

**ULVAC**

ULVAC, Inc.

# **Business Results**

## **The First Half of FY2021**

**(July 2021 - December 2021)**

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**Feb. 15, 2022**

**Securities code : 6728**

**Breakthrough 2022**

## Disclaimer regarding forward-looking statements

The forward-looking statements, including the earnings forecasts shown in this document are based on information currently available to the Company and on certain assumptions deemed to be reasonable. As such, they do not constitute guarantees by the Company of future performance.

Actual business performance and results may differ significantly from these forecasts and other forward-looking statements due to various factors including the global economic situation, market conditions in the semiconductor, electronic device, FPD, raw materials, and other markets, capital expenditure trends, response to rapid technological innovation, and exchange rate fluctuations.



# Summary



## 1. Overview of Consolidated Business Results for 1H FY2021

### Orders, net sales, and operating profit increased significantly YoY

- OP Margin : improved to 10.8% (+3.8pt YoY)
- Gross Profit Margin(the second quarter) : 32.4%  
⇒Highest level since listing due to strengthened manufacturing capabilities, etc.
- Full-year orders plan revised upwardly to ¥245.0 billion (+¥15.0 billion vs. Initial Plan)

(Unit: ¥1 billion)	<u>FY2021 1H</u>	<u>YoY</u>	<u>Vs. Initial Plan</u>
□Order Received	144.6	+ 53.6 +59%	+37.6 +35%
□Net Sales	105.7	+ 21.8 +26%	+9.7 +10%
□Operating Profit	11.4	+ 5.6 +95%	+2.4 +27%

## 2. Environment surrounding ULVAC

### Semiconductor, electronics and FPD investment will continue to expand over medium-to-long term

- Strong orders in 1H (Semiconductor:1.7x, Electronics:1.2x,FPD2.4x YoY)

## 3. Progress of mid-term management plan: Progressing as planned

- Strengthening development capabilities and growth businesses  
⇒Increase in orders for semiconductors, electronics, and FPDs
- Profitability improved by strengthening manufacturing capabilities



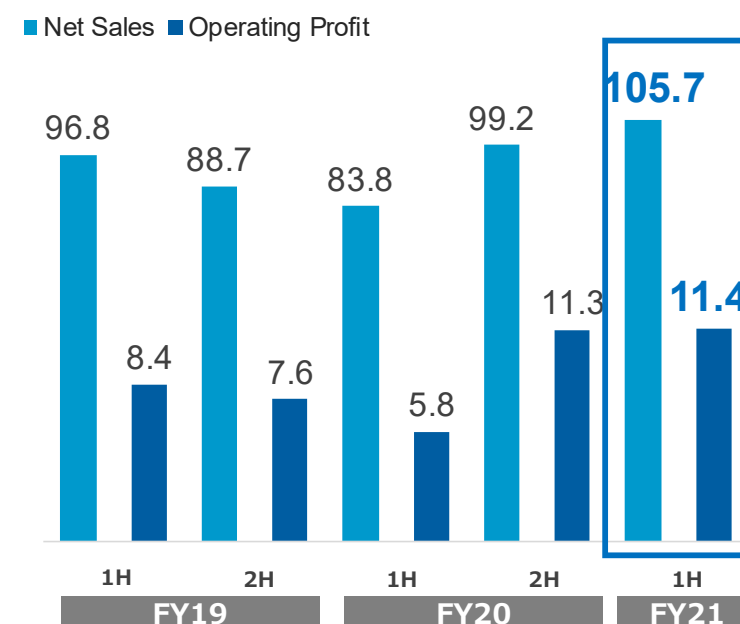
# **1H FY2021 Business Results**

# 1. Overview of 1H FY2021 Business Results

- Orders Received : Increased 59% YoY due to the investment expansion in semiconductors and electronics, etc.
- Net Sales : Increased 26% YoY / Operating Profit : Increased 95% YoY
- OP Margin : Improved to 10.8% (+3.8pt YoY) **(Further improvement expected in 2H)**

(Unit: ¥1 billion)	FY2020 1H	FY2021 1H				
	Actual	Initial Plan	Actual	YoY	Vs. Initial Plan	
Orders Received	91.0	107.0	144.6	+53.6	+59%	+37.6
Net Sales	83.8	96.0	105.7	+21.8	+26%	+9.7
Gross Profit	23.3	-	32.1	+8.8	+38%	-
Gross Profit Margin	27.8%	-	30.4%	-	+2.6pt	-
SG&A	17.5	-	20.7	+3.2	-	-
Operating Profit	5.8	9.0	11.4	+5.6	+95%	+2.4
Operating Profit Margin	7.0%	9.4%	10.8%	-	+3.8pt	+1.4pt
Profit attributable to owners of parent	4.5	6.5	8.1	+3.6	+79%	+1.6
To net sales ratio	5.4%	6.8%	7.7%	-	+2.3pt	+0.9pt

