

ULVAC, Inc.

Q&A for FY2018 business results presentation (held on August 8, 2019) and Analyst meetings

【Overall】

- ① Please tell us about your current business environment and growth strategy.
- A : FPD-related investment will be a landing place in terms of orders for the time being, as business negotiations for LCDs for large-sized TVs will be completed and the next investment of OLED for our customers is expected next year. However, with the advancement of smart society, fields where ULVAC's technical capabilities can contribute, especially semiconductor electronics, are expanding dramatically, and we believe that medium- to long-term growth opportunities are great. In order to achieve growth in the electronics field, we are also working on strengthening our development system in collaboration with leading global companies and cutting-edge laboratories. ("Growth Strategy" posted on financial results briefing materials P23 and later)

【FY2018 consolidated results】

- ② What is the allowance for doubtful accounts recorded in FY18 and how much was it? What about risk management?
- A : Due to concerns about uncollectible large-scale receivables at some FPD / PV related customers, allowance for doubtful accounts of ¥ 2.4 billion and with an inventory valuation loss of 400 million yen, total of 2.8 billion yen was recorded. This time it could not be diverted since it was a customized device which is a special case. We will continue to strengthen the credit management system.
- ③ Eventually, how much was the OLED related additional costs? Will it occur in FY19?
- A : Although it was explained that there is a possibility of OLED additional cost of about 3 billion yen at the time of disclosure of earnings revision in February, it decreased by several hundred million yen and recorded 2.4 billion yen. Necessary treatment has been provided and it will not occur in this term (FY2019).
- ④ What are the operating profit margin ranks by segment in FY18?
- A : 1) Components 2) Semiconductors / electronics 3) Others 4) Materials 5) General Industries 6) FPD / PV. The overall average profit margin is between 3) Others and 4) Materials.

⑤ The reason why sales in FY18 did not meet expectations.

A : It was due to a shift into the current fiscal year in some customer investment plans related to FPD and semiconductor electronics.

【FY2019 Consolidated Forecast】

⑥ If there is no allowance for doubtful accounts and additional OLED costs in FY19, will the profit margin be a little higher?

A : Although the impact of the allowance for doubtful accounts that occurred in FY18 will be eliminated, there is an expectation of an increase in research and development expenses and an increase in development-related depreciation expenses in the future. Profitability is expected to improve as shown in the forecast due to an increase in the ratio of OLED-related sales, which is relatively low in profit, and the impact of a decrease in sales.

【FPD/PV】

⑦ What are the future prospects for FPD investment? What is the background to the decrease in FPD orders and sales in FY2019?

A : The large-screen TV LCD factories in China are scheduled to start operations from 2019 to 2021, but large-scale negotiations have been completed, and the OLED investment negotiations for smartphones of our customers are likely next year, so this year's FPD related orders and sales are expected to decline. With the full-scale operation of LCDs for large-sized TVs in China, it is anticipated that full-scale investment in large-screen OLEDs (due to expansion of OLED applications) for differentiation will be expected mainly by South Korean panel makers, and we believe that ULVAC's strengths can be utilized. (See financial results briefing materials P11-12)

⑧ What are the expected orders for OLED investment and ULVAC in FY2019?

A : Investment in OLED for smartphones in China is expected to be active. We divide the share in the Chinese market with Japanese competitors. ULVAC received orders in the third quarter of the previous fiscal year. However, the order received amount is expected to decrease as the next order is expected next fiscal year.

⑨ Breakdown of FPD orders received and forecasts.

A : Orders received in FY18 related to FPD was 89.4 billion yen, with less than 50% for LCDs (mostly for large-sized panels), more than 40% for OLEDs, and more than 10% for others. The forecast orders in FY2019 related to FPD is ¥ 62.3 billion yen, LCD is over 30% (mostly for large-sized panels), OLED-related is less than 50%, others are less than 20%.

⑩ How about the solar power generation related activities in FY2019 and the perspective?

A : Capital investment plans for high-efficiency solar power generation are prosperous mainly in China. Because it places emphasis on investment profitability, price competition with competitors is fierce, and there are strong demands to reduce the initial investment amount. Therefore, it is necessary to halve the manufacturing cost, and we intend to make it more competitive by shifting to Chinese production. The market is huge and we will challenge.

【Semiconductor / Electronics】

⑪ When do you expect to resume investment in semiconductor memory? From when will it contribute to business results?

A : Memory companies made active investments in 2017-2018, resulting in excessive supply, and prices that had soared sharply dropped. For this reason, memory companies began to postpone their investment from the end of 2018, and initially they were expected to resume from the middle of this year. However, due to the trade dispute between the US and China, the full-scale resumption of investment is likely to carry over from next year.

⑫ In FY2019 forecast, Semiconductor/electronics segment will grow. What will increase specifically?

A : Memory such as DRAM, PCRAM, logic, communication devices, sensors, power semiconductors, etc. are expected to grow.

⑬ What is the potential of the PCRAM market ?

A : PCRAM has the same processing speed as DRAM, and like NAND, it is a memory that can be stored even when the power is cut off. PCRAM has been put to practical use to realize faster and energy-saving servers such as data centers. Installation on AI chips for edge devices is also expected. ULVAC is the only supplier of PCRAM mass production deposition equipment and we are confident that the business will grow as the market grows.

⑭ What are the current trends in logic and future orders ?

A : From the previous fiscal year, two major companies decided to adopt ULVAC's sputtering process for miniaturized cutting-edge products in the logic field. Orders are also received in FY2018 4Q. It is a great experience that we were able to enter the logic market for the first time, which is expected to have a stable investment, similar to the memory market size such as DRAM and NAND. At present, it takes a while for a large-scale order to be received, since it is at a stage where semiconductor manufacturers are developing a business for miniaturized cutting-edge products to their customers,

and ULVAC's plan is to expand the business to the same level as DRAM / NAND.

⑮ Breakdown of semiconductor electronics order results and forecasts

A : Orders received related to semiconductor electronic devices in FY2018 was 38.8 billion yen. Approximately 40% for memory-related, mid-single digit for logic, less than 30% for electronic devices, mid-10% for power semiconductors, mid-single digit for packing and few% for LED.

The forecast orders related to semiconductor electronic devices in FY2019 is 50.1 billion yen. Less than 40% for memory-related, less than 10% for logic, more than 30% for electronic devices, mid-10% for power semiconductors, mid-single digit for packing and few% for LED.

⑯ Which fields related to electronics are expected to see future growth?

A : Currently, communication devices, sensors, power semiconductors, etc. are contributing, and in the future, packaging and optical film fields are expected to expand.