

**FAQ on IR Day for FY2023/03**

September 22, 2022		
Q1	SPE	Supercritical drying is used for DRAM STI (shallow trench isolation) and capacitors. Does SCREEN counter against it with sublimation drying? There are concerns regarding residues after sublimation drying. Are there any solutions?
A1		We do not think that supercritical drying is a technology that achieves scaling economically. With regard to the concerns about residues after sublimation drying, we are improving the cleanliness level quite well in our joint development with our current partner.
Q2	SPE	The prospect of WFE for the next year (CY2023) is changing (decreasing). What do you think of achieving the sales goal for the next term (fiscal year ending March 2024, final year of the medium-term plan)?
A2		We are anticipating a decrease in WFE for the next year mainly in capital investment of memory customers. Our company whose exposure to memory customers is relatively low should be less likely to be affected from the influence of the reduction of capital investment. Therefore, we think that we can expect our sales growth continuously in the next year too. In fact, our production capacity cannot deal with every business inquiry at present, so even if we experience a negative growth rate of WFE in the next year (CY2023), we anticipate that our business plan for the next term will not be affected greatly because foundry and logic businesses have been strong.
Q3	SPE	Because the proportion of cleaning in WFE has stably remained at about 5 to 6% for the past several years, it is hard to imagine that the proportion will increase in the future. Please explain again what will be the major point of the changing.
A3		In order not to stop device scaling, it is necessary to reduce the number of random defects. We are promoting the technology development through close collaboration with our customers and have been providing technologies for high-level cleaning needs in a timely fashion. Therefore, we think that the result of our efforts will lead to an increase in the proportion of cleaning.
Q4	SPE	You explained that you have FEOL-like cleaning needs in back end of line (BEOL, the wiring process). What opportunities do you expect in the future?

A4		As scaling progresses, structures to be formed become more complex. When we pursue that point, scrupulous control is also required for cleaning in BEOL. For example, we recognize that new technologies including power supply from the backside of a device fall under the category of backend. Therefore, we think that we have opportunities to adopt/employ technologies we have accumulated so far through FEOL for backend too.
Q5	SPE	In the transition from FinFET to Nanosheet and Forksheet, how will SCREEN's business opportunities be affected by factors such as the increase in the number of around-gate cleaning times and the decrease in the number of BEOL processes due to the introduction of an EUV exposure machine?
A5		Even if the number of surfaces to be cleaned increases, it does not necessarily mean that the number of cleaning times will also increase proportionally, (although I believe it will definitely increase). The numerical contribution will be clarified by evaluations through pipelines in the future. If a Hi-NA lens is introduced to the EUV exposure machine, single patterning will be used instead of double patterning. In so doing, metal resist may be adopted. If that is the case, we expect that the number of cleaning processes for removing metal will increase for sure.
Q6	SPE	How old are the conventional hot DIW supply unit and the new-type hot DIW supply unit that were compared in your explanation of the reduction of environmental burdens? Does this technology have a competitive advantage compared to your competitors?
A6		The conventional model is just one or two years old and the new-type model was released within the past one year. We believe that this technology has competitive advantages in performance.
Q7	SPE	As a business opportunity with miniaturization, which of the drying technology and the selective etching technology will contribute to your business performance?
A7		At this time, it is difficult for us to clearly say how much each of the technologies will contribute to our business performance, but we are evaluating them to acquire new POR with both technologies.
Q8	SPE	What technologies for gas-phase process for selective etching do you have to compete with other companies? What are SCREEN's advantages over the competitors?
A8		We believe that wet process and gas-phase process are the only process available for selective etching. It is extremely difficult to understand the etching behavior in nano-level gaps; therefore, making a breakthrough by gaining a better understanding of it will be the technology to get ahead of the competition.
Q9	SPE	Will the fixed costs including development costs increase in the future?

A9		At present, we recognize that the percentage of the sales for development costs is slightly lower than that of our competitors. As show in our presentation, we are now advancing our development with an eye to 10 years ahead through multiple pipelines. From now on, we want to increase development costs antecedently to create competitive technologies.
Q10	SPE	We understood the background of your plan for increasing the composition ratio of cleaning to WFE well. However, we recognize that the ratio of cleaning in WFE has been decreasing despite the fact that the same thing was repeated over the past five years. Why can you say that the ratio will increase based on the fact in the past five years?
A10		The reason why we think that the ratio will increase is as we explained earlier. Because we had some times in the past in which the number of cleaning steps decreased due to change in patterning and device structure, we think that the ratio did not increase relatively.
Q11	SPE	Why does the ratio of the cleaning process outperform that of other process equipment (in WFE)?
A11		The biggest reason that the ratio of the cleaning process decreased in the past is that the number of patterning times decreased due to the introduction of the EUV exposure machine. However, we are reviewing the importance of rear surface cleaning to utilize the EUV exposure machine, which can contribute to an increase of the ratio of the cleaning process. At the same time, we think that our new effort regarding chiplets will also contribute to an increase in opportunity for the use of the cleaning process compared to that for the use of other process equipment.
Q12	SPE	If the recovery of CY2024 WFE estimate is delayed, are you thinking of postponing the investment in S <sup>3</sup> -5S (a new factory that is scheduled to start operating in January 2024)?
A12		We decided to build S <sup>3</sup> -5 this time because we thought we would need to increase our production capacity further to move into the next period of growth. During the period of the current medium-term plan, we intend to do capital investment to support the next medium-term plan, and we will continue the investment whatever the situation is. Because the equipment in which we need to invest this time is almost only its buildings, we think that it is possible to manage the increase of fixed costs and depreciation and amortization. In a medium- and long-term perspective, we expect that the WFE market will grow constantly, so we want to achieve a satisfactory level of performance in the next medium-term plan.
Q13	SPE	We want to ask you about strategies for memory business. Will you do development mainly for foundry customers without being aggressive about development for memory customers or will you draw up any strategy to gain market share of memory customers behind the scenes?

