain period.

33. Financial Instruments

(1) Capital management

The Group aims to achieve sustainable growth and maximize its corporate value. Investments of surplus funds are limited to short-term deposits and financial assets with a high level of safety. Regarding financing sources, the Group mainly uses borrowings from banks. The Group mainly uses derivative financial instruments to manage fluctuations in foreign currency exchange rates, and the Group's policies prohibit holding or issuing derivative financial instruments for speculative transactions. Items subject to management are net interest-bearing liabilities obtained by deducting cash and cash equivalents from interest-bearing liabilities and equity. Their balances and the major indicators that the Group uses for its capital management are as follows.

		(In millions of yen)
	As of December 31, 2020	As of December 31, 2021
Interest-bearing liabilities	693,721	830,898
Less: Cash and cash equivalents	(219,786)	(221,924)
Net interest-bearing liabilities	473,935	608,974
Total equity attributable to owners of parent	616,701	1,158,143
Total liabilities and equity	1,608,985	2,406,247
Equity ratio attributable to owners of parent (%)	38.3	48.1

Equity ratio attributable to owners of parent: Total equity attributable to owners of parent /Total liabilities and equity.

(2) Basic policies for financial risk management

The Group is exposed to financial risks (credit risk, liquidity risk and market risk) in the process of executing its business activities. Accordingly, the Group regularly monitors the financial risks based on internal management regulations and takes measures to avoid or reduce the risks as required.

The Group does not engage in derivative transactions for speculative purposes.

A. Credit risk

(a) Credit risk management

Notes and trade receivables are exposed to the credit risk of customers. Conforming to the internal rules for the management of receivables, the Group regularly monitors major customers' credit and manages the due dates of collection and the balance for each customer. Other receivables are exposed to the credit risk of customers, but most of them are settled in the short term. Short-term investments are financial assets invested on a short-time basis, and the Group transacts with highly creditworthy financial institutions. Trade receivables are regarded as non-performing if all or part of them cannot be collected or if collection is deemed extremely difficult. The Group does not have any exposure to the significant credit risk of certain customers, and there is no excessive concentration of credit risk that requires special management.

The largest exposure to credit risk at the end of the reporting period is the carrying amount of financial assets after impairment, but there is no historical experience of recognizing a significant credit loss in previous years.

Regarding debt guarantees, the balance of debt guarantees presented in "Note 36. Commitments and Contingent Liabilities" is the largest exposure of the Group to credit risk.

(b) Analysis of changes in loss allowance The changes in the loss allowance are as follows.

The year ended December 31, 2020

The year ended December 31, 2020								
	12-month expected credit losses	Lifetime expected credit losses						
	Loss allowance for financial instruments other than trade receivables	Loss allowance for trade receivables	Loss allowance for financial instruments whose credit risk has increased significantly	Loss allowance for financial instruments whose credit is impaired				
Beginning balance	_	95	_	_				
Increases	_	58	—	_				
Decreases due to reversal	_	(31)	_	_				
Other	_	(3)	_	_				
Ending balance	_	119	_	—				

The year ended December 31, 2021

	12-month expected credit losses	sses		
	tinancial instruments I loss allowance for		Loss allowance for financial instruments whose credit risk has increased significantly	Loss allowance for financial instruments whose credit is impaired
Beginning balance	_	119	_	—
Increases	_	174	_	_
Decreases due to reversal	_	(232)	_	_
Other	_	8	_	_
Ending balance	—	69	_	_

(Note) Acquisition by business combination is included in "Increases."

⁽c) Carrying amount of financial instruments for the loss allowance The carrying amount (before the loss allowance) of financial instruments for the loss allowance as of each fiscal year end is as follows.

	12-month expected credit losses	Lifetime expected credit losses				
	Loss allowance for financial instruments other than trade receivables	Loss allowance for trade receivables	Loss allowance for financial instruments whose credit risk has increased significantly	Loss allowance for financial instruments whose credit is impaired		
As of December 31, 2020	4,751	86,036	_			
As of December 31, 2021	3,737	155,604	_	_		

(d) Analysis of credit risk

The aging analysis of trade receivables as of each fiscal year end is as follows.

