

ULVAC, Inc.

Q&A for FY2022 1Q Web Conference (Nov 11, 2022) and Analyst meetings

Orders received

- 1. Orders received remained high at 66.6 billion yen, but how did that progress against the internal plan? What is the outlook for 2Q and beyond?
- A: Orders received were almost in line with the plan. We expect a high level of orders in 2Q and beyond, mainly in the electronics field.

In semiconductor and electronic sector, (1) power devices are expected to grow significantly due to large projects in China and increased investment in Japan, and electronics are expected to remain strong in 2Q and beyond, and (2) semiconductors are uncertain due to the current restraint on memory investment and the impact of Chinese semiconductor regulations in the US. However, we have started transactions with new customers and entered into new processes, which are nurturing the seeds for growth over the medium to long term. 1Q orders for semiconductors and electronics reached a record high level on a quarterly basis.

FPDs are expected to be on the margins this year, partly due to a reactionary decline in investment in LCDs for IT panels, which were active in the previous year. Although there will be some fluctuation depending on the quarter, orders for FPD are expected to be almost as planned for the first half of the year,

Orders for components were at a high level, partly due to advance orders from manufactures, etc., in response to longer delivery times for parts and materials.

Sales and Profits (margins), Parts Procurement

- 2. Why did the gross profit margin of 29.3% decrease from the previous year's 4Q? How are sales and operating profit (margin) progressing against the internal plan?
- A: The decrease in gross profit margin from the 4Q of the previous fiscal year was due to lower sales. Sales fell slightly short of plan and operating profit was also lower than plan due to the impact of longer delivery times for parts and materials. In addition, profit margin fell short of plan due to the impact of longer delivery times for parts and higher parts costs, which curbed the effect of profit margin improvements from strengthening manufacturing capabilities.

From the 2Q onward, the profit level and profit margin are expected to improve because (1) sales are expected to be around 65 billion yen, supported by a high level of orders, and the profit margin is expected to improve as sales increase, (2) the sales mix will improve in the second half as the portion of semiconductors and electronics, which has a high profit margin, increases, and (3) the long delivery period problem of parts and materials is expected to gradually ease in the second half, and the effects of efforts to strengthen manufacturing capabilities are expected to gradually recover.

3. Why has the improvement of profit margin by strengthening manufacturing capabilities been restrained?

A: The improvement of profit margin by strengthening manufacturing capabilities has been difficult to achieve due to the following reasons: (1) Procurement of parts and materials with long delivery lead times has become a priority since 3Q FY2021, making it difficult to negotiate volume cost reductions through standardization and commonization of parts, and (2) Reorganization of production processes and additional installation after delivery are required, and then productivity improvements that have been undertaken to strengthen manufacturing capabilities are becoming less effective. The problem of long lead-time for parts and materials is expected to ease gradually in the second half of the fiscal year, and the effects of efforts to strengthen manufacturing capabilities are also expected to recover gradually, so we expect profit levels and profit margins to improve.

4. What parts and materials are taking longer delivery times? What measures are being taken?

A: The availability of electronic parts continues to be difficult, and the long delivery times continue with the scope expanding from parts and materials to products.

Control systems, power supplies, mass flow controllers, communication boards, etc. are all taking longer to deliver, with procurement lead times of up to a year or more. For some products, it is difficult for suppliers to answer the delivery dates.

In addition to the advanced procurement of parts and materials, cooperation with suppliers in procuring raw materials, early procurement of parts for standard units, and a cooperative system based on regular meetings with manufacturers, we are also working to secure parts globally through cooperation with overseas group companies.

We also share information on parts that are difficult to obtain with our suppliers and some of our customers, and are working together to secure parts. In addition, we also replacing parts by changing specifications.

5. How much has the equipment lead time increased?

A: It varies depending on the equipment. For example, in semiconductors and electronics, the lead time, which used to be kept at around six to eight months through various measures, is now exceeding one year due to the longer delivery time of parts and materials.

6. What is the impact of higher parts procurement costs and logistics costs?

A: The increase in parts and materials procurement and logistics costs were absorbed in the past by price negotiations on a case-by-case basis, as our equipment business often involves price negotiations for each quotation, However, panel makers, for example, are facing a difficult income and expenditure situation, and price negotiations are becoming more severe, and in some cases additional costs cannot always be fully absorbed. The effect of improved profit margins by strengthening manufacturing capabilities is also being held back by longer delivery times for parts.