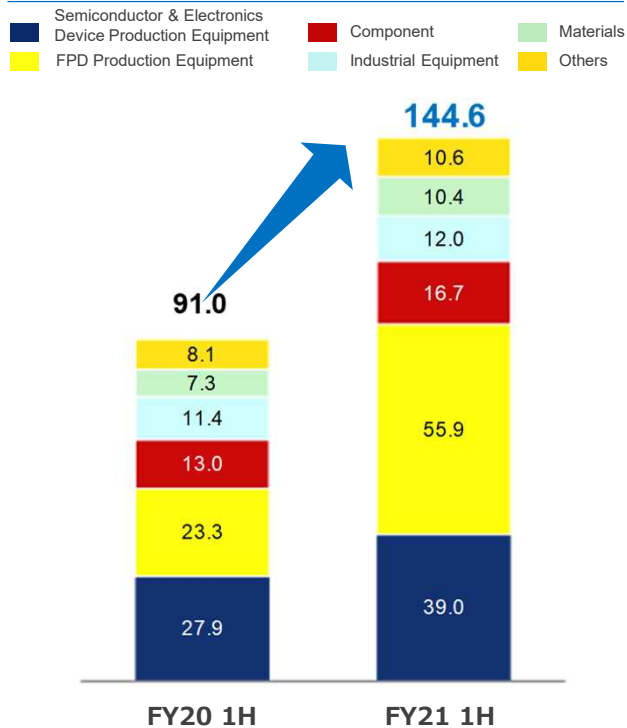
Quarterly Net Sales and Operating Profit (Unit: ¥1 billion)



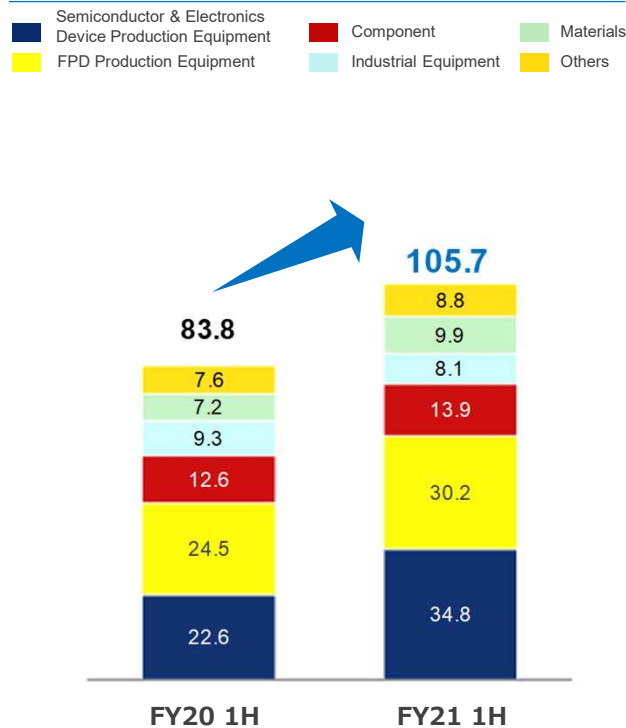
# 1-(1) Orders and Net Sales by segments: Increased significantly due to active investment

- Significant YoY increase due to active investment in semiconductors, electronics and FPDs

## Orders received (Unit: ¥1 billion)



## Net sales (Unit: ¥1 billion)



### Orders Received

- **Semiconductors:** Active investment in both logic and memory, **1.7x** YoY
- **Electronics:** Increased mainly in power devices and various electronic devices, **1.2x** YoY
- **FPD:** Orders received in 1H achieved 80% of the full-year plan due to the orders received ahead of schedule (approx. ¥20 billion) (**2.4x** YoY)

