4Q/Full-Year Ended December 31, 2021
Conference Call (Held February 9, 2022)
Presentation and Question & Answer Summary

Presentation

Moderator: Hello, everyone, thank you very much for taking time out of your busy schedule to join Renesas Electronics and its full-year financial results briefing for the Year Ended December 31, 2021 today.

At today's briefing, President and CEO, Hidetoshi Shibata; Senior Vice President and CFO, Shuhei Shinkai; and Takeshi Kataoka, Senior Vice President and General Manager of Automotive Solution Business Unit, are here with us. Other staff members are in attendance.

CEO Shibata will give a few words, and then CFO Shinkai will explain the financial results for 4Q, followed by a question-and-answer session. The entire briefing is scheduled for 60 minutes. The materials used in today's briefing are the same as those posted on the IR website of our company. Now, please, Mr. Shibata.

Shibata: Hello again, everyone, I am Shibata. We had a fire last year, and I would like to talk about the summary of that fire and the progress of our medium- and long-term strategies in the progress update scheduled for next month, which we are doing twice a year. Therefore, today I would like to focus on last year's full-year results.

As many of you may have already seen, on a non-GAAP basis, we were able to achieve sales of slightly less than JPY1 trillion and operating income of slightly less than JPY300 billion last year. Demand continues to look strong, and we have provided figures for 1Q of 2022 that show a reasonable expectation of steady growth.

However, I would like to keep a careful eye on the question of where the turning point in demand will be, and if there is any change, I would like to take immediate action.

Now, CFO Shinkai will talk about the details of the figures. Please go ahead.

4Q/FULL-YEAR 2021 FINANCIAL SNAPSHOT
NON-GAAP

(B yen)	2020		2021								
	4Q (Oct-Dec)	Full Year (Jan-Dec)	3Q (Jul-Sep)	4Q (Oct-Dec) Forecast	4Q (Oct-Dec) Actual	YoY	QoQ	Change from Oct 28 FCT*1	Full-Year (Jan-Dec) Actual	YoY	Change from Oct 28 FCT*1
Revenue	191.6	715.7	258.4	298.0 (±4.0)	**314.4**	**+64.1%**	**+21.7%**	**+5.5%**	**994.4**	**+38.9%**	**+1.7%**
Gross Margin	47.0%	47.3%	55.2%	53.0%	**54.3%**	**+7.2pts**	**-0.9pt**	**+1.3pts**	**53.2%**	**+5.9pts**	**+0.4pt**
Operating Profit (Margin)	37.2 (19.4%)	137.5 (19.2%)	83.9 (32.5%)	83.4 (28.0%)	**98.7 (31.4%)**	**+61.6 (+12.0pts)**	**+14.9 (-1.1pts)**	**+15.3 (+3.4pts)**	**296.6 (29.8%)**	**+159.0 (+10.6pts)**	**+15.3 (+1.1pts)**
Profit Attributable to Owners of Parent	24.2	111.5	62.9	-	**80.9**	**+56.6**	**+18.0**	**-**	**222.2**	**+110.7**	**-**
EBITDA*2	57.5	223.2	103.6	-	**119.4**	**+61.9**	**+15.7**	**-**	**375.4**	**+152.1**	**-**
1 US$=	105 yen	107 yen	110 yen	111 yen	**112 yen**	7 yen depreciation	2 yen depreciation	1 yen depreciation	**109 yen**	2 yen depreciation	0 yen depreciation
1 Euro=	124 yen	121 yen	131 yen	130 yen	**130 yen**	6 yen depreciation	0 yen appreciation	1 yen depreciation	**130 yen**	8 yen depreciation	0 yen depreciation

*1: Each figure represents comparisons with the midpoint in the sales revenue forecast range
*2: Operating profit + Depreciation and amortization

Shinkai: I'm Shinkai, the CFO. I will now explain the details of the financial results for 4Q and the full-year ended December 31, 2021 based on the presentation materials posted on the IR website.

Please see page four.

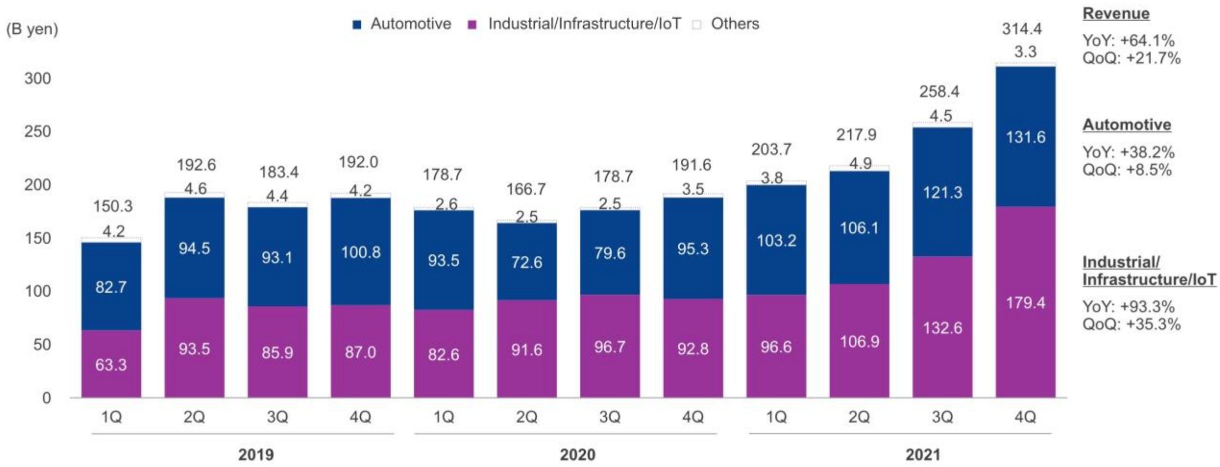
For 4Q, please refer to the dark blue column in the middle of the table. Revenue was JPY314.4 billion, gross profit margin was 54.3%, operating income was JPY98.7 billion, operating margin was 31.4%, current net income was JPY80.9 billion, and EBITDA was JPY119.4 billion.

Please refer to the three right-hand columns for 4Q forecast comparisons. I would like to explain in detail later.

The full-year figures are shown in the dark blue column to the right.

The acquisition of Celeno, which was completed on December 20 of last year, is not included in the P&L for the FY2021. Only the balance sheet is consolidated in FY2021, and that is how it is handled.

QUARTERLY REVENUE TRENDS



Next, page five, please. This is the quarterly sales revenue trend.

For 4Q, please refer to the far right. Overall, sales revenue increased by 64.1% YoY and by 21.7% QoQ. If we exclude the consolidation of Dialog, the scale of the business is 37.2% in YoY terms and 8.0% in QoQ terms.

This is followed by the Automotive business and the Industrial/Infrastructure/IoT business, as described below. Excluding the effect of Dialog's consolidation, the Automotive business remained largely unchanged at 37.0% YoY and 8.1% QoQ. For the Industrial/Infrastructure/IoT business, sales increased by 38.9% YoY and 9.1% QoQ.

