

# First Quarter of the Year Ended December 31, 2023

## Conference Call (Held April 27, 2023)

### Presentation and Question & Answer Summary

## Presentation

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**Moderator:** Thank you very much for taking time out of your busy schedules to join us today for the financial results briefing of Renesas Electronics Corporation for Q1 FY2023.

In attendance today are Hidetoshi Shibata, Representative Director, President, and CEO; Shuhei Shinkai, Senior Vice President and CFO, and other staff members.

Mr. Shibata will now make a few remarks, after which Mr. Shinkai will explain the Q1 financial results, followed by a question-and-answer session. The entire briefing is scheduled to last approximately 45 minutes. The materials used in today's presentation are the same as those posted earlier on the IR page of the Company's website.

Now, please go ahead, Mr. Shibata.

**Shibata:** Hello everyone. This is Shibata.

As many of you may have already seen, Q1 ended slightly above target. We expect sales to be almost flat in Q2 as well. On the other hand, it is difficult to predict whether H2 will be better or worse, and I think there may be some upside. Therefore, we would like to enhance our channel inventory in preparation for this.

Overall, the situation has changed in many ways, and we plan to provide a comprehensive update on the medium- to long-term, e.g., how to hold inventory, at the Capital Market Day scheduled for next month.

So, I think it is a quarter without many special points, but Mr. Shinkai, CFO, will discuss the details. Please go ahead, Mr. Shinkai.

## DISCLAIMER

- **Adoption of IFRS:** With the outlook that the Group will continue to expand globally and to provide financial figures that can be compared on a global scale, the Group discloses its consolidated financial statements in accordance with IFRS starting from the annual securities report for FY2018/12.
- **Non-GAAP figures:** Non-GAAP figures are calculated by removing or adjusting non-recurring items and other adjustments from GAAP (IFRS) figures following a certain set of rules. This adjustment and exclusion include the amortization of intangible assets recognized from acquisitions, other PPA (purchase price allocation) adjustments relating to acquisitions, stock-based compensation, as well as other non-recurring expenses and income the Group believes to be applicable.
- **Presentation of financial forecasts:** Starting from the consolidated forecasts for the three months ended March 31, 2019, the Group presents its financial forecasts as a range, and gross margin and operating margin figures in the non-GAAP format. The gross margin and operating margin forecasts are given assuming the midpoint in the sales revenue forecast.
- **Purchase Price Allocation (PPA):** The allocation of the acquisition costs for the business combination with Steradian Semiconductors Private Limited ("Steradian"), which was completed on October 17, 2022, has been revised during the current fiscal year. This revision to the allocation of the acquisition costs (PPA) has been reflected in the consolidated financial results for the year ended December 31, 2022.

**Shinkai:** This is Shinkai, and I am the CFO of the Company. I will explain the financial results for Q1 of this fiscal year based on the materials posted on the IR website.

This is a disclaimer that the fourth point reflects the results of Steradian's PPA, whose acquisition was completed last October.

And one more point, which is a heads-up for the next earnings call. We are undertaking an integration of our ERP system, which will be completed next year, in mid-2024. We plan to switch over some of these systems at the beginning of October. Before and after the switchover, and especially before, the switchover will be accompanied by advance production shipments, etc., which is expected to have a considerable impact on Q3 results.

We are currently in the process of examining the details of this project and would like to discuss them in detail at the next presentation of the Q2 financial results.

# 1Q 2023 FINANCIAL SNAPSHOT

## NON-GAAP

(B yen)	2022		2023				
	1Q (Jan-Mar)	4Q (Oct-Dec)	1Q (Jan-Mar) Forecast	1Q (Jan-Mar) Actual	YoY	QoQ	Change from Feb 9 FCT <sup>1</sup>
Revenue	346.7	391.3	355.0 (±7.5)	<b>359.7</b>	+3.7%	-8.1%	+1.3%
Revenue (Excluding Foreign Exchange Impact)	-	-	-	-	-6.3%	-2.5%	+0.8%
Gross Margin	58.4%	56.0%	54.5%	<b>56.2%</b>	-2.2pts	+0.2pt	+1.7pts
Operating Profit (Margin)	135.5 (39.1%)	135.7 (34.7%)	32.5%	<b>124.8 (34.7%)</b>	-10.8 (-4.4pts)	-10.9 (+0.0pt)	+9.4 (+2.2pts)
Profit Attributable to Owners of Parent	90.2	109.3	-	<b>107.5</b>	+17.3	-1.8	-
Profit Attributable to Owners of Parent (Excluding Foreign Exchange Impact) <sup>*2</sup>	107.8	85.6	-	<b>106.8</b>	-1.0	+21.2	-
EBITDA <sup>*3</sup>	155.2	155.5	-	<b>144.3</b>	-10.9	-11.2	-
1 US\$=	115 yen	144 yen	130 yen	<b>133 yen</b>	18 yen depreciation	12 yen appreciation	3 yen depreciation
1 Euro=	130 yen	144 yen	140 yen	<b>142 yen</b>	12 yen depreciation	2 yen appreciation	2 yen depreciation

<sup>\*1</sup>: Each figure represents comparisons with the midpoint in the sales revenue forecast range

<sup>\*2</sup>: Profit attributable to owners of parent – foreign exchange gain/loss