A13		People say that the memory area is our weak point and the numbers actually tell so, but it does not mean that we have given up doing development for memory customers. We have been getting steadily prepared to gain market share of memory customers and will take measures necessary to achieve that.
Q14	SPE	Does SCREEN have any advantage in the area of cleaning equipment for power semiconductor? We think that local cleaning machine manufacturers in China are also focusing their efforts on the development of equipment for power semiconductor. How is the competitive environment with them? Based on the assumption that the power semiconductor market will grow substantially in the next five years, how big is the business opportunity?
A14		We have continuously been developing equipment for small-diameter wafer including 200-mm or smaller silicon, SiC and GaN for a long time. Now it is time for us to demonstrate our ability. We want to be dedicated to developing equipment for power semiconductor whose market is expected to grow for the future. Through the active use of our process technologies accumulated with 300-mm products for the development of equipment for power semiconductor, which is called a legacy area, we want to be in a position of advantage over Chinese cleaning machine manufacturers.
Q15	SPE	SCREEN is currently losing market share and does not appear to be in a position to regain market share soon. Please tell us the possibility SCREEN may be able to expand its market share.
A15		We think that our market share will gradually be regained as miniaturization progresses. Semiconductor chips will be increasingly sophisticated and optimized for low-power consumption. For this reason, various changes in chiplet, device structure and material will become more and more important. Consequently, the development for the device structures and materials next to those we are preparing now will become more effective. We want to accomplish the development to regain our market share. We will also establish a mechanism to have an advantage over Korean competitors as well. Although our market share decreased temporarily, we will make efforts to increase our market share in the next medium-term plan too as a significant subject. We hope we can provide more concrete information when we present information about the next medium-term plan.
Q16	SPE	In the WFE assumption, how do you think the fluctuation of exchange rate will influence your business?
A16		The exchange rate we use in the WFE estimation is 1 US \$ = 130 yen for both FY2022 and FY2023.
Q17	SPE	In the WFE forecast you made this time, do you reflect changes of customers' investment plans after the first quarter financial results announcement?

A17		We reflect customers' investment plans that have been changed since the previous first quarter financial results briefing. In the WFE estimation for FY2022, we have already reflected changes of customers' investment plans that had been determined. Although we further need to closely examine the sales forecast for FY2023, we reflect the slow-down forecast as far as we can see at this time.
Q18	SPE	SCREEN expects positive sales growth in FY2023 with respect to the WFE negative growth in CY2023. Is this because the ratio of memory customers is relatively low or because the increase in proportion of the cleaning process to WFE is also reflected?
A18		The sales ratio of our company's memory products is relatively low; therefore, it is true that SCREEN is not seriously affected by slowing of investment in memory. In addition, people say that the growth rate of the WFE market will slow down in the next term, but we have not seen or heard any concrete information about such slowdown or change in transactions with our customers. Therefore, we have no significant changes in sales plan between the current term and the next term.
Q19	SPE	In the past three weeks, some memory customers who have business with your company have lowered the forecast for investment plan for the first half of the next fiscal year. Do you still think that your company will not be affected?
A19		Although we know that there is some change in the entire investment plan of our customers, we have not experienced a significant change in transaction with our company so far.
Q20	SPE	What makes you disable economic scaling of supercritical drying?
A20		High pressure is required to create a supercritical state and the hardware structure will be extremely complicated. For sublimation drying, on the other hand, we can use the existing equipment platform and achieve an uncomplicated structure. We also believe not only that the cost of supercritical drying equipment is high but also that supercritical drying contains some non-economic aspects such as CO <sub>2</sub> consumption and costs for running.
Q21	SPE	Supercritical drying has already been used for DRAM. Will you use sublimation drying instead in the near future?
A21		We have had the technology of supercritical drying and assessed it for a while, but we think that sublimation drying is better in view of the use for the mass production process. We will explore the merits of sublimation drying and proceed with replacement of supercritical drying with sublimation drying.

**Notes:**

SPE = Semiconductor production equipment business