4Q 2021 REVENUE AND GROSS/OPERATING MARGIN
NON-GAAP

	Automotive	Industrial / Infrastructure / IoT	Company Total
Revenue	131.6 B yen vs FCT: + QoQ: +8.5%	179.4 B yen vs FCT: ++ QoQ: +35.3%	314.4 B yen vs FCT: +5.5% QoQ: +21.7%
Gross Margin	49.1% QoQ: -0.1pt	59.1% QoQ: -3.0pts	54.3% vs FCT: +1.3pts QoQ: -0.9pt
Operating Margin	29.7% QoQ: +0.5pt	33.5% QoQ: -2.3pts	31.4% vs FCT: +3.4pts QoQ: -1.1pts

Operating Margin vs FCT + 3.4pts
- **Revenue**
- **Gross Margin** vs FCST: +1.3pts
  - Currency Impact
  - Product Mix
  - Production Recovery
  - Production Costs, etc.
- **Operating Expenses**

Operating Margin QoQ -1.1pts
- **Revenue**
- **Gross Margin** QoQ: -0.9pt
  - Currency Impact
  - Product Mix
  - Production Recovery
  - Production Costs, etc.
- **Operating Expenses**

Please continue on to page six. Summaries of revenue, gross profit margin, and operating income margin for 4Q are shown. From this time onward, the results are combined and organized with the results by segment.

First, I would like to talk about the company-wide total. Please refer to the box on the upper right of this page for the forecast ratio.

Sales were 5.5% above the forecast, or JPY16.4 billion above the median. As for the breakdown of this figure, the impact of foreign exchange rates is roughly over 20%, and the rest is due to changes in the Automotive and Industrial/Infrastructure/IoT businesses. Due to the procurement mix at the customer side, there was a slight adjustment towards the end of the period.

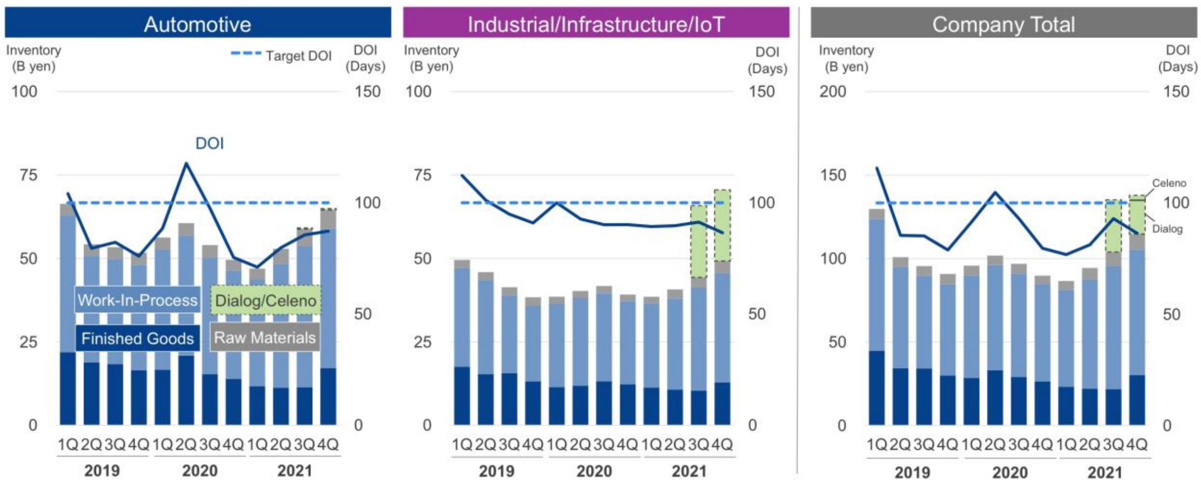
On the other hand, the Industrial/Infrastructure/IoT segment showed a significant increase over the forecast. This is a result of the strong demand for the old Dialog products for PCs and mobile devices, and the fact that we were able to respond to production and ship the products ahead of schedule. We expect this amount to be adjusted in 1Q.

The gross profit margin was 1.3 percentage points higher than the forecast. The main factors are an improved product mix and increased production recovery. In general, about 80% of the contribution came from improving the mix.

Operating expenses decreased compared to the forecast, and both R&D and SGA decreased at almost the same rate compared to the forecast. As for the QoQ on the lower right, the negative 0.9 percentage points in the gross profit margin is almost entirely due to the consolidated impact of Dialog.

Next, let's look at the table by segment on the right, and sales revenue is as explained in the breakdown. As for the gross profit margin and operating profit margin, if you look at the QoQ of the Industrial/Infrastructure/IoT segment in particular, you will see that it has fluctuated, but this is also mostly due to the consolidated impact of Dialog.

IN-HOUSE INVENTORY (FINANCIAL ACCOUNTING BASIS) AND DOI*1



*1: DOI: Days of Inventory = Inventory valuation balance at the end of the quarter / cost of sales of the quarter (Non-GAAP) × 90. However, Dialog's quarterly cost of sales for 3Q 2021 is calculated by multiplying Dialog's September costs by 3

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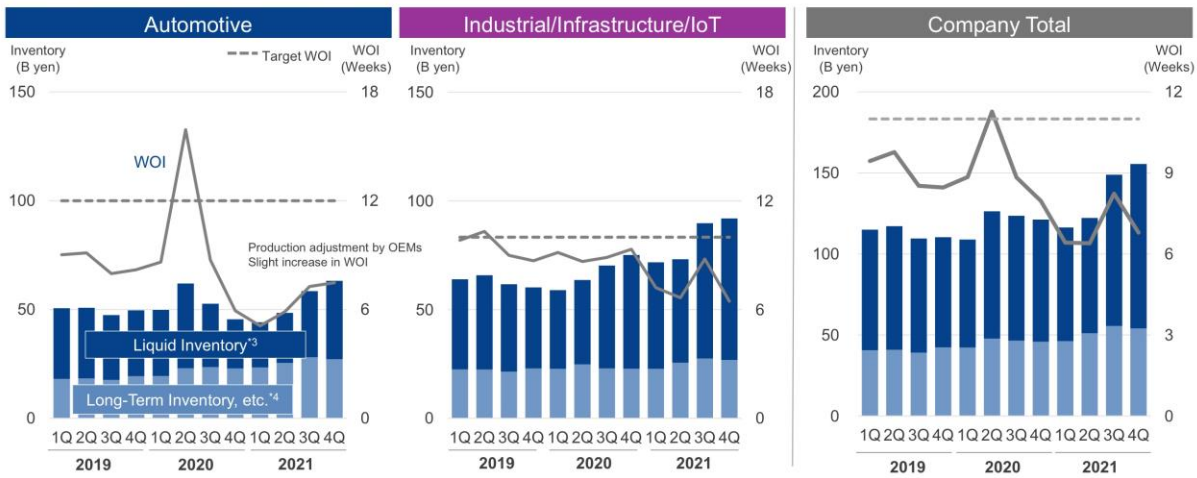
Next, please turn to page seven. This is the status of our inventory.

First, look at the company-wide total on the right. The overall DOI decreased QoQ, while on the left side you can see that there is a slight increase in Automotive and a decrease in Industrial/Infrastructure/IoT. The actual increase in the overall amount is due to three factors, excluding the impact of Dialog's PPA and the addition of Celeno.

The first is an upfront buildup to meet future demand, both for in-process and finished products. As for the work-in-process, it was higher than expected due to the rate-limiting effect of the back-end process. As for the finished products, as I mentioned earlier in the Automobile business, it is the portion that remains on the balance sheet due to timing issues. Therefore, work-in-process and finished goods have increased a little more than the assumption I mentioned in the previous financial results.