	As of December 31, 2020	As of December 31, 2021			
Before due date	83,560	148,040			
Up to 30 days past due	1,916	7,142			
Over 30 days past due and up to 90 days past due	240	372			
Over 90 days past due	320	50			
Total	86,036	155,604			

(In millions of ven)

For trade receivables, the Group's major counterparties consist of specific distributors with high credit ratings and there is no material balance of loss allowance based on expected loss rate. For financial instruments other than trade receivables, there is no credit risk that is concentrated around credit ratings.

B. Liquidity risk

The Group is exposed to liquidity risk whereby the performance of payment obligations could become difficult. To limit its exposure to liquidity risk, however, the Group works to maintain fund management through the optimization of capital efficiency through the efficient management of working capital and the central management of funds by the Company. The Group also manages the liquidity risk by appropriately maintaining liquidity on hand through the timely preparation and updating of the financing plan and taking the external financial environment into account.

The balance of financial liabilities by due date is as follows.

As of December 31, 2020

As of December 5	1, 2020						(In milli	ons of yen)
	Carrying amount	Contractual cash flows	Due within one year	Due after one year but within two years	Due after two years but within three years	Due after three years but within four years	Due after four years but within five years	Due after five years
Non-derivative financial liabilities								
Trade and other payables	139,412	139,412	114,235	11,695	10,979	2,503	_	_
Bonds and borrowings	679,744	698,762	98,560	97,777	96,994	405,431	—	_
Lease liabilities	13,977	14,487	3,927	3,388	2,278	1,738	1,365	1,791
Other	300	300	—	300	—	—	—	_
Total	833,433	852,961	216,722	113,160	110,251	409,672	1,365	1,791

As of December 31, 2021

	<u> </u>							
	Carrying amount	Contractual cash flows	Due within one year	Due after one year but within two years	Due after two years but within three years	Due after three years but within four years	Due after four years but within five years	Due after five years
Non-derivative financial liabilities								
Trade and other payables	219,430	219,430	204,330	12,308	2,792	—	—	_
Bonds and borrowings	814,088	840,156	128,366	126,503	413,823	36,931	134,533	—
Lease liabilities	16,810	17,683	5,654	4,098	3,021	2,232	1,075	1,603
Lease liabilities	4,681	5,176	5,176					_
Contingent consideration (Note)	1,550	1,550	1,384				166	
Total	1,056,559	1,083,995	344,910	142,909	419,636	39,163	135,774	1,603

(Note) For details, please refer to "Note 7. Business Combinations."

C. Market risk

(a) Foreign currency exchange risk

(i) Foreign currency exchange risk management

Foreign currency receivables and obligations arising from the global business development of the Group are exposed to the risk of foreign exchange rate fluctuations. To reduce the risk of foreign exchange rate fluctuations, the Group uses forward exchange contracts, currency options and currency swaps.

(ii) Net foreign exchange risk exposure

The Group's exposure to the risk of foreign exchange rate fluctuations (net amount) is as follows. This excludes derivative transactions and the amount entered into to hedge foreign exchange rate fluctuation risk using foreign currency deposits.

		(In millions of yen)
Currency	The year ended December 31, 2020	The year ended December 31, 2021
US dollar	(145,066)	(297,436)
Euro	10,083	37,706

(iii) Sensitivity analysis of foreign exchange rates

Based on the assumption that all other variables are constant for foreign currency financial instruments held by the Group in the previous fiscal year and the current fiscal year, the amount of the impact of the 1.0% appreciation of the yen against the US dollar and the euro on profit before tax in the consolidated statement of profit or loss is as follows.

		(In millions of yen)
Currency	The year ended December 31, 2020	The year ended December 31, 2021
US dollar	1,451	2,974
Euro	(101)	(377)

(b) Interest rate risk

Although the Group raises funds through borrowings for the purpose of securing funds for long-term working capital and the promotion of growth strategies, the Group is exposed to the risk of interest rate fluctuations because some borrowings are made at floating interest rates. To reduce the risk of changes in the interest paid on borrowings, the Group uses interest rate swaps as required. Accordingly, the Group has decided that the impact of the risk of interest rate fluctuations on the Company is limited and insignificant and does not conduct a sensitivity analysis for interest rate risk.