### Net Sales

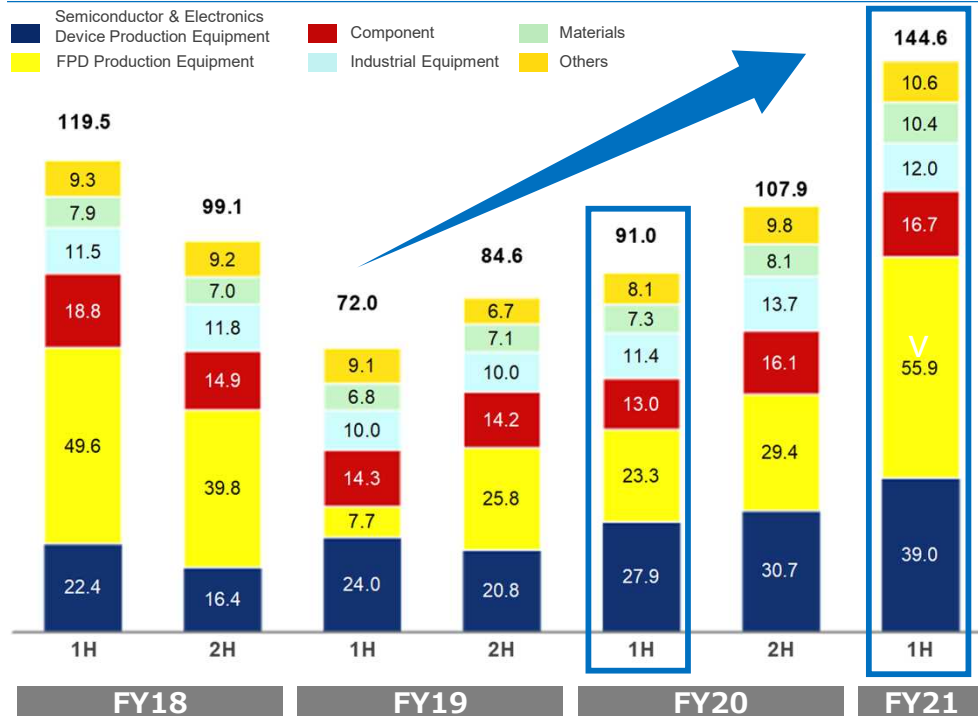
- Increase compared to the same period of the previous year, mainly in semiconductors, electronics and FPDs (Time lag in sales contribution due to longer delivery times for parts)

# 1-(2) Orders and Sales by Segment: Growth in Semiconductors and Electronics exceeding plan

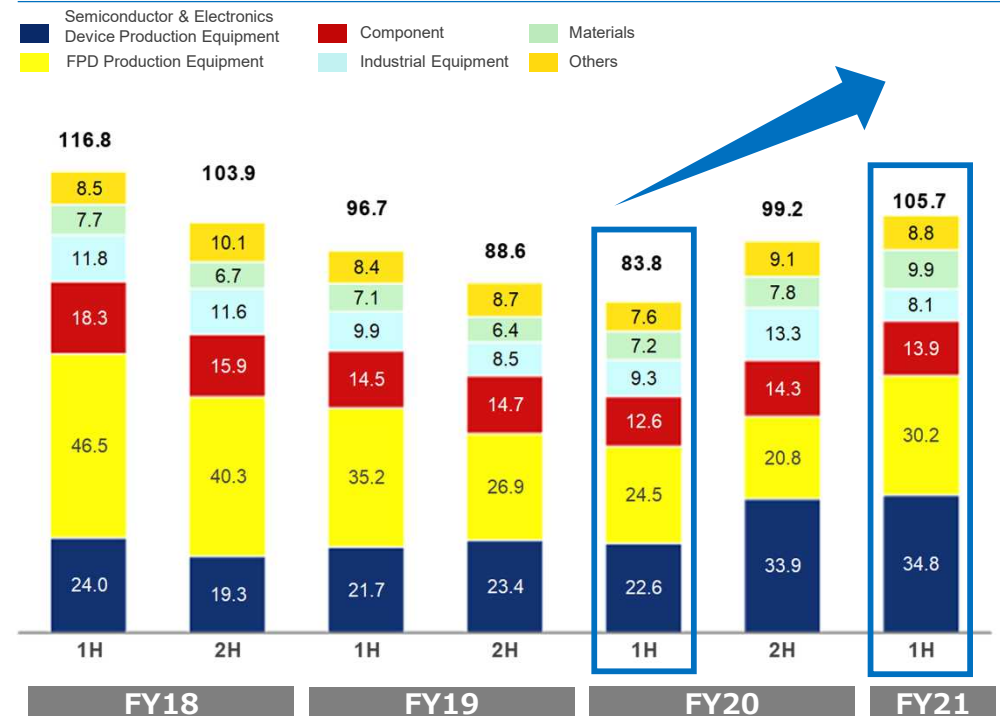


- **Semiconductors and Electronics: Growth exceeding mid-term plan**
- **FPD: Significant increase in 1H due to the increased investment in LCD**
- **Increased order backlog will contribute to sales in the next fiscal year and beyond**

