

## **Murata Manufacturing Co., Ltd.**

Q3 Financial Results Briefing for the Fiscal Year Ending March 2024

February 2, 2024

## Event Summary

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[Company Name]	Murata Manufacturing Co., Ltd.	
[Company ID]	6981-QCODE	
[Event Language]	JPN	
[Event Type]	Earnings Announcement	
[Event Name]	Q3 Financial Results Briefing for the Fiscal Year Ending March 2024	
[Fiscal Period]	FY2024 Q3	
[Date]	February 2, 2024	
[Time]	15:30 – 16:29 (Total: 59 minutes, Presentation: 19 minutes, Q&A: 40 minutes)	
[Venue]	Webcast	
[Number of Speakers]	3	
	Norio Nakajima	President, Representative Director
	Masanori Minamide	Executive Vice President (Board Member), General Manager, Corporate Unit
	Nagato Omori	Executive Vice President, General Manager, Ceramic Capacitor Business Unit
[Analyst Names]*	Daiki Takayama	Goldman Sachs
	Shoji Sato	Morgan Stanley MUFG Securities
	Hideki Yasuda	TOYO SECURITIES
	Shingo Hirata	UBS Securities
	Manabu Akizuki	Nomura Securities
	Takayuki Naito	Citigroup Global Markets

## Presentation

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**Moderator:** As it's time to start, we would like to begin Murata Manufacturing Co., Ltd.'s Q3 financial results briefing for the fiscal year ending March 2024. Thank you very much for taking time out of your very busy schedule to join us today.

First, let me introduce today's attendees from our company. Norio Nakajima, President, Representative Director.

**Nakajima:** Thank you.

**Moderator:** Masanori Minamide, Executive Vice President (Board Member), General Manager, Corporate Unit.

**Minamide:** Thank you.

**Moderator:** Nagato Omori, Executive Vice President, General Manager, Ceramic Capacitor Business Unit.

**Omori:** Thank you.

**Moderator:** For today's proceedings, we will first provide an explanation of our financial results, followed by a Q&A session, starting around 15:50. The materials for this presentation are available on our company website, in the IR Library under the Investor Relations section.

The presentation materials are also available on the Company Announcements Disclosure Service. We will say the number of pages in the financial results presentation materials, so please refer to them if you are joining us by phone.

Prior to the presentation of financial results, President Nakajima will explain the impact of the Noto Peninsula earthquake that occurred on January 1, 2024 on our company.



The Murata Group expresses deep sorrow for the victims of the 2024 Noto Peninsula earthquake, and our thoughts and prayers are with all of those affected by the disaster.

We will do our utmost to support those affected and sincerely hope for a swift recovery.

**Murata Manufacturing Co., Ltd.**

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**Nakajima:** Hello, everyone. Thank you for your participation despite your busy schedule.

First of all, we would like to express our condolences to those who lost their lives in the Noto Peninsula earthquake that occurred on January 1 and would like to provide the utmost support to those affected by the disaster so that they can get back to normal as soon as possible.

## The Aftermath of the Noto Peninsula Earthquake



- The Company has checked the status of damage to the infrastructure and facilities of affected business sites. Upon ensuring the safety of employees, production has resumed in facilities in sequence.
- Regarding the prospect of upcoming restoration, the Company will post information on [its company website](#) as soon as the situation changes.

Name of Production Site	Status of Production and Estimated Schedule of Resumption of Production as of February 2nd
Toyama Murata Manufacturing Co., Ltd.	Production resumed since Jan.9
Fukui Murata Manufacturing Co., Ltd.	Production resumed since Jan.6
Sabae Murata Manufacturing Co., Ltd.	Production resumed since Jan.6
Kanazawa Murata Manufacturing Co., Ltd.	Production resumed since Jan.9
Kanazu Murata Manufacturing Co., Ltd.	Production resumed since Jan.9
Asuwa Murata Manufacturing Co., Ltd.	Production resumed since Jan.9
Komatsu Murata Manufacturing Co., Ltd.	Production resumed methodically since Jan. 9
Himi Murata Manufacturing Co., Ltd.	Production expected to resume methodically from early February
Hakui Murata Manufacturing Co., Ltd.	Production resumed methodically since Jan. 11
Wakura Murata Manufacturing Co., Ltd.	Production expected to resume methodically from early March
Anamizu Murata Manufacturing Co., Ltd.	Production is expected to resume in mid-May or later.

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Next, I would like to show you the status of our factories. We have 13 factories in the Hokuriku area, 11 of which are shown here. We will do our best to avoid any inconvenience to our customers through alternative production, et cetera. We appreciate your understanding and support. That is all.

**Moderator:** Now Mr. Minamide will explain the details of the financial results.



### Financial Results of the third quarter of FY2023

- Revenue were 439.4 billion yen, flat from the last quarter, and operating profit came to 76.2 billion yen, down 14.2% from the last quarter. Revenue from high-frequency modules and capacitors for smartphones increased. However, revenue as a whole remained almost flat due to a decrease in revenue from capacitors for distributors and industrial equipment in addition to a decline in revenue from lithium-ion secondary batteries for video game consoles. In terms of profits, a productivity loss from lower capacity utilization and declines in product selling prices caused a profit decrease.
- +3.4% of revenue forecast. Revenue exceeded expectations mainly in parts for smartphones

### Projected Financial Results for FY2023

- The Company has kept the full-year projections and dividend forecasts for FY2023 unchanged from the announced figures.
- To verify the projected financial results, the Company has taken the impact of the Noto Peninsula Earthquake into consideration

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**Minamide:** Page four, please. First, I would like to discuss the topics for Q3 of the current fiscal year.

These are the results for Q3. Compared to the previous quarter, revenue was almost flat and operating profit was negative 14.2%.

The main reason for the decrease in profit while revenue remained almost unchanged is mainly the decline in production, which I will explain in more detail later.

This is an increase of 3.4% compared to the announced quarterly revenue forecast, which was partly due to the weaker yen, but exceeded the forecast mainly for smartphones.

This is the full year forecast for FY2023. The earnings and dividend forecasts remain unchanged from the previous announcement. The Noto Peninsula earthquake will have a small impact in Q4. I will explain this later, but we have also examined the impact of these factors and have decided to leave the forecasts unchanged.