<sup>\*3</sup>: Operating profit + Depreciation and amortization

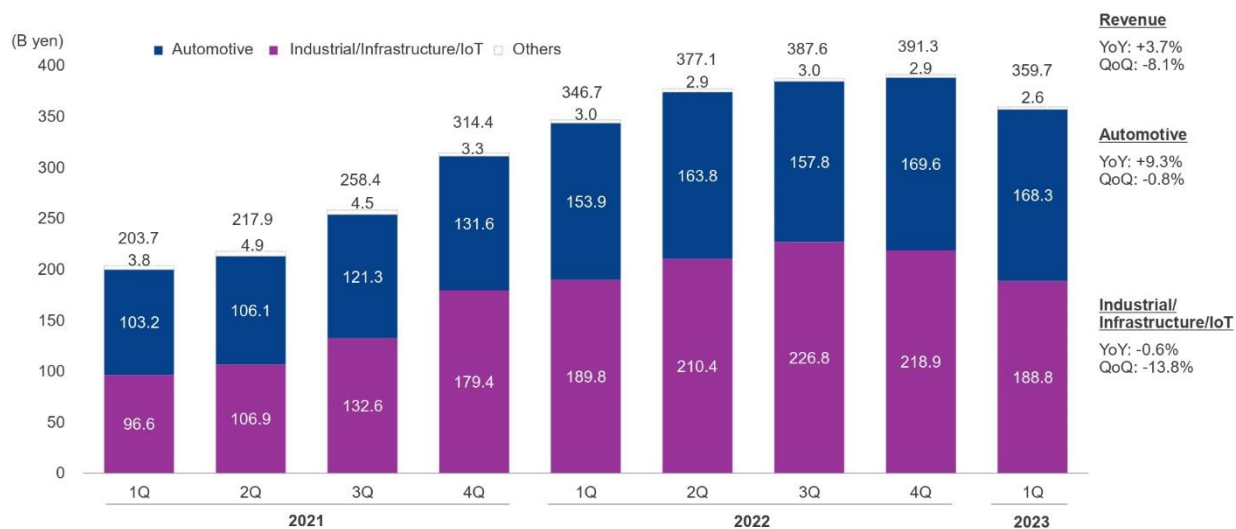
Here are the results for Q1. Please look at the row in the middle.

Revenue was JPY359.7 billion, gross margin was 56.2%, operating profit was JPY124.8 billion, operating margin was 34.7%, net profit was JPY107.5 billion, net profit excluding foreign exchange impact was JPY106.8 billion, EBITDA was JPY144.3 billion, and exchange rates were JPY133 per US dollar and JPY142 per euro.

Please refer to the rightmost column for the forecast ratio. I intend to explain this later.

Again, for the purpose of showing the quantitative level of net profit, net profit excluding foreign exchange impact is shown. In addition to the change in the method of pooling among group companies in Q4 of last year, there was no significant difference in exchange rates between the end of Q4 and the end of Q1 of this year, resulting in a slight foreign exchange impact.

## QUARTERLY REVENUE TRENDS NON-GAAP



The following table shows quarterly changes in revenue. For Q1, please refer to the far-right side.

First is the entire picture. Overall sales revenue increased by 3.7% YoY but decreased by 8.1% QoQ. Due to significant foreign exchange rate fluctuations, when excluding exchange rate fluctuations, it declined by 6.3% YoY and 2.5% QoQ, as noted on page four.

The breakdowns into the Automotive and the Industrial/Infrastructure/IoT Business Units are shown.

# 1Q 2023 REVENUE AND GROSS/OPERATING MARGIN

NON-GAAP

	Automotive	Industrial / Infrastructure / IoT	Company Total	
<b>Revenue</b>	168.3 B yen vs FCT: + QoQ: -0.8%	188.8 B yen vs FCT: + QoQ: -13.8%	359.7 B yen vs FCT: +1.3% QoQ: -8.1%	<b>Operating Margin vs FCT +2.2pts</b> <b>Revenue</b> <b>Gross Margin vs FCT: +1.7pts</b> Currency Impact Product Mix Production Recovery Production Costs, etc. <b>Operating Expenses</b>
<b>Gross Margin</b>	52.8% QoQ: +4.6pts	59.4% QoQ: -3.1pts	56.2% vs FCT: +1.7pts QoQ: +0.2pt	<b>Operating Margin QoQ +0.0pt</b> <b>Revenue</b> <b>Gross Margin QoQ: +0.2pt</b> Currency Impact Product Mix Production Recovery Production Costs, etc. <b>Operating Expenses</b>
<b>Operating Margin</b>	36.1% QoQ: +5.0pts	33.5% QoQ: -3.2pts	34.7% vs FCT: +2.2pts QoQ: +0.0pt	

This page is about revenue, gross margin, and operating margin for Q1. I will start with the Company-wide totals. Please look at the top right. Compared to the forecast, the operating margin resulted in 2.2 percentage points above the forecast.

Revenue was up 1.3% from the median of the forecast, but roughly a little less than half was due to foreign exchange effects, and the rest was due to factors other than foreign exchange effects. Both Automotive and Industrial/Infrastructure/IoT Business Units were above the forecast.

Gross margin was 1.7 percentage points above the forecast. The main factor is almost exclusively an improvement in the product mix. Foreign exchange rates were roughly in line with the forecast, product mix was positive, production recovery was slightly positive, and manufacturing costs resulted roughly in line with expectations. Operating expenses are down slightly, while R&D and SG&A are both down slightly from the forecast.

Next is the QoQ comparison. Please refer to the table at the bottom right. Operating margin was flat QoQ. Revenues were down 8.1% including foreign exchange and 2.5% excluding foreign exchange.

Gross margin is plus 0.2 percentage points. The main factor was the product mix offsetting lower production recovery and higher manufacturing costs. Operating expenses decreased in R&D and SG&A. In addition to the seasonality from Q4 to Q1, cost control measures contributed to the increase.

For the segments on the left, some additional information on QoQ changes in gross margin and operating margin has been provided. There is a relatively larger effect of product mix improvement in the automotive segment, while the industrial/infrastructure/IoT segment have recorded inventory valuation reserve and, therefore, there is a difference in change in this gross margin behavior. In addition, due to decreasing the scale of sales in the industrial/infrastructure/IoT segment, the operating margin declined QoQ.