SALES CHANNEL INVENTORY*1 (MANAGEMENT ACCOUNTING BASIS) AND WOI*2



*1: Channel Inventory: Total inventory amount for Tokuyakutens for Japanese customers and overseas distributors (excluding channel inventories of former Dialog and Celeno)
*2: WOI: Weeks of Inventory = Channel inventory at the end of the quarter / (cost of channel sales in the quarter / 13 weeks). It should be noted that from the inventory management perspective, to calculate appropriate WOI, certain Long-Term Inventory is excluded from Channel Inventory
*3: Liquid Inventory: Channel Inventory – Long-Term Inventory, etc. *4: Long-Term Inventory: Inventory with unique holding periods (End of Life or "EOL" products, e-commerce inventory etc.)

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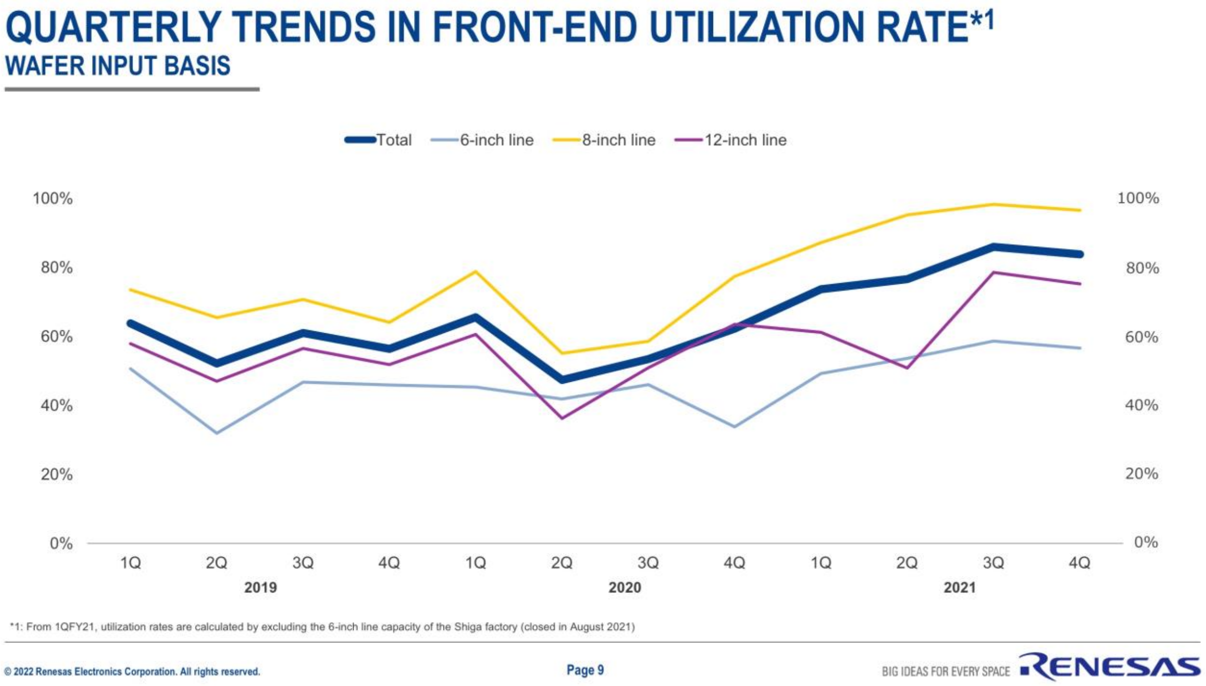
Please continue to the next page. This is about channel inventory.

See the same company-wide image on the right.

Please note that the inventory of this channel does not include Dialog yet. The integration is expected to be completed by the end of the first half of this year.

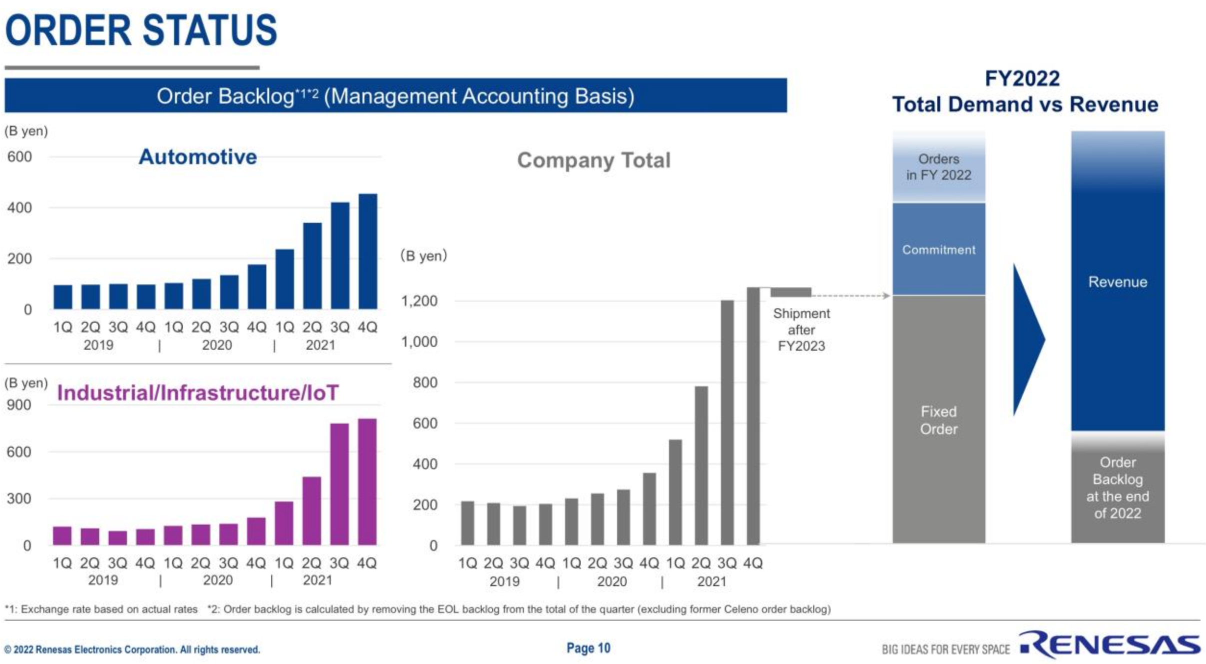
This is the company-wide total. Overall WOI decreased QoQ. However, if you look at the left-hand side of the chart by segment, you will see that the Automobile segment has increased more than expected. We believe this is due to OEM production adjustments.

This is followed by Industry/Infrastructure/IoT, which is lower than expected. This is the result of both a decrease in inventory and an increase in end-use demand. It seems like a slight increase, but the actual monetary amount looks a little bit larger because we introduced Ship and Debit in some of the commercial channels. The introduction of Ship and Debit is expected to continue intermittently in some parts of the world, which will result in some increase in the actual monetary amount in the future.



Please continue to the next page, which shows utilization rate.

The input-based utilization rate for the front-end process was 84% in 4Q, roughly in line with our expectations. The slight decrease QoQ is due to the operating days.