# Financial Results Overview



	FY2022		FY2023		FY2023		Y on Y Change		Q on Q Change		Impact of exchange rate	Constant Currency basis	
	3rd Quarter		2nd Quarter		3rd Quarter								
	(B JPY)	(%)	(B JPY)	(%)	(B JPY)	(%)	(B JPY)	(%)	(B JPY)	(%)	(B JPY)	(B JPY)	(%)
Revenue	419.0	100.0	442.7	100.0	439.4	100.0	+20.4	+4.9	(3.3)	(0.7)	+8.0	(11.3)	(2.6)
Operating profit	78.4	18.7	88.8	20.1	76.2	17.3	(2.2)	(2.9)	(12.6)	(14.2)	+4.0	(16.6)	(21.8)
Profit before tax	65.7	15.7	98.5	22.2	64.2	14.6	(1.5)	(2.2)	(34.2)	(34.8)			
Profit attributable to owners of parent	51.0	12.2	75.1	17.0	49.4	11.2	(1.7)	(3.3)	(25.7)	(34.2)			
Average exchange rates yen/US dollar	141.64		144.63		147.89		*Exchange rate sensitivity (per 1 JPY/US\$ change per year) Revenue : 10.0 BJPY    Operating profit : 5.0 BJPY						

## Third Quarter of FY2023(QoQ)

- Revenue of high frequency modules increased for smartphones and capacitors increased for smartphones and mobility. However, Revenue of multilayer resin substrates and connectivity modules decreased for smartphones. Additionally, revenue of lithium-ion secondary batteries decreased for video game consoles.
- Operating profit decreased due to a decline in production output and deteriorations in product selling prices despite profit-increasing factors such as streamlining and cost reduction, and the effect of a weak yen.
- The impact of the Noto Peninsula Earthquake, etc. on profit/loss has not been recorded in the third quarter under review.

Page six, please, financial results overview.

While revenue increased by 4.9% YoY, operating profit and below decreased YoY.

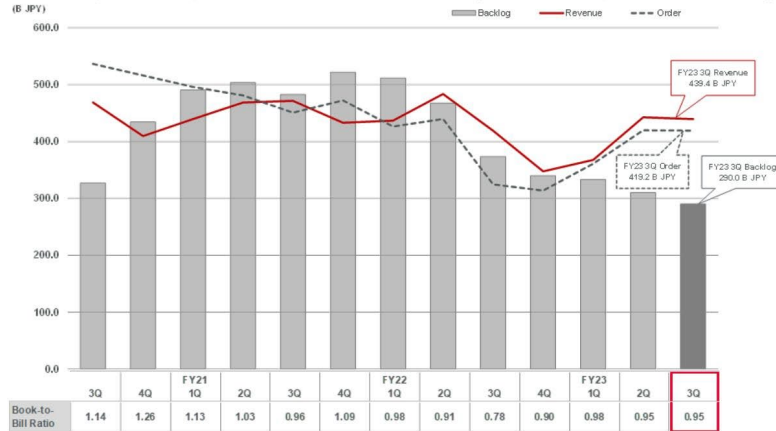
The same period of the previous year was a period of inventory build-up, and we slightly reduced inventories in Q3 of this fiscal year, resulting in a decrease in production relative to revenue. The effect of this change was an increase in revenue and a decrease in profit.

As for QoQ change, as I mentioned earlier, I will explain in detail about revenue and operating profit later.



## Quarterly Revenue, Order and Backlog

- Orders received fell slightly on a quarter-on-quarter basis. The decline was due to revaluation of the order backlog that was denominated in foreign currency as the yen rapidly appreciated compared with the end of September, in addition to decreases in High-Frequency Devices and Communication Modules resulting from the seasonality of smartphones.
- The book-to-bill ratio of capacitors improved to 1.03. Orders received grew for smartphones and mobility.



\* Orders = Revenue + Backlogs at the Current Quarter - Backlogs at the Previous Quarter

\* Backlogs are calculated based on exchange rates as of the end of each quarter.

\* Exchange rate against the U.S. dollar: 149.58 yen at the end of September 2023, 141.82 yen at the end of December 2023

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Page seven, please. First, here are the results for revenue, order, and backlog.

In Q3, orders received were slightly low compared to revenue, resulting in an overall book-to-bill ratio of 0.95. Meanwhile, the book-to-bill ratio for capacitors alone improved to 1.03. This was due to an increase in orders for smartphones and mobility.

Regarding order backlogs, about half of the decrease from the previous quarter is due to the impact of foreign exchange rates. The yen appreciated slightly toward the end of December in Q3, and this impact also affected the revaluation of order backlogs.





## Revenue by Operating segments

	FY2022 3rd Quarter		FY2023 2nd Quarter		FY2023 3rd Quarter		Y on Y Change		Q on Q Change	
	(B JPY)	(%)	(B JPY)	(%)	(B JPY)	(%)	(B JPY)	(%)	(B JPY)	(%)
Capacitors	182.7	43.6	197.0	44.5	198.1	45.1	+15.3	+8.4	+1.0	+0.5
Inductors and EMI filters	43.4	10.3	48.4	10.9	48.2	11.0	+4.8	+11.0	(0.2)	(0.5)
High-Frequency Device and Communications Module	114.4	27.3	127.7	28.9	130.9	29.8	+16.5	+14.5	+3.2	+2.5
Battery and Power supply	53.9	12.9	43.1	9.7	36.6	8.3	(17.3)	(32.2)	(6.5)	(15.2)
Functional Device	22.1	5.3	23.5	5.3	22.8	5.2	+0.7	+3.0	(0.8)	(3.2)
Others	2.5	0.6	2.9	0.6	2.9	0.6	+0.4	+18.1	+0.0	+0.7
Revenue	419.0	100.0	442.7	100.0	439.4	100.0	+20.4	+4.9	(3.3)	(0.7)

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Page eight, please, revenue by operating segments.

The right-hand side of the graph, which shows the QoQ change, will be explained on the next page.

On a YoY basis, there was a significant decrease in battery and power supply. On the other hand, for other segments, there was an improvement trend YoY.

## Revenue by Operating segments [FY23 3rd Quarter vs. FY23 2nd Quarter]



<b>Capacitors</b> +0.5%	<b>MLCCs :</b> Revenue decreased for AV equipment. Revenue increased for smartphones and mobility.
<b>Inductors and EMI filters</b> (0.5%)	<b>Inductors, EMI suppression filters :</b> Revenue increased for mobility. Revenue decreased for wearable devices and AV equipment.
<b>High-Frequency Device and Communications Module</b> +2.5%	<b>High frequency modules :</b> Revenue increased for smartphones. <b>Multilayer resin substrates, Connectivity modules :</b> Revenue decreased for smartphones.
<b>Battery and Power supply</b> (15.2%)	<b>Lithium-Ion secondary batteries :</b> Revenue decreased for video game consoles.
<b>Functional Device</b> (3.2%)	<b>Sensors :</b> Revenue decreased for mobility and smartphones.

