<u>Fiscal Year Ended December 31, 2018</u> <u>-Financial Results Announcement (February 8, 2019) – Q&A for Briefing Session</u>

Q: Regarding the Q1 guidance, sales are expected to decrease significantly QoQ, and there is a demand risk in the short term, but what is the background of the substantial decrease in sales? Also, what do you expect for Automotive, Industrial and Broad-based?

A: Automotive sales are expected to decrease in the mid-10% range. About half of that is from the channel inventory. The inventory level increased a little by the end of the last year, as you can see from the presentation materials available on our website. This is related to technical factors associated with factory operations, etc. during the New Year's holidays, and also related to SoCs with long lead time that we have mentioned in the past. The move to continuously reduce inventories has not changed, but they are increasing due to somewhat temporary factors. Q4 sales have increased more than end market demand and the repercussions can be seen in Q1. If you look at it on a real demand basis, I think that it is more correct to say that QoQ Automotive sales will decrease by high-single digit. Regionally, we will see large sales drops in Japan, China, and South Korea where there seems to be large exposure to China. We expect sales for overseas-based Tier 1 customers, whose sales exposures are global, to decline, but the level of decline is somewhat small. Industrial sales are expected to see a large decline of 10% points compared to Automotive sales. Broad-based sales decline is expected to be a little smaller than the Automotive sales decrease. For non-Automotive sales as a whole, we forecast a slightly large decline compared to the Automotive sales drop. Although it has been stated by many that forecasts for FA and Capex are very cautious due to the weakening of the Chinese economy, the trend is very apparent in the Q1 guidance and we anticipate the largest drop in sales for Smart Factory by about 30%. White goods sales are also weak, but the decrease level is small compared to the Smart Factory segment. In addition, not structural, but somewhat specific factors are involved, and sales for our Infrastructure category are expected to decrease by nearly 30%, almost the same level as Smart Factory. Regarding Broad-based sales decrease, we believe that it comes from softening of the entire market caused by China.

Q: In the Q4, Renesas in-house inventories considerably decreased due to utilization adjustments, but on the other hand, channel inventories increased QoQ. How much of the current channel inventory is still excessive for Automotive and Non-Automotive applications compared to the appropriate level? Also, when will it fall to an appropriate level in the future?

A: Although it has not changed since the previous earnings, we believe that channel inventories for Automotive applications are already at an appropriate level if you exclude the technical, temporary factors for the New Year's holidays. Therefore, after the first quarter, we believe that channel inventories for Automotive will be at an appropriate level. Meanwhile, for non-Automotive applications, although it will be a repeat of previous comments, it still feels slightly excessive. Previously, it was said that it would take until the end of Q1 and in some cases during Q2, but with the fact that we are facing rapid demand decrease starting from China, it would probably take until the end of the 1H to adjust.

Q: When do you expect the timing of bottoming out? When do you think that your business results will return to positive year-on-year? Also, please let me know if you have an estimate of sales growth in each of the markets.

A: I think that relatively large sales growth can be expected probably from Q1 to Q2. Although we anticipate somewhat higher sales for non-Automotive business, we believe that both Automotive and

non-Automotive will grow QoQ. Meanwhile, I believe that China will review their capital investment and production plans for the next year after the Chinese New Year, and while I do not think there will be any major impacts on Q2, we might have them in 2H. However, to comment on the year, I think that it is better to wait for an updated plan in China in order not to be misunderstood.

Q: Do you think Q2 sales will see large growth, similar levels to Q4?

A: We do not anticipate a big growth and it will not be to the Q4 level.

Q: Is there a temporary factor in sales?

A: I think so.

Q: There is a trade friction between the US and China, but what are your expectations for the Chinese market when looking at the long term?

A: China is a tremendously large market, and although it is not flawless, I believe it will continue to grow over the mid-to long-term. The Chinese government seems to manage economic policies well. There are rumors that they will introduce incentives for new cars, and they managed well when the stock and the real estate market did not go well three years ago. However, since it is hard to expect what will happen regarding their relationship with President Trump, we will not plan CAPEX or R&D on the premise that sales will grow, but we want to build a structure that is strong enough even if the harsh conditions of Q1 and Q2 continues.

Q: Please tell us about your current status and reasons for the early retirement program at the end of June.

A: With regard to the early retirement program which we are considering now, we are in negotiation with the union and cannot disclose any details as the matter is yet to be decided. We think that it is necessary to constantly pursue efficiency as a whole, I would like to continuously replace human resources globally, with consideration to the regional market demand or fields that are growing. We would like to make our company's structure lean and strong by leveraging this opportunity when the current market is looking quite soft.

Q: I would like to ask about the inventory situation and the outlook for factory utilization rates. In-house inventory was a problem for the Automotive business, but I heard that the adjustment was completed. Does this mean that the adjustment is completed when looking at the overall level, or are all the issues including the problematic products resolved? Also, although the Q1 sales will decrease, what is the picture of utilization rates from the Q1 to 2019's year-end?

