Full Year Ended December 31, 2019

Conference Call (Held February 12, 2020) Question & Answer Summary

<Questioner 1>

Q: I have two main questions. As my first question, when you take the midpoint of the expected revenue for the first quarter from January to March, QoQ revenue is to decrease by 7%. I would like to ask you to comment on what kind of assumptions you have made in Automotive and elsewhere.

A: Of the 7% decrease QoQ, about 2 points are due to the impact on shipments resulting from the suspension of Chinese factories. The rest is related to the actual demand of each business. We assume that the Automotive segment is relatively strong and the Industrial, Infrastructure, and IoT segment is weak.

Q: Do you mean that the rate of decline is smaller for Automotive and higher for others?

A: Yes, your understanding is correct.

Q: My second question is about the industrial/infrastructure-related demand in the October to December quarter. I would you to comment on what kind of growth was seen in this demand, and how you regarding the sustainability of that portion of demand from January to March onwards, excluding the situation of the coronavirus.

A: In terms of the reasons for the overshoot in revenue, first is that the industrial SoC shipment saw robust performance, and former IDT products for infrastructure were stronger than expected.

In relation to the first quarter, we believe that this trend will continue for former IDT products for infrastructure, particularly timing devices.

<Questioner 2>

Q: I would like to ask about three points. The first is about the coronavirus. This also overlaps with the last question, I think it is the back-end process in Beijing, but I would like to know if there is anything that you know about the situation at present, and what is going to happen to the factory going forward.

A: The factories are in operation from Monday this week, and both of our back-end process plants in China, in Beijing and Suzhou, have been affected.

It has been operating as planned since Monday, or as planned after the change, and currently it is operating at around 50% of full capacity. We currently expect to gradually ramp up operations next week and the following week, to reach nearly full capacity two weeks from now.

Naturally, the future spread of the virus can completely change this, but there are two major uncertainties currently envisioned. The first is the headcount: there are a certain number of employees who are not able to return to work, so one point is whether they can come back in line with our current expectations. And the other is supply. Some of our own supplies, for example, will have a considerable shortage in inventory within a week, so depending on these two inputs, we may have to move in a slightly lower operating rate situation.

However, so far, we had anticipated a much worse situation, but I would like you to understand that we are resuming operations in line with expectations.

Q: Second, please explain your approach to operating the front-end processes for the January to March period. How much is QoQ change? That's my second question.

A: In the January to March quarter, this may change depending on how demand is affected by the virus. At this point, compared to the fourth quarter of the previous year, we assume that operations will increase on an input basis by around 10 points.

There are two reasons for this. Until last year, we had a more inventory control-oriented operation, but we have shifted to a more balanced operation from this year. Second, we are seeing strong underlying demand. We assume that operations will increase due to these two factors.

Q: Third, maybe I should ask on the 17th, as shown but on page 12, the gross margin of the Automotive segment is improving based on the last year's first quarter. This apparently cannot be explained solely by the recovery in the utilization rate. I would like to know the factors that drove recovery by around 40% after bottoming out in the first quarter.

In addition, please mention whether there is a possibility that gross margins will improve to more than 40%. That's my third question.

A: In addition to the impact of the increase in plant input, the mix is moving somewhat positively. The third point is that we are steadily reducing costs and implementing measures in detail, so that we are seeing a gradual effect from cost reductions around this point.

Although it would be great if there was a strong rise in utilization, there are various projects that come in from customers, and I would like to explain the mid- to long-term outlook along with the direction of the Automotive Division to analysts on Monday.

<Questioner 3>

Q: I would also like to ask three questions. First, in terms of the results for the fourth quarter, the October to December quarter, I think that the cost reduction significantly contributed to QoQ or compared to your plan. I understand that the fourth quarter originally has some seasonality of increasing costs QoQ, so what resulted in the decrease in costs in the fourth quarter? I would like to know how sustainable this is from the first quarter onwards.