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Page nine, please.

Capacitors and inductors were almost the same as in the previous quarter, although there was a slight difference, that the figures were in the positive or negative.

In the area of high-frequency device and communications module, revenue of high-frequency modules increased for smartphones. On the other hand, sales of multilayer resin substrates and connectivity modules for smartphones decreased. The reason for this is that multilayer resin substrates are affected by a slightly earlier uptake period. As for connectivity modules, there was an impact of portfolio reclassification.

Battery and power supply has decreased significantly.

Incidentally, regarding functional device, it is written that revenue decreased for mobility and smartphones. As a trend, revenue for mobility have been gradually rising, while it was slightly decreasing QoQ.



## Revenue by Application

	FY2022 3rd Quarter		FY2023 2nd Quarter		FY2023 3rd Quarter		Y on Y Change		Q on Q Change	
	(B JPY)	(%)	(B JPY)	(%)	(B JPY)	(%)	(B JPY)	(%)	(B JPY)	(%)
Communication	162.6	38.8	194.1	43.9	199.1	45.3	+36.5	+22.5	+5.0	+2.6
Mobility	106.3	25.4	110.7	25.0	113.0	25.7	+6.7	+6.3	+2.2	+2.0
Computers	50.7	12.1	50.7	11.4	52.2	11.9	+1.5	+2.9	+1.5	+3.0
Home Electronics	45.6	10.9	40.3	9.1	32.7	7.4	(12.9)	(28.2)	(7.5)	(18.8)
Industry and Others	53.8	12.8	46.8	10.6	42.4	9.7	(11.4)	(21.2)	(4.5)	(9.5)
Revenue	419.0	100.0	442.7	100.0	439.4	100.0	+20.4	+4.9	(3.3)	(0.7)

\*Based on our estimate

Page 10, please, revenue by application.

While the revenue of home electronics and industry and others significantly declined YoY, the revenue of other applications, such as communication, mobility, and computers are on the road to recovery.

## Revenue by Application [FY23 3rd Quarter vs. FY23 2nd Quarter]



<b>Communication</b> +2.6%	Revenue of high-frequency modules and capacitors increased for smartphones.  Revenue of multilayer resin substrates and connectivity modules decreased for smartphones.
<b>Mobility</b> +2.0%	Revenue of capacitors, EMI suppression filters and inductors increased due to a demand recovery for automobiles.
<b>Computers</b> +3.0%	Revenue of capacitors increased for data centers and server.  Revenue of capacitors and connectivity modules decreased for PCs.
<b>Home Electronics</b> (18.8%)	Revenue of lithium-ion secondary batteries and capacitors decreased for video game consoles.
<b>Industry and Others</b> (9.5%)	Revenue of capacitors decreased for distributors and industrial equipment.

\*Based on our estimate

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Page 11, please.

The trend of the QoQ change is roughly the same as that discussed by operating segments. Particularly for home electronics, lithium-ion secondary batteries and capacitors have decreased for use in game consoles.

Industry and others, which includes sales to distributors, decreased QoQ.

## Segment Information



		FY2022 9 months		FY2023 9 months		Y on Y Change	
		(B JPY)	(%)	(B JPY)	(%)	(B JPY)	(%)
Components	Revenue	725.8	100.0	706.9	100.0	(18.9)	(2.6)
	Operating profit	238.4	32.8	178.8	25.3	(59.6)	(25.0)
Devices and modules	Revenue	612.4	100.0	541.5	100.0	(70.9)	(11.6)
	Operating profit	42.2	6.9	40.8	7.5	(1.3)	(3.2)
Others	Revenue	54.8	100.0	47.8	100.0	(7.0)	(12.8)
	Operating profit	(1.5)	(2.8)	(4.5)	(9.4)	(2.9)	-
Eliminations	Revenue	(53.8)	-	(46.4)	-	+7.4	-
Consolidated	Revenue	1,339.2	100.0	1,249.7	100.0	(89.5)	(6.7)
	Operating profit	279.0	20.8	215.1	17.2	(63.9)	(22.9)

- Components** Profits fell due to the expansion of a loss of productivity from lower capacity utilization resulting from a decrease in production output, despite the profit-increasing effect of the depreciation of the yen.
- Devices and modules** Although operating profit decreased partly resulting from the drop in revenue, operating profit ratio improved primarily due to the profit-increasing factor of the weaker yen, improvements in the profitability of individual parts, and a rise in the ratio of Multilayer resin substrates and SAW filters to the product mix.

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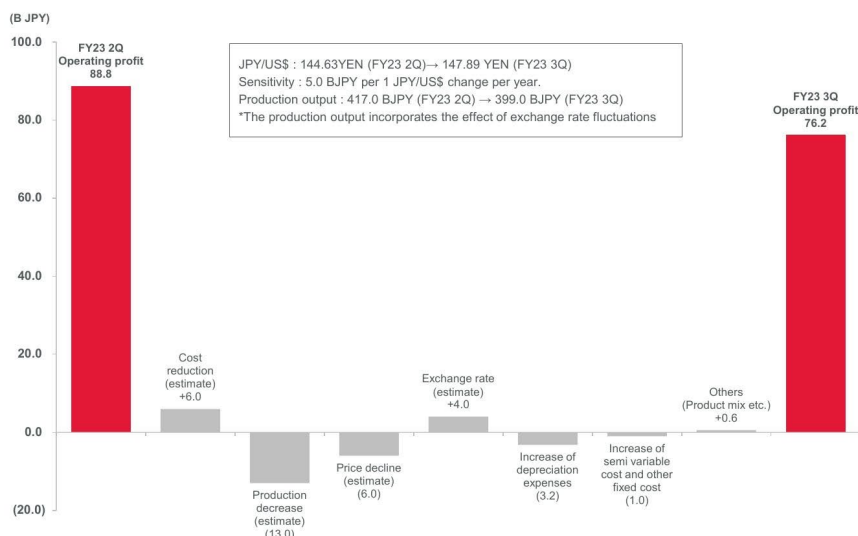
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Page 12, please. This is profit/loss by segment.

