

Third Quarter of FY2020 Presentation Q&A

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[20Q3 Results and Outlook]

Q: Please share with us the reason why the timing at which a reactionary fall in demand will start is later than your initial assumption. Also, you have forecast that demand will calm down in and after March. Do you detect such signs at the moment?

A: Orders from U.S. and South Korean smartphone manufacturers and three major smartphone manufacturers in Greater China surged after the largest smartphone manufacturer in Greater China was forced to stop production by the decoupling of the U.S. and China. Considering this trend as transient, we explained at a past presentation that we had received so many orders in 20Q3 that we were given a sense of overheating. However, looking at how orders are coming in January, we find the situation settling down gradually, but the flow of orders remains robust. Nonetheless, we expect sales for 20Q4 to be weaker than those in 20Q3, and our assumption is that demand will settle down slightly from March or so. In China in particular, 5G smartphones have been produced in considerable amounts. Therefore, we forecast that the phenomenon of a reactionary decrease may take place from March to May. We think that we are looking at the situation a little bit cautiously, but my reply is based on our observation of the current situation.

Q: Are you saying that such a phenomenon, that is, a reactionary decline, will occur regardless of whether or not smartphones sell well? And, is this development limited to smartphones?

A: It is smartphones among others that are trending in a way that attracts attention. Our analysis is that we have been receiving orders that are driven by an overheated market, compared to the real economy.

Q: It is broadly said that production in the January–March period will decline compared to the October–December period due to seasonal factors and a shortage of semiconductors. How do you expect your sales to automobile manufacturers to change in the January–March and April–June periods?

A: The problem with the production capacity of semiconductors has not basically caused a big issue for production, although the lead time has become longer. Therefore, we assume that the business of our MLCC and other components for automotive use will play out as planned.

Q: You have a good stockpile of components for automotive use, such as MLCCs. But isn't it a mistake to expect that sales of components for automobiles will not decrease but will keep momentum at least for the first half of this year?

A: We are not under the impression that there is an inventory pileup. We expect sales to remain firm from 20Q3 to 20Q4.

Q: Regarding the gap in the degree between the current situation of procurement of components and producing finished products at customers, you explained that the move to purchase components was stronger in smartphones and automobiles. How large is the gap?

A: To give you a feeling, the production plans of the three smartphone makers in China far exceed the production volumes that the largest manufacturer under U.S. sanctions planned. That is where there is a big gap from the quantity that was initially speculated. With regard to automobiles, orders are coming to us at a level slightly higher than actual demand. This is happening while manufacturers are stockpiling finished vehicles amid a situation where the stock of finished vehicles is low or it is very difficult to obtain semiconductors. We think that once stockpiling of finished vehicles progresses to some extent, demand will start calming down.

Q: Orders received for capacitors in 20Q3 are coming close to ¥200 billion, which is 20% higher than the peak in 2018. What applications are driving this growth?

A: The factors behind this are the peak period of sales of smartphones, an overheated level of orders being received from smartphone makers, and a rapid recovery in automobile production. All these factors have come together to create this impact.

Q: You say that the status of orders received is settling down. Are orders declining in January compared to 20Q3?

A: At the previous presentation, we forecast that as the overheating up to December would end, orders would plummet in and after January. But this is not happening now. However, we are getting the impression that the situation is slightly cooling down. Therefore, we think that we should expect a reactionary decline to come around March.

[Multilayer ceramic capacitors (MLCCs)]

Q: Please share with us your thinking about capacity reinforcement and average unit prices. Also, how should we interpret the current strength of demand, compared to 2018?

