## Second Quarter Ended June 30, 2018 -Financial Results Announcement (July 31, 2018) - Main Q&A for Briefing Session

## Q: We understand that Q2 was better than expected. Could you describe what factors caused the difference?

A: Regarding the end market for the Industrial area and a part of the Automotive information area, while there are a variety of factors, inventory corrections in our sales channels were delayed, and we recognize sales of these segments were somewhat larger compared with the market. We also think that there will be adjustments in Q3 corresponding to this factor. We think that rather than the end demand being higher than the expectation, it was a combination of technical factors and sales channel behaviors that caused Renesas sales to end up somewhat higher.

## Q: Regarding production adjustments due to the current inventory levels and conditions, what are the situations in Automotive, Industrial, and Broad-based areas?

A: Compared to our previous earnings call, our comfort level has risen quite a bit. Thus we are somewhat confident and we think that we are now able to control our own inventory more timely, which are manufactured at our factories, to an appropriate level by the end of this year. Therefore, although production adjustments had already started as of our previous earnings call, we are increasing the intelligence applied to demand forecasting, and, with that, are hitting the brakes on production even harder. While it is thought that the extent to which we do so will be reflected as reductions in the gross margin, we think that we can now control inventories to appropriate levels in a timely manner. Regarding products manufactured at our outsourcing partners (foundries), mainly for the automotive applications, whose lead times are longer than the products manufactured in-house; although we have hit the brakes one level harder, we expect that time will be required for this adjustment to take effect. We expect that it will require an amount of time to control these inventories at appropriate levels until Q1 next year. I would like to reassure you that this situation is not out of control, but rather the situation is that we have created a comfortable plan for control and management of inventories to appropriate levels and that we are now executing this plan.

### Q: What are the situations for the inventory corrections in the Industrial and Broadbased areas?

A: Although we do not differentiate those areas, we think that we will complete adjustments mainly for in-house production of microcontroller by the end of this year. Our We think that the problem is in the sales channel inventories mainly for the Industrial area, and that some amount of time will be required for the correction. We believe we will be making adjustments at least through Q3 and Q4 this year and perhaps into Q1 next year. Regarding the levels in our own inventory and our sales channel inventories for non-Automotive products, we will have to carefully monitor the situation to assure that it is moving according to plan.

#### Q: Please provide breakdowns of the quarter-on-quarter sales decrease in Q3.

A: The area for which we are expecting a large reduction is the Industrial area. Our image is that this will account for about half of the total reduction. The next largest reduction will

be in the Automotive area. The reduction in the Automotive area will be about 70% of that in Industrial products. The remaining reduction will be in the Broad-based area.

## Q: We heard that corrections in sales channel inventories for automotive products had largely been completed in Q1, but it seems that sales channel inventory levels are smoldering for the Automotive area again. Is that the case?

A: That is true, due to certain technical factors in the Automotive information area. But if the question is "will adjustments be necessary again in the sales channels for the Automotive area as a whole", the answer is no. We think that the feeling of sales channel overstocking as a whole has been resolved.

### Q: What is the background to your expectation that the Automotive sales in Q3 will fall?

A: We are expecting a slight reduction, in part due to cyclicality, but also due to the effects of the new regulations that have been reported in the media.

### Q: What are your targets for operating ratios for Q3 to Q4?

A: We do not expect that the lowered operating ratios will return to high levels (on wafer output basis). For demand after Q1 next year, we are updating our forecasts on a weekly basis and we will input wafers at an appropriate level. It is still possible that our Q4 operating ratio (on wafer input basis) will increase depending on the latest forecasts.

### Q: What are your plans for the operating ratios moving forward?

A: We are assuming that moving into Q4 we will be lowering the operating ratios somewhat from their current levels. We need to put some special efforts into how we report on our operating ratios moving forward, especially regarding the numerator and denominator. Previously, we had been using numerators and denominators that made it easy to imagine the effects factory operating ratios would have on sales, but in the current conditions, I think that we should provide different figures. If we used the previous figures, we would expect our operating ratios to fall somewhat as we move into the end of this year.

## Q: For end markets from which the sales channel inventory factors have been excluded, how much have sales in the Automotive and the Industrial areas have actually grown compared to the previous year?

A: In the home appliances area, we have a large portion of sales in air conditioners, and this year has been weak. It seems that the inventories of finished products in the air conditioning area are is accumulating. In contrast, if we look at the so-called industrial applications, it seemed to be solid when we entered Q2. However, if we look at the financial announcements and future expectations of our FA related customers, they are doing well but expect some major changes. While the demand was strong in Q1 and at the beginning of Q2, it seems that it will be somewhat weak from Q3 onwards. Regarding the Automotive area our sales is expanding at a mid-single digit %. This is what we see when we run simulations that exclude the effects of inventory levels and other factors. There are no large changes in particular.

#### Q: Regarding your level of R&D expenditures in Q2, these seem low compared to the

## previous quarter, and the quarter before that. May we assume that moving forward, you will be managing these costs to remain low?

A: While several factors are involved, we are tightly controlling OPEX for the total of R&D and SG&A expenditures. We are reviewing the content of each cost and expenditure individually and will not be spending money that does not need to be spent. At the same time, there has been a certain amount of interchanging of figures. Although it seems that R&D has fallen significantly compared to the previous quarter, it is actually not the case that only R&D has fallen. As a result of tightly controlling OPEX through R&D and SG&A's total expenditure, the total values have been getting smaller. I would like you to understand that it is not the case that we have been intentionally reducing R&D spending in particular.