(c) Stock price risk

The Group has adopted an incentive plan for its employees for the purpose of securing excellent human resources, particularly at subsidiaries. To operate the incentive plan, the Group holds shares and other financial instruments for the long term and is exposed to the risk of changes in their market prices. Please note that, following the introduction of a stock option plan, the incentive plan was abolished and there was no new issuance.

The Group does not conduct a sensitivity analysis for the risk of changes in share prices since the impact of changes in share prices are immaterial.

(3) Fair value of financial instruments

A. Calculation method of fair value

The calculation method of the fair value of financial instruments is as follows.

- (a) Cash and cash equivalents, and trade and other receivables
- The fair value of these instruments approximates their carrying amount due to short term maturities.
- (b) Trade and other payables

For trade and other payables that will mature within a short amount of time, the fair value approximates the carrying amount. The fair value of trade and other payables that will not mature in a short amount of time is calculated by the present value that is discounted by an interest rate assumed for the case where a similar borrowing is newly made and classified as Level 2.

(c) Securities

If the market price of a security is available in an active market, the securities are measured using this market price and classified as Level 1. If the market price is not available, the fair value is measured mainly by a method based on net assets (method of calculating by making adjustments to the market value as required based on the net assets of the entity that issues shares), etc. and classified as Level 3.

(d) Long-term borrowings

The fair value of long-term borrowings is calculated at the present value that is discounted using an interest rate assumed for the case where a similar borrowing is newly made and classified as Level 2.

(e) Derivative transactions

Forward exchange contracts, currency options and currency swaps are calculated based on the price presented by the customers' financial institution and classified as Level 2. In addition, the fair value calculated using unobservable inputs is classified as Level 3.

(f) Bonds

- The fair value of bonds is calculated by referring to a market price and classified as Level 2.
- (g) Contingent consideration

The fair value of the contingent consideration is calculated as the present value of the payments in the future using appropriate valuation methods with consideration of the probability of occurrence and is classified as Level 3.

(h) Other financial assets and liabilities

Time deposits with maturities of more than three months, long-term accounts receivable, security deposits and guarantee deposits received that are measured at amortized cost are classified as Level 2. Because their fair value approximates their carrying amount, they are omitted from the following table.

B. Classification of financial instruments measured at fair value by levels

In the fair value hierarchy, financial instruments are classified from Level 1 to Level 3 as follows.

Level 1: Fair value measured using unadjusted quoted prices in the active markets

Level 2: Fair value other than quoted prices include within Level 1 that are observable, either directly or indirectly Level 3: Fair value calculated by using a valuation technique including inputs that are not based on observable market data

Transfers between the levels in the fair value hierarchy are recognized on the assumption that the transfers occur at the end of each reporting period. There is no transfer between levels.

(a) Financial instruments measured at amortized cost

The carrying amount and the fair value of financial instruments measured at amortized cost are as follows. Financial instruments measured at fair value and financial instruments whose carrying amount closely approximates fair value are not included in the table below.

As of December 31, 2020

					In millions of yen)
	Carrying		Fair val	ue	
	amount	Level 1	Level 2	Level 3	Total
Financial liabilities					
Borrowings	679,733	_	680,962	—	680,962
Bonds	11	_	11	—	11
Other payables	47,433	_	46,736	—	46,736
Total	727,177	_	727,709		727,709

As of December 31, 2021

(In millions of yen) Fair value Carrying amount Level 2 Level 1 Level 3 Total **Financial liabilities** 661,181 Borrowings 659,537 661,181 154,551 154,551 Bonds 154,551 Other payables 59,262 58,987 58,987 Total 873,350 874,719 874,719 ____

(b) Financial instruments measured at fair value The components of financial assets and financial liabilities measured at fair value on a recurring basis that are classified as each level of the fair value hierarchy are as follows.

As of December 31, 2020

			(Ir	n millions of yen)
	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets measured at fair value through profit or loss				
Investment trust	4,160	_	_	4,160
Unlisted securities	_	_	2,498	2,498
Equity instruments measured at fair value through other comprehensive income				
Unlisted securities	_	_	2,242	2,242
Total	4,160	_	4,740	8,900
As of December 31, 2021				
				In millions of yen)
	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets measured at fair value through profit or loss				
Derivative assets	_	123	_	123
Investment trust	5,475	—	—	5,475
Unlisted securities	_	_	6,018	6,018
Equity instruments measured at fair value through other comprehensive income				
Listed securities	250	—	_	250
Unlisted securities	_	—	2,581	2,581
Total	5,725	123	8,599	14,447
Financial liabilities				
Financial liabilities measured at fair value through profit or loss				
Derivative liabilities	—	1,550	_	1,550
Contingent consideration (Note)	_	_	4,681	4,681
Total	_	1,550	4,681	6,231

(Note) For details, please refer to "Note 7. Business Combinations."