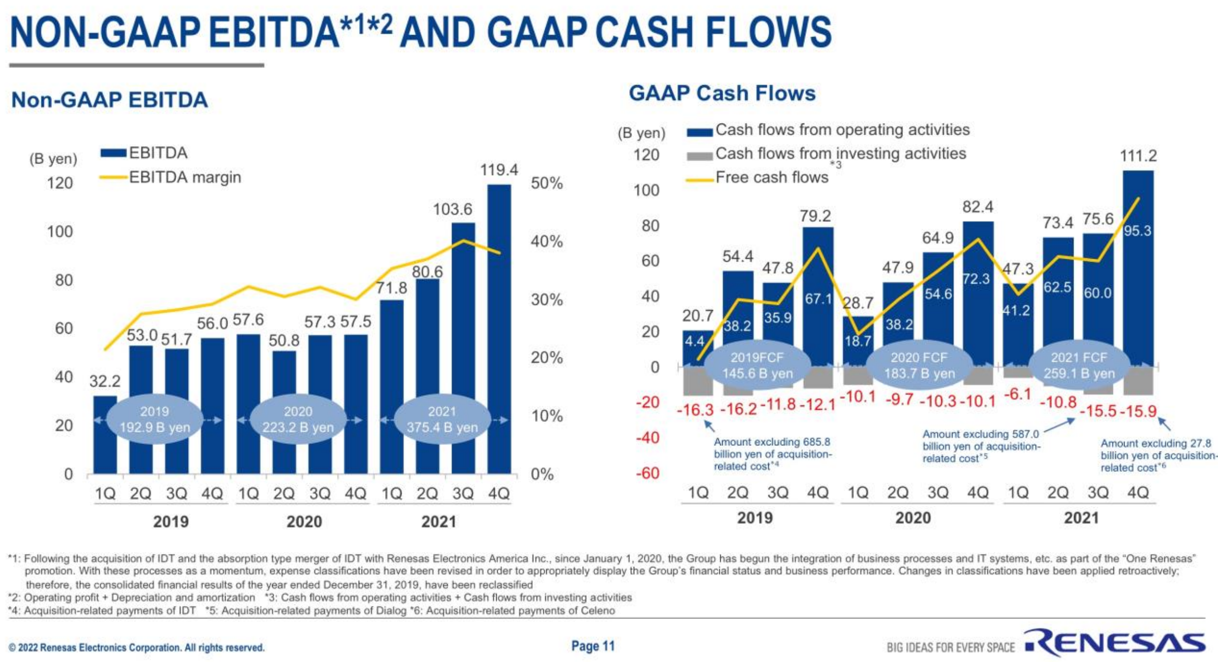
Next, page 10, please. The following is an explanation of the status of orders received.

Here is the quarterly trend of the order backlog based on the delivery date requested by customers. The long-term orders that I have talked about so far, except for Dialog, were generally completed in 3Q, and Dialog's portion was completed in 4Q. Therefore, from here on, this total order balance will be digested.

The image on the right shows the total order backlog and sales. There are two bars on the right side, and on the left side of the bar graph, this is the gray area for confirmed orders. On the other hand, there are orders that have not yet been placed, but for which the customer has promised to place an order by contract. These are labeled "Commitment." In addition, there is a portion of orders that are inherited during the term, which is labeled "Orders in FY2022" above it.

If you look at the right side of the chart, you will see that the total represents the total demand, and most of it is the sales for this year.

On the other hand, if you look at the bottom of the page, you will see that some of the order backlog will remain as order backlog at the end of this year. In other words, if we do not take such measures, the bar graph of the order backlog is expected to become smaller in the future.



Page 11, please. This is about EBITDA and free cash flow.

EBITDA for 4Q was JPY119.4 billion and JPY375.4 billion for the full year.

As for the free cash flow on the right, operating cash flow was JPY111.2 billion and free cash flow was JPY95.3 billion. Free cash flow for the full year was JPY259.1 billion.

1Q 2022 FORECAST
NON-GAAP

(B yen)	2021		2022		
	1Q (Jan-Mar)	4Q (Oct-Dec)	1Q (Jan-Mar) Midpoint Forecast*1 (Range)	YoY	QoQ
Revenue	203.7	314.4	336.0 (±4.0)	+65.0% (±2.0pts)	+6.9% (±1.3pts)
Gross Margin	50.2%	54.3%	55.5%	+5.3pts	+1.2pts
Operating Profit (Margin)	52.6 (25.8%)	98.7 (31.4%)	34.5%	+8.7pts	+3.1pts
1 US$ =	104 yen	112 yen	113 yen	9 yen depreciation	1 yen depreciation
1 Euro=	127 yen	130 yen	129 yen	2 yen depreciation	2 yen appreciation

*1: Each figure represents comparisons with the midpoint in the sales revenue forecast range

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Next page, please. This is about the forecast for 1Q of FY2022.

Please refer to the dark blue column in the middle of this page. The median sales revenue is JPY336 billion. For QoQ, please refer to the far right. Sales are expected to increase by 6.9%.

Then, the gross profit margin is expected to increase by 55.5%, or 1.2 percentage points QoQ.

Operating margin is expected to be 34.5%, up 3.1 percentage points QoQ.

1Q 2022 REVENUE AND DEMAND FORECASTS

		Automotive	Industrial/Infrastructure/IoT	Company Total
Revenue (Sell-in) Forecast	QoQ	+ +	+	**+6.9%** +
	YoY	+ +	+ +	**+65.0%** + +
Customer Demand (Sell-through) Outlook	QoQ	+ +	+	+ +
	YoY	+ +	+ +	+ +

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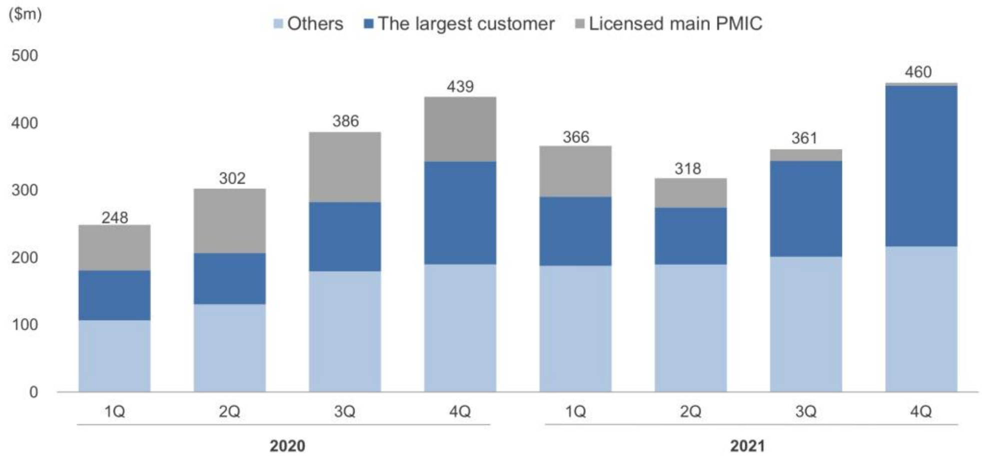
Next page, please. Here is the sales and demand forecast for 1Q.

As for the sell-in forecast, the QoQ and YoY figures are in sync with the previous page. Although sales to the automobile industry are expected to increase, they are expected to be in the mid-10% range.

On the other hand, there was one positive figure for Industrial/Infrastructure/IoT applications, but it was a low single-digit percentage gain. As I explained at the beginning of this report, this was due to a reactionary decline in some shipments that were moved up.

The same is true for the sell-through forecast, which is expected to increase by a single-digit percentage in the QoQ for Industry/Infrastructure/IoT due to this rebound. All other segments are expected to increase by double-digit percentages.

(REF) DIALOG QUARTERLY REVENUE TRENDS



Next page, please. This is a breakdown of Dialog's revenue.