## IN-HOUSE INVENTORY (FINANCIAL ACCOUNTING BASIS) AND DOI\*1\*2



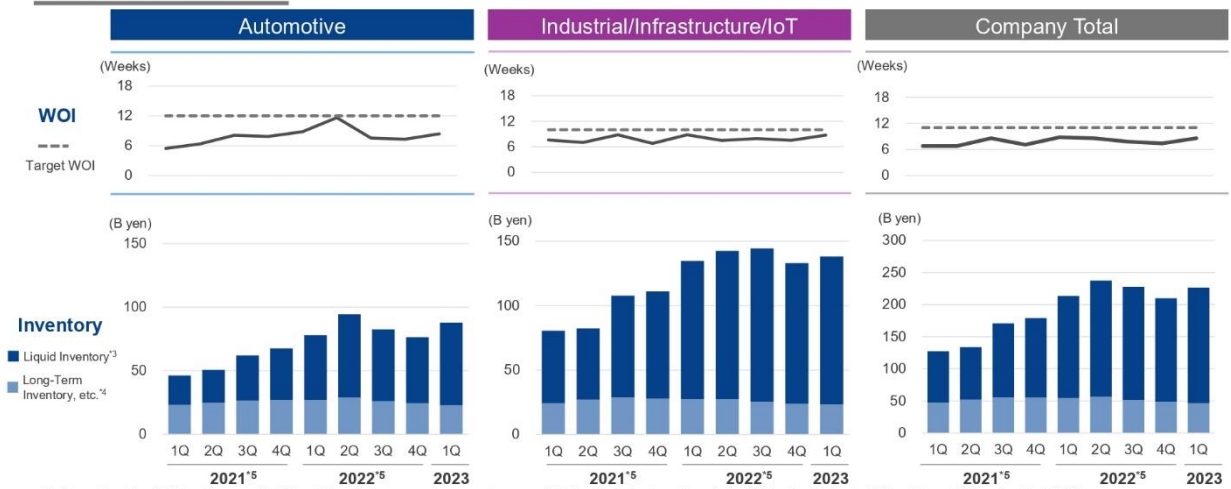
\*1: DOI. Days of Inventory = Inventory valuation balance at the end of the quarter / cost of sales of the quarter (Non-GAAP) × 90.

\*2: The figures include Dialog's inventories from 3Q21 and Celeno's inventories from 4Q21. However, note that Dialog's quarterly cost of sales for 3Q21 is calculated by multiplying Dialog's September costs by 3.

Next is about in-house inventory. On the right, the overall DOI increased QoQ to 107 days.

By segment, both actual amount and DOI increased, mainly in automotive, mainly in Work-in-Process. For industrial/infrastructure/IoT, the actual value peaked out in size in Q3 of last year, and the DOI remained mostly flat.

# SALES CHANNEL INVENTORY\*1 (MANAGEMENT ACCOUNTING BASIS) AND WOI\*2 FY2023 BUDGET RATE BASE



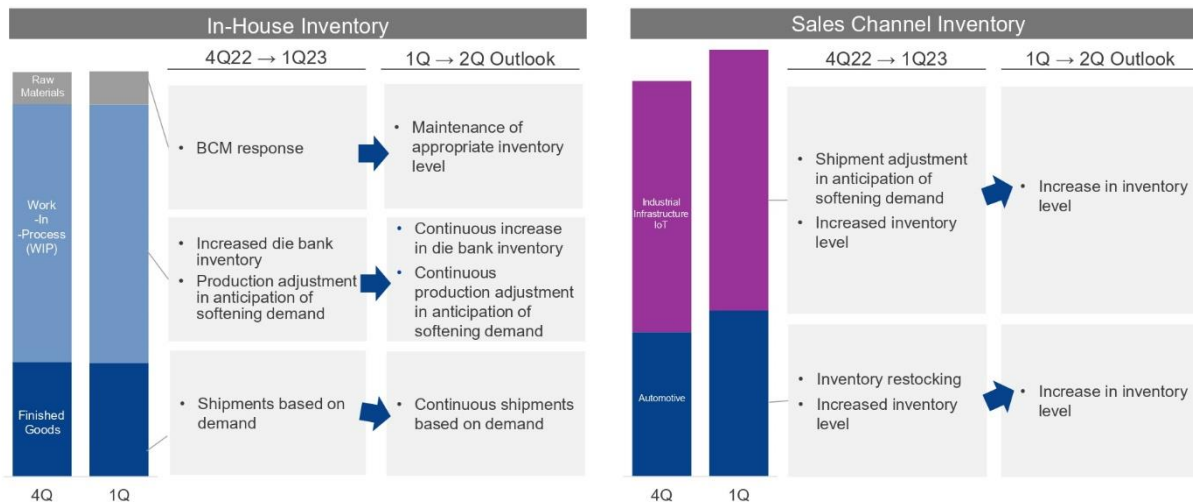
\*1: Channel Inventory: Total inventory amount for Tokuyakutens for Japanese customers and overseas distributors (including channel inventories of Dialog from September 2021 and those of Coleno from March 2022)  
 \*2: WOI: Weeks of Inventory = Channel inventory at the end of the quarter / (cost of channel 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.)  
 \*5 Exchange rates for the FY2021 and FY2022 have been adjusted (and are calculated based on the FY2023 exchange rate) in accordance with the change in exchange rate for the FY2023 budget.

This page is about WOI for channel inventory and weeks in possession. WOI increased QoQ. Both automotive and industrial/infrastructure/IoT resulted in the mid-eight-week range.

Note that this page is presented using the exchange rate used in management accounting, and the budget rate used in management accounting was changed in the current fiscal year, beginning in FY2023. For easy comparison with the past, figures from last year and prior to FY2022 are also shown, updated to this year's budget rate. However, the WOI impact from this exchange rate change is not material.



# INVENTORY ANALYSIS



The next section discusses inventory increase/decrease factors. Our inventory was nearly flat in value scale. Raw materials increased slightly in Q1, but are expected to remain flat thereafter.

As for Work-In-Process, the decrease in Work-In-Process due to production adjustments in Q1 was as expected. On the other hand, MCU wafers for automotive applications have been purchased from foundries ahead of schedule, and these wafers are in the back-end process at the end of Q1. Thus, the result was almost flat QoQ. In Q2, we expect the same in terms of monetary scale, with a decrease in Work-In-Process and an increase in die bank.

As for finished products, we expect Q1 to be roughly in line with our expectations, and a slight decrease in Q2.