First, for components, revenue and profits for the first nine months of the fiscal year declined YoY. Although the decrease in operating profit is large relative to the decrease in revenue, this is due to a significant decrease in production output, as inventories have reduced in the current period.

In devices and modules, revenue and profits also declined, but the operating profit ratio improved slightly YoY. While revenue decreased, there was a profit-increasing factor of the weaker yen, and the increase in the ratio of multilayer resin substrates and SAW filters, and the improvement of profit margins for each product type, had an impact.

## Breakdown of Operating Profit Changes [FY23 2nd Quarter to FY23 3rd Quarter]



\*\*"Production decrease" is calculated on the basis of production output excluding the effect of sales price reductions and exchange rate fluctuations.

\*\*"Increase of depreciation expenses" include the impact of one-time expenses with the disposal of equipment that occurred in the third quarter of FY2023.

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Page 13, please, breakdown of operating profit changes. Please check for the production output figures in the box.

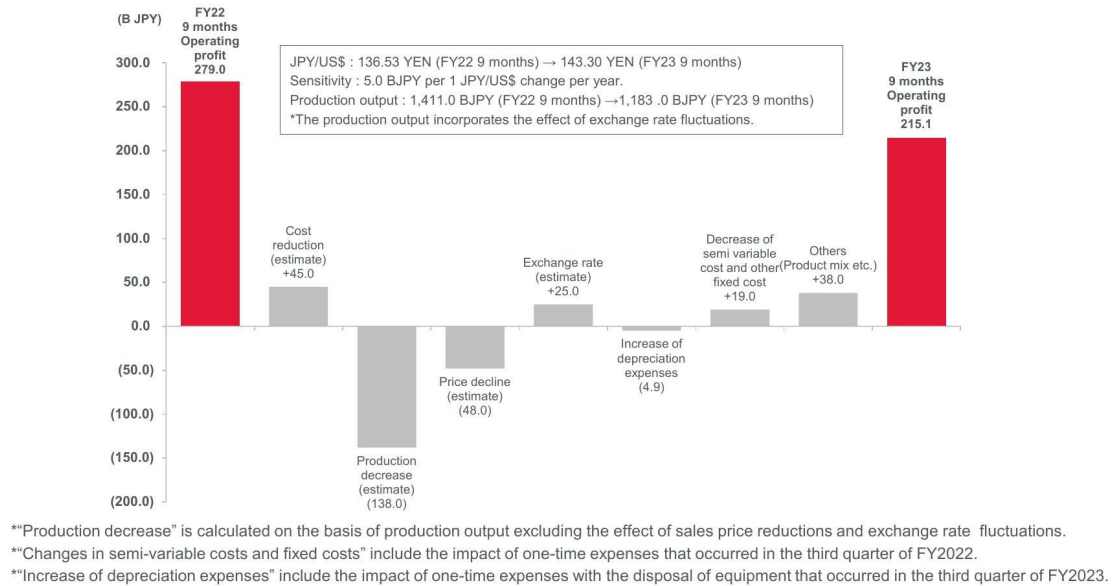
As you can see in the box, production output was down QoQ. Production decrease had a negative impact of JPY13 billion. Price decline was almost in line with our expectations, with a negative JPY6 billion, then the exchange rate was positive.

As for the increase of depreciation expenses, the figure is negative JPY3.2 billion. Of this amount, about JPY2 billion is for components, and disposal of equipment due to the termination or cancellation of projects for both devices and modules is included.

Then for semi-variable cost and other fixed cost, the impact is slightly negative this time. In addition, this time we have recorded a valuation loss of about JPY3 billion on the inventory valuation of batteries, which is included in product mix. This result is based on the fact that the inventory valuation has dropped by about JPY3 billion due to the prolonged slump in demand.



## Breakdown of Operating Profit Changes [FY22 9 months to FY23 9 months]



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Page 14, please. This is a YoY comparison of the nine-month total. Production figures are also shown in the box here.

With regard to production output, there was a significant decrease compared to the previous fiscal year. There was a JPY138 billion loss on production decrease, and as in the previous slide, a negative impact of price decline was as assumed at the beginning of the fiscal year, then the exchange rate was positive. Depreciation expenses include what I mentioned earlier.

As for semi-variable cost and other fixed cost, we have been basically responding by controlling controllable costs, et cetera. However, in the same period of the previous year, the cumulative total up to Q3 included special costs, such as quality-related costs, future costs for soil remediation, and other costs for review. That was billions of yen included in the last fiscal year. Such influences are a positive factor this time.



## Cash Flows

- Cash flow from operating activities increased as a result of decrease in inventories despite a year-on-year profit decrease.
- Cash flow from investing activities decreased due to a year-on-year increase in payments for acquiring property, plant and equipment, mainly capital expenditures.
- Cash flow from financing activities grew since the Company repurchased treasury stock in the same period a year earlier.

	FY2022 9 months (B JPY)	FY2023 9 months (B JPY)	Y on Y Change (B JPY)
Cash flows from operating activities	186.0	326.0	+140.0
Cash flows from investing activities	(99.5)	(171.2)	(71.7)
Cash flows from financing activities	(180.5)	(102.7)	+77.8
Effect of exchange rate changes	12.7	11.5	(1.2)
Cash and cash equivalents at end of period	430.9	533.0	+102.2
Free Cash Flows	86.5	154.8	+68.3
Purchase of property, plant and equipment	(143.1)	(185.7)	(42.7)
Depreciation and amortization	126.2	131.1	+4.9

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Page 15, please, cash flows.