A: Regarding inventories, we have completed the adjustment of our in-house inventories in general. Since factory utilization occurs backwards of about 3 months, with consideration to the estimated level of Q2 sales, we cannot give specific numbers for the Q1 utilization, but we anticipate an increase from the Q4 level by around 10%.

Q: You mentioned the mid-term plan is scheduled to be updated after the completion of the IDT acquisition. What is the company's problem that you can see now when imagining the whole roadmap after acquiring IDT? Please tell me where you are having problems with the cost structure and what resources are missing.

A: Although no new issues in particular with the acquisition of IDT has been discovered in particular.

A continuing problem of ourselves, for example, our cost structure is fixed-cost oriented and the operating leverage is high. The problem here is that the margin might sharply drop in the down-turn period. Also, as before, I think that there is still a problem that our Forex sensitivity is continuously high. Although these concerns have nothing to do with the IDT acquisition, we hope to accelerate our approach and to bring us closer to a more desirable form by leveraging the acquisition as a trigger. In terms of products and applications, IDT handles higher-margin analogue products, focusing on high margin customers and end markets as well. I would like to actively incorporate these points and lead to margin improvements for the entire company.

Q: Although you said that fixed costs are large in your cost structure and the Forex sensitivity is high, can it be said that the fixed cost in Japan is heavier?

A: That will be the case. The biggest among the fixed costs is COGS. They are the costs related to manufacturing. All the front-end factories are based in Japan and the fact is that the costs there are very big.

Q: An item called "compensation expenses" appears as special loss in Q4 and it is disclosed that this is related to contract change with a foundry. Please let me know the specific background and the possibility if that will happen again in the future.

A: It is temporary, and we do not expect any future continuations at the moment. We were using a foundry service of a company whose lines were originally a part of Renesas in-house factories but was sold to them. In our original plan, we intended to gradually lower the dependence of the foundry and to end the service at an early stage. However, demand continued to rise, exceeding the assumption in 2016 and 2017, so we revised the plan and steered in the direction to continue to utilize it in the mid- to long-term. Since then, the demand situation changed again, so we returned the original plan, but along with that, temporary penalties have occurred. By the way, by retracting the products entrusted to this foundry back to our own lines, the gross margin for the product and the company as a whole is expected to improve greatly due to the large fixed costs.

Q: Please tell me more about the early retirement program. Is it a response in anticipation of an economic slowdown caused by the US-China trade friction? Although this means a reduction of headcount in Japan, please tell me whether there will be a shift towards overseas including the development side in the future?

A: The current demand softening is occurred globally, so the North American automotive market is also weak. Therefore, we are planning to reduce fixed costs including optimization of personnel on a global scale. Labor law differs from country to country, and we are negotiating with the labor union in Japan based on the Japanese labor law. This means we are responding to global demand shifts. Regarding developments, Japanese customers are of course important, and we will not be relaxing developments for them.

On the other hand, demand is growing in China and India, although the demand is currently soft. Also, some companies based on the US or Europe may be able to take leaderships to set global standards in some equipment areas. I would like to allocate personnel resources according to customers' demand. Sales should be balanced, including fixed costs, R&D, as dollar-based sales increases. I think that it is not good to have a corporate structure where all the management plan will go away if the yen appreciates. Therefore, I believe Renesas itself has to become lean with balanced management. Regarding the acquisitions of Intersil and IDT, they have a large dollar costs, dollar sales and do not have big production facilities by themselves, so the fixed cost structure is light. We believe that our Forex sensitivity and the fixed cost rate will go down simply by adding their structures and taking the weighted average. Also, I think that it is management's task to grow Renesas, a Japan-originated company, while keeping its goodness and balance in the mid- to long-term.

Q: I think that factory utilization rates are somewhat declining. Please let me know the future prospects and plans regarding reorganizations of domestic factories and shifts to become a fabless company.

A: For the 6-inch factories, we announced to close the Yamaguchi factory and the silicon line of the Shiga factory, and we are currently receiving orders for the last inventory buildup for products on those lines from customers. Internationally, I believe it is difficult to maintain competitiveness by keeping all of our 6-inch factories. Demand is falling, but one and a half years ago, we were not able to reach the demand of our customers though we were producing as much as we were able to. Since we will grow in the mid- to long-term, we believe that additional productions will be secured by utilizing foundries and OSATs, but we also believe that we can fully utilize our in-house factories. A year and a half ago we thought that we would not be able to bring out new products with our lines, as we thought the factories' floors would not be emptied for the next 3-4 years with products that we had from the past, such as our legacy products. However, we believe that there is a possibility that we can manufacture new products including SOTB that can differentiate our production processes at our own factories since the in-house factory floors seems to have some spaces now.