A: We plan to increase the capacity of MLCCs by between 5% and 10% on a capacity load basis during this fiscal year. We are in the middle of formulating a budget for the next fiscal year, and our rough idea for the next fiscal year is to increase by between 5% and 10% as in the current fiscal year. The range may fluctuate depending on market trends. As for prices, they have declined more slowly in this current term than in usual years. The January to March period is a time for annual price negotiations with automakers. We think that we will also have a low price reduction rate compared to usual years. To answer the question of whether MLCCs will be in short supply as a result that the so-called demand-supply gap occurs as in 2018, there is no sense of panic that we felt at that time since we do not detect a sense of overheating, for instance, generated by excessive orders issued by distributors. Regarding average unit prices, as the ratio of sales for automobiles rises, the mix will improve. As the automotive market recovers in 21F, we think the average unit prices will be on an upward trend.

Q: Is there any possibility of raising prices by taking the current strong demand into account?

A: We are not thinking of any price hike at the moment.

Q: You said that the pace of fall in sales price was slower than initially expected. Should we understand that this trend will continue?

A: At this point, the price reduction has progressed slowly, but the situation will change once inventory adjustments take place. It is possible that the range of rate of price reduction will fluctuate depending on the volume of sets, or especially how well smartphones sell.

Q: Is it correct to assume that there is no delivery problem for MLCCs, unlike between 2017 and 2018, and that such a problem will not occur anytime soon?

A: There is no supply-demand gap now, as there was in 2018. At the moment, the sense of overheating by smartphone manufacturers and the surge in production by automakers are making the supply slightly tight, but we think that this will be solved in 20Q4.

Q: In the next fiscal year, what is your plan to invest in the pre-process or the post-process to increase production? How much for each process?

A: As the electrification of cars progresses, the volume of high-voltage capacitors will rise. In that case, it seems that it is necessary to expand and strengthen capacity in the pre-process. But at the moment, we are not disclosing figures for each of the pre-process and the post-process of investment plans. In any case, in the next fiscal year and beyond, the number of components mounted in smartphones will increase due to 5G. Regarding automobiles, the

shifts to EV and autonomous driving will further advance, partly driven by COVID-19 and the rise in environmental awareness.

Q: If you are to expand capacity by between 5% and 10% every year, will you run out of space in your existing plants and require another major investment? If this is the case, please share with us your rough idea.

A: We will install equipment in our existing buildings for the next one or two years. For the period after that, we are at the stage of drawing an outline including the existing plants.

Q: I want to know your strategy for general-purpose products. Amid the further electrification of automobiles, will you develop investment plans, based on the stance that you will supply all MLCCs including general-purpose products, or have you already entered the stage of making the choice of which products to handle to some extent? Please share your thoughts with us.

A: For the time being, we intend to maximize the coverage, as we have done until now, and want to somewhat manage to establish a situation where no competitors can catch up with us. We will consider the direction of future investment plans over the course of developing the next medium-term plan.

Q: Demand grows for high-end products in particular, so it seems that if you put more energy into those products, you might be able to protect your market share. Please share with us the background as to why you are continuing with general-purpose products.

A: If we withdrew from general-purpose products, that would end up helping other companies to catch up. With this point in mind, we will proceed with business operations.

Q: Regarding the MLCC business for base stations, sales remain sluggish during the current fiscal year due to inventory adjustments and a decrease in antennas. Please share with us the outlook for 20Q4 and the next fiscal year.

A: We assume that business will remain sluggish in 20Q4 as well. The number of units in base stations has not fluctuated, but the main reason is that the antenna configuration is lower than 64T x 64R. We are not ready to offer a clear answer because the budget is still being formulated, but we envisage that sales of MLCCs to base stations will be on an upward trend in the next fiscal year. Having said that, we don't think the trend in the antenna configuration will change much.

[Modules]

Q: You explained that RF modules and MetroCirc™ had increased during 20Q3. How did RF modules change in each region? Also, did MetroCirc™ increase significantly for millimeter-wave smartphones, or grow for smartphones compatible with sub6GHz as well? Please share the information with us.