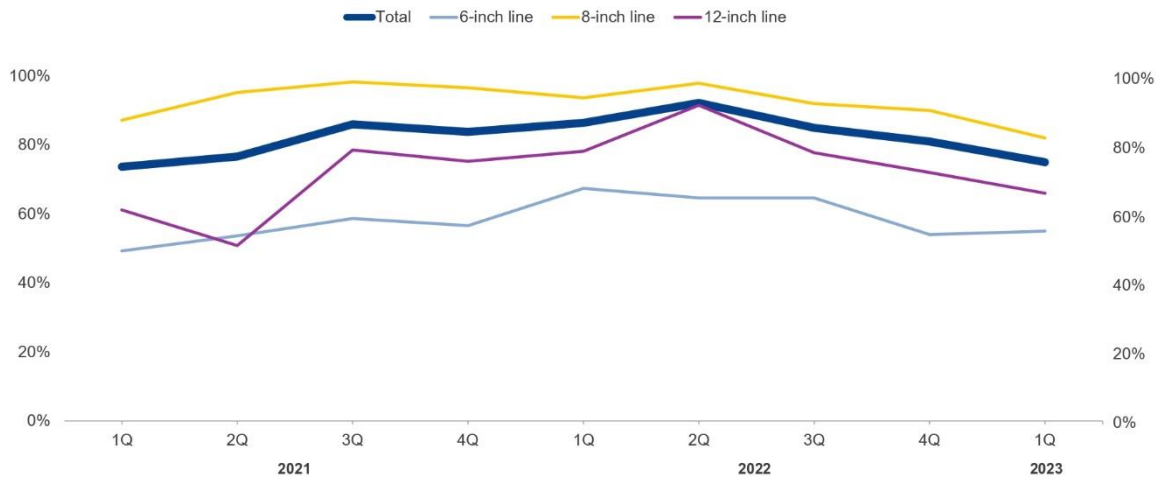
On the right, we have points about the channel inventory. In both automotive and industrial/infrastructure/IoT, Q1 results were generally in line with expectations. In Q2, we are carefully watching demand trends in H2 for shipments. In particular, as Shibata mentioned earlier, we plan to slightly increase the level of channels so as not to lose opportunities.

Industrial/infrastructure/IoT saw increases in both actual value and WOI in Q1. In Q2, we expect an increase in levels to meet this H2 demand.

For automotive, both actual value and WOI increased QoQ in Q1 due to the restocking of inventories that was initially anticipated. In Q2, we expect a similar increase in actual amount and WOI.



# QUARTERLY TRENDS IN FRONT-END UTILIZATION RATE\*1 WAFER INPUT BASIS

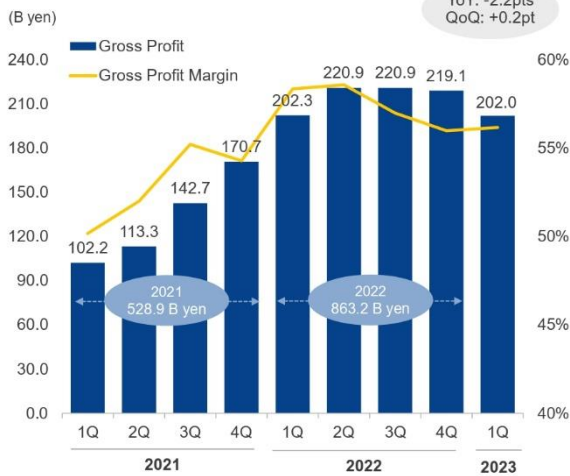


\*1: Utilization rates are calculated by excluding the 6-inch line capacity of the Shiga Factory (closed in August 2021) and the Yamaguchi Factory (closed in June 2022) from 1Q21 and 1Q22 onwards, respectively.

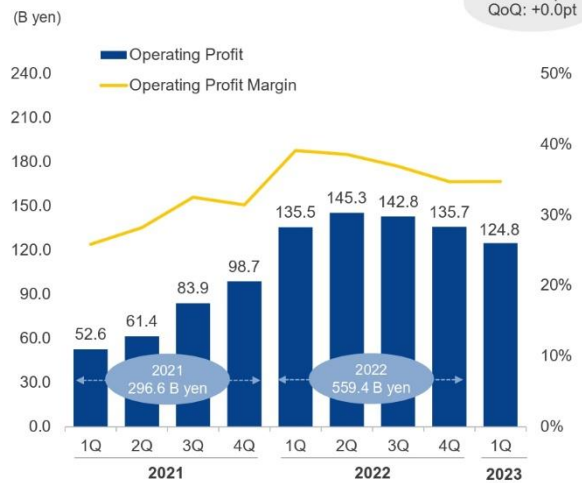
This is the utilization rate of the front-end process on a wafer input basis. In Q1, the utilization rate on the input basis was in the mid-70%, which was generally in line with expectations. In Q2, we expect a slight decrease in utilization rate due to further production adjustments.

# GROSS PROFIT AND OPERATING PROFIT QUARTERLY TRENDS NON-GAAP

## Gross Profit (Margin)



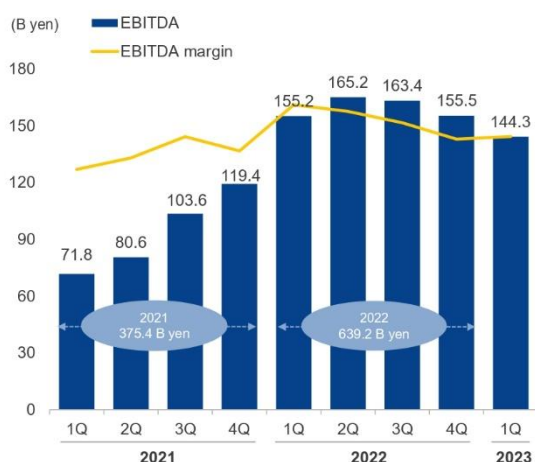
## Operating Profit (Margin)



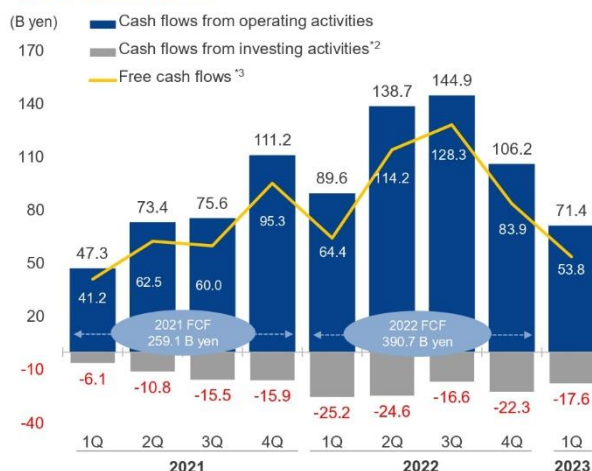
This is a new additional slide that provides a reference for trends in gross margins and operating margins. Please refer to it later.