C. Changes in financial assets that are classified as Level 3 are as follows.

		(In millions of yen)
	The year ended December 31, 2020	The year ended December 31, 2021
Beginning balance	3,926	4,740
Total gains or losses in the period	674	4,438
Profit or loss (Note 1)	1,357	3,072
Other comprehensive income (Note 2)	(683)	1,366
Purchases	140	—
Sales	_	—
Settlement	_	(623)
Acquisition due to business combination	_	44
Other	—	—
Ending balance	4,740	8,599

Changes in financial liabilities that are classified as Level 3 are as follows.

		(In millions of yen)
	The year ended December 31, 2020	The year ended December 31, 2021
Beginning balance	_	
Total gains or losses in the period	_	—
Profit or loss (Note 1)	_	—
Other comprehensive income	—	—
Purchases	—	—
Sales	_	—
Settlement	—	—
Acquisition due to business combination	_	4,681
Other	—	—
Ending balance		4,681

(Note) 1. Total gains or losses in the period are for financial assets and liabilities measured at fair value through profit or loss and included in finance income and finance costs in the consolidated statement of profit or loss.

 Total gains or losses in the period are all for equity instruments measured at fair value through other comprehensive income at the end of the reporting period and presented in "Equity instruments measured at fair value through other comprehensive income" in the consolidated statement of comprehensive income.

3. Financial instruments that are classified as Level 3 consist of unlisted securities and contingent consideration for acquisitions. Unlisted securities are mainly investments in funds, and the fair value of unlisted securities is measured based on the value of net asset as a valuation technique. In addition, the fair value of contingent consideration is measured in consideration of the possibility of achieving for developmental milestones and the time value of money. The measurement results of the fair value are reviewed and approved by an appropriate authorized person. Since these estimates are uncertain, fair value may increase if significant non-observable development milestones become more likely to be achieved.

4. For details, please refer to "Note 7. Business Combinations."

(4) Derivative transactions and hedging activities

A. Overview of hedges

The Group uses forward exchange contracts, currency options and currency swaps for the purpose of hedging transactions against the risk of foreign exchange rate fluctuations in foreign currency cash flows. Hedge accounting is applied to those transactions that meet the requirements for hedge accounting. Even if the requirements for hedge accounting are not met, the Group uses derivative transactions if they are economically reasonable. Changes in the fair value of the derivative transactions are recognized in profit or loss. The Group has also set a policy of not engaging in derivative transactions for speculative purposes.

Cash flow hedges

Cash flow hedges are hedging transactions to avoid the risk of changes in future cash flows, and changes in the fair value of derivative transactions that are designated as cash flow hedges are recognized in other comprehensive income. The amount that is recognized in accumulated other comprehensive income is reclassified to profit or loss at the time when the hedged transactions affect profit or loss. If the hedged items give rise to the recognition of non-financial assets or non-financial liabilities, the amount that is recognized in other comprehensive income is reclassified as an adjustment to the initial carrying amount of non-financial assets or non-financial liabilities. Derivatives that are designated as cash flow hedges include forward exchange contracts, currency options and currency swaps to hedge the risk of changes in cash flows due to changes in the foreign exchange rates for foreign currency transactions.

In the previous fiscal year and the current fiscal year, the amount recognized in profit or loss for the hedge ineffective portion and the portion that was excluded from the assessment of hedge effectiveness was not material. B. Information on items that are designated as hedging instruments

The impact of hedging instruments that are designated as hedges on the consolidated statement of financial position is as follows. Derivative assets and liabilities are included in "Other financial assets" and "Other financial liabilities," respectively, in the consolidated statement of financial position.

As of December 31, 2020 Not applicable.