The gray areas are the so-called legacy businesses that have already been effectively sold—the licensed main PMIC business. This shows that the project is finished in 4Q as scheduled.

STATEMENT OF FINANCIAL POSITION

GAAP

(B yen)	20/3	20/6	20/9	20/12	21/3	21/6	21/9	21/12
Total Assets	1,657.8	1,634.5	1,620.4	1,609.0	1,688.1	1,942.7	2,328.0	**2,406.2**
Cash and Cash Equivalents*1	136.9	148.5	175.9	219.8	243.6	504.8	223.0	**221.9**
Inventories	95.7	101.8	96.9	89.8	86.6	94.4	135.2	**137.9**
Goodwill	620.9	614.6	603.6	590.5	631.6	630.9	1,167.7	**1,234.6**
Intangible Assets	430.3	409.8	386.7	364.8	369.7	351.9	379.0	**372.0**
Total Liabilities	1,030.5	1,005.1	988.3	989.3	966.9	966.9	1,280.8	**1,244.8**
Interest-Bearing Liabilities*2	764.2	740.2	717.1	693.7	671.1	647.7	897.6	**830.9**
Total Equity	627.3	629.4	632.2	619.7	721.1	975.8	1,047.1	**1,161.5**
D/E Ratio (Gross)*3	1.22	1.18	1.14	1.12	0.93	0.67	0.86	**0.72**
D/E Ratio (Net)*4	1.00	0.94	0.86	0.77	0.60	0.15	0.65	**0.53**
Equity Ratio Attributable to Owners of Parent*5	37.7%	38.3%	38.8%	38.3%	42.5%	50.1%	44.8%	**48.1%**
Leverage Ratio (Gross)*6	3.5	3.4	3.2	3.1	2.8	2.4	2.9	**2.2**
Leverage Ratio (Net)*7	2.9	2.7	2.4	2.1	1.8	0.5	2.2	**1.6**

*1: This is comprised of cash on hand, demand deposit, and short-term investments that are readily convertible into cash, bearing low risk of changes in value and are redeemable in three months or less from each acquisition date
*2: Borrowings (current and non-current liabilities) + Lease Liabilities (current liabilities) + Lease Liabilities (non-current liabilities) + Bonds
*3: Interest-Bearing Liabilities / Equity attributable to owners of parent *4: (Interest-Bearing Liabilities - Cash and Cash Equivalents) / Equity attributable to owners of parent
*5: Equity attributable to owners of parent / Total liabilities and equity *6: Interest-Bearing Liabilities / EBITDA (Non-GAAP) *7: (Interest-Bearing Liabilities-Cash and Cash Equivalents) / EBIDTA (Non-GAAP)

Then I would like to touch on a few things on the APPENDIX page. Page 19, please.

This is the status of the balance sheet.

As I mentioned at the beginning, the acquisition of Celeno is reflected in our balance sheet. Approximately JPY35 billion worth of goodwill has been recorded. Dialog's PPA is scheduled to be completed in 1Q of this year, and we will reflect the results of the PPA at that time. Celeno will be completed in 2Q and the results will be reflected as well.

GAAP / NON-GAAP RECONCILIATION（FY2021）

(B yen)	9 months (Jan-Sep)				4Q (Oct-Dec)				Full-Year 2021 (Jan-Dec)			
	Gross Profit	Operating Profit	Net Profit	EBITDA	Gross Profit	Operating Profit	Net Profit	EBITDA	Gross Profit	Operating Profit	Net Profit	EBITDA
Non-GAAP (vs Revenue)	358.2 (52.7%)	197.9 (29.1%)	141.3 (20.8%)	256.0 (37.6%)	170.7 (54.3%)	98.7 (31.4%)	80.9 (25.7%)	119.4 (38.0%)	528.9 (53.2%)	296.6 (29.8%)	222.2 (22.3%)	375.4 (37.7%)
Recurring Items	-1.5	-51.1	-44.9	-9.6	-0.5	-17.0	-13.3	-2.5	-2.0	-68.1	-58.3	-12.1
Former-Intersil PPA Effects	-0.3	-11.6	-8.9	-	-0.1	-4.0	-3.1	-	-0.3	-15.6	-12.0	-
Former-IDT PPA Effects	-0.4	-29.9	-26.4	-	-0.1	-10.5	-7.8	-	-0.5	-40.4	-34.2	-
Stock-Based Compensation	-0.9	-9.6	-9.6	-9.6	-0.3	-2.5	-2.5	-2.5	-1.2	-12.1	-12.1	-12.1
Former-Dialog Related Items	-3.9	-10.4	-8.4	-10.0	-9.7	-12.8	-11.2	-11.6	-13.6	-23.2	-19.6	-21.6
PPA Effects	-3.9	-9.6	-7.7	-9.2	-9.5	-10.7	-9.1	-9.6	-13.4	-20.4	-16.8	-18.8
Stock-Based Compensation	-0.1	-0.7	-0.7	-0.7	-0.2	-2.1	-2.1	-2.1	-0.2	-2.8	-2.8	-2.8
Former-Celeno Related Items	-	-	-	-	-	-0.5	-0.4	-0.5	-	-0.5	-0.4	-0.5
Non-Recurring Items	-15.0	-16.9	-12.5	-16.8	-1.8	-4.3	-4.2	-4.2	-16.9	-21.2	-16.7	-21.1
Naka Factory Fire Impact	-13.2	-13.3	-9.9	-13.3	-2.2	-2.2	-1.6	-2.2	-15.4	-15.5	-11.6	-15.5
Others	-1.8	-3.6	-2.6	-3.5	0.4	-2.1	-2.5	-2.1	-1.5	-5.7	-5.1	-5.6
Non-GAAP Adjustments Total	-20.5	-78.4	-65.9	-36.4	-12.0	-34.6	-29.1	-18.9	-32.5	-113.0	-95.0	-55.3
GAAP (vs Revenue)	337.7 (49.7%)	119.5 (17.6%)	75.5 (11.1%)	219.6 (32.3%)	158.7 (50.5%)	64.1 (20.4%)	51.8 (16.5%)	100.5 (32.0%)	496.4 (49.9%)	183.6 (18.5%)	127.3 (12.8%)	320.1 (32.2%)