# NON-GAAP EBITDA\*1 AND GAAP CASH FLOWS

## Non-GAAP EBITDA



## GAAP Cash Flows



\*1: Operating profit + Depreciation and amortization \*2: The figures exclude acquisition-related payments and payments for acquisitions of subsidiaries for the contingent consideration  
\*3: Cash flows from operating activities + Cash flows from investing activities

EBITDA for Q1 was JPY144.3 billion, while cash flow on the right side was JPY71.4 billion in operating cash flow and JPY53.8 billion in free cash flow.

If we speak in terms of the difference in operating cash flow from EBITDA in Q1, there is a difference of JPY72.9 billion. In terms of major items, there were tax payments of just under JPY80 billion, bonus payments of over JPY30 billion, insurance deposits, interest income, and such. As a result, large expenditures were slightly offset.

## 2Q 2023 FORECAST NON-GAAP

(B yen)	2022			2023				
	2Q (Apr-Jun)	1H (Jan-Jun)	1Q (Jan-Mar)	2Q (Apr-Jun) Midpoint Forecast (Range) <sup>*1</sup>	YoY	QoQ	1H (Jan-Jun) Forecast	YoY
Revenue	377.1	723.8	359.7	360.0 (±7.5)	-4.5% (±2.0pts)	+0.1% (±2.1pts)	719.7 (±7.5)	-0.6% (±1.0pt)
(Excluding Foreign Exchange Impact)	-	-	-	-	-8.7%	+0.1%	-	-
Gross Margin	58.6%	58.5%	56.2%	55.5%	-3.1pts	-0.7pt	+55.8%	-2.6pts
Operating Margin	38.5%	38.8%	34.7%	32.0%	-6.5pts	-2.7pts	33.3%	-5.5pts
1 US\$ =	124 yen	120yen	133 yen	132 yen	8 yen depreciation	1 yen appreciation	132 yen	13 yen depreciation
1 Euro =	134 yen	132yen	142 yen	143 yen	9 yen depreciation	1 yen depreciation	142 yen	10 yen depreciation

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

Next is the earnings forecast for Q2. Please refer to the blue column in the middle.

Median revenue was JPY360 billion, minus 4.5% YoY, plus 0.1% QoQ. Excluding foreign exchange effects, the figures are minus 8.7% YoY and plus 0.1% QoQ.

Gross margin is expected to be 55.5%, with minus 0.7 percentage points QoQ. As a main factor, lower production recovery is expected to be offset by a partial product mix. We expect foreign exchange and manufacturing costs to be mostly flat QoQ.

Operating margin is 32.0%, minus 2.7 percentage points QoQ. Operating expenses are expected to increase seasonally. In addition, we expect an overall increase, taking into account the impact of employee salary increases starting in April. The exchange rate is expected to be JPY132 to the US dollar and JPY143 to the euro.

## GAAP / NON-GAAP RECONCILIATION\*1

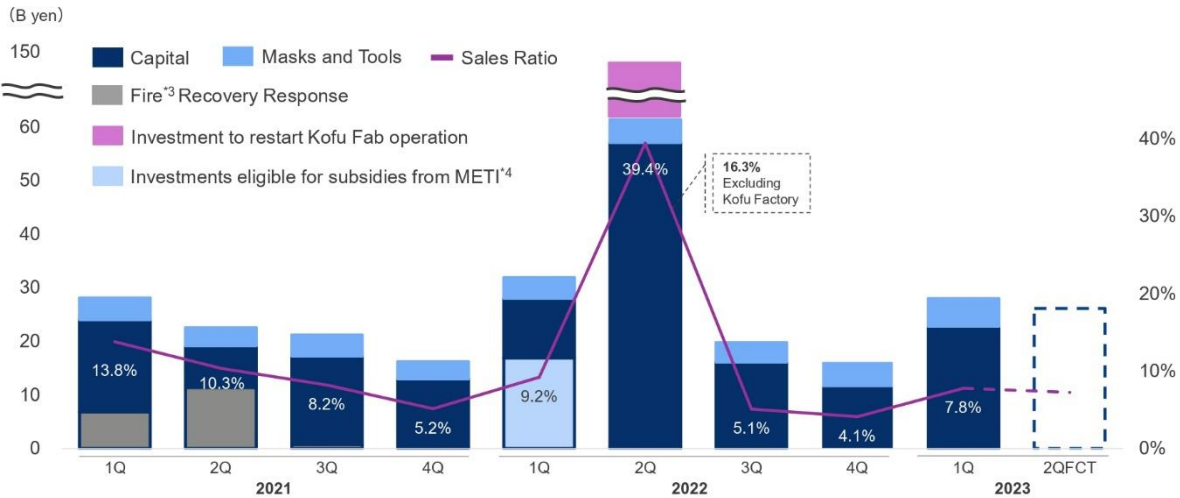
(B yen)					Full-Year 2022 (Jan-Dec)				2023			
	1Q (Jan-Mar)								1Q (Jan-Mar)			
	Gross Profit	Operating Profit	Net Profit	EBITDA	Gross Profit	Operating Profit	Net Profit	EBITDA	Gross Profit	Operating Profit	Net Profit	EBITDA
<b>Non-GAAP (vs Revenue)</b>	202.3 (58.4%)	135.5 (39.1%)	90.2 (26.0%)	155.2 (44.8%)	863.2 (57.4%)	559.4 (37.2%)	377.3 (25.1%)	639.2 (42.5%)	202.0 (56.2%)	124.8 (34.7%)	107.5 (29.9%)	144.3 (40.1%)
Recurring Items	-1.7	-29.4	-25.2	-5.1	-6.0	-127.2	-107.5	-21.5	-0.8	-29.9	-25.8	-4.5
Former-Intersil PPA Effects	-0.1	-3.7	-2.8	-	-0.3	-14.6	-8.7	-	-0.1	-3.2	-2.4	-
Former-IDT PPA Effects	-0.1	-10.7	-9.4	-	-0.5	-48.4	-42.7	-	-0.1	-12.4	-10.9	-
Former-Dialog PPA Effects	-0.5	-9.5	-7.5	-0.4	-2.2	-41.0	-33.0	-1.8	-0.4	-9.3	-7.6	-0.3
Former-Celero PPA Effects	-0.7	-1.5	-1.5	-0.7	-1.5	-5.0	-5.0	-1.5	-	-0.7	-0.7	-
Former-Reality AI PPA Effects	-	-	-	-	-	-0.0	-0.0	-	-	-0.0	-0.0	-
Former-Steradian PPA Effects	-	-	-	-	-	-0.0	-0.0	-	-	-0.0	-0.0	-
Stock-Based Compensation	-0.3	-4.0	-4.0	-4.0	-1.5	-18.1	-18.1	-18.1	-0.3	-4.2	-4.2	-4.2
Non-Recurring Items	-2.7	-6.3	-5.1	-6.3	-3.2	-8.0	-13.2	-7.5	-1.1	28.4	23.5	28.4
Naka Factory Fire Impact	-0.7	0.2	0.2	0.2	-0.9	-0.0	-0.0	-0.0	-	29.6	29.6	29.6
Others	-2.0	-6.6	-5.3	-6.5	-2.3	-8.0	-13.2	-7.5	-1.1	-1.3	-6.1	-1.2
<b>Non-GAAP Adjustments Total</b>	<b>-4.4</b>	<b>-35.7</b>	<b>-30.3</b>	<b>-11.4</b>	<b>-9.2</b>	<b>-135.2</b>	<b>-120.7</b>	<b>-29.0</b>	<b>-1.9</b>	<b>-1.5</b>	<b>-2.3</b>	<b>24.0</b>
<b>GAAP (vs Revenue)</b>	<b>197.9</b> (57.1%)	<b>99.8</b> (28.8%)	<b>59.9</b> (17.3%)	<b>143.8</b> (41.5%)	<b>854.0</b> (56.9%)	<b>424.2</b> (28.3%)	<b>256.6</b> (17.1%)	<b>610.2</b> (40.7%)	<b>200.1</b> (55.7%)	<b>123.3</b> (34.3%)	<b>105.2</b> (29.3%)	<b>168.3</b> (46.8%)