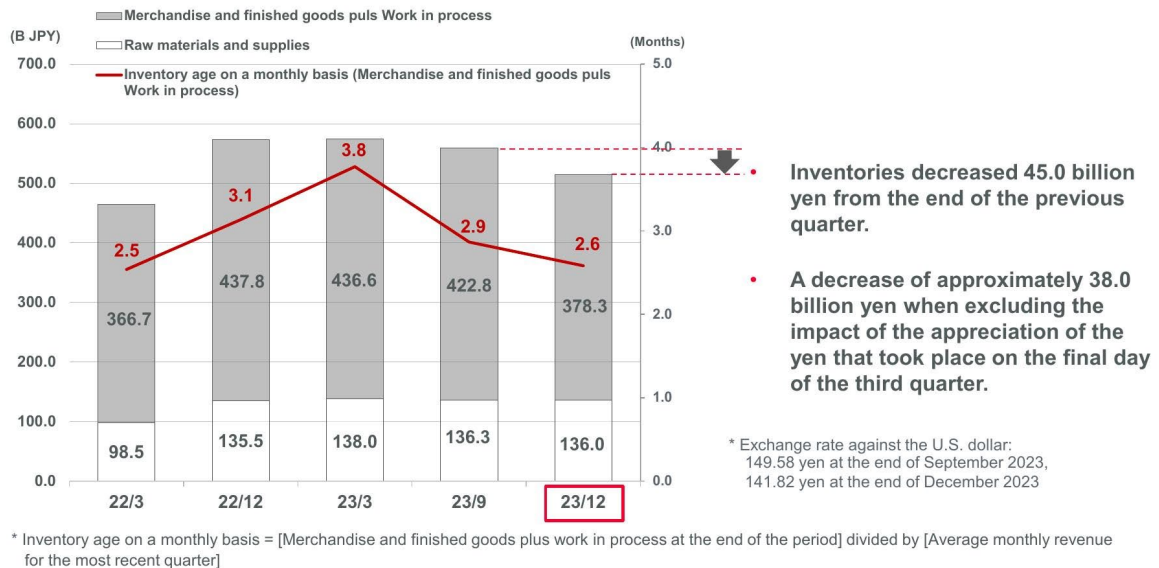
Cash flow from operating activities was positive this time due to a significant reduction in inventories.

Cash flow from investing activities was negative, largely due to changes in investments in marketable securities.

Cash flow from financing activities is positive this time due to the acquisition of treasury stock, which amounted to about JPY80 billion in the previous fiscal year.



## Current Inventory Situation



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Page 16, please, current inventory situation.

In Q3, we had originally planned to produce about the same amount as sales, but inventories have significantly decreased this time. The decrease was JPY45 billion QoQ, and excluding the effect of exchange rates, the decrease was about JPY38 billion.

There are several reasons for this. First of all, the inventory of batteries, which had been built up considerably, has been slightly reduced during the quarter. Also, inventories of multilayer resin substrates and communication modules decreased more than expected, partly due to the relatively strong performance of these products in Q3. Thirdly, inventories of condensers have also decreased a little in Q3.

Basically, demand is increasing, but there is some unbalanced demand depending on the application. For example, demand for home electronics, industrial equipment, and distributors is still weak. As a result, we continued somewhat cautious production.

## Projected Financial Results for FY2023



	FY2022 Actual		1st Half	2nd Half	FY2023 Projections(October)		Y on Y Change		Impact of exchange rate	Constant Currency basis	
	(B JPY)	(%)	(B JPY)	(B JPY)	(B JPY)	(%)	(B JPY)	(%)	(B JPY)	(B JPY)	(%)
Revenue	1,686.8	100.0	810.4	809.7	1,620.0	100.0	(66.8)	(4.0)	+75.0	(141.8)	(8.4)
Operating profit	298.2	17.7	138.9	131.1	270.0	16.7	(28.2)	(9.5)	+38.0	(66.2)	(22.2)
Profit before tax	302.7	17.9	161.2	136.8	298.0	18.4	(4.7)	(1.5)			
Profit attributable to owners of parent	243.9	14.5	125.2	99.8	225.0	13.9	(18.9)	(7.8)			
ROIC (pre-tax basis) (%)	14.4				12.3		(2.1pt)				
Average exchange rates yen/US dollar	135.48				143.00		*Exchange rate sensitivity (per 1 JPY/US\$ change per year) Revenue : 10.0 BJPY Operating profit : 5.0 BJPY				

- The Company has not revised the projected financial results for FY2023.
- To verify the projected financial results, the Company has taken the impact of the Noto Peninsula Earthquake into consideration.

Page 18, projected financial results. As a result, as I mentioned earlier, the previous forecast remains unchanged.

In Q4, we expect the Noto Peninsula earthquake to have a negative impact of JPY3 billion to JPY5 billion on profit and loss.

This breakdown is inventory disposal, repair costs for equipment, and buildings that need to be repaired, some of which may need to be disposed of. Also, there were some plants that are not operating or were not operating, so there was a production decrease. In addition, there will be some insurance proceeds. Since there is still a wide range in the timing of such matters, we have taken into account a negative impact of JPY3 billion to JPY5 billion, and on that basis, we have left the current forecast unchanged.

As for revenue, we have JPY14.4 billion in savings in Q3, so we believe the certainty of revenue is relatively high.

On the other hand, it will be difficult to achieve an upward swing in operating profit due to the impact of the earthquake, as well as the special expenses and loss on valuation of inventories in Q3 that I mentioned earlier, but we hope to achieve this amount of operating profit through corporate efforts, reduction of controllable expenses, and improvement in productivity of individual products.

## Recognition of Business Environment



	Premises of projected financial results as of October	Recognition of the current situation as of February
<b>Revenue</b>	<ul style="list-style-type: none"> <li>- In terms of quantity, demand for parts is lower than expected in all applications, but the demand will move on to a recovery path in the second half of the fiscal year.</li> <li>- A delay in a demand recovery for the power tools market and PC peripheral and server markets.</li> <li>- A rise in the price-downward pressure including in such as mobility by intensifying price competition.</li> <li>- The assumed exchange rate for the full year and 2<sup>nd</sup> half year has been changed to 143 and 145 yen against the U.S. dollar.</li> </ul>	<ul style="list-style-type: none"> <li>- Demand for parts for the smartphone market has improved more than expected. Demand for the computer and mobility markets is as much as expected.</li> <li>- Inventory adjustment has continued in the power tool market, and demand for parts for the home electronics market and industrial equipment is slightly weaker than expected.</li> <li>- Product selling price declines are ongoing within the scope of the Company's expectations.</li> </ul>
<b>Productions</b>	<ul style="list-style-type: none"> <li>- A decrease in production output excluding the effect of exchange rates in line with a decrease in demand quantities.</li> <li>- Many parts of inventory quantities have reached almost appropriate levels in the first half of the fiscal year.</li> <li>- Production is planned to meet sales for the second half of the fiscal year.</li> </ul>	<ul style="list-style-type: none"> <li>- A production system is being established in preparation for a quantitative increase in demand in the next fiscal year</li> <li>- For the fourth quarter, production is planned to meet the scale of sales or inventory is planned to increase slightly in preparation for a demand recovery.</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li>- Improvement in the ratio of materials to costs in the wake of a decline in raw material prices</li> <li>- Decrease in fixed costs due to a fall in electricity unit prices and cost restraints</li> </ul>	<ul style="list-style-type: none"> <li>- Expenses in connection with the Noto Peninsula Earthquake will be incurred in the fourth quarter.</li> <li>- Controllable fixed costs have been kept constrained in a sustainable manner.</li> </ul>

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Page 19, please. Here is a summary of what I have said so far. I would like to conclude with a small summary of the recognition of the current situation as of February on the right.