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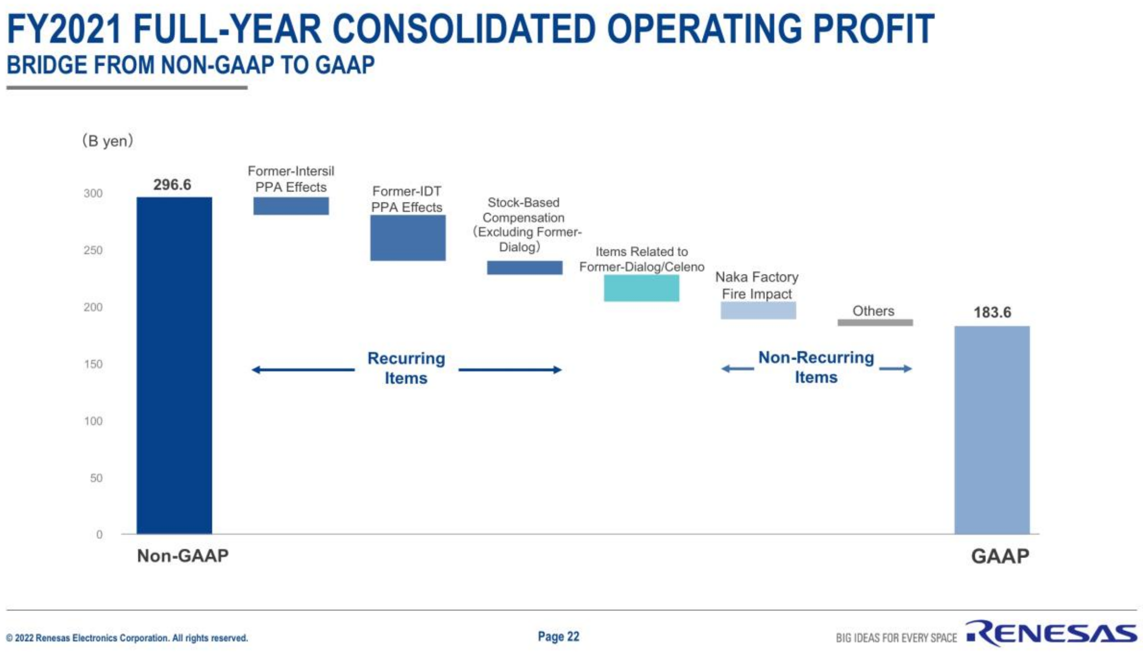
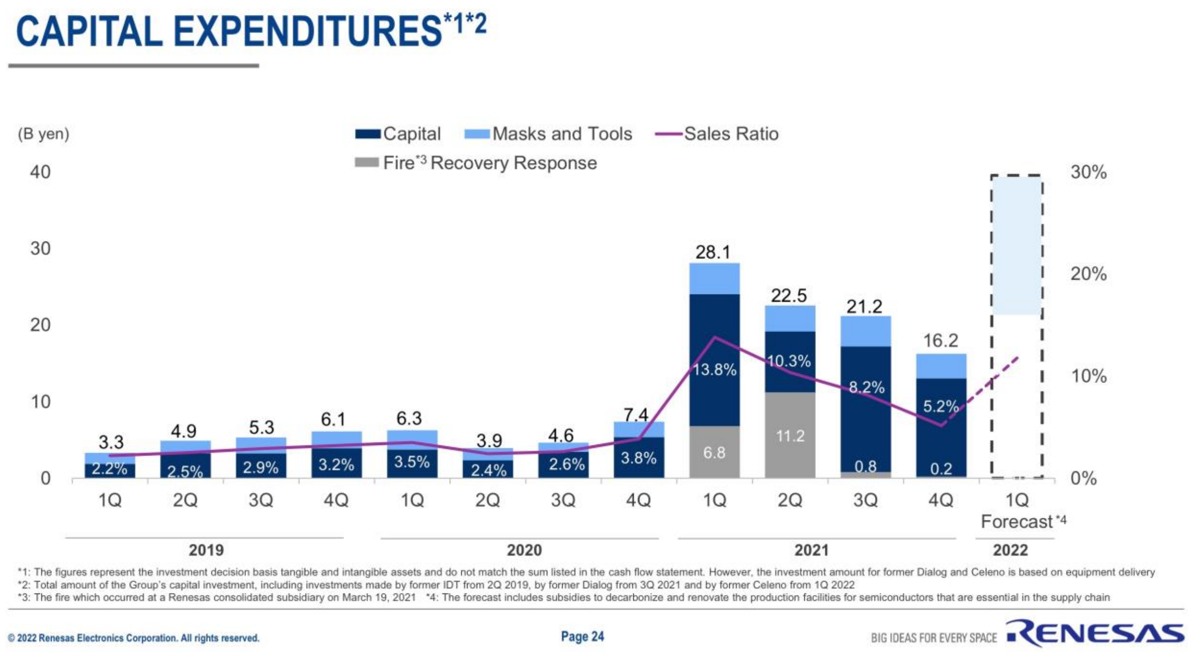
BIG IDEAS FOR EVERY SPACE RENESAS

Page 21, please. I've changed the classification of GAAP and NON-GAAP reconciliation to make it a little easier to understand.

The data is organized into recurring and non-recurring items. Non-recurring items are divided into the Naka Site Fire Impact and Others.



If you turn to the next page, you will see a graph that shows the relationship between Dialog and Celeno in the middle of the page, which will be reflected in the current account in 1Q and 2Q, respectively.



Next, please turn to page 24. This is about the status of capital investment.

In 1Q, we plan to make a capital investment of about JPY40 billion on this decision-making basis.

Of this, the part with the light blue shade is about half full, and we plan to use the subsidy from the Ministry of Economy, Trade and Industry to invest in increased production.

This concludes the explanation.

Question & Answer

[Questioner 1]

Q: I would like to confirm is on page 10 of the presentation materials. On the right side, you have shown us an image of the total demand vs. sales for FY2022. The confirmed order seems JPY1.2 trillion, on top of that, you add up the committed orders and the expected orders in FY2022, the total demand appears to be about JPY2 trillion.

It looks like the remaining order backlog is around JPY500 billion in the bar graph, so is it correct to assume that the figure indicates that your company is planning to achieve sales of about JPY1.5 trillion this year? This is the first point.

A: It's a sense of direction, though JPY1.5 trillion may be slightly too strong. But it's fine as a sense of direction.

Q: Assuming that the JPY1.5 trillion is accurate, the first question is whether or not you already have the capacity to achieve this. If we assume that the total amount is JPY1.5 trillion, even if we exclude the newly consolidated Dialog, we can expect a YoY increase of about 30% in the mainstay business in FY2021 and FY2022.

In FY2022, the mainstay business will be even more significant. When excluding Dialog, it looks like the revenue will increase by 50% YoY. I think this is a very high level compared to the consumption of goods in the world, but is this something that can happen in reality? Please go ahead.

A: Please don't misunderstand me, but I think JPY1.5 trillion is indeed too confident. I think it's too strong. I don't think it will happen that way. Especially, since we have not been able to secure supply based on JPY1.5 trillion yen.

It is true that we are expecting a large amount of continuous growth from last year to this year as well, and I think we have been able to secure a supply for our company for that amount, as far as I can see at the moment.

There are two main reasons why I say "generally," and although the scale is not that large yet, we are still in the process of requesting a continuous increase in supply or allocation, especially from foundries, OSAT, and some raw material suppliers.

The other factor is that, as has been the case for the past two or three years, we are still experiencing the effects of the coronavirus pandemic, so we don't know what will happen and where the suppliers will be disrupted.

However, I would like to reiterate that although I think JPY1.5 trillion is indeed too strong, it is true that we expect a certain amount of continuous steady growth compared to last year. I would also like to mention that we have generally been able to secure the materials and capacity for this growth. That's all for now.

Q: Thank you very much. I think you mentioned in the follow-up that an increase in allocation is being requested on an ongoing basis, but the guidance for this 1Q is still the lowest level that we have seen throughout 2022. Is it correct to assume that the growth will continue sequentially?

A: We don't provide an annual guide, so it's a little difficult to repeat this exchange, but at the moment, I think we can expect a relatively smooth sequential curve, without too much rise or fall. That's all.

[Questioner 2]

Q: Last year's sales of Renesas automotive semiconductors increased by about 35% YoY, far exceeding automotive production by more than 30 percentage points. I wonder what kind of analysis can be done when this difference is divided into content increase and inventory replenishment. There is a concern in the market that too many semiconductors are being produced, so we wanted to confirm this.