\*1: From 3Q 2021 onwards, Non-GAAP adjustments have been also applied to the revenue following the implementation of PPA

Let me summarize some of the Appendix.

This is a bridge between Non-GAAP and GAAP. The main non-recurring item in Q1, on the fourth line from the bottom, is the insurance income related to the fire that occurred in the Naka factory in 2021. JPY29.6 billion is reported as a non-recurring item.

# CAPITAL EXPENDITURES\*1\*2



\*1: The figures represent the investment decision basis tangible and intangible assets and do not match the sum listed in the cash flow statement. However, the investment amount for former Dialog and Celeno is based on equipment delivery  
 \*2: Total amount of the Group's capital investment, including investments made by former IDT from 2Q 2019, by former Dialog from 3Q 2021 and by former Celeno from 1Q 2022  
 \*3: The fire which occurred at a Renesas consolidated subsidiary on March 19, 2021 \*4: METI: Ministry of Economy, Trade and Industry



Next is the status of capital investment. For Q1 and Q2 of 2023, we expect a slightly higher level than this 5%, including R&D-related investments, IP purchases, license purchases, IT investments, the ERP replacement mentioned earlier, and facility-related investments.

# ACQUISITION OF PANTHRONICS

Overview of Panthronics		Rationale	
<b>Company Name</b>	Panthronics AG		<b>Expand Connectivity Portfolio</b>
<b>Headquarters</b>	Graz, Austria		<ul style="list-style-type: none"> <li>Continue strengthening connectivity portfolio, following Dialog &amp; Celeno acquisitions, to further meet customer needs</li> </ul>
<b>Business</b>	Development and sale of semiconductor for Near-Field Communication (NFC)		<b>Provide NFC Solutions for the Growing Markets</b>
			<ul style="list-style-type: none"> <li>Extend reach into growing and emerging NFC applications in Fintech, IoT, asset tracking, wireless charging and automotive</li> </ul>
<b>Acquisition Summary</b>			<b>Strengthen Global Engineering Talent</b>
<b>Source of Financing</b>	Cash-on-hand		<ul style="list-style-type: none"> <li>Expand R&amp;D capabilities in Austria</li> </ul>
<b>Closing</b>	By the end of calendar year 2023		



Just to let you know, we have acquired an Near-Field Communication company called Panthronics.

This concludes the presentation.

## Question & Answer

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### [Questioner 1]

**Q:** First of all, I would very much like the President to comment on the outlook for the semiconductor market in the future. In addition, could you tell us if there are any areas where your company's sales are outperforming or underperforming the market conditions, as well as the background and outlook for the future?

**A:** That's a difficult question. If I talk about several segments, the situation with PCs remain unchanged as I mentioned last time; we expect it to be bottomed out in Q2. However, we are cautious about how strong the recovery will be after bottoming out. Since inventory adjustments at customers have made considerable progress in Q1 and Q2, I think we will see a slight recovery in H2, where sales will be made on an actual demand basis. Basically, we expect sales to remain in line with the market and market conditions.

Similarly, in terms of market and market conditions, there are no particular factors that would cause us to move differently in mobile- and consumer-related businesses, so we are keeping our business at the same level as market conditions. I see this becoming even softer over H2. We expect it to fall.

On the other hand, although there continues to be a sense of uncertainty in the wide range of industrial applications, such as smart meters, our best assumption at this point is that the market will remain moderately strong. Our current view is that the market will remain relatively strong, in line with market conditions.

The other thing I have been hoping for a long time about the cloud data center and that hasn't happened yet is the upgrade of the server platform. If this successfully happens in H2, we can expect content gains slightly above the market rate, which is one of the upsides I mentioned earlier. Perhaps this transition will be delayed until next year, but if all goes well, we believe the transition will occur during H2 of this year and will be one of the drivers for growth above our market conditions.

The last one is automotive, and I wonder what the overall sentiment is like. We try not to be too optimistic because of the uncertainty, but the tailwind factor for us is that we still have a large exposure to Japanese OEMs. Japanese OEMs have a relatively strong global outlook for production volume through H2. So, as it becomes more apparent, it will be a tailwind for us.