## Orders received (Unit: ¥1 billion)



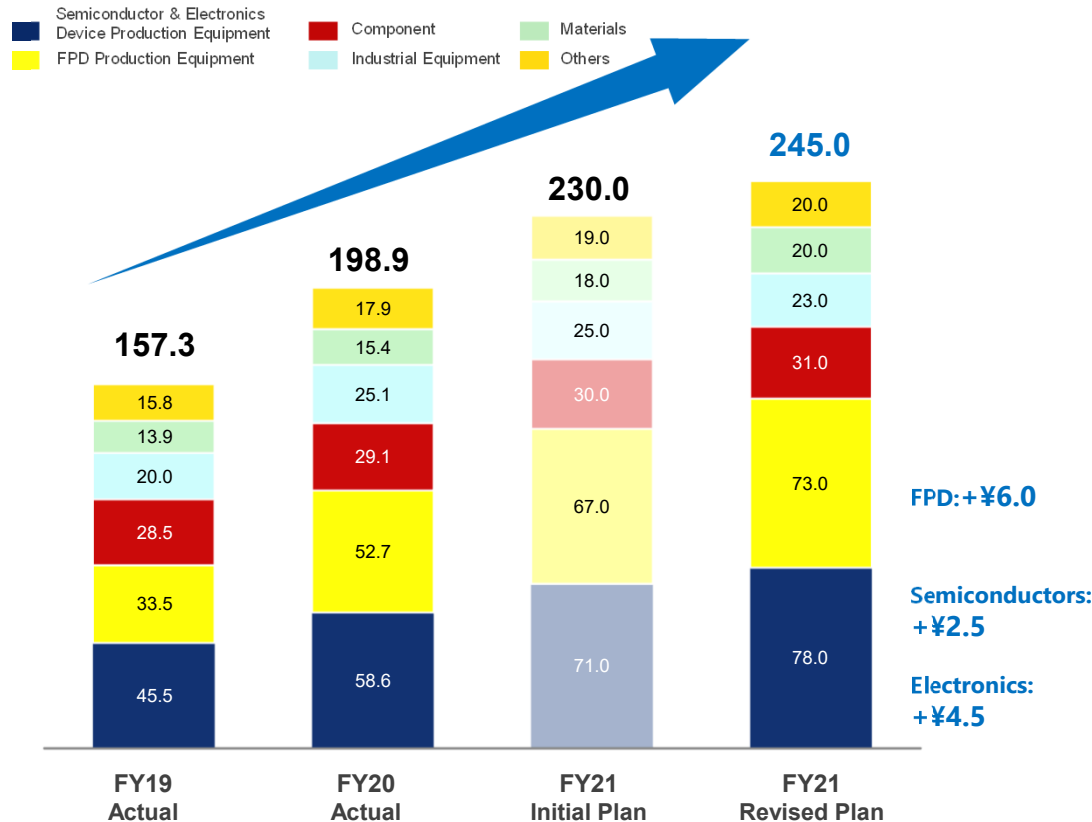
## Net sales (Unit: ¥1 billion)



## 2. Revision of full-year order Plan : Revised to ¥245.0 billion (+¥15.0 billion)

- Full-year order plan revised from ¥230.0 billion to ¥245.0 billion (+¥15.0 billion) due to active investment in semiconductors, electronics, and FPDs
- Aiming for further growth with a focus on semiconductors and electronics (next fiscal year's plan to be disclosed in August)

(Unit: ¥1 billion)



### Semiconductors: 1.5x YoY

- Logic(2.2x YoY) · Memory(1.3x YoY)  
Investment increasing

### Electronics: 1.2x YoY

- Power Device(1.5x YoY) · Active investment in China

### FPD: 1.4x YoY

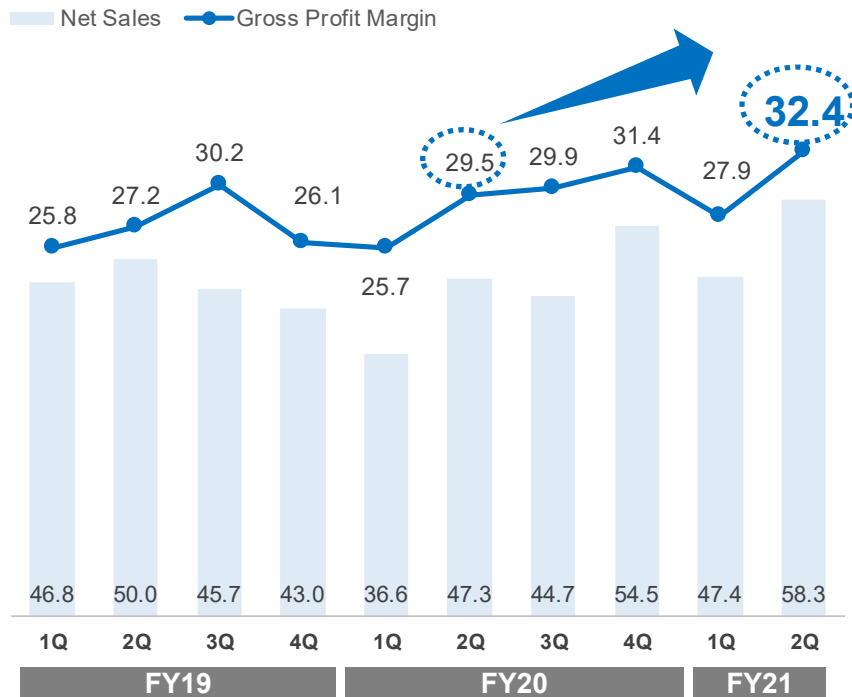
- Investment increasing in LCD
- Investment in IT panels and OLED (large substrates) are expected to continue in the next fiscal year and beyond, and investment in EV batteries is expected to be full-scale investment from FY2023