In addition, what will the magnitude of future growth in automobile production and in-vehicle semiconductors be, especially the differences due to content growth? If you have any suggestions, please let me know. This is the first point.

A: Since Kataoka is here, he will answer, but first I'd like to say one thing: The content increase will be the similar as in the past, but I personally feel that the impact of it became much greater.

I think this is largely due to two factors. One is that, as I'm sure you can already sense, even if you look at entry-level cars these days, the ADAS equipment is very extensive. Compared to the past that is. It's so well equipped that it's not much different from premium segment cars. Then there is the shift to EVs. This is one of the factors for the impact.

Another factor is that an American automobile manufacturer discloses its products to the public quite openly, but they have to prioritize the production and sales of various products due to supply constraints. In the midst of this kind of competition, we believe that they and their customers have increased the production of cars with a high price range and, as a result, cars with a high semiconductor content and electronic content. Based on these two factors, we feel that the impact of the increase in semiconductor content is now much greater than in the past.

A: I'm Kataoka from the Automotive business. Well, last year, various data was available, but it is said that the growth of car production was about 3% last year. There is a wide range of data on content growth, from 8% to 15%, and even up to 20% in some cases.

However, as Mr. Shibata mentioned earlier, it is difficult to manufacture cars, and OEMs are making cars with higher added value. So, in that sense, there is a possibility that the content growth will be higher than the 8% to 15% I mentioned earlier.

So, in total, I think the production volume plus content growth will be around 20% or more. You were asking where the 35% come from. OEMs and Tier 1 companies are already at historical low inventory levels since last year and even now to some extent, so I think they are working to build up their inventory. I'm wondering if that's what the delta is for.

However, it is true that inventory levels are rising, and we are watching this very closely. We are working closely with Tier 1 and OEM companies to check and see what is going on now. However, if we look at OEMs alone, we can see from the general data that finished goods inventory is still in a historical low. That's all I have to say.

For this year, we have various data on the production volume, but according to the data we have now, the production rate is actually over 10%. In addition, content growth is expected to be about the same as last year, so in that sense, I believe that overall onboarding growth is expected to be quite high.

However, if the production volume does not reach 10% or more as I mentioned earlier, due to the impact of semiconductor and other materials, I think the total production volume will fall a little from that level. We are focusing on that as a future development. That's all.

Q: One thing that I would like to follow up on now is that you are watching the inventory closely. We would like to know how you are watching them to get a sense of security. Can you tell us whether the backlog and customer inventory are healthy numbers? I would like to have some peace of mind by knowing how they are monitored.

A: It's not a big deal. At the micro level, we conduct interviews with each individual company, and where we can get concrete numbers, we verify based on the numbers.

We are also looking at some macro data, especially inventory levels. To be honest, we don't really know if the absolute level is high or low anymore, but we try to look at where we are now compared to the past to identify any potential concerns.

Again, I'm thinking that about two-thirds of last year's sales increase is a good story that's settled down with a lot of huffing and puffing, and about one-third is piling up in inventory, whether intended or unintended. On the other hand, I think most people probably have the prospect of a reasonably large increase in production volume this year compared to last year. Thus, if things go well there, I don't think we have much to worry about. If we continue to fall short of the production forecasts issued by OEMs and third parties due to various factors, we will have to change our perspective. That's all.

[Questioner 3]

Q: I would like to ask you about demand. In 2022, which do you expect to have higher market growth, ABU or IIBU? While in 1Q alone, the IIBU is expected to have a low growth rate due to the rebound from the accelerated shipments, I would like to know which growth rate is expected to be higher throughout the year: Automotive or Industry/Infrastructure/IoT?

If possible, what are the demand trends by application? In addition, if there is anything in your product portfolio that will help Renesas to grow beyond the market, I would like to hear about it as well. This is the first point.

A: In terms of sales growth itself, we expect Automotive to be higher this year. In the area of Industry/Infrastructure/IoT, our strategy until now has been diversification, and I think that is working well. On the other hand, due to the fact that we are diversifying, our sales growth prospects are a little lower than a portfolio that bets heavily on cloud data centers that have very high growth potential. I think that this is inevitable.

In the case of Automotive, we only have the automotive part, so we will see a very large growth this year. In terms of growing applications, I would say that ADAS and EVs, which you are already familiar with, are the major ones. However, in our case, we are seeing significant growth in sales especially the 3rd generation SoC and 40-nanometer microcontrollers, since the designs that we have acquired in the past are now being developed rapidly.

It's a little difficult to define SoC, but I think this is where we are probably seeing greater growth than the market as a whole, or than other companies. That's about it from me. Mr. Kataoka, do you have anything to add?

A: Yes, in terms of in-vehicle use, it's all about electrification, isn't it? Also, xEV, electrification, ADAS, gateways, these applications are increasing and they are becoming standard equipment. Our latest SoC and microcomputers are expected to grow very rapidly in this sense. Depending on the product, new product sales are expected to double or triple compared to last year, so we can see very high growth in total sales. That's all.

Q: Secondly, I would like to ask you about page 10 of the presentation materials. The growth of order backlogs was very high in 1Q, 2Q, and 3Q, but I think the growth in 4Q was much slower than that. It may be that some of the long-term order initiatives are having an impact on the quarterly results, but including that, I would like to know how the long-term order initiatives are affecting the order backlog on a quarterly basis, and whether the smaller increase in the current 4Q is in any way indicative of a trend change. Can you please confirm this point for me?

A: Thank you for asking. I thought it was important for everyone to understand the importance of this. Basically, every company has their initiatives. A company in the US said that they have already received confirmed orders for next year, while a company in Europe said that they don't need them.

What we did was to go and consolidate for the rest of the year. So, we haven't basically talked about next year yet. Since the middle of last year's fiscal year, we have been requesting our customers to solidify the demand for 2022, because we feel that we will not be able to keep up with the various plans unless we solidify them to a great extent under such tight conditions.

Therefore, this gray bar that you are seeing now is basically the orders for 2022 and nothing more, although only a part of it is really a mixture of various things. Therefore, we started in the middle of the fiscal year, and at the beginning we were accumulating more and more. However, by 4Q, which is when 2022 is approaching, our activities to secure orders have already been completed, except for Dialog, for which the process was delayed and increases still recorded. I think I mentioned that in the last earnings announcement.

So it is quite natural for us to flatten out here, and we have prepared this diagram to tell you in advance that the gray bars will decrease from here.

On the other hand, again, there are a good number of non-cancellable orders that have been exchanged in writing in this outer frame. That's the committed portion in the middle here. The reason why they did this was because the customer wanted to use the same EDI system for ordering as before. Therefore, there were a certain number of customers who did not like the idea of assigning orders with a predetermined date in advance from an operational standpoint. Thus, for those customers, we obviously decided that that was fine and made arrangements for receiving and placing orders outside the system.

Therefore, as the due date approaches, orders are received from customers via EDI, and although they are committed, they are not recognized as orders in the system. Current orders received, which is at the very top, are from new customers, long-tail customers, and for customers for whom we have decided to accept orders with the same lead time as before.

Therefore, the amount of commitments in the middle is fixed as the total amount. As the term progresses, this will fall into this gray area. As for current orders received, which is at the very top, the total amount itself has not yet been determined yet, and this is expressed through the gradation.

Therefore, as time goes by, the gray bar at the bottom of the screen will decrease more and more. To compensate for that, the committed portion and current orders received at the top will decrease, and the gray bar will be filled. As a result, the sales on the right side of the bar would eventually fall into the dark blue area.