First, regarding the market, demand for parts for smartphones is improving. On the other hand, demand for the computer and mobility markets is largely in line with expectations. Inventory adjustment in the power tool market has continued, and demand for parts for the home electronics market and industrial equipment is slightly weaker than expected. We believe that the price decline is almost in line with our expectations, including Q4.

As shown here, for Q4, production is planned to meet the scale of sales, or inventory is planned to increase slightly in preparation for a demand recovery.

As for costs, as I mentioned earlier.

That is all for my presentation.

## Question & Answer

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**Moderator [M]:** We will move to the Q&A session.

Now Mr. Takayama from Goldman Sachs, please ask your questions.

**Takayama [Q]:** First, I would like to have a series of figures at MLCC, Q3 and Q4 utilization estimates, and price movements. Also, as you mentioned, how do you plan to bring production and inventory to the end of Q3 and the end of Q4?

From there, as a qualitative tone, how do you see the market conditions? I think the tone was to build toward the end of Q3 and to raise the occupancy rate to a level higher than it had been.

**Omori [A]:** First of all, regarding the price estimates for Q3 and Q4, when we reported the Q2 financial results, we estimated that there would be a certain gradual progress in the automotive and mobility markets, and this estimate is proceeding gradually as we assumed.

Regarding inventory, as explained earlier by Minamide, we have still been making some inventory adjustments in capacitors. We have been making certain adjustments in the fields of PCs and industrial equipment. On the other hand, we have gradually increased our capacity utilization for smartphones and mobility.

As for Q4, after a certain level of adjustment of market inventory and our own inventory has been made, we plan to raise the capacity utilization ratio in the fields as I mentioned above.

As for market conditions going forward, we still expect a delay in the recovery of demand for PCs and industrial equipment, but we are planning to increase our capacity utilization rate from Q4 in anticipation of a recovery in the smartphone and mobility fields. That is all.

**Takayama [Q]:** In terms of numbers, you said before that the occupancy rate was slightly higher in Q4, from 80% to 85%. What are the numbers there now?

**Omori [A]:** For Q3, we maintained 80% to 85%, based on operating days. There is the unbalance I just mentioned. With a strong trend for smartphones and automotive, and a weak trend for PCs and industrial equipment, the average rate of growth was maintained between 80% and 85%.

For Q4, we are planning to further raise the level, which will probably be around 85% even if we run at full capacity due to holidays, especially Chinese holidays, in Q4.

**Takayama [Q]:** I think prices have been dropping in the same low single-digit range QoQ, but I think there was also an expectation of a normal annual drop from Q3 to Q4. Is that mostly along the expectation?

**Omori [A]:** Yes. We are proceeding along the expectation.

**Takayama [Q]:** I think you mentioned that the inventory was down a bit in Q3 and that it would be raised a bit more at the end of Q4. In terms of the level, what is the tone of the inventory raise, for example, before it falls, the end of September or a little earlier?

**Omori [A]:** We are still imagining up to the September level.

**Takayama [Q]:** It's a raise up to about the end of September?

**Omori [A]:** Yes.

**Takayama [Q]:** Secondly, you mentioned earlier that the production of the entire company has been kept under control in relation to sales, and that batteries were digested as expected, sales of multilayer resin substrates also increased, and this absorbed a considerable amount of inventory.

On the other hand, were there many cases in which you intentionally lowered inventory levels even further toward the end of Q3 or with the intention of lowering production?

**Nakajima [A]:** No, if anything, in contrast to normal seasonal fluctuations, I think the usual trend is to produce communication parts and materials early in Q2 and use up inventory in Q3. It is normal for that.

**Takayama [Q]:** The last question is about the assembly or the idea of the next year. Basically, I think the idea is to see a gradual recovery in demand after inventory adjustment. What is being assembled to drive sales, for example, the growth rate of the MLCC market, or the growth rate of modules? I think telling the actual number would be difficult, but could you give me a sense of the strength or weakness of them?

**Nakajima [A]:** I think it would be easier to think of it by application.

While I think that the situation will continue to be difficult for industrial electric equipment and home electronics, for example, the mid- and low-end smartphones will expand, as we have said before.

As for expectations, high-end models are also increasingly equipped with AI. At present, they are limited to camera specifications and translation functions, but I believe that high-end models will grow as such applications expand.

I also think there will be solid growth in mobility, especially not in overall volume, but the xEV content of that will grow.

**Takayama [Q]:** As a supplement, is there any possible impact of the current Edge AI of smartphones and PCs on content?

**Nakajima [A]:** I think even if an AI chip is installed, contents of the smartphone itself will not change much because current AI functions are mainly driven by software.

**Takayama [M]:** I understand. Thank you very much.

**Moderator [M]:** Mr. Sato from Morgan Stanley MUFG Securities, please ask your questions.

**Sato [Q]:** I have three questions. First, please reorganize the onetime expenses incurred in Q3. Is it correct that what will occur in Q4 is JPY3 billion to JPY5 billion related to the earthquake?

**Minamide [A]:** As for onetime expenses in Q3, first of all, there will be a loss on revaluation of inventory, which will amount to about JPY3 billion for batteries. A loss on disposal of production facilities, which is included in depreciation expenses, amounted to about JPY2 billion. This is included in both components and devices and modules.

In Q4, we estimate that the earthquake will have a negative impact of about JPY3 billion to JPY5 billion. There are both positive and negative impacts, but in Q4, there is a reversal of retirement benefits of about JPY10 billion due to the raising of the retirement age from 60 to 65. This means that the extended payment period will add about JPY10 billion due to the discount rate.

This is as expected, and for Q4, as included in the forecast, now that we have adopted IFRS, we have included a lump-sum payment of over JPY10 billion for property tax in Q4. Such are the main special expenses for Q4.

**Sato [Q]:** Could you explain the background behind the decline in profits from devices and modules in Q3, which was more than the decline in sales, and also the decline in sales to distributors?

**Minamide [M]:** Is what you just said from Q2 to Q3?

**Sato [Q]:** Q2 to Q3.

**Minamide [A]:** In the high-frequency device and communications module segment, we had to take in highly profitable multilayer resin substrates and connectors in Q2, and these fell in Q3. In addition, due to the deterioration in profit and loss in the battery business, including the loss on revaluation of inventories I mentioned earlier, the profit decline was more than that of the sales.