The other is China. This has also been discussed for a while now as stimulus measures, and at this point we don't have anything very definite, but if this becomes apparent in H2, I think it will be a good tailwind. I'm not sure, but it may be comparable to market conditions, but we think it may be an additional tailwind.

On the other hand, ADAS and EV-related matters will be our tailwind in their own way. However, since the portion of the total automotive business is still not that large, about 15% in total, we believe that although it will be a tailwind, it will not be strong enough to offset the impact of overall automotive market conditions.

Also, I forgot to mention one thing about the cloud data center, but I think that if the deployment of generative AI begins promptly, it will be a moderate tailwind. As a result, we envision China, then cloud data centers, and then a little bit of generative AI as the upside of H2. We also assume that PCs will be flat to slightly up, mobile consumers will continue to be down, and industrial will be flat in a good way.

**Q:** Second, I would like to ask about pricing. With utility costs rising, I believe your company is partly considering pricing. On the other hand, there is a strong sense of uncertainty about market conditions, so what is your outlook for future pricing strategies in this situation of both strength and weakness?

**A:** Our pricing strategy, or rather our take on price, is basically annual. Therefore, we do not envision any further price changes for the current year, 2023, at this time. In particular, regarding the utility costs that you just pointed out, we expect them to rise slightly again in H2, so we are working to absorb that portion through various cost reductions, including raw material costs.

## **[Questioner 2]**

**Q:** Regarding the first question, Mr. Shinkai explained earlier that gross margin for automotive is very high because of the product mix. I would like to know a little more about improvement of product mix. We would also like to hear your outlook for the future.

**A:** The product mix within automotive has improved slightly. Also, as it regularly happens, fluctuations in non-device sales can have an effect on the product mix. The effect of prices has appeared since this Q1, and that makes up part of the product mix.

Regarding the future outlook, the automotive business is affected by the operation of in-house factories, since the proportion of products manufactured in these factories is that large. In Q1 and Q2, we also expect the utilization rate to decline, as we have indicated. Therefore, the reduction in production recovery due to this is expected to make a relatively large contribution to automotive.

**Q:** So, can we keep in mind that although there are negative factors, the improvement in pricing and product mix may work as positive factors in Q2 and beyond?

**A:** Regarding prices, as Shibata mentioned earlier, they are generally set on an annual basis, so there is not much improved in QoQ. If anything, I think the product mix can change.

**Q:** This is my second question. Topics at the May 19, Capital Market Day, included how to hold inventory in the medium to long term. While we look forward to your discussion of top-line growth, we would also like to get a preview of what, if any, message you are planning to send out at this time.

**A:** This is an event that we held every year, so it doesn't change that much over the course of a year. Basically, we intend to maintain the target model for the foreseeable future, so I think our focus will be to communicate the progress of what we have talked about over the last year, and hopefully increase your convictions about achieving the mid-term targets.

## **[Questioner 3]**

**Q:** First, as was brought up earlier, I would like to ask about the IIBU. I believe that in terms of WOI, target figures have generally been achieved for the sales channel. It was said that there is an upside from now to H2, so the Company will be building up. Earlier, you mentioned that there is a bit of upside for the products for the cloud. I would be interested to know about what other upside factors you see in addition to this.

**A:** If we talk in terms of applications, rather than products, it would be the cloud/AI I mentioned earlier. The rest of our focus is on the Chinese market.

**Q:** I see. On the other hand, are there any that are excessive and may further prolong the adjustment?

**A:** I don't think so. We have managed our channels and our own inventory very carefully. What I am concerned about now is that if we learn from this experience and become overly cautious, we may lose the opportunity



I mentioned earlier. However, we may end up seeing another supply chain crunch, so we would like to be prepared and have some extra.

**Q:** Second, I think you mentioned that the utilization rate will drop a bit more in Q2 in terms of QoQ. In the last financial results, it was mentioned that Q2 would be roughly the bottom. As for the forecast of the utilization rate, should we picture that it will bottom out in Q2 and rise in line with demand in Q3 and Q4?

**A:** That's right. We are assuming that Q2 is the bottom exactly as you have indicated. Now it is hard to say whether it will go up in Q3 and Q4 or pick up over Q3 and remain at the same level, as it depends on the future outlook. However, we assume that Q2 will be the bottom and Q3 will be better.

**Q:** I have some follow-up questions. Inventories have not increased much, although in automotive, it has increased a little. In this situation, I think that if demand recovers a little, the utilization rate will also recover, but it appears that final demand and current production are not that far apart. Is this correct?

**A:** I think that's correct. When it comes to automotive, I see that there are probably a lot of ups and downs. If anything, we are seeing too much inventory buildup in the so-called mega-Tier 1 customer base, especially in Europe. Therefore, sales to such customers and actual demand will diverge slightly until inventory adjustments on the customer side are completed.

On the other hand, the customers' inventory, especially in Japan, is not like that and remains relatively lean. So, it is good that we are able to ship in line with actual demand now, but if there is a slight upturn, we will run out of supply. Here is a factor in our desire to expand. In total, I think it is fair to say that shipments are generally in line with actual demand.

#### **[Questioner 4]**

**Q:** First, the same question has already been asked, but in terms of preparing for potential upsides, looking from the outside, the market of servers is not very strong. Of course, I am aware of the platform change and your leverage multiplier, but it is not very strong.

In the context that automotive market in China is also weak, is the upside that your company is talking about for H2 the upside that has some visibility, that is, the decision to increase inventories because of such outlook? Let me confirm that nuance. Otherwise, is it just a lost opportunity as an optionality? Does this upside have a visibility that is a little more than that? Please let me confirm the nuances of this area.

**A:** It is more of an optionality. As I have said repeatedly, the absolute amount of inventory has increased since the past, but the baseline sales have also increased significantly, so I feel that we have been able to manage the inventory quite leanly.

Therefore, I think the reality is that if we continue as is, we will come up short if there is an upswing, so we will have a little extra to be prepared even if there is an upswing. Like the generational shift in platforms I mentioned earlier, the main focus is to selectively expand the platform, focusing on those that will emerge in the next fiscal year even if they are not realized this fiscal year, and to do so with care, things will not get strange later on. However, the reality is that we are preparing for such a possibility rather than something foreseen for very certain.

**Q:** Do you also consider the risk of building up inventory again, and do you also consider operations that will not generate excessive inventory without any optionality realized?

