

Kaga Electronics Co., Ltd.
Briefing on EMS Business and Virtual Factory Tour
Main Questions and Answers

Date and time: 4:00 p.m.–5:30 pm, Monday, March 30, 2022
(Online Briefing)

<Points to note>

The “Main Questions and Answers” has been posted as a reference for the convenience of those who were unable to attend the briefing. Please be aware that it is not a transcription of all matters discussed at the briefing, but rather a brief summary of those points that Kaga Electronics deems to be key.

Please also note that the statements contained in this document that relate to the future, such as results forecasts, are based on information currently in the possession of Kaga Electronics and certain assumptions that have been judged to be reasonable. Actual performance, etc. may differ substantially due to a range of factors.

EMS results in this fiscal period and forecasts for new medium-term management plan

Question 1: In the medium-term management plan, Kaga Electronics plans to increase EMS sales from 110 billion yen to 150 billion yen. How does the company plan to accomplish this? Also, which areas will see this growth?

Answer: We expect substantial increases in production from existing customers and existing products going forward, even in the current conditions. In addition, the acquisition of Kaga FEI and Excel as part of the Group brings with it a sales division of over 1,500 people, and the number of new inquiries is also increasing due to daily sales activities with our business partners. We think that sales will increase overall from existing efforts and new developments. In particular, we are taking sales measures to ensure that inquiries translate into orders, with a focus on automotive devices and medical and industrial equipment.

Question 2: Can a profit margin in the 6% range be maintained when aiming for 150 billion yen in sales in the EMS business? In addition, does the company aim to achieve this sales target even if it means a somewhat lower profit margin?

Answer: The competitive environment is very harsh, so the profit margin is not high for customers with the highest level of sales. However, sales to customers with a great range of product types at small volume, which we specialize in, are high, and our ability to generate a reasonable profit margin in this area gives us an overall profit margin that is higher than that of our competitors. We hope to maintain our profit margin at about the current level going forward.

Question 3: What is the extent of the transactions in the EMS business that also cover development, verification/analysis, and maintenance? Are there synergies with Kaga FEI?

Answer: On the development and design side, Kaga FEI receives information from customers such as the supply from wafers and the development of ASIC, and this leads to visits from EMS managers. Some of these are inquiries about completed products, and we think that we can link this to the design and mass production of completed products, rather than being limited to the development of semiconductors and design of substrates. At this point, orders for mass production are not yet substantial, and amount to just a few percentage points of all orders, but this kind of order is on the rise. In the future, we expect orders from the development stage will account for about 50% of orders, and added value will rise further.

Question 4: Has the spike in the procurement price affected the profit margin due to the recent shortage of semiconductors and parts?

Answer: The parts shortage is a global problem, and we are also really struggling to procure parts. The procurement price is rising sharply, but we procure parts after consulting first with customers, and our customers shoulder the higher costs. This has allowed us to maintain the profit margin.

Question 5: Earnings results were strong despite turmoil in distribution, lockdowns due to the COVID-19 pandemic, and other factors. Why was this?

Answer: In the early stages of a pandemic, several overseas plants stopped operation due to lockdowns ordered by local governments, and we were affected by parts shortages. However, employees at each of these bases worked as hard as they could so that operations could somehow continue. We think that this is the factor behind our strong earnings.

Question 6: Even in the difficult business environment, did the convenience store-type EMS have an effect?

Answer: This helped significantly in avoiding risk. For example, the factory in Ho Chi Minh City, Vietnam, suspended operations for nearly two months due to the lockdown, but during this period equipments were moved to Japan and production was continued. This was highly praised by customers in terms of our BCP (business continuity plan).

Kaga Electronics' EMS business

Question 7: How will Kaga Electronics overcome competition from other companies in this industry?

Answer: Traditionally in our EMS business, we have covered the process from procurement to verification, but there is little in this that differentiates us from others in this industry, and we think that if we continue on this trajectory, we will end up competing on estimates. In this environment, by beginning our relationship with customers from the development stage, traditional EMS (procurement, production, verification) can be designated as part of a series of transactions. Moreover, by including the added value of Kaga Electronics' development, we have more opportunities to make proposals to customers and our close rate will also increase.

Question 8: Resources are needed to work on development and design, and the closeness with customers also increases, so are there limits on the extent to which you can broaden your customer base?

