

Advantest Corporation
FY2022 (Period ended March 31, 2023) Financial Briefing
Q & A Summary

April 26, 2023

Q: I see a bit of upside potential to your FY2023 sales forecast given that investment by China's indigenous chipmakers has picked up quite a bit and that things like ChatGPT have created more excitement lately. What do you think? Also, when did you formulate your forecast?

A: While there are parts of the market that are very depressed at present, we believe that the market will definitely grow over the mid/long term. It is true that our Chinese customers are actively investing, especially our fabless customers.

We formulated our sales forecast from the bottom up based on information compiled from our sales team in January and February. We believe that we will be able to maintain our market share and do not rule out the possibility of upside, but please take our forecast as our best guess considering that we do not have clear visibility on when the market will bottom out.

You correctly note that ChatGPT has created excitement in the market. Our understanding is that most of the relevant chipmakers either are or could potentially become our customers. We expect there to be implications for our sales in the second half of FY2023 or in FY2024. As such, we see now as the time to make solid preparations for future demand.

Q: You are forecasting FY2023 sales of ¥480 billion. Roughly speaking, how do you think that will split between the first and second half of the fiscal year?

A: In the first half of the fiscal year, we will continue to fulfill orders from our current backlog. Given that our customers have excess test capacity at present, we are trying through our conversations with them to identify when new demand is likely to arise. Our visibility on the second half of the fiscal year is low because test capacity and utilization rates differ from customer to customer, but we expect a recovery in the market to spur sales growth for us. We think our sales will probably be at least 10% higher in the second half than in the first half.

Q: What areas do you think are likely to pick up in the second half?

A: Our FY2023 outlook assumes that smartphone-related demand will pick up in the second half.

We expect functionality gains in the chips that our customers use for smartphone applications to spur greater test demand, but how great that growth is likely to be is something we will assess through the measurement and evaluation process.

Q: You are saying that you expect customers in the smartphone space to drive change in demand in the second half, but how are your customers in the server and other high-performance computing (HPC) spaces doing at present?

A: We are hopeful that HPC/AI-related demand will expand in 2024, and we think it is likely to start picking up in the second half of 2023.

Q: You are forecasting a year-on-year decline of ¥80 billion in sales for FY2023, but you expect your operating income to decline by ¥63 billion. Even taking your marginal profit into account, that seems like a sharp decline in your operating income. Could you share your thinking on gross profit and what you expect in terms of product mix?

A: Our gross margin was 57% in FY2022, but we expect that to narrow to around 55% in FY2023. We anticipate a less favorable product mix, but a 2-point decline in the gross margin should not have that great of an impact on our operating income. We are working to pass through higher parts and materials costs, so we are taking the steps that we can to get our gross margin above 55%. However, I understand that the decline we are forecasting in our operating income looks somewhat steep. We will be investing in new projects that will be getting off the ground in 2024 and beyond, making capex outlays to expand production in preparation for the future, and continuing to invest in hiring talent for Advantest Cloud Solutions™ and other data businesses that we are working on. Of course, we recognize that we are in the midst of an earnings downturn and intend to avoid any unnecessary expenses and save where we can. However, we believe that we are in a phase where we first need to spend to ensure new leaps forward in the future, so we view this downturn in our operating income as a step we must tolerate on our path forward.

Q: Given that you expect your earnings to be down in FY2023 versus FY2022, what do you intend to prioritize in terms of your R&D spending and capex?

A: On the R&D side, we plan to continue to add to our developer headcount and to step up our development efforts on a variety of projects. As such, we expect our R&D spending to rise from ¥60.1 billion in FY2022 to ¥63 billion in FY2023.

On the capex side, we specifically plan to add to the equipment in our factories. We are building a new factory in the US state of Arizona to produce IC test sockets for semiconductors, and we plan to invest in robotics and other manufacturing equipment for

that factory. We have also received subsidies from the federal and state government. We are also planning to acquire a Taiwanese company called ShinPuu that manufactures test boards among other products. It needs additional production capacity to address demand from customers in Taiwan and the US. Because of these solid forward-looking investment plans, we anticipate a total capex outlay of ¥21 billion in FY2023, but that is less than what we spent in FY2022.

By contrast, we intend to hold off somewhat on the sort of office environment improvements that we have been making over the past two years or so. As such, ours is a nuanced plan that calls for solid investment in some areas and restraint in others.

Q: What are your lead times like at present?

A: Through 3Q FY2022, our lead times had been nine to 12 months, but they have now improved to six to nine months. These shorter lead times are one of the reasons that we were able to book more sales in 4Q than we had anticipated.

Q: Approximately when do you expect your delivery lead times to return to the usual two to three months, and what steps will you take to get back to normal delivery lead times? Also, have semiconductors become any less difficult to procure? Please update us on that situation and its relevance to the growth in your inventories.

A: It was about three years ago that our delivery lead times were two to three months. Once the semiconductor market embarked on its upward trajectory, they gradually grew longer. Looking back on it, I believe that it was in the summer and autumn of 2022 that the delivery lead times for the parts and materials that we procure were at their longest. There have subsequently been delays with some parts and materials, but as deliveries have begun to come in more smoothly, our lead times have also shortened.

In 2022, we booked parts and materials quite a bit in advance, especially if their lead times were long. Our suppliers' ability to supply also increased. As such, our inventories are rising slightly. We will naturally exercise appropriate control over our inventories, so we believe that the current levels will prove to have marked the peak.