As for what we are going to do about orders from next year onward, the overall market situation is still difficult to foresee. Thus, we will take a little more time to discuss with our customers whether we should do the same thing, shorten the period, increase the flexibility, or in some cases make the period longer, and choose the most appropriate method. I hope that explains it, but that's all for now.

Q: I would like to ask a supplementary question. Given that production lead times continue to lengthen and the supply-demand balance for semiconductors remains tight, I think it will be difficult to shorten orders in reality. In that case, it is true that some of the confirmed orders will manifest as sales. However, it was said that orders for FY2023 would come in, causing the order backlog to continue to decline. Could you explain a little more about that?

A: Yes, I think that will depend on the efforts toward the middle of the year as I mentioned earlier. If we make the same effort as last year, the gray bar will go up again.

I don't think that the lead time itself is growing that fast. The lead time for manufacturing semiconductor devices, or rather the lead time from receiving an order to shipping it, is of course getting longer because there is more demand. Also, the lead time for semiconductor manufacturing equipment from the time an order is placed to the time the equipment is available is getting very long. I believe that is the case.

On the other hand, I think that most of the companies have not yet determined how they will allocate their manufacturing capacity, whether it is raw materials, foundries, or OSAT, for the next year or so.

We have been told that they would like to finalize the project by the middle of this year. Some of the major companies are planning to start in the second half of this year. Therefore, there is still a great deal of room for change up to that point, so it can wait until then. We thought that we should decide what to do next year. That's all for now.

[Questioner 4]

Q: First of all, I would like to ask you to look back on the profit of the bottom line. Although there may have been some changes in the accounting period, I think it has been the highest profit ever. I know that there have been some changes in market conditions, but I would like to know how you summarize the results of the reforms that led to the achievement of the highest profit this time. Based on this, what are some of the areas that you think should be focused on this fiscal year?

A: It's difficult to pick just one thing, but if I may be a bit blunt, one thing I would say is that we are gradually making progress in our efforts to sell products that are needed by customers at a somewhat appropriate price or value. While we can speak confidently about what we think are the biggest factors, the reality is that the future is uncertain.

In the absence of a clear view, we have drawn up several scenarios in advance, and I think the most important thing is that we have a better ability to decide how to act in response to changes in the situation or outlook, compared to before.

For example, in a situation like now, we can take measures to increase the supply of products for which demand is strong. If the demand is going to go down in the future, the opposite approach will naturally be taken, right?

All of these corporate activities, from expanding manufacturing capacity, to securing raw materials, to negotiating for the allocation of foundry and OSAT capacity, have become much more agile due to changes in outlook and decision making. I think that's a big part of it.

You asked what are you going to do this year. This year, as I mentioned on page 10 of this slide, we have generally completed what was necessary to do in terms of demand. We are clear which steps have to be taken for delivery to our customers, and now we just need to execute.

Therefore, this year, I would rather change gears and use this year to prepare for a leap forward, to upgrade our mid-term targets, which we announced to you last September, by another level or two. We will continue to look for ways to acquire or invest in tuck-ins, and we would like to further deepen our thinking on whether the current approach to manufacturing capacity is sufficient.

In addition, we would like to deepen our examination of our business model, or the source of our added value, to see if it is sufficient to continue with the existing model, and take the necessary actions.

Also, as I mentioned at Analyst Day, we have been lagging behind our competitors for quite some time now, but we would like to start working on shareholder returns. We would like to work on the above this year, and make it a year of defining the long-term future from the immediate future as much as possible. That's all.

Q: Another point I would like to make briefly is that in 4Q, the growth in Industry/Infrastructure/IoT was quite large due to the advance of Dialog. In the next 1Q, when we look at Industry/Infrastructure/IoT, and applications, I would like to know if there are any changes in trends from the past, and what the drivers will be. That's all.

A: I was wondering myself to what extent these sequential steps really make sense. As I mentioned earlier, if manufacturing catches up and we move ahead of schedule, that amount will come out as a negative in the next quarter.

Therefore, I don't think there is any point in discussing sequential trends here. I will focus on the longer-term trends. One of the strongest sectors this year will be in Industrial, especially factory automation. It has been strong since last year, and I expect it to continue to strengthen.

Also, after lagging behind in PC and mobile computing, perhaps supplies are finally catching up a bit, but it looks like printer demand will continue at a fairly high level this year. On the other hand, PC and mobile computing is expected to slow down considerably compared to last year, but the extent of the slowdown is smaller than when I talked about it in the last financial results announcement, and I think it will be a moderate growth.

I also thought that home appliances, mainly air conditioners, would become much weaker, but at this point it doesn't look like they will weaken that much. So, I think that PCs and home appliances will slow down, but will be a little stronger than anticipated before. The area that will probably continue to see strength is the cloud data center market. Part of this will depend on the timing of platform updates by major MPU vendors, but we are already seeing steady growth in shipments of DDR5-compatible products. I think we can expect a gradual, step-by-step growth this year and possibly next year.

The strongest sectors are factory automation and cloud data centers, while the PC and consumer sectors are slowing down, but from a traditional perspective, they are relatively strong. That's all.

[Questioner 5]

Q: The first point is that the market share seems to have increased according to some estimates. Due to the effects of the fire, there is a possibility that the market share will go down and then go up, but as a strategy, do you feel that the market share has increased this year?

Secondly, as the year drew to a close, the industry seemed to have accepted the fact that there was a shortage of products again this year. However, I felt that there was an atmosphere that the semiconductor market would not collapse. I think that negotiations concerning price, transactions terms, cancellations penalties, and the product mix are going on. Based on that, if you could give us an indication of what you think will happen this year, I would appreciate it. That is all.

A: I understand the background to your question, but it's difficult to answer the second question, as this will largely depend on the continuation of the tailwind. I'm sorry, but that's all I can say. I'm sorry, but if I say too much, it will boomerang back at me, so I'll just leave it at that.

As for market share, we shouldn't be too gloomy just yet, so I think it's better to talk about it after the third-party figures become available, but at the moment I have the feeling that the areas where we decided we wanted to grow are starting to grow. In particular, in the case of the Automotive business that I mentioned earlier, the strategic products are quite clear and, as I will repeat here, are growing quite rapidly, so I expect the figures to show up in a certain way.

Also, in the Industrial/Infrastructure/IoT fields, there is a wide variety of products, so it's hard to discuss everything in general, but from our point of view, the original Renesas products, such as microcontrollers, SoCs, and MPUs, have been losing market share since 2013. However, I feel that the trajectory is starting to change in this area.

It would be bad to announce something too strong and then take it back at a later stage. When the third party figures come out, which I'm sure will come out in a couple of months from now, I'll be able to talk about it with a little more confidence once our current feeling is confirmed. That's how it is as of today. That's all.

<Comments from CEO Shibata>

Thank you again for your time today. As mentioned during the questions, the numbers are growing strongly, but I understand that people have certain doubts as to whether this is true. We will continue to monitor our performance, and if there is any change in our perspective, we will share it with you as soon as possible. As of today, we are not too worried about it.

Another thing I would like to do is to take this year as the start of a new phase in our development, to become a company that can achieve further growth. Though we will not be ready to disclose anything by the next strategy progress update in March yet, we would like to use this year to work on this so that we will be able to inform you again in the not-too-distant future. We will properly update you with more details about our medium and long-term progress next month, so please look forward to it.

Thank you very much for your time today.

[END]