As of December 31, 2021

	Contract amount -	Book value of hedging instruments (Fair value)		Changes in fair value used as the basis for recognizing the	
		Assets	Liabilities	ineffective portion of hedges	
Cash flow hedges					
Foreign currency exchange risk					
Currency options	74,919		918	—	
Currency swaps	155,156	123	166	(1,151)	

C. Information on items designated as hedged items

The amount of the impact of hedged items that are designated as hedges on the consolidated statement of financial position is as follows.

As of December 31, 2020 Not applicable.

As of December 31, 2021

	Changes in fair value used as the basis for recognizing the ineffective portion of hedges	Surplus for cash flow hedges related to ongoing hedging	Surplus for cash flow hedges related to the suspension of hedge accounting
Cash flow hedges			
Foreign currency exchange risk			
Plan on purchasing	_	(684)	-
Bonds	(1,151)	(111)	_

D. Impact of the application of hedge accounting on the consolidated statement of profit and loss and the consolidated statement of comprehensive income

The impact of hedging instruments that are designated as cash flow hedges on the consolidated statement of profit and loss and the consolidated statement of comprehensive income is as follows.

As of December 31, 2020 Not applicable.

As of December 31, 2021

			(In millions of yen)
	Changes in the value of hedging instruments recognized in other comprehensive income (Note)	Ineffective portion recognized in profit or loss	Amount after basis adjustment to cash flow hedges (Note)
Cash flow hedges			
Foreign currency exchange risk			
Currency options	(4,329)	—	
Currency swaps (Note) Amount before tax effect.	162	_	(223)

E. Fair value of derivatives to which hedge accounting is not applied The fair value and contract amount, etc. of derivatives to which hedge accounting is not applied are as follows.

As of December 31, 2020 and December 31, 2021 Not applicable.

(5) Transfer of financial assets

Accelerating from restructuring to growth stage, the Group provides diversified financing to achieve these growth strategies and liquidates certain trade receivables by transferring receivables.

The expenses arising from transfer of trade receivables derecognized in their entirety were 40 million yen in the prior fiscal year and 61 million yen in the current fiscal year.

34. Related Parties

(1) Transactions with related parties

Innovation Network Corporation of Japan, which was a principal shareholder of the Group, was established in July 2009 with the Japanese government as the principal shareholder, and the total amount of investments by the Japanese government accounts for 95% or more of the capital of Innovation Network Corporation of Japan. As a result, the Japanese government and the government-related entities have become related parties of the Group.

In addition, Innovation Network Corporation of Japan conducted a business divestiture in September 21, 2018 and newly created INCJ, Ltd.. INCJ, Ltd. succeeded to all of the Group's shares of Innovation Network Corporation of Japan and became a principal shareholder of the Group.

Between the Group and these related parties, there are neither significant transactions individually nor significant transactions on aggregate although not significant individually.

Furthermore, transactions with INCJ and other related parties are not applicable.

(2) Compensation to key management

Compensation paid to key management personnel is as follows.

		(In millions of yen)
Category	The year ended December 31, 2020	The year ended December 31, 2021
Remuneration and bonuses	227	226
Share-based payments	292	384
Total	519	610

(Note) The exercise price and other key terms of share-based payment arrangements are as stated in "Note 32. Sharebased Payments."

35. Major Subsidiaries

All subsidiaries are included in the scope of consolidation for our consolidated financial statements.

Major subsidiaries as of December 31, 2021 are as follows.

			Percentage Ownership and Voting Interest (%) (Note 1)	
Company	Location	Descriptions of Principal Businesses	The year ended December 31, 2020	The year ended December 31, 2021
Renesas Semiconductor Manufacturing Co., Ltd.	Hitachinaka, Ibaraki	Manufacturing and Engineering Service Companies	100.0	100.0
Renesas Electronics Hong Kong Limited	Hong Kong, China	Sales Companies	100.0	100.0
Renesas Electronics America Inc.	California, U.S.A.	Design, Applications, Manufacturing and Sales Companies	100.0	100.0
Renesas Electronics Europe GmbH (Germany)	Dusseldorf, Germany	Design, Applications and Sales Companies	100.0	100.0
Renesas International Operations Sdn. Bhd.	Selangor, Malaysia	Management of parts of consignment business of our Group companies	100.0 (100.0) (Note 2)	100.0 (100.0) (Note 2)
Renesas Electronics (Penang) Sdn. Bhd.	Penang, Malaysia	Engineering, Manufacturing and Sales Companies	100.0 (100.0) (Note 2)	100.0 (100.0) (Note 2)
Renesas Electronics Germany GmbH	Dresden, Germany	Engineering, Manufacturing and Sales Companies	100.0 (100.0) (Note 2)	100.0 (100.0) (Note 2)
IDT Bermuda Ltd.	Bermuda	Business Corporations and Others	100.0 (100.0) (Note 2)	100.0 (100.0) (Note 2)
GigPeak, Inc.	California, U.S.A.	Business Corporations and Others	100.0 (100.0) (Note 2)	100.0 (100.0) (Note 2)
Dialog (Note 3)	Reading, U.K.	Engineering, Manufacturing and Sales Companies	_	100.0
Celeno (Note 4)	Delaware, U.S.A.	Business Corporations and Others	_	100.0

