

## ULVAC, Inc.

### Q&A for FY2019 1H business results presentation (held on Feb 14, 2020) and Analyst meetings

#### **[FY2019 1H consolidated results]**

#### ① **What is the operating profit margin rank by segment in FY19 1H?**

A: 1) Components 2) Semiconductor/electronic devices 3) Others 4) General Industries  
5) FPD / PV 6) Material. The overall average OP margin is between 3) Others and  
4) General Industries.

#### ② **Breakdown of FPD, semiconductor electronics order received and net sales (1H results)**

A: Excluding the ¥3.4 billion for the order cancelation occurred in 1Q, the FPD orders  
received should have been ¥34.6 billion.

Mid-50% is for LCDs (mostly for large-sized panels), more than 40% for OLEDs,  
and few% for others.

The sales in FY19 1H related to FPD was ¥35.0 billion, mid-40% for LCDs (mostly for  
large-sized panels), more than 50% for OLEDs, and few% for others.

Orders received related to semiconductor/electronic devices in FY19 1H was  
¥24.0 billion. Mid-30% for memory-related, less than 10% for logic, more than 30% for  
electronic devices, less than 20% for power devices, few% for packaging.

Sales related to semiconductor/electronic devices in FY19 1H was ¥21.8 billion.  
Approximately 30% for memory-related, more than 10% for logic, less than 30% for  
electronic devices, less than 20% for power devices, less than 10% for packaging.

#### **[FY2019 revised consolidated forecast]**

#### ③ **The reason why the revised operation profit declined by ¥7.5 billion while the revised Net sales declined by ¥7.0 billion.**

A: Comparing to the initial forecast,

1) Impact of decreased sales: -¥2.1 billion

(Sales -¥7.0 billion × Initial gross profit margin 30.1%)

2) Order cancellation in 1Q: -¥0.2 billion

(Sales, Cost of Sales: -¥2.6 billion + Reversal of allowance for doubtful accounts  
¥2.4 billion which was booked in FY18 4Q)

3) Actual SG&A increase: -¥1.0 billion

[(Initial SG&A forecast: ¥37.9 billion + Reversal of allowance for doubtful  
accounts: ¥2.4 billion) – revised SG&A forecast: ¥39.3 billion.]

4) Increase of the manufacturing fixed costs, etc. in the condition of decrease in sales:  
-¥3.6 billion (-¥2.1 billion increase of manufacturing fixed costs within -¥3.6 billion)  
Manufacturing fixed cost percentage increase from 21.7% to 23.5% (+1.8%) ,  
FY2019 revised Net sales forecast ¥198.0 billion × -1.8% = -¥3.6 billion  
(Manufacturing fixed cost increase: -¥2.1 billion, Impact of decreased sales: -¥1.5 billion)

5) Decrease of Gross profit margin: -¥0.6 billion (-0.3%)

The total of 1) to 5) resulted in operating profit decrease of ¥7.5 billion, exceeding sales decrease of ¥7.0 billion.

Of this, manufacturing fixed costs increased by ¥2.1 billion and SG&A expenses increased by ¥1 billion, as a result, the total fixed costs increased by ¥3.1 billion, mainly due to development costs increase.

**④ The increase in manufacturing fixed costs of ¥2.1 billion and SG&A expenses of ¥1 billion is said to be due to the execution of the development, but do you increase the fixed costs when on the other hand the earning forecast has been revised downwards?**

A : The number of development projects working with the customers are increasing. If we miss the opportunities now, we will not be able to enter into the market. In order to capture the future business opportunities as smart socialization progresses, it is now necessary to work on the development with the customers.

**⑤ The explanation of the increase in fixed costs was mainly related to development costs. In what fields and when will it contribute to sales?**

A : The timing of contribution to sales differs from project to project. For example, communication devices, power devices, sensors, etc., which are actively engaged in technological innovation in response to the 5G / smart society, will contribute to business in a relatively short period of time, for example, about six months to one year.

For PCRAM, a full-scale investment has not started yet, but the number of customers working on mass production development is beginning to be counted with both hands. We expect that the leading customer will make investments from the next FY and onwards. For batteries, in-vehicle applications require time to verify safety, etc., but for lithium batteries, we are undergoing mass production R & D with multiple companies and it is likely to grow significantly. For Packaging, we expect it to grow significantly within three years.