Q: I think that there are many fluctuating factors for the semiconductor market outlook in 2019, but how do you see it?

A: Though we have to imply that the situation and our views could change after the Chinese New Year's festival, we see the year to grow slightly. The outlooks vary by products and we do not expect that our core products, microcontrollers, are optimistic for growth. On the other hand, in areas like analog & mixed signals that we would like to grow in the mid- to long-term, continuous growth is expected. However, memory etc. are severe. Considering all these factors, for now, we see a slight increase. However, I would like you to acknowledge that there is a possibility that what we say may differ after a month.

Q: Is there anything I should consider as an independent factor for your company's sales? Inventory was heavy last year, including distribution channels, and there will be both negative and positive factors for your TAM. If sales were flat, would the factory utilization rates become positive compared to last year?

A: In terms of the short-term time horizon like this year, factors like rebounds from inventory adjustments we mentioned previously will be unique to us. Sales to our channels against our end sales were relatively weak over the past year. The Automotive business was generally weak overall and the non-Automotive business, especially for the Industrial business, were solid in the 1H, but it meant a delay in reducing channel inventories, which decreased sales against the end demand. I feel that such negative factors will not materialize this year. Also, although it is difficult to make a quantitative statement, we still have large positions of sales from Japan-based customers for both automotive and industrial applications. I feel that sales from our customers to the end users in the Chinese market are higher than competitors in the US or Europe, so that we will be affected from the demand fluctuations of the Chinese market stronger than our competitors.

Regarding the factory utilization rates, if sales were the same as last year, the portion which we controlled production last year would come back.

Q: The car navigation market seems to have structurally collapsed recently, but what is the impact on your company?

A: I am not convinced that the expression that it has collapsed is appropriate, but it is factual that it seems to be very weak. In the outlook for Q1, I feel that a considerable part of the weakness of Japanese customers is clearly shown in conventional car navigation systems and infotainment.

Q: Every time I discuss with investors, they say the purchase price for IDT is too high. Also, many investors see it as irrelevant to the Automotive business growth story. What kind of discussion are you having internally regarding the IDT acquisition? Please tell me the current message such as the rationale to acquire at this price after receiving feedback from investors.

A: Regarding the strategic consistency, the fact that we receive comments as yours suggests that our communication is inadequate, and we would like to explain more carefully during the scheduled update of the comprehensive mid- to long-term plan. However, we have not changed our story and the Automotive market definitely continues to be very important to us, but I think the operational structure that only focuses on the Automotive business is unfavorable. We would like to have some end market pillars including data center and 5G, for example. As for products, only focusing on microcontrollers is somewhat poor in appeal for future growth, too. Analog products are required to differentiate when offering microcontrollers or SoCs. From the perspective of market exposure or from the product line-up perspective, I have confidence in the strategic rationale to acquire IDT. As for the price, since the market as a whole fluctuates widely, I understand the opinion that it is too

As for the price, since the market as a whole fluctuates widely, I understand the opinion that it is too expensive, but I think the fundamentals of IDT are steady and the essential value is unchanged. It is our task as the management to show results in figures as early as possible, and to make accumulated achievements as in the case of Intersil when looking backwards.

Some media mentioned that opinions of Shibata and Kure are different. In those articles, Kure sees the Automotive business as the most important, while Shibata intends to strengthen other businesses than the Automotive business. However, I (Kure) completely agree with what Shibata is saying. What Shibata mentioned does not mean to weaken the Automotive business and I think it is important for us to keep balances between the Automotive business and the other businesses. At the time of the Intersil acquisition, some media reported that Renesas was going to enhance the Automotive business by the acquisition. In the Intersil case, we have synergies in the Automotive business, but it is not easy to obtain LTVs in the Automotive market. The LTVs we have got are with smoke detectors or fire alarms combining Intersil's battery management devices and our low-power and reliable microcontrollers, for example. We are not trying to be a member of the Automotive supply chain by this acquisition, but rather, I would like to leverage our reliability and mid to long term technical roadmap.

On the other hand, although it is difficult to manage areas where volatility is high, such as to the extend where we have a big opportunity this year, but it will be lost the next year, we want to make good use of long-term relationships with customers on a steady basis. In that sense, Intersil and IDT are very similar, as they have good, long-term relationships with major data center providers. As I mentioned, with our allocations of domestic and overseas resources, I would like to keep balance to respond well enough for cloud data servers where domestic leaders do not exist, by leveraging IDT and Intersil's resources. This is not to relax the development capability for domestic customers, but to enhance it. It is important for us to enhance the non-Automotive business, at a speed that is not inferior to the Automotive business to strike a balance. Although microcontrollers and SoCs are important, it is significant to take on products with more profitable and growing synergies around them, and as Renesas' management, including Shibata and I (Kure), we have the same strategy to proceed.