Other players had also in the past found themselves unable to keep to their delivery dates because they had not arranged for the inventories that they needed. As a result, all of the players established appropriate levels of inventory this time, which means that our lead times are unlikely to return to the two-to-three-month range for some time. However, our suppliers did not add capacity in the true sense, so if the market were to enter another uptrend, we see the possibility of supply shortages occurring again. We will be working on

the question of how to address this risk of supply-demand volatility as our top challenge in FY2023.

Q: How sizable were the inventory valuation losses in your system-level test (SLT) business? Also, your forecast is for flat SLT sales in FY2023. I understand that that includes your assumption that you will book some sales originally anticipated in FY2022 in FY2023 instead, but can you explain the reasoning behind that solid outlook? Has the number of your customers decreased?

A: Worsening conditions in the memory semiconductor market drove down memory-related SLT demand, and users transitioned increasingly to newer generations of memory chips, leading to our decision to recognize valuation losses on relevant test systems. We recognized roughly ¥3 billion in inventory valuation losses in 4Q FY2022, and while we are not disclosing exact figures, I can say that at least half of that amount was in the SLT business.

The fact that particular customers account for such a large percentage of the sales from our SLT business is an issue, but because of conditions in those customers' businesses, the recognition of some sales was pushed into FY2023. Furthermore, the SLT business also post sales from our division dealing in consumables. Our expectation for sales to hold flat year on year in the SLT business takes into account the fact that demand for consumables tends to turn upward when destocking in the semiconductor market calms.

We have not seen the number of our customers decline. We want to ready ourselves for a further leap forward in 2024 as our existing customers' earnings recover and we acquire new customers.

Q: You look for the SoC tester market to be down between 5% and 15% in 2023, but what are the main variables that account for that range? Also, to what degree have you factored in HPC-related demand?

A: In our view, the extent to which end demand for smartphones and other key consumer electronics picks up will be the primary determinant of where the market lands within our estimated range. We do not speak in quantitative terms regarding how large a portion of the 2023 SoC tester market we expect HPC/AI-related testers to account for, but I can say that we estimate it to be the largest of all the applications that comprise the tester market.

Q: This means that you expect 2023 to be a second straight year of decline in the size of the tester market, but what is your outlook for the market in 2024?

A: We are engaged with our customers and have a handle on their device development plans and the like. Projects at customers starting to adopt leading-edge nodes will need testers for evaluation purposes based on their yields. There are multiple projects on which we could see sales grow in 2024. While we expect the size of the market to be down in 2023, we are hoping that in 2024 it will be equal to or greater than that of 2022.

Q: What do you expect your shares of the markets for SoC and memory testers to be in 2023? It seems that your peer is seeing some success in testers for DDR5 and other high-speed memory chips, but what do you expect your share of the market to be?

A: We expect to have somewhere between roughly 55% and 60% of the total semiconductor tester market in 2023. At present, we think that our share of the SoC tester market will be somewhere between around 55% and 60% and that our share of the memory tester market will be somewhere between roughly 50% and 55%. It is true that we have competition in the high-speed space, but we believe that we maintain our advantage in DRAM testing.

Q: Numerous players continue to develop chips for HPC applications. Is the number of potential customers for Advantest that are pursuing such efforts with an eye to mass production growing?

A: The number of potential customers for Advantest is growing. We are already involved in projects with companies that you all know and that are likely to come to mind. We are quite deeply involved with customers in the US. In addition, China, Japan, Taiwan, South Korea, and Europe may also give rise to such players going forward, but we have yet to see any especially striking developments in those geographies.

There are companies in China that are already our customers that may start mass production, but we do not have any solid visibility on that as of yet.

Q: Do you mean that you are unclear at present as to when potential customers in the US might start ramping up investment in a meaningful way, but that you hope it will be in either the second half of FY2023 or in FY2024?

A: Device design and prototyping efforts are already underway, and we are involved in those projects. However, our understanding is that no concrete plans have been finalized regarding locations or other aspects of mass production, partly in consideration of the regulatory measures being put into place globally.

Q: You say that you expect a recovery in HPC in 2024 driven by promising applications like generative AI. Is that view backed by actual inquiries from customers? Also, how much

should we expect demand for the relevant testers to boost your earnings? Please describe your expectations and the timeline that you anticipate.

A: There are multiple specific projects in which we are engaged with customers, and chip design and prototyping efforts are actually underway.

Processing units with strong computing capabilities for applications such as ChatGPT are part of the semiconductor market that will grow going forward, and we have successfully established relationships with customers that will be developing such chips. We believe that as ChatGPT is put to more use, greater demand for consumer electronics will be sparked, in turn spurring advancements in the performance of data centers and the like. This chain of events should also result in further growth in semiconductor demand. We are hoping to leverage our robust customer base to capture such demand. That said, the business environment remains uncertain, so we would like to provide you with an update once we have had the opportunity to assess the situation for around a quarter or two.

Note

This document is prepared for those who were unable to attend the financial briefing and is intended only for reference purposes. The original content has been revised and edited by Advantest for ease of understanding.

This document contains “forward-looking statements” that are based on Advantest’s current expectations, estimates and projections. These statements include, among other things, the discussion of Advantest’s business strategy, outlook and expectations as to market and business developments, production and capacity plans. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “project,” “should” and similar expressions. Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause Advantest’s actual results, levels of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking statements.