**Sato [Q]:** Looking ahead to the next fiscal year, other than a recovery in demand for MLCCs, what other changes in performance do you anticipate for each product or business, such as the launch of XBAR, or improvements in batteries, for example?

Also, I think the sales of SAW filters to China were strong in Q2. Did this continue in Q3? Could you tell us whether SAW filters or the sale of individual filters will continue to expand in the next fiscal year and beyond?

**Nakajima [A]:** The big demand for SAW filters is for mid- and low-end phones, as I mentioned earlier. We believe that such a market will grow in the next year and beyond, so the demand for SAW filters will increase.

In addition, from next year, probably in H2 of 2024, we expect to release filters using XBAR in applications, such as Wi-Fi 7 and Wi-Fi 8 to the market, although single filters will be the first step.

In terms of products that we expect to grow in the mobility market, we anticipate business growth in areas, such as power inductors, inertial sensors, and ultrasonic sensors.

**Sato [Q]:** How should we think about when you can incorporate the XBAR filter into your own modules and expand sales as module sales?

**Nakajima [A]:** I think it will be in FY2025. We have been working on it since FY2024, but I think it will be FY2025 before sales start to come in.

**Sato [Q]:** Is it correct to understand that the customer evaluation is progressing well?

**Nakajima [A]:** Yes.

**Sato [M]:** Thank you very much.

**Moderator [M]:** Mr. Yasuda from TOYO SECURITIES, please ask your questions.

**Yasuda [Q]:** As mentioned earlier, AI smartphones are coming out and I think AI PCs will also come out in the future, and the amount of DRAM installed will probably increase significantly at that time, so how will that affect your component demand, et cetera? I would be most grateful if you could suggest some kind of quantity.

**Omori [A]:** First of all, in terms of AI, the biggest impact is on server systems. As capacitors of considerable capacity will be required, we see an increase in the number of capacitors and then in the area of large capacitance.

For AI PCs, the area you just pointed out is exactly correct. We expect the amount to increase, at least not to the single-digit percent order, but to the image above that.

However, regarding AI smartphones, to be honest, it is difficult to understand this part, but we do not expect a large increase at this time. As a background, given that processing on the cloud and processing in software matter will probably become the main focus, we do not expect major changes in the smartphone itself at this time.

However, if more advanced processing is required in the next stage, we believe that design changes will be necessary there. That is all.

**Yasuda [Q]:** Just to add, from what you just said, the next model that comes along won't change much because it can be processed in the cloud, but as the process becomes a little more sophisticated, processing on the Edge will increase, so your company expects demand for components to increase. Is that correct?

**Omori [A]:** Yes.

**Yasuda [Q]:** The second point is about battery and power supply. The situation is a bit difficult right now, and I think that various products are decreasing, but looking at the next year by application, I think that there are areas where we can expect a recovery, such as games. Could you tell me how you are looking at it now?

**Nakajima [A]:** Now as mentioned earlier, we are still in a situation where there is still quite a bit of market inventory, and I think it will take at least until H1 of 2024 to digest the inventory.

In the markets after that, we expect demand for power tools and cleaners, which are our target markets, to increase.

**Yasuda [Q]:** Is there much influence from new models and such?

**Nakajima [A]:** At this time, there is not much that we can see clearly for FY2024.

**Yasuda [Q]:** Lastly, if you look at FY2024 as a whole, what do you expect to be the areas of growth? In the medium term, from 2025 to 2026, could you please comment if there are any changes in the area that your company can expect, Mr. Nakajima?

**Nakajima [A]:** In terms of the Edge, as I mentioned earlier, we are confident that the market for mid- to low-end smartphones will grow as it has in the past in FY2024.

On the other hand, half of this is my expectations, but the AI smartphone that was just talked about can expect market growth from the expansion of its applications, although AI is still used for limited applications at the moment.

As for the Edge, after that, with the implication of connecting physical and virtual spaces with AI, we expect the market of wearable devices that can generate more and more biometric sensing data, for example, to grow.

Regarding mobility, in addition to drones, I believe that the conversion of automobiles to xEVs will also be a driving force, then we expect that demand for AI servers will expand rapidly as data center investments, especially for hyperscalers, continue to grow.

**Yasuda [M]:** I understand. Thank you very much.

**Moderator [M]:** Mr. Hirata from UBS Securities, please ask your questions.

**Hirata [Q]:** First of all, in terms of ceramic capacitors, you commented earlier that the mobility market is quite strong, but I have also heard many comments from companies of semiconductors for automotive use and similar auto parts companies that there are inventory adjustments in the automotive market.

In the area of mobility, is it healthy from the perspective of the assumptions made at the beginning of the term? With the recent slowdown in the EV market, has there been any change in the way your company see the ceramic capacitors for automotive use?

**Omori [A]:** I recognize that this is the kind of question about what kind of changes we are seeing when EVs become a little harder to see. What matters is what is included in the EVs. If we see a change in these areas, whether it is BEVs or PHEVs, it may have a slight impact on the major areas of power systems as our company.

However, as for PHEVs, we do not expect any major changes in the engine control unit, battery control unit, and power control unit. Each of which will be necessary. We expect a certain level of growth in the future.

**Hirata [Q]:** As a supplement question, I sometimes hear that distributors' inventories are high for automotive ceramic capacitors in general, for example, or that tier one is experiencing inventory adjustments. Rather than changes in powertrains, what do you see as the market conditions for ceramic capacitors for automotive use?

**Omori [A]:** As far as market conditions are concerned, we still expect the number of installations to increase in the future. As a backdrop, we believe that the volume will be driven by the increasing level of automated driving and the growing area of infotainment related to such driving.

**Nakajima [A]:** In our opinion, the inventory environment is already healthy, as operations have been slowed down considerably.

**Hirata [Q]:** Secondly, you have been asked earlier what the unique factor for growth is. Please give us some indication of how your company is responding now to your major and largest customers in terms of the High-frequency modules.

**Nakajima [A]:** I apologize for saying the same thing over and over again, but we have managed to come up with a proposal that will allow us to have a presence in the next platform change period, and I think it is working so far. However, I can't say for sure if the platform change will occur in FY2024, since it is about a specific customer, but I think the situation is quite difficult.