**⑥ Breakdown of FPD, semiconductor electronics order, sales (revised forecast)**

A : Excluding the ¥3.4 billion for the order cancelation in 1Q, the FPD orders received is ¥34.6 billion.

More than 40% is for LCDs (mostly for large-sized panels), more than 50% for OLEDs, and mid-single digit for others.

The full year sales forecast for FY19 related to FPD is ¥67.4 billion, mid-50% for LCDs (mostly for large-sized panels), more than 40% for OLEDs, and few% for others.

For semiconductor/electronic devices, the full year order forecast in FY19 is ¥51.1 billion. More than 30% for memory-related, approximately 10% for logic, more than 30% for electronic devices, less than 20% for power devices, mid-single digit for packaging.

The full year sales forecast in FY19 is ¥46.8 billion. More than 30% for memory-related, approximately 10% for logic, more than 30% for electronic devices, less than 20% for power devices, mid-single digit for packaging.

### **【FPD order trend】**

#### **⑦ Why was FPD orders suddenly revised downward sharply?**

A : We did not expect this much delay for FPD in the fall of last year. In the past, it was questioned if China really will invest or not, but at the end, China mostly executed the investment. We had that thought until November last year, but we began to recognize the severe situation around December.

As for LCDs for large TVs, large factories began operating in China last year, and panel prices dropped sharply. The Korean manufacturer had to make a decision to adjust their production due to this drastic drop in panel prices and also led to the postponement of investment.

Regarding OLED for smartphones, we believe there is no change in the investment trend in China, but our orders declined due to the postponement of our investment projects that we anticipated for sputtering equipment for backplanes.

#### **⑧ What is the order backlog for FPD at the beginning and end of FY2019?**

A : The beginning of the term was slightly under ¥60 billion, and the end of the term is expected to be slightly over ¥20 billion.

#### **⑨ How much was the backplane and evaporation deposition equipment orders for OLED this 1H? What is the competitiveness of Backplane sputtering equipment?**

A : The OLED investment of our customer (China) was large in FY18 3Q, and the next investment is expected to be in the next FY. As there is no investment negotiation in this FY, the weight of the Evaporation deposition equipment is low. Orders are mainly for backplane sputtering equipment, but as Korean equipment manufacturers are gaining competitiveness, the competition is intensifying. We will develop the business firmly by improving the performance and increasing cost competitiveness as well.

**⑩ What are the share of sputtering equipment for large LCD TVs and backplanes for small and medium OLEDs for smartphones?**

A : The share of G10.5 sputtering equipment for large TVs is over 90%, which we have an overwhelming strength. We believe that we can leverage our strengths by providing large equipment solution with the shift to medium and large substrates of OLEDs. On the other hand, Korean manufacturers have been increasing their market share by taking advantage of their cost competitiveness for backplane sputtering equipment for small and medium-sized OLEDs for smartphones. We will be working to secure the market share by improving equipment performance and reducing cost.

**⑪ Will next year's FPD orders be higher than this FY? If so, why?**

A : For the next FY, we will explain it in the medium-term management plan in August. But considering the bellow factors, we are planning to have more orders in the next FY than this FY.

- 1) Planning to have the next business negotiation for the next FY with our Chinese customer from whom we received a large order in the previous FY for OLED Evaporation deposition equipment and are focusing on the installation in this current FY.
- 2) The postponed large-screen TV LCD project, which was planned for this current FY is planned as an investment with a view to convert the equipment into OLED backplane.
- 3) Aiming to recover by reducing costs for small and medium-sized OLED backplanes However, the impact of the coronavirus needs to be confirmed.

**【Semiconductor/electronics】**

**⑫ In the semiconductor logic field, how did you enter into the market despite the strong competition? How much volume can you expect in the future?**

A : 6-7 years ago, Lam Research acquired Novellus and substantially withdrew from the sputtering business, so there was a request from the logic foundry who disliked purchasing from only one company. However, no matter how good the proposals was, replacing the existing process was difficult due to the "Copy Exactly" requirement. This time, with the introduction of EUV, a new process was required in the fine process and the material changed at the same time. We challenged the new process and gained a reputation that we could meet the required performance better than our competitor in the most difficult process. We consider this as a very big step and an entry ticket to logic foundry business. Approximately 10% of semiconductor electronics' current sales forecast of ¥48.6 billion is logic, and in a conservative point of view, we can expect ¥1 to ¥2 billion sales increase every year in this 1-2 year. We will grow further by expanding the nominated process and customers.