**A:** Yes. We will continue to maintain prudence there.

**Q:** My second question is this: regarding forecast of July–September quarter and onward, there is nothing officially confirmed yet, and of course, it could change depending on product mix, operations, etc., but in a manner of speaking from earlier, the overall trend is that we have seen the bottom up. Margins will not fall off either. Does this outlook sound correct to you?

**A:** I don't envision it going lower and lower, especially in terms of direction, right now.

#### **[Questioner 5]**

**Q:** Q2 revenue is roughly flat QoQ for the entire company, but what are your thoughts on increase/decrease in ABU and IIBU QoQ?

**A:** We expect both to be almost flat.

**Q:** I see. There are sub-segments within the IIBU. Is it flat there too? For infrastructure, the Company may possibly expect positive QoQ, but are there any negatives in others, like IoT?

**A:** If we talk about each sub-segment, it is a bit complicated because there are many different ups and downs in each quarter, but we think that the industry is strengthening. Infrastructure is also fairly strong from Q1 to Q2. I'm not sure about the IoT and consumer segments; things might get a little better, but I think they're almost flat. This does not mean that the mass market is strong in terms of trends, but I can see that it may be a little stronger in Q2 than in Q1.

When I talk about it that way, it's all strong talk, and it doesn't look that bad when looked at individually, but it is also true that there is a sense of uncertainty as a whole. So, we do operations like rough haircuts to be prepared. We expect things to be flat for automotive.

**Q:** For automotive, is it based on actual demand, not haircuts?

**A:** Yes. That is how we see it at the moment.

#### **[Questioner 6]**

**Q:** First is the status of the backlog. Since about the middle of last year, I heard the status is really high, but you said that you could not talk about it because you did not know what was going to happen next. Please tell us how you see the current situation. It is okay if you can talk only in the qualitative terms.

Second is an image of the breakdown by product for onboarding. I think some were sufficient and some were tight. You used to talk about tightness in 40nm microcontrollers and cutting-edge SoCs, and you mentioned earlier about Tier 1's inventory in Europe, so could you give us some color on whether the situation has changed in this area?

**A:** 40nm microcontrollers continue to be tight at the current market. Some applications and customers continue to be extremely tight, while others have expanded their customer-side inventories. Compared to the last time of our earnings call, we are closer to a balance between supply and demand, to put it nicely. If I were to venture a negative comment, I would say that demand is weak. The 40nm microcomputer continues to be tight, but the tightness has eased compared to the last time.

Other than that, I think we are almost out of the hand-to-mouth situation, so it is not that tight.

The backlog has not changed that much. There is enough to support the sales forecast for the current quarter, and the backlog itself is clean. However, for all the shortening of our lead time, we are still receiving orders up to the date of the last day. So, I imagine that some customers are probably concerned about that and are probably assigning orders up to the date of the previous day.

So I think that if this current situation continues, we will see more short-dated orders come in and the mix in the backlog will become sort of steady, which will happen around Q2 or H2. The overall amount or quality has not changed much since we last talked about it, and we feel that it is a reasonably reliable backlog with a lot of substance.

#### **[Questioner 7]**

**Q:** Again, please tell us what is the biggest factor behind, the decline in the operating margin from Q2 onward.

**A:** I will explain about Q2, rather than post-Q2. It is expected to be 32.0% in Q2, down 2.7 percentage points. The increase in operating expenses is in effect, which is due to seasonality; roughly Q2 and Q4 are the quarters with the highest spending. Then, in our cycle, we have been giving regular raises since April, and this year's raises are global and on a reasonable scale. Therefore, the increase in personnel expenses will start in Q2, so we have included these effects in our forecast for the increase in expenses.

**Q:** Is there any possibility that Q2 will be the biggest downturn and that the labor cost will not have such an impact in Q3 and beyond?

**A:** Yes. Personnel expenses will remain flat, while other expenditures will be increased or decreased with seasonality and in line with trends.

#### **[Questioner 8]**

**Q:** There is the move by automotive manufacturers or manufacturers making e-Axle to design so-called semiconductors and send them directly to foundries. Is this a risk that should be considered in the future? Do we not need to think about those things too much? Please tell us what your judgment is of Honda's new move announced yesterday from your point of view.

**A:** I am not sure, but my view is that automakers will only really develop semiconductors in-house to a very limited extent. Working quite closely with semiconductor manufacturers on designs together may happen here and there. But I am thinking that designing semiconductors in-house must be very limited, for example, at the level that the big manufacturers in the smartphone world are doing, or in automotive, Tesla is designing self-driving chips.

It is probably not as easy as it sounds, and if they want to recoup a large investment, it will be difficult to do so without a significant number of products, so I think it will be a limited effort.

**Q:** Tesla, who you just mentioned, said that SiC is very costly, and the price of SiC wafers is inevitably very high. I believe that your company is also considering SiC products, in the future. In that case, I think it is difficult for semiconductor manufacturers to have wafers, though they used to have. If you are going to produce SiC, will you purchase and produce SiC wafers? What are your thoughts on the new power semiconductor movement?

**A:** The situation is constantly changing, so I can't say that what I am going to say will never change, but we almost don't envision making the SiC boule on our own at this point. The supplier base of boule has not yet

increased in number at the moment, but it has increased a lot as a supplier base, and a good deal of investment has been made, so we are not thinking about that.

Also, I think everyone is well aware that SiC is still in the early stages of wafer substrate manufacturing technology, and that there are many losses. As this method of slicing, or rather manufacturing, progresses more and more, the number of substrates that can be taken from the same boule will increase dramatically. There are many ways to look at it in terms of whether it is really a good idea to have the whole operation of boule on our own in such a situation, but we do not think we have to.

However, I think it would be better to be able to form the epitaxial layer on our own, so I would like to consider in-house production, not of the substrate itself, but of the epitaxial layer on top of it.

**<Closing Comments from CEO Shibata>**

I think this is reflected in the fact that you have asked so few questions, but when I am looking back on this year's financial results, they are not that noteworthy.

If you have time, please join Capital Market Day next month for a more cohesive discussion of the progress of the mid- and long-term initiatives from members of the product line and others besides Shinkai and myself. Thank you.

Thank you for taking time out of your busy schedule today.