**Hirata [Q]:** Lastly, you mentioned earlier that low-end and mid-end smartphones will increase in the future and that discrete SAW filters will increase in the context. In the past, I thought that the low-end or mid-end markets were not that attractive for your company as a ceramic capacitors customer. As the mid-end market increases, is this becoming an attractive market that your company can capitalize on?

**Nakajima [A]:** The cost side is as severe as expected. If we avoid the market for SAW filters and MLCCs, our Chinese competitors will grow in terms of both technology and volume. It is necessary to take measures to control these areas, and while the scope of our measures will naturally be determined, we have a policy of taking firm measures for those areas in which we are highly cost competitive.

**Hirata [Q]:** You don't think much about whether this will lower your profit margin or not, but rather you will continue to work in areas where you can add value?

**Nakajima [A]:** Yes, that's right.

**Hirata [M]:** Thank you very much.

**Moderator [M]:** Mr. Akizuki from Nomura Securities, please ask your questions.



**Akizuki [Q]:** First of all, I would like to know the numbers. The inventory, excluding foreign exchange, was reduced by JPY38 billion. Dividing into components and modules, roughly what is the ratio of one to the other?

**Minamide [A]:** We have not disclosed detailed figures, but the decrease in components was small, while the decrease in module devices was large. As a background, as I mentioned earlier, batteries, communication modules, and multilayer resin substrates have been largely responsible for the drop.

**Akizuki [Q]:** How do you think about the so-called loss for the drop in operation? Can it be calculated based on your company's average marginal profit ratio, or is it something above or below that?

**Minamide [A]:** It is difficult to answer this question. For example, although we publish quarterly earnings forecasts in terms of revenue only, we expect to see the impact of the decline in production from the marginal profit ratio assumptions that analysts usually calculate for production output or a similar impact on a QoQ basis.

**Akizuki [Q]:** The second question is about XBAR. If you want to launch with a new product, I think it is very difficult to launch without a reasonably large customer and on a large platform because it is such a product. You mentioned H2. Do you already have a rough idea of your target customers, and I think they are smartphones, and is it correct to say that you feel you can get onboard?

**Nakajima [A]:** Yes. However, I am not sure if the volume will be as big as Mr. Akizuki envisions. Launching a new technology is quite a difficult task, and it is too risky to suddenly become a volume runner. I would like to gradually build a track record from such a point of view.

**Akizuki [Q]:** You will aim for big volume with next year's modules.

**Nakajima [A]:** Yes.

**Akizuki [Q]:** The third question is about MLCC. In the past, I think there was a time when the application processors and such for smartphones were evolving rapidly and the functionality of smartphones was increasing, say, in 2013, 2014, or 2015. At this time, I would like to know how much the capacitance value of the high-end model increased annually in the past for the same model, if any.

**Nakajima [M]:** Is it a capacitance value?

**Akizuki [Q]:** To be honest, it's difficult to know what kind of question to ask. Perhaps the easiest way to tell is to look at the number of pieces, or in other words, how much the unit price has increased.

**Omori [A]:** On an annual basis, I understand that the pace was around 20% or 30%, at one point, at its peak. I'm not sure if it is the number of pieces or the capacitance, but in your earlier question, you said capacitance. As for the past trend, for example, if twice the capacitance is required, the first step is to place two pieces of the same product on top, then unify those two pieces into one. Such changes were a major trend.

As I mentioned earlier, I am aware that at its peak, the annual growth rate was about 20% to 30%.

**Akizuki [Q]:** Now quite technically speaking, I think we are getting to the point where smartphones are also difficult, but do you think it is technically possible to increase the single amount by 20% or 30% per year with the current technology?

**Omori [A]:** There is a period of technical step-up. We are aware that the next timing on that is a little further down the road.

**Akizuki [Q]:** Without that, about 10% increase is full.

**Omori [A]:** Yes. We are aware that 10% is about the full amount.

**Akizuki [Q]:** It will jump up when it becomes new.

**Omori [A]:** Yes.

**Akizuki [Q]:** You mentioned earlier that you don't see much increase in AI-equipped smartphones at the moment because, for example, there is new model from a major chipset maker, which is not really designed for AI smartphones, and if a lot of new models are used, the content will increase, but it's not going to increase very much because it's 8, because it's a new one. New processors will be developed for AI phones. Perhaps content will likely increase. Is my understanding correct?

**Omori [A]:** Yes.**Moderator [M]:** Mr. Naito from Citigroup Global Markets, please ask your questions.

**Naito [Q]:** Let me ask you about MLCC. As for the supply-demand situation, some of your competitors have recently expressed the view that it will take some time for the tight supply-demand situation to return to normal.

On the other hand, your company is experiencing a trend where there is a sense of recovery. Is your company's current share increasing rapidly within the market? Also, if it is happening, what is the background, if any?

**Omori [A]:** As for the overall tightness of the situation, given the capacity we have, we still have some leeway. We recognize that this may be the case for other companies as well. On the other hand, our sense of the market is that demand for automotive-related products is growing to a certain degree.

How is the market share changing in this context? We are not particularly aware of any major share fluctuations here at this time. There has not been any drastic increase or decrease in the situation, with some fluctuation from QoQ.

**Naito [Q]:** What do you envision for the period when market conditions will become tighter? Regarding the concept of market share in the future, will you take an aggressive strategy to further increase your market share, even in the area of automotive products, et cetera?

**Omori [A]:** In terms of market share targets, of course we would like to increase our share. In this context, there are areas in which only we can do this. We are now preparing a system that will enable us to produce and supply this part of the product in a more robust manner.

**Naito [Q]:** Also, what do you think is the timing for the tightening of the market again and perhaps for more growth in the automotive market?

**Omori [A]:** This is a duplicate of previous answer, but I think it will probably come up in H2 of FY2024 or later.

**Naito [Q]:** One more thing, I think you mentioned that the low-end and mid-end smartphones will start to recover and increase, which will have a positive effect. When considering the unit price of MLCCs for low-end and mid-end, is there a risk that this will lead to some downward direction of ASP? How should we be aware of this?

**Omori [A]:** It depends on the volume level, but at this point, the unit price itself does not have a significant impact, so I think its impact will be limited.

**Naito [Q]:** Do you mean that we should understand that the volume recovery will have a fair effect on the next fiscal year?

**Omori [A]:** Yes. That's right.

**Moderator [M]:** With that, we conclude the Murata Manufacturing Co., Ltd. Q3 financial results briefing for the fiscal year ending March 2024. Thank you very much for taking time out of your busy schedule to join us today.

[END]

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