- 7. What was the breakdown of orders and sales by application for semiconductors & electronics and FPDs in this 1Q?
- A: As per the Appendix.
- 8. What is your 1Q operating margin ranking?
- A: As per the Appendix.

Semiconductors and Electronics

- 9. What is the impact of the U.S. restrictions on Chinese semiconductor exports, etc.?
- A: In terms of memory, logic and other semiconductors, the impact on existing transactions with Chinese semiconductor manufacturers will be limited, as their existing transactions with us are not that large.

There are some new transactions that we had expected to start this fiscal year, and we are currently confirming the possibility that they may have an impact of up to about 5 billion yen. In the area of power devices and various electronic devices, which we expect to grow in the China business, there is no particular impact from U.S. semiconductor regulations and we will be able to compensate for this because power devices and other electronics-related products are performing well.

- 10. Many believe that investments related to semiconductors such as memory will slow down in 2023. How do you think this will affect ULVAC's orders?
- A: Although there is a sense of a slowdown due to the shift from 1H to 2H in the memory and logic sectors, entry into the metal hard mask (MHM) process has provided an opportunity to expand into other processes, not only in the logic sector, but also in the memory sector. Actually, we have also begun doing business with new customers by entering into other processes, and the seeds of medium- to long-term growth are emerging.
- 11. Orders for power devices in the 1Q exceeded 10 billion yen, which I believe was the highest level ever on a quarterly basis. What were the weights by region, equipment and method (IGBT/SiC)?
 - Will the business continue to perform well in the 2Q and beyond?
- A: By region, China accounted for more than 60% of orders for power devices in 1Q FY 2022 due to large SiC orders. Japanese investment also increased, accounting for over 20%, while Taiwanese investment accounted for around 10%.
 - In China, ion implanter for SiC has a high weighting, and in Japan, sputtering systems for IGBT and SiC are the main products.
 - In the 1Q, orders were notably high due to the contribution of a large order worth around 4-5 billion yen in China, and we expect a high level of orders in the 2Q and beyond, mainly in Japan and China.

12. Please tell us about investment trends in optical device, electronic device, etc.

A: We received a large order for μOLED used for AR/VR in 1Q and expect to receive another order for μOLED from another customer in 2Q and beyond.

In addition to μ OLED, orders for various electronic device-related products are also at a high level due to increased production investment from Japanese electronic device manufacturers, and investment for increased production and technological innovation in Japan and China are expected to continue in 2Q and beyond.

FPDs

13. Is there ongoing investment in LCDs? What is your order outlook for FPDs this fiscal year?

A: The order plan reflects the fact that LCD panel prices are falling and investment is expected to decrease significantly compared to the previous fiscal year. Chinese companies are competing with each other in terms of productivity and price for LCDs used in IT panels such as for automotive applications, and they are continuing to invest in large glass substrates (G8.6) to improve productivity.

Investments in productivity improvement and high-definition modification of G6 OLED panels for smartphones continue in China, Korea and Japan.

In addition, in preparation for investment in large-substrate OLEDs for IT panels by top manufacturers in Korea and China, we have installed G8.5 multi chamber sputtering equipment at our Korean plant and are having sampling and other tests conducted to confirm the advantages of low particle counts and other features in preparation for mass production. We believe that investment for mass production will begin in the second half of this fiscal year or next fiscal year.

<Appendix>

Breakdown for Order Received

Order Received	FY2022 1Q
Semiconductor/ Electronics(¥1billion)	29.3
•Memory	less than 20%
·Logic	mid-10%
·Electronics Device	mid-20%
·Power Device	about 40%
 Packaging 	several %
FPD(¥1billion)	9.9
·LCD	mid-30%
(for large-sized)	(100%)
•OLED	more than 60%
•Others	several %

Breakdown for Net Sales

Net Sales	FY2022 1Q
Semiconductor/ Electronics(¥1billion)	17.1
•Memory	more than 30%
•Logic	more than 10%
·Electronics Device	mid-20%
•Power Device	about 20%
 Packaging 	more than 10%
FPD(¥1billion)	16.4
·LCD	more than 50%
(for large-sized)	(70%)
•OLED	more than 40%
•Others	less than 10%

Operating Profit Margin Rank of FY2022 1Q

Coperating From Margin Frank Co. F. 12022 FQ	
Rank	Segment
1	Components
2	Semiconductors and Electronics
3	General Industries
4	FPDs
5	Others
6	Materials

Overall average is between 2) Semiconductors and Electronics and

3) General Industries