# Q: Regarding the data you are using as the basis for your Q3 onwards demand forecasts, is it the case that you are using not only the data from the financial results announcements from direct and indirect Renesas customers, but also feedback from customer contacts and distributors?

A: The data is the combination of three items. First, we are looking at motion in the demand outlook which we collect as data. The second we look at is the commentary and outlooks from our direct customers and from the final end-product products' customers. The third item we look at are levels that take certain presumptions and preconditions into account, such as our in-house simulations and the influence of inventory levels. Our forecasts combine all these items.

### Q: What do you think are comfortable levels of inventories for in-house production?

A: Our standards for these levels will continue to be constantly updated and thus will change. Currently, in terms of our management accounting basis, we see 110 days plus a small margin as being appropriate.

## Q: In Q2, those levels appeared to be a bit above 110 days. Do you see those as being close to being appropriate?

A: We apply a devaluation in our financial results for inventories that move slowly, and thus the figures for the management accounting basis differ. Since the values vary significantly with the inventory valuations, we would like to reduce inventory levels by just under 15% from now, on the management accounting basis.

## Q: We expect the design-ins for the Automotive are acquired in 2016 will contribute to your sales starting next year. Is there any need to change this story now?

A: While we published a medium-term plan roughly at the end of 2016, if you ask, "has your view changed much since then," in all honesty, it hasn't really changed. I feel that we have come to a place comparatively close to what that plan called for. Our view was somewhat distorted by the artificial inflation of our financial results last year. When compared to our original plans, the story has not changed significantly. However, in the Automotive area, where lead times are long, not all that much time has passed since 2016. Therefore the sales increase effect in 2019 will be limited, and what we would like you to understand is that most of that effect must wait until 2020 and beyond.

Q: What is the reason for the reduced operating ratio of your 300 mm wafer line? While there is a risk associated with inventory corrections for automotive SoC products, has the operating ratio fallen because of that? And is it that operating ratio of the 90 nm microcontroller line, which up to now has seen adjustments, now increasing? Also, is the reason you are adjusting the operating ratio of the 200 mm line downwards the influence of inventory corrections for the Industrial area?

A: Although it cannot be said that there are no effects of the inventory corrections for SoC products, the 300 mm line operating ratio is being adjusted mainly for microcontrollers. Although the 200 mm line operating ratio is also mainly being adjusted for microcontrollers, regarding the size of these adjustments, it will be larger for the 300 mm line.

Q: Concerning inventory level, is it your understanding that for sales channel inventory levels, the level of the Automotive are is about appropriate but there were excessive efforts in Q2 in the Industrial area and you think corrections will be made for the heavy inventory in Q3?

A: For sales channel inventories that are mostly in the Industrial area, we thought major part of corrections would be made earlier, up until Q2, and thought that would continue somewhat into Q3. In contrast, inventory levels increased even more in Q2 and rather than completing corrections in Q3, we now think that there is overstocking which will require more time to resolve. To that extent, we need to carefully look into our sales forecasts for the Industrial area.

Q. Is it correct to believe that since the inventories of work in progress match expected demand for next year, where the products outsourced to TSMC are accumulating as wafer states, and since this is linked to sales, the situation here is healthy?

A: Regarding the fact that we have substantial inventories of wafers procured from foundries, I stated in our previous earnings call, that we are carefully considering how hard we should apply the brakes to the production, since we are watching next year's demand. However, my message this time is that although we did apply the brakes for a period, the lead time for products manufactured at our outsourcing partners are long. As for effects that are appearing this year, when compared to our in-house manufactured products, it is limited. Therefore, we'd like you to understand that adjustments for ourtsourced products will be occurring until next year.

Q: At your previous earnings call, you mentioned that you expected demand for 40 nm microcontrollers would be ramping up strongly into next year. Has there been any change in your expectations for the? If there are no significant changes in the demand for cars, what is the background to the changes in this forecast?

A: Our forecast itself has not changed at all. When we considered the forecast in the light of inventory buildup until now, we decided that it would be acceptable to apply the brakes, or else sooner or later we would have to apply brakes to production. It is not the case that our expectations for final demand is stronger than it was at the previous announcement. I hope that you will not misunderstand that point.

Q: Regarding your annual growth rate, in the previous earnings call, your expectations had fallen to a view that growth would be either in the mid-single digit %

### or would be flat. Has this view not been changed significantly?

A: Regarding our view for this year, it is weaker than we thought as of the previous call. If we achieve the guide for this quarter (Q3), exceeding last year's figures for the whole year will be very difficult without significant growth in Q4. That is going to be a high hurdle to clear.

However, there have not been any surprises regarding our business fundamentals. We are proceeding quite well as seen from the multiple years discussed in our medium-term plan. We see our business results of the previous year as having been "excessively good", and that our figures were slightly inflated due to the inventory build-up. Compared to the last year's results, this year may look bad, but we think that if we average last year's and this year's financial results, we are not significantly different from the plan we originally drew up, and that we are progressing. Therefore our view that our average annual growth will be in the high-single digit % remains unchanged.