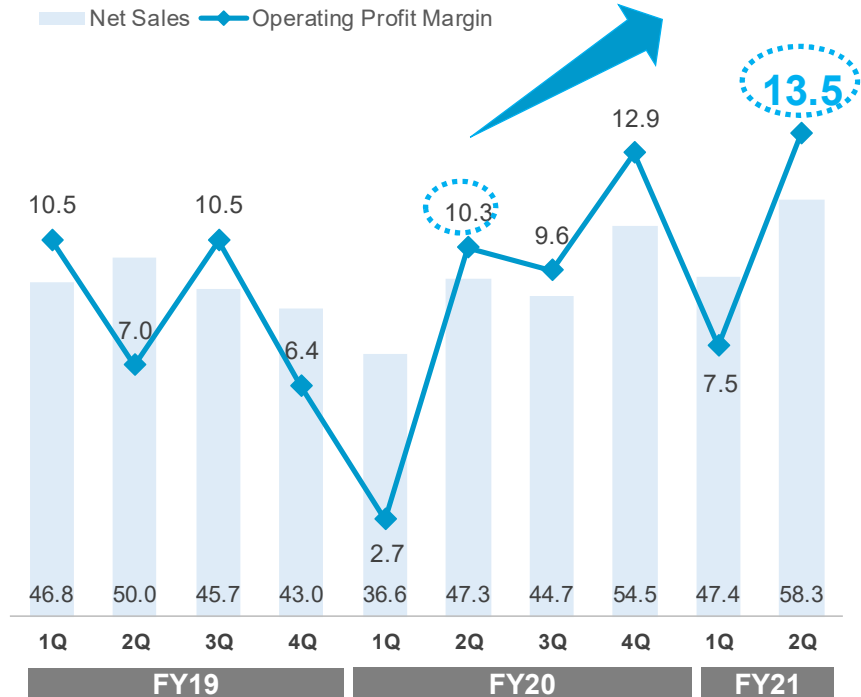
### 3-(1) 2Q Profit Margin: Gross Profit Margin at highest level since listing

- **Gross Profit Margin: 32.4%, Highest level since listing**
- **Operating Profit Margin: 13.5%, improved significantly YoY**

**Gross Profit Margin** (Unit: ¥1 billion,%)



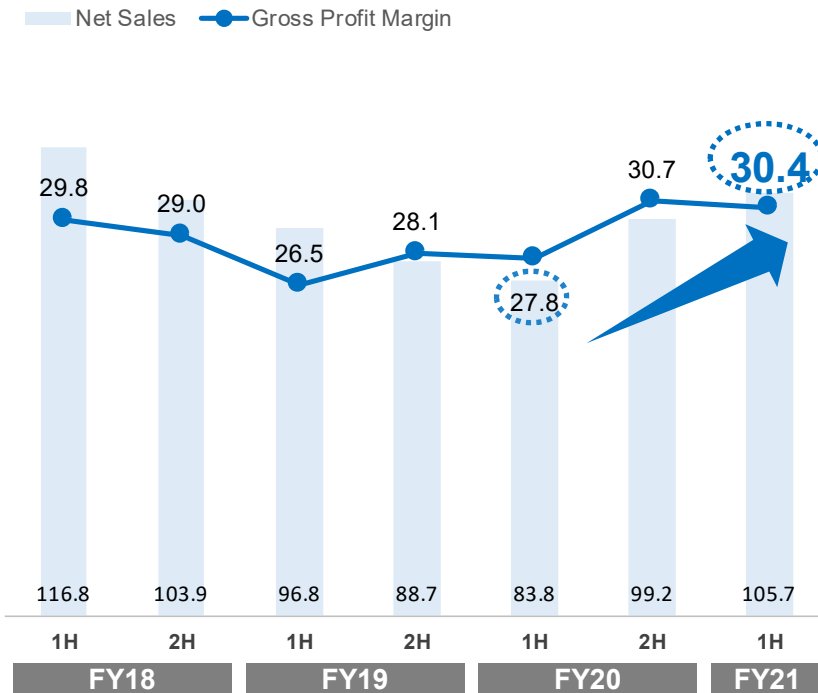
**Operating Profit Margin** (Unit: ¥1 billion,%)