**⑬ What is the current situation and future growth of semiconductor/electronics?**

A : For electronics (communication devices, sensors, power devices, etc.) are performing well and growing as planned. For semiconductors, we initially expected that memory investment would revive in the second half of the FY, but recovery is likely to be a bit slow. However, both NAND and DRAM are beginning to see a resumption of investment, so it is expected that full-fledged operations will begin around mid of this calendar year. Logic Foundry outperforms the plan due to the customers has pulled in their investment. They have announced to strengthen the investment for cutting-edge nodes and we look forward to it in the future.

Although PCRAM is slightly behind our expectations, we anticipate that the leading manufacturers will begin to make full-scale investments, which will lead to orders from summer to autumn this year. Existing DRAM manufacturers have been working on mass production development to respond to the trend of replacing DRAM with PCRAM, and already introduced our equipment. However, PCRAM will compete with their own product, DRAM, and at this stage they are waiting if the replacement from DRAM to PCRAM is judged to be progressing. If so, there is a possibility that the investment will accelerate.

**[Performance from next FY onwards]**

**⑭ In terms of business results from next FY onwards, orders for FPDs have declined significantly this year, so the sales are expected to decrease next FY. If so, will your consolidated results be in a loss? Are you planning to lower the costs?**

A : The plans for the next FY and later will be shown in the explanation of the mid-term business plan in August. However, we believe that the significant decrease in FPD orders in this FY will affect sales in the next FY, so the FPD sales will fall from this FY. FPD orders and sales are likely to be in the adjustment phase for about one and a half to two years.

However, we do not think the consolidated results will be in a loss for the next FY.

Sales of FPD will decrease in the next FY, but orders will increase due to anticipation for the OLED evaporation deposition equipment. Orders for semiconductors/electronics will also increase, and the consolidated orders is expected to increase.

In the new medium-term management plan, we will also work on reviewing the cost structure. Since last year, we have been working on management reforms to improve the constitution. We will allocate management resources such as human resources to growing fields such as semiconductor/electronics.

- ⑮ **Regarding the review of the medium-term management plan, you said you will also implement management reforms to strengthen the management base. What are the main points? How do you deal with management issues such as development investment, business portfolio, and management efficiency? Could there be a significant costs occurrence, such as restructuring costs?**

A : (Initiatives for development)

ULVAC emphasizes research and development, and will continue to work with customers on technological innovation in the next FY and onwards to expand the business opportunities. Of course, we will prioritize the projects that are likely to be commercialized, continue to invest in development to capture business opportunities that are expanding through the development of the smart society. As most of the customers are overseas, our R & D human resources capable of technology sensing are allocated also in overseas, but it is also necessary to develop domestic recipients that will lead the equipment development of each division. We will work on reviewing the development system that can correspond to the speed of the market changes and how to collaborate with other companies.

(Business portfolio)

The FPD business has been supporting the whole business until now, which as a result, has slowed down the reforms. We have advanced the shift to semiconductors/electronics two years ago. In the future, we will further invest in human resources for semiconductors/electronics to seize business opportunities. We will continue to rotate the human resources more than ever. We will also strengthen the Components, Materials, Customer support, etc.

(Management efficiency)

We will of course work on the cost reduction. The development of the basic business system will also be promoted.

From the perspective of improving group management efficiency, we do not aim to reduce the number of entities, but rather work on improving efficiency and adding value. For example, two presidents for two companies will be reduced to one president for two companies to promote substantial integrated management. We will also consider to collaborate with outside parties by taking advantage of our factory location as a value. We do not expect to record significant costs, such as the cost restructuring in the past.

### **【Impact of the coronavirus】**

- ⑯ **Impact of the coronavirus**

A : Employees (Japan, South Korea, Taiwan) who went to Wuhan for installation have been evacuated with the customer's consent. Only a few local staff members are left. As there are cases where staffs remain for installations in other regions of China, we are thoroughly managing physical conditions such as temperature measurement.

Future negotiations may be affected, but at this moment, it is difficult to measure the affect. Some people say that returning to the normal situation will be at the end of April or May at the earliest. Regarding the operation status of customers, there are some customers of which the operation rate is 80-90% and some about 50%. Due to restrictions on movement across provinces, the availability of stocked raw materials may reduce the operation rate, so we will closely monitor the situation.