(Note) 1. Percentage ownership and voting interest are rounded down to the second decimal point.

2. Numbers in parentheses represent indirect voting rights.

3. On August 31, 2021, the Company made an acquisition of the entire issued and to be issued share capital of Dialog. In addition, Dialog changed its company name to Dialog Semiconductor Limited on September 14, 2021.

4. On December 20, 2021, the Company made an acquisition of the entire issued share capital of Celeno, a semiconductor company in the United States of America which is headquartered in Israel.

There are no subsidiaries with significant non-controlling interests.

36. Commitments and Contingent Liabilities

(1) Commitments for the acquisition of assets

The Group's commitments for the acquisition of assets are as follows.

(In millions of yen)As of December 31, 2020As of December 31, 2021Property, plant and equipment4,26725,771Intangible assets358447Total4,62526,218

(2) Loan commitments

The Group has entered into a contract for setting commitment lines with its main banks for the purpose of securing long-term working capital, and the balance of unused loans is as follows.

	(In millions of ye		
	As of December 31, 2020	As of December 31, 2021	
Total amount of commitment lines	125,000	50,000	
Balance of used loans	_	—	
Balance of unused loans	125,000	50,000	

(3) Debt guarantees

The Group provides debt guarantees against bank loans, etc. of its employees as follows.

		(In millions of yen)
	As of December 31, 2020	As of December 31, 2021
Guarantees of employees' obligations	36	26
Total	36	26

(Guarantees of employees' obligations)

The Group provides guarantees for the housing loans of employees as part of its welfare program. If an employee cannot repay a housing loan covered by a debt guarantee, the Group must assume the obligation. These debt guarantees are secured by the houses of the employees.

(4) Others

As the Group conducts business worldwide, it is possible that the Group may become a party to lawsuits, investigation by regulatory authorities and other legal proceedings in various countries.

Though it is difficult to predict the outcome of the legal proceedings to which the Group is presently a party or to which it may become a party in future, the resolution of such proceedings may require considerable time and expense. There is a possibility that the Group's business, performance, financial condition, cash flow, reputation and creditability to have significant adverse effects by the outcome.

The Group records provision for loss on litigation for several cases written below to the extent possible to make a reasonable estimation. Additionally, the Group records loss on litigation for cases other than below, to prepare for payments regarding lawsuits against other companies and compensation for damages. In accordance with IAS 37 "Provisions, Contingent Liabilities and Contingent Assets" Article 92, the Group does not disclose detailed information of these cases since it is likely to lead the Group to an unfavorable position.

(Civil lawsuit related to the alleged patent infringement and trade secret violation)

The Group's subsidiary has been named as a defendant in a civil lawsuit in the United States of America related to the alleged patent infringement and trade secret violation. The Group's subsidiary has been named as a defendant in a lawsuit filed in November 2008 in the United States of America District Court for the Eastern District of Texas (hereafter "the Court of First Instance"). The Court of First Instance entered a final judgment in June 2016 against the Group in the amount of 77.3 million U.S. dollars; however, the Group's subsidiary immediately filed a notice of appeal at the Court of Appeals for the Federal Circuit (hereafter "the Court of Second Instance"). In July 2018, the Court of Second Instance rejected the judgement of the Court of First Instance for payment of compensation and conducted the retrial order at the Court of First Instance.