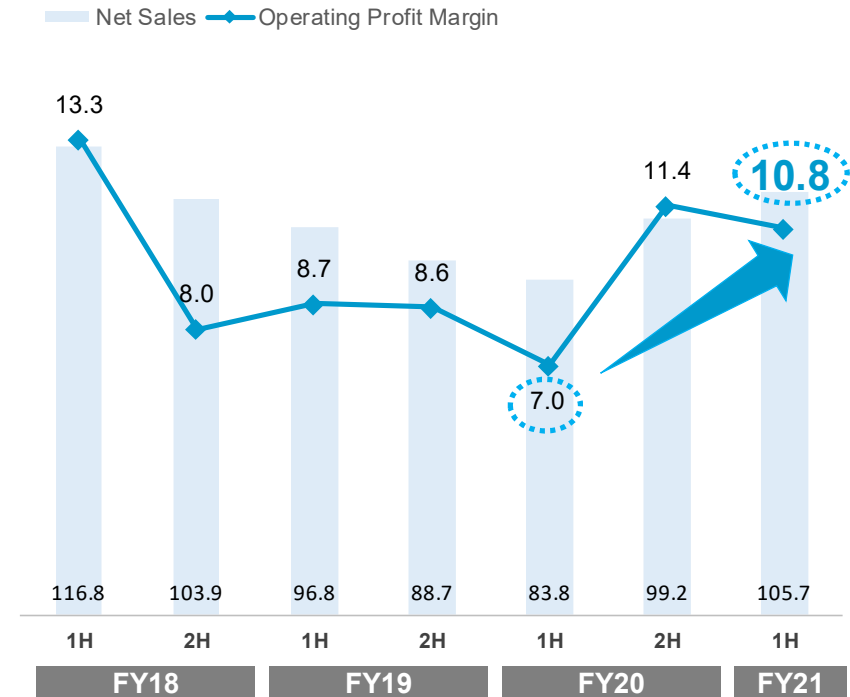
### 3-(2) 1H Profit Margin: Improvement over the same period of the previous year

- Both gross profit margin and operating profit margin improved.
- Profitability in 2H is expected to improve further by strengthening manufacturing capabilities.