A: As you understand, in the fourth quarter there is an increase mainly in R&D expenses, so the increase in these expenses happens on a QoQ basis. One thing is that, in the forecast, we expected a larger figure than what actually materialized. Another point apart from R&D expenses was that we were able to achieve a slight decrease in manufacturing expenses, which contributed to the whole decrease.

Looking ahead, in terms of sustainability, we expect that the reduction in manufacturing costs will continue.

Q: Second, some questions have been asked about the coronavirus. I understand that demand has not been factored in this time, but are you seeing any signs or movements of customer inquiries, particularly in the Automotive segment?

A: Whether it's Automotive or anything else, we haven't at this moment. It seems that we have to wait a little more to find out.

However, when we talk about Automotive in particular, we should assume that customer demand will be affected to a certain extent, regardless of end-demand movements, because suspension of production on the customer side is considerably prolonged.

But apart from Automotive, when we look at local customer bases in China, there may be a significant impact on some of them, of course, but on the whole, we have received reports that the factories are operating in line with expectations.

I would like to reiterate that, in terms of end demand, we are not yet able to predict what impact will be seen. However, at this point in time, based on the operation of our customers' manufacturing lines, we assume that there may be less impact on operations other than Automotive.

Q: Third, I would like to talk about your comments at the last results briefing. You said that from the second half of this year, demand is likely to increase for 5G and data centers. I would like to ask for an update on the degree of certainty in this area.

A: At this point in time, the outlook remains unchanged. I'll explain a little about 5G and data centers separately. The demand from data centers are gradually rising, and the trend is on this track. The trend is actually a little stronger than anticipated.

On the other hand, with regard to 5G, we originally anticipate a slightly tail-heavy ramp up. If I remember correctly, when I talked about this last year, I said that a substantial contribution is assumed to start in the second half of this year.

Currently, we are seeing an extremely high YoY growth, but since the base is small, in terms of impact on the Company as a whole, it is assumed that it will make a certain contribution from the second half.

On the other hand, we may not have been able to talk enough about this last time, but the ramp-down of 4G will have a considerable impact. So, if we talk about our entire telecommunications infrastructure business, the impact of the ramp-down of 4G has recently become quite large, and the overall figures are not very significant.

5G itself, once again, is growing considerably quickly YoY.

<Questioner 4>

Q: I would also like to ask three questions. The first question is about the rationale for the 2% impact of the new pneumonia coronavirus. Looking only at the plants in Beijing and Suzhou, I think the impact of output is slightly less than 10% or so. I'd like you to explain the gap.

In short, your company has stock, though small, of finished products. And I don't think Beijing and Suzhou are your only locations in the region, so I would like you to explain the impact of operations in Beijing and Suzhou, as well as the gap with the 2%.

A: Beijing and Suzhou account for about 7% and 7% of total output each, for a total of about 14%. These two factories were unable to ship for more than two weeks on average, so the impact on first quarter is roughly 2%, essentially 2/13, effective on 14% of the output.

Q You mean that it doesn't make much difference if you consider details like finished goods inventory in certain locations, so, you calculated mechanically.

A: In terms of the impact on the first quarter, we naturally considered what we extract from our inventory, but it is not that large, just as I have mentioned.

Q: The second question is also related to this, but why has it started from 50% operation? Is it, for example, because employees have not yet returned properly, or because it's after a suspension? Does this reflect your caution to respond to the government asking for a variety of measures, so will this be the starting point? I would like you to explain a bit about why you start with 50%.

A: This is largely due to the impact of employees. Of course, we prioritize employees' health and safety. Some people are not able to return from their hometowns to the vicinity of the plant. Others are back in the vicinity of the plant but are required to stay home for the time being. Yet others are lacking means of transportation from their home to come work at the plant.

By gradually eliminating these factors, we plan to gradually increase the output, but this spring we are operating at 50% of the output.

Q: To confirm, are there certain measures required by the government? For example, the only stories we hear on television are about the cafeterias, but are you required to take cautionary measures, for example, in the allocation of personnel within the production line?

A: That is not the case at the moment.