(Civil lawsuits related to the alleged violations of the competition law)

In July 2019, the Group has been named in the United Kingdom as a defendant in civil lawsuits related to possible violations of competition law involving smartcard chips brought by purchaser of such products.

(Indemnification claim related to environmental pollution)

The Group's subsidiary in Taiwan has been subjected to requests for restitution for environmental pollution associated with a factory in Taiwan owned by the subsidiary's predecessor company.

Since June 2004, the Group's subsidiary has been notified that a company reserved its right to seek indemnification from us for all costs associated with the remediation of the contamination related to environmental pollution found at a factory in Taiwan owned by the subsidiary's predecessor company, and the costs associated with the lawsuit as well as the costs relating to those retained environmental liabilities in a toxic tort class action lawsuit filed by ex-employees worked at the factory. Though the Group's subsidiary is not a defendant in the class action lawsuit, the claimant initiated arbitration proceedings against us related to all claims arising out of the contamination, including the remediation, the toxic tort claims, and attorneys' fees in December 2017, but afterward, the arbitration was ordered to stay by the arbitrator on a unilateral request by the claimant.

37. Government Grants

Government grants related to employment or other actions taken by the Group are recognized in profit or loss. Government grants of 681 million yen and 1,471 million yen were deducted from cost of sales and selling, general and administrative expenses, respectively for the year ended December 31, 2020. Government grants of 286 million yen and 1,051 million yen were deducted from cost of sales and selling, general and administrative expenses, respectively for the year ended December 31, 2020. Government grants of 286 million yen and 1,051 million yen were deducted from cost of sales and selling, general and administrative expenses, respectively for the year ended December 31, 2021. In addition, government grants related to research and development are recognized in profit or loss and recorded in other income.

38. Additional Information

Fire outbreak in a wholly-owned manufacturing subsidiary

On March 19, 2021, a fire broke out at a manufacturing line in the N3 Building (300mm line) of Naka Factory (located in Hitachinaka, Ibaraki Prefecture) of Renesas Semiconductor Manufacturing Co., Ltd, a wholly-owned manufacturing subsidiary of the Company. Due to this fire, certain property, plant and equipment such as machinery and equipment and inventories such as work in progress were damaged.

Due to this fire, the Group recorded 18,216 million yen for restoration and repairment costs of property, plant and equipment, disposal costs and reinspection fees of inventories and fixed costs during the shutdown for the year ended December 31, 2021. These are included in cost of sales of 18,108 million yen and other expenses of 108 million yen in the Consolidated Statement of Profit or Loss. In addition, other payables of the fire related costs are recorded in trade and other payables and other liabilities of 6,147 million yen in the Consolidated Statement of Financial Position. The amounts of loss may change depending on the repair of property, plant and equipment and the determination of insurance claim income.

39. Subsequent Events Not applicable.

(2) Other

Quarterly information, etc. for the year ended December 31, 2021

(Cumulative period)		First quarter	Second quarter	Third quarter	The year ended December 31, 2021
Revenue	(Million yen)	203,678	421,553	679,986	994,418
Profit before tax	(Million yen)	17,624	50,736	100,781	152,463
Profit attributable to owners of parent	(Million yen)	13,714	37,705	75,457	127,261
Basic earnings per share	(Yen)	7.92	21.53	41.61	68.96

(Accounting period)		First quarter	Second quarter	Third quarter	Fourth quarter
Basic earnings per share	(Yen)	7.92	13.56	19.50	26.69



Independent Auditor's Report

To the Board of Directors of Renesas Electronics Corporation

Opinion

We have audited the consolidated financial statements of Renesas Electronics Corporation (the Company) and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31 2021, and the consolidated statement of profit or loss, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in Japan. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Japan, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Impairment analysis of goodwill arising from the acquisitions of Intersil Corporation and Integrated		
Device Technology, Inc.		
Key audit matter description	How our audit addressed the key audit matter	
The Company is affected by changes in	In auditing the impairment analysis of	
semiconductor market trends driven by global	goodwill recorded as a result of the	
economic cycles, changes in demand for end-user	acquisitions of former Intersil and former IDT,	
products, and other factors. In addition, because the	we performed the following principal audit	
semiconductor market is extremely competitive, the	procedures:	
Company is exposed to fierce competition on product		
performance, structure, price, and quality from many	• We assessed the effectiveness of the	
competitors in the same industry both domestically	design and tested the operating	
and internationally.	effectiveness of internal controls over	
	preparation and approval of the business	
The Company has made multiple acquisitions	plan as well as the determination of gross	
recently in order to expand its business and	margins, the perpetual growth rates in	