**Gross Profit Margin** (Unit: ¥1 billion,%)

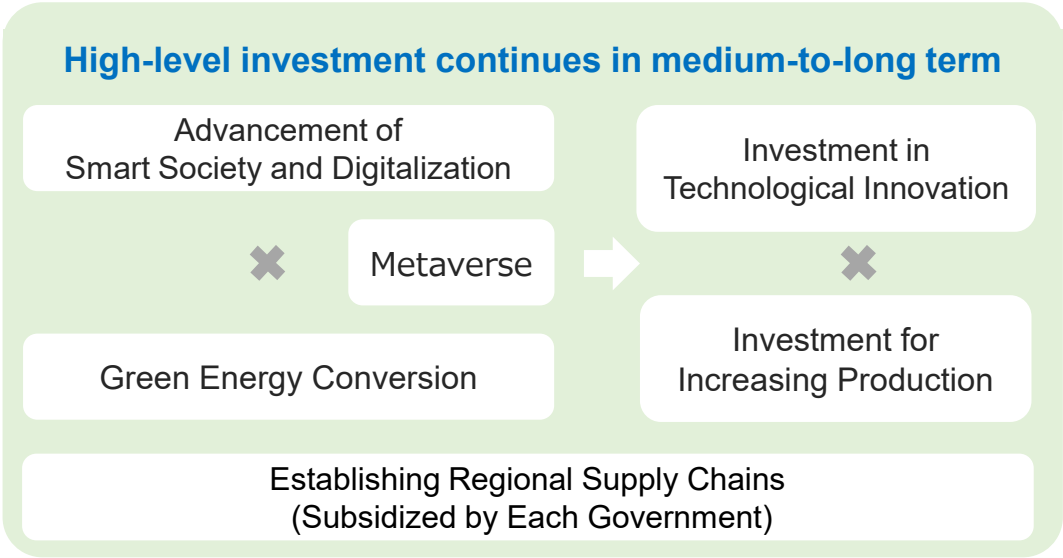


**Operating Profit Margin** (Unit: ¥1 billion,%)





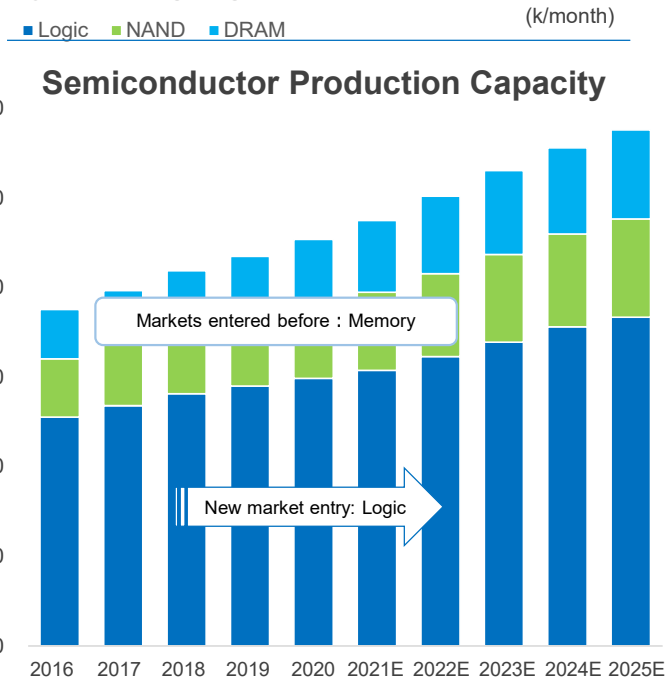
## **Environment surrounding ULVAC**



# 1-(1) Semiconductors: Expanding business opportunities by entering Logic market ULVAC

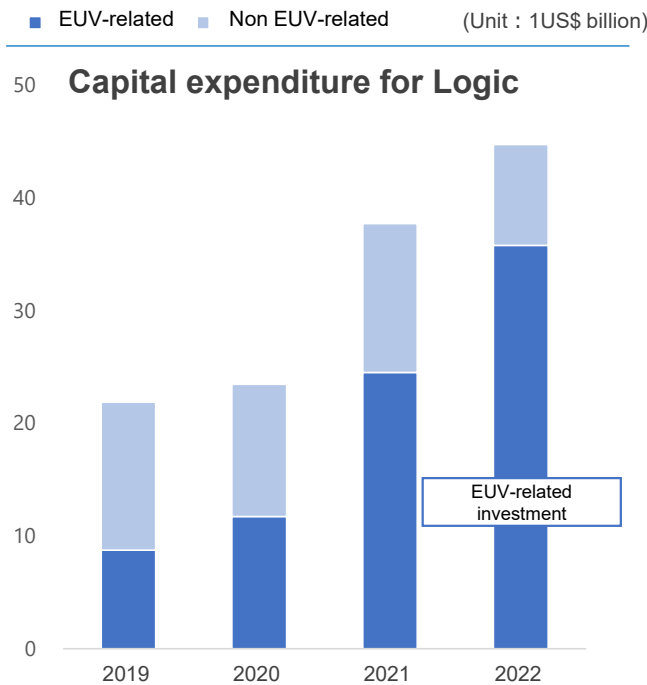
- Logic: Expanding business opportunities by entering the metal hard mask (MHM) process
- Achieving growth through both logic and memory
- Aiming growth exceeding that of the logic market (MHM and other processes)

## Expanding business opportunities by entering logic market



Source : ULVAC's forecasts based on the data of SEMI etc.

## Expansion of EUV-related investment: 80%



Source : ULVAC's forecasts based on the data of SEMI and CAPEX Plans of each manufacturer

## Investment of Logic Foundries

- Aggressive expansion of production capacity in both logic and memories through technological innovation such as miniaturization and stacking
- Being **de facto standard in MHM process** of EUV  
→Expanding business opportunities in other processes as well(Highly expected to be a strong second vendor)

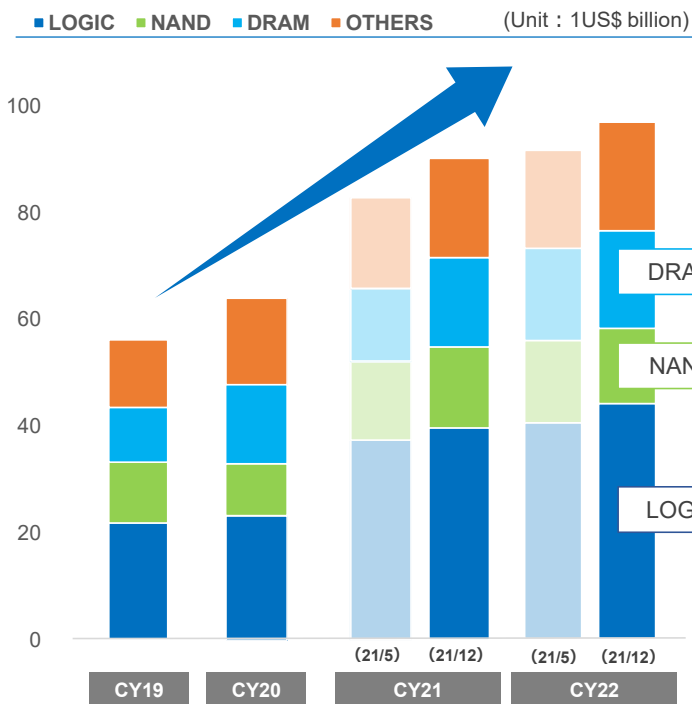
## EUV-related investment expansion, Growth outpacing market