Q: The third question is about the revenue guidance for the first quarter. If we exclude the impact of IDT, I think that the mid-point of this guidance is based on the assumption that revenue will increase YoY. Is this actually the case?

If the YoY improvement differs depending on the product or other factors, can you explain a little more about what is relatively good or bad?

A: The answer to the first half is yes, it is correct. But this can certainly be misleading, as this is of course our revenue guidance, so we are talking about a variety of things based on our revenue and orders received. This does not necessarily move in line with the end demand, as we have certain channels in between. I think you are all aware of this already.

Therefore, for example, in the March quarter, there is a movement to narrow down the inventory mainly at Japanese dealers, whose fiscal years end in March, and it becomes a bit of an obstacle to talk about the demand outlook.

On the other hand, we naturally have a view on end demand. On that basis, we expect positive QoQ growth as a whole, including both Automotive and non-Automotive sectors. We expect growth to be small but positive.

Looking at the content a little more in detail, the growth of Automotive is driven by products related to EV and ADAS, and also SoC regardless of ADAS. The second generation of products used in conventional products like car navigation systems are just starting up as well, which are driving the growth of the Automotive segment. On the other hand, our forecast for revenue centered on conventional microcontrollers is almost flat.

Other than Automotive, there are bigger differences. Among our categories, what we call industrials are a little weak. The infrastructure business is weak, with the effects of 4G ramp-down, which I mentioned earlier.

Industrial's content is fairly diverse, so it is difficult to talk about it in a generalized manner. But for so-called hard-core FA, it is not recovering much, but we do not feel that it is falling that much either. On the other

hand, there has been some decline in certain products like digital cameras, for example, which are categorized in the Industrial segment.

<Questioner 5>

Q: It may be difficult to do so, but when we look at this year, what is the trend expected for Automotive? For example, I would like to know in more detail about the direction around results from D-ins.

A: We assume that market demand will not grow so strongly this year, but demand for MCUs and SoCs that we will newly launch will start up gradually.

Q: Can you give us some hints on how much revenue will be added this year, for example, or how much of a rebound may occur?

A: We initially expected revenue to recover to a level comparable to that of the market, so if we exclude the effect of the coronavirus at this point, we expect revenue to be slightly positive.

Q: I have another question, which may be a little generic, but you mentioned there were considerable cost reductions in the fourth quarter, and the inventory reduction has been completed. What sort of targets can you set for future cost and savings? Currently, I think you are doing various reforms to domestic distributors, and I would like to ask about any areas you recognize the need to do something.

A: We get this question from time to time, but the answer is actually hard to give. Cost reductions don't take place like a festival that occurs every few years. We always think about it and have done it all the time. Some of them produce results in the short term, and others turn out to be more than a few years into the future.

Thus, we make further cost reductions, or use costs more efficiently. We believe there is still much room for improvement in terms of spending as we watch value. The same applies to everything from manufacturing, so-called COGS, as well as R&D and SG&A expenses.

Therefore, we will continue to constantly and regularly review how we spend money from the perspective of how much effect it will have, every time we spend one yen or one cent.

I don't know if this answers your question, but that's our honest truth.

<Questioner 6>

Q: I have three questions. First, I would like to ask about the way of thinking about 2020. In the case your annual revenue is flat in 2020, I would like to ask if you have a plan on how inventory, depletion, R&D, and SG&A would change.

I'm afraid there are five items that I would like to ask about. What is the direction of your inventory and your channel inventory? Is it no longer decreasing or increasing? Those are two. Then, I'd like you to look at depreciation, R&D, and SG&A, these five items. This is the first question.

A: Ideally, we would like to reduce our in-house inventory in terms of monetary value. However, we would like to place emphasis on changing the content of them, if possible. Rather than holding finished products, by keeping them as work in progress, the Company can actually hold a little more inventory while keeping the

same level or slightly decreasing its amount, in terms of monetary value. If revenue is flat, that's the ideal form of our own inventory.