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strengthen its competitiveness, including a US-based business Intersil Corporation (hereafter "former Intersil") in February 2017, a US-based business Integrated Device Technology, Inc. (hereafter "former IDT") in March 2019, a UK-based business Dialog Semiconductor Plc (hereafter "Dialog") in August 2021, and a US-based business Celeno Communications Inc. (hereafter "Celeno") in December 2021, and recorded goodwill as a result of these acquisitions in its consolidated financial statements.

As stated in [notes to the consolidated financial statements] 13. Goodwill and Intangible Assets, the Company recorded goodwill of 1,234,600 million yen as of December 31, 2021. Of this amount, 656,179 million yen, which excludes 578,421 million yen related to the acquisitions of Dialog and Celeno which occurred during the current year, was related to the acquisitions of former Intersil and former IDT. The recorded amount of such goodwill comprised approximately 27% of consolidated total assets.

The Company tests goodwill for impairment annually and more often at an interim date if indicators of impairment exist. In testing goodwill for impairment, the Company measures the recoverable amount of the cash-generating unit including goodwill at its value-in-use. The value-in-use is determined by discounting to present value the estimated future cash flows, which are estimated based on the five-year business plan that was approved by management, and estimated perpetual growth rates in revenue for the period thereafter. Key assumptions in estimating the value-in-use include gross margins in the business plan, the perpetual growth rates in revenue, and the discount rates.

We have determined that the impairment analysis of goodwill arising from acquisitions of former Intersil and former IDT constitutes a key audit matter because of the materiality of such goodwill to the consolidated financial statements, the complexity of impairment testing of goodwill, the uncertainty in estimating gross margins, the perpetual growth rates in revenue, and the discount rates, and the necessity of subjective judgments made by management. revenue, and the discount rates required in estimating the future cash flows.

- We primarily performed the following procedures for the business plan approved by management:
 - We examined the gross margins used by management in determining the business plan through procedures such as comparing those forecasted to the historical results.
 - We compared the gross margins in the business plan that was used in the impairment analysis in the previous fiscal year, with the actual gross margins, examined the reasons for the discrepancy between the actual results and the plan, and confirmed that it was properly reflected in the business plan for the current fiscal year.
- In verifying the perpetual growth rates in revenue and the discount rates that were used to determine the recoverable amount, we primarily performed the following procedures with the assistance of our valuation specialists:
 - We assessed the appropriateness of the methods that management used to determine the perpetual growth rates in revenue and the discount rates.
 - We obtained important source documents that were used to determine the discount rates and the perpetual growth rates in revenue and verified them by agreeing those used to third-party information.
- We examined the reasonableness of the recoverable amount determined by management by comparing the concluded recoverable amount to the Company's market capitalization.



Responsibilities of Management and The Corporate Auditors and Board of Corporate Auditors for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error. In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease its operations, or has no realistic alternative but to do so. The Corporate Auditors and Board of Corporate Auditors are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in Japan will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with auditing standards generally accepted in Japan, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, while the purpose of the consolidated financial statement audit is not to express an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.



- Evaluate whether the presentation and disclosures of the consolidated financial statements are in accordance with International Financial Reporting Standards, the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Corporate Auditors and Board of Corporate Auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit. We also provide the Corporate Auditors and Board of Corporate Auditors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Corporate Auditors and Board of Corporate Auditors, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Interest required to be disclosed by the Certified Public Accountants Act of Japan

Our firm and its designated engagement partners do not have any interest in the Group which is required to be disclosed pursuant to the provisions of the Certified Public Accountants Act of Japan.

DocuSigned by: 澤山 宏行 7DA967F451AD4DB.

Hiroyuki Sawayama

Designated Engagement Partner Certified Public Accountant

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Takeaki Ishibashi

Designated Engagement Partner Certified Public Accountant

DocuSigned by:

近藤 仁

<u>AF71E894F944A0...</u> Hitoshi Kondo Designated Engagement Partner Certified Public Accountant

March 30, 2022