Answer: At present, in our EMS factories we are working on making our production system visible. This system makes it possible to ascertain the status of operations within the factory, and is intended to strengthen the links between suppliers/customers and the company. After this system begins operation, it can be applied to other customers as well, so that even if the number of customers increases, we can make connections with our resources and development companies. We think that this will be effective in increasing customers further.

Question 9: Orders and inquiries look likely to increase, but have you set any limits on profitability and profit margins?

Answer: Our resources will be insufficient if orders increase but end with just a single transaction, so naturally we consider the future potential. Initially, we try to take on orders that might be small at first but have the potential to lead to major business in the future.

Kaga EMS Towada

Question 10: Have the strengths that Kaga EMS Towada built up during its days as Towada Pioneer Corporation borne fruit? During its Pioneer days, the company had considerable business related to car navigation systems and optical disc drives. Is there anything that is currently being utilized?

Answer: Kaga EMS Towada was Pioneer's car navigation production factory, so the assembly process for completed products in particular carried over much of the technology and knowledge built up during the Pioneer days. In the solder mounting process, Kaga EMS Towada continues its equipment development as well as its version upgrades for equipment, and the technicians remain employees of the company.

Question 11: Has Kaga EMS Towada introduced the Kaga Group's systems and equipments? Can you provide figures for areas of improvement, such as productivity and defect rates?

Answer: In the insertion parts mounting line, Kaga Electronics' equipments and image inspection machines have been introduced, and in the surface solder mounting line, monitoring systems and parts alarms have also been introduced. In addition, equipments to meet new requests and new specifications is being introduced in collaboration with the Kaga Electronics Group's overseas factories and production centers.

In terms of the defect rate, we monitor the solder joint defect rate (joints between each component terminal) with high international standards for quality assessment. For example, a single substrate has about 1,000 soldered connections, and our defect rate in this process is 2–3 ppm, which has not changed much since before. This rate of 2–3 ppm has been maintained, even though the types of production substrates and the items have increased, and we attribute this to the coordination with the EMS Business Division. Customers have been very impressed with this achievement, so we will continue to maintain this figure going forward.

In terms of productivity, on automated lines for some processes, such as surface mounts, we have achieved approximately double the labor-saving.

Question 12: What kind of manufacturing scale do you expect at the Towada Plant? Will the manufactured items change significantly in the next three to five years? Will there be any impact on the Kaga Electronics Group, which is the mother factory?

Answer: In the medium-term plan for the Towada factory, we expect a 20–30% annualized increase in sales over the next three to five years. In addition to the ongoing manufacture of car navigation systems, inquiries from Kaga Electronics Group companies are increasing and more products require production in Japan due to the response to country risks and the return to domestic production. As a result, we envision augmenting equipment at the Towada Factory and boosting production volume in parallel with capital investments.

Question 13: What applications and items are expected to increase going forward?

Answer: We will utilize the high quality and high reliability that the Towada Factory represents and focus on automotive and medical products. In automotive devices, since joining the Kaga Electronics Group, production consignments for substrates that require high quality have started and inquiries concerning automotive control-type substrates are also picking up. Inquiries concerning medical devices are also increasing through Kaga Electronics Group companies.

Question 14: Going forward, if manufacturing increases, is there space to increase the production lines?

Answer: The Towada Factory's building is 30,000 m². At its peak, there were 800 employees, but currently there are 290. In addition, there were eight surface mount soldering lines at the peak, so there is adequate space.

Question 15: About one person is assigned to each line, but going forward, are there processes in which manpower could be reduced further? Is it difficult to reduce manpower further?

Response: Only the surface solder mounting process has one person per line. This is because the mounting equipment has high-performance specifications, and we have improved efficiency within the company. Reducing manpower further would be difficult in terms of risk management and quality assurance.

That said, much of the work in back-end processes (soldering insertion components, assembly process) is done by people, so we are working hard to reduce the number of workers from the current 10 employees per line to eight to nine people.

Question 16: How long will it be until the surface mounting and back-end equipment needs to be replaced? As the items handled and the production amounts are expected to increase in the future, will they need to be replaced? Can this be addressed with the equipment that is already available?

Answer: The soldering mount equipment, for example, has a service life of seven years in terms of fixed-asset tax accounting, but is generally used for about 10–15 years. We boost productivity (recovery capacity) by introducing cutting-edge equipment, and replace equipment about every seven to eight years. However, equipment that does not require high-performance specifications is scrupulously maintained so that we can continue using it for 15–20 years.