For channel inventory, we have been talking about this for some time, but there is a need to increase volume from the viewpoint of BCM or BCP, especially in the Automotive segment. I believe that this will naturally lead to some increase.

When it comes to COGS, as seem from last year's results, ideally the effects of ceaseless cost reductions gradually show, and we expect that those effects will gradually contribute to COGS reduction.

And depreciation, which was specifically asked in your question, peaked last year as we already mentioned. So, it will turn to a downward trend from this year, in the direction of gradually reducing COGS.

Regarding SG&A, as Shinkai mentioned in the first guidance, we will work on some reclassification this year. Apart from that impact, we don't think there is much SG&A expense that can be reduced in the short term.

In some cases, we are making a considerable strategic review of sales channels not only in Japan, but also globally. We are working to improve our partnership, and we expect that the effects of this review will have some effect in reducing SG&A. However, at this point in time, we do not anticipate a substantial decrease in other areas in the short term.

The same applies to R&D. There are plenty of things we want to do, so we need to use the expenses flexibly after watching the overall revenue and the shape of the income statement.

As one point of view, we intend to control the ratio of R&D against revenue within a certain range so as not to fluctuate as much as possible, so if revenue is flat, we expect R&D spending to move mostly flattish. Did I answer your question?

Q: This question is roughly the same, but I would like to hear your views about the January to March period.

I think you gave us the idea of a slight increase in utilization. On the other hand, revenue is decreasing slightly, so apart from operation, I'd like to confirm what kind of expectations are made for QoQ change from January to March for SG&A and R&D.

A: First of all, I would like to talk about gross profit. Revenue will decrease QoQ, but production will increase, so that portion will be offset. In terms of manufacturing costs, as mentioned earlier, depreciation costs and other manufacturing costs are decreasing, while some items will come over from SG&A due to changing the recording classification, so it is assumed that these costs will be offset and the gross margin will be flat.

Costs and other OPEX will decline in reaction to the higher figure in the fourth quarter. However, we have a view that the margin will decline as a result of a decline in scale and the size of revenue. This is all.

Q: The third point is the outlook for the market in 2020. There are probably some uncertainties, including the coronavirus and the macro economy. Is it likely to grow soon? The guidance from other companies also shows that inventory adjustments have been largely completed. Therefore, it would be helpful if you could provide your outlook on the TAM or semiconductor market this year, and assumptions on strength in the 5% or 10% range.

A: We think, or thought, it will grow, apart from the impact of the coronavirus. Automotive is probably quite soft on the whole, while ADAS and EV and particular generations of SoC, which I mentioned earlier, will pull the whole to grow slightly against last year.

Other than automotive, this is a repetition, but data centers and 5G are very strong. The Chinese home appliances market is also quite strong, according to our internal figures, so we assumed to see a little stronger growth centered on nodes. As a whole, I will refrain from saying 5% or 10%, but we have been expecting some growth in the single digits so far.

It has now become quite difficult to make a clear forecast, so I don't know how meaningful this answer is, but so far, those have been the reasons.

<Questioner 7>

Q: Please answer these two questions. First, in terms of the synergies with IDT for the entire year of 2019, I'd like to know the scale of synergies on the cost side and the revenue side, although on the sales side there might not be so much.

Second, in terms of fourth quarter alone, free cash flow was approximately JPY67 billion, which I believe is a record high level, although quarterly results might not matter that much. Could you comment on whether this happened to be the case due to changes in working capital, or whether there were any other specific factors? I'd like to know about the sustainability of this.

A: About synergies with IDT, I will talk about it using some diagrams next Monday. It will take some time to explain, so allow me to do so.

We understand that half of this was done intentionally, and half was instantaneous. The creation of operating cash flows by curbing inventories made a contribution, and other factors pushed up the free cash flows in the fourth quarter, including the push-up of internal sites and the refund of consumption. Therefore, in terms of sustainability, I think that it is correct to say that none of the factors are sustainable.

<Comments from CEO Shibata>

Thank you for participating in our telephone conference today. We would like to continue to provide appropriate information from next week onward, so we appreciate your continued support.