A: Sales of modules increased for new models of smartphones launched during 20Q3. The ratio of sales to Greater China was high until 20Q2, but declined in 20Q3, and instead, large volumes were shipped out mainly to the U.S. and South Korea, though the situation in the latter was weak. Additionally, large volumes were shipped out for some 5G devices in China. MetroCirc™ can be expected to be adopted in places, such as substrates of millimeter-wave modules, some antennas and transmission lines. At present, MetroCirc™ is adopted in antenna components, transmission lines, etc.

Q: Please share with us the background as to why the profit ratio of modules improved significantly in 20Q3. I previously heard from you that you wanted to realize double-digit sales growth in RF modules during 21F. Have the prospects changed?

A: As for Wi-Fi modules for specific customers, we have come to handle the front-end part only from this fiscal year. Accordingly, the sales mix changed considerably, improving the mixture of product categories. In addition, we have been able to keep the profitability high during 20Q3 primarily because we were fortunate enough to be given a high share of RF modules, as we assumed. In the next fiscal year, as the ratio of smartphones adopting 5G will increase, demand itself will grow. But honestly, with the same customer, there are some areas that are going well and others where we are struggling. Also, we are in a situation in which we are unable to make usual alignments or technical adjustments with some customers. With some in a fluid condition, we have been struggling now. We have no choice but to rely on local staff support in some parts, and we are having a hard time providing support amid a situation where the movement of people is restricted. Under the circumstances, we find it difficult to be given a share equal to or higher than that of 20F.

Q: Please share with us the background as to your having difficulty in getting a good share allocation of RF modules. In addition, please share with us what response you are receiving about dealing with smartphone manufacturers in Greater China other than the largest one in the same region.

A: We end up in the top two or so in almost all components every year. For the process of confirming characteristics to align with sets and finalizing the design, we had dispatched our engineers from Japan to the local site for alignment until last year. However, we have had to

rely on our local staff in much of that work this year, so we were unable to take the same steps as in usual years. Since the results of share allocation are unknown to us, we will consider countermeasures going forward, but we will carefully handle this point in the next fiscal year and beyond. As for China, we think that modules will continue to be put to general-purpose use, and as we have secured a reference to the platforms of Chinese chipset manufacturers, we assume that the rollout of modules of that part will expand in this term or the next term.

Q: The trend of millimeter-wave devices seems to have weakened. What outlook on millimeter-wave devices do you have? Also, please share with us how the outlook for the module business in the next fiscal year will change.

A: As you know, U.S. customers adopt millimeter-wave devices only for smartphones shipped for the U.S., and the ratio of adoption remains much lower than initially assumed. In order to realize the intrinsic functions of 5G, base stations that support millimeter-wave devices will be necessary. We believe that millimeter-wave devices will become popular sooner or later, but they have taken longer than expected. The popularization needs a large-scale event as a trigger, but no such events have been organized so far, delaying the adoption. However, when it comes to the timing, it seems they will start expanding in 2021 and 2022, so we will make sure we are ready when the time comes. As for sub6GHz as well, we expect the ratio of adoption to rise steadily. We assume that the number of 5G devices in 20F will be 330 million units, but expect it to increase up to 500 million units in 21F. Anticipating that situation, we will proceed with preparations.

Q: Please share with us the advantages of MetroCirc™ in millimeter-wave devices and its outlook.

A: In millimeter-wave devices, the characteristics of MetroCirc™ can demonstrate its advantages. However, the number of smartphones compatible with millimeter-wave devices is lower than expected.

[Lithium ion batteries]

Q: Please share with us the business environment, the status of profitability and your upcoming initiatives.

A: Although the flow of orders received was weak until 20Q2, they surged for electric power tools, gardening tools and vacuum cleaners after 20Q3, leaving the supply very tight. We expect this tendency to stay for a while. In our case, in particular, we are downsizing business for smartphones and redirecting resources to products for power tools, which means that we

are on the market trend. Regarding profitability, we have made a considerable improvement. We have moved steadily in the right direction to turn profitable, which is the goal for 21F.

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