- **Leading-edge investment by foundries and logic manufacturers is related to EUV (about 80% of the logic investment)**
- Orders are expected to grow 2.8x against the increase in logic capex (1.7x in 2021 vs. 2019), **exceeding the market growth.**  
→Aiming growth exceeding that of the logic market by MHM capital investment increase, new customer development , and the entry into other processes

# 1-(2) Semiconductors: Growth expected to exceed market growth

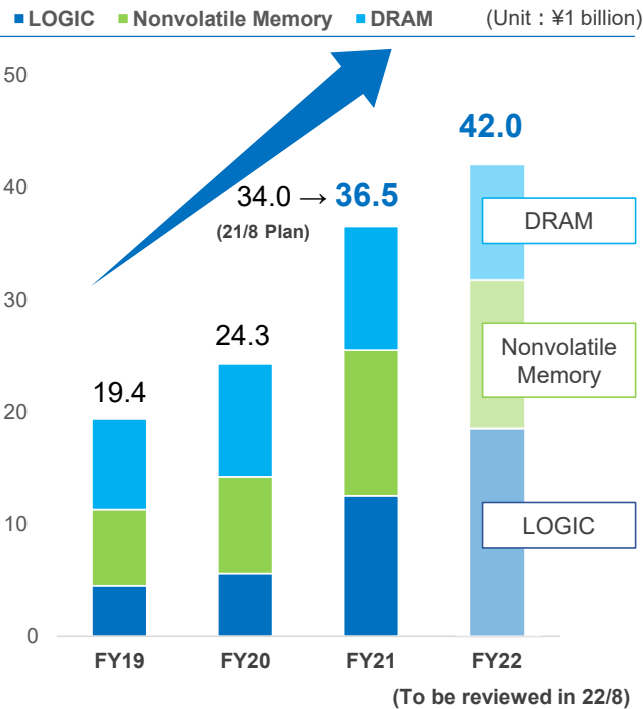
- Continued capex expansion for both logic and memory
- Logic: Aiming to grow faster than market growth by MHM process and other processes increase

## Semiconductor Capex Forecast



Source : SEMI

## Orders Plan


















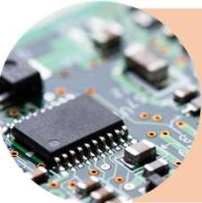


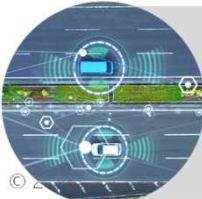


## Investment Trend

- Expanding scope and increasing functionality of applications such as 5G, IoT, AI, and metaverse. Data center investment for increased data traffic → Semiconductor investment is expected to expand over the medium-to-long term.
- Capex expansion trend expected to remain unchanged even in FY2022

## Orders Trend

- In 1H, logic (+90% YoY) and memory (+60% YoY) both increased
- In the 2H, we expect orders to remain at the same high level as in 1H, and for the full fiscal year, we expect orders of ¥36.5 billion (+50% YoY), exceeding the plan.
- Continued growth expected mainly in logic-related business

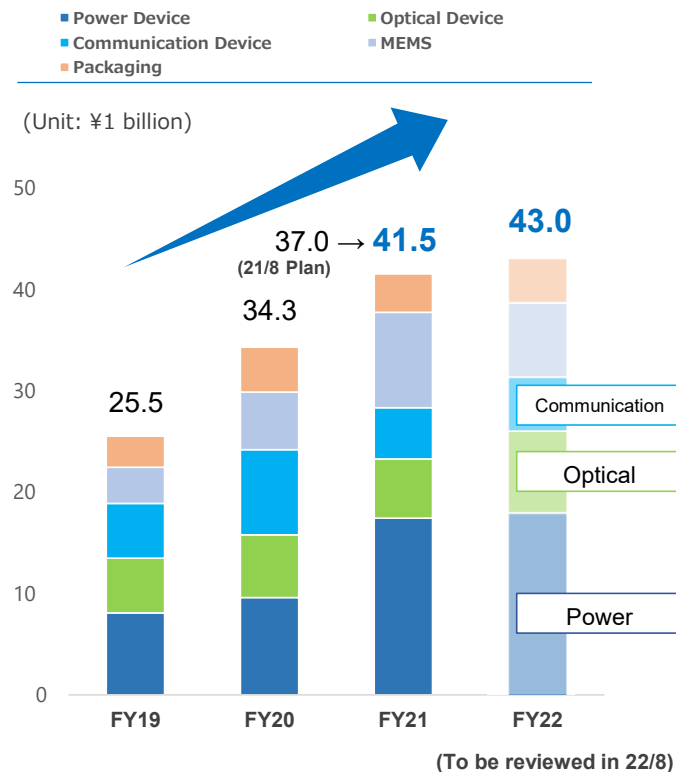
## 2-(1) Electronics: Lineup of equipment for various electronic device fields and applications

	Application	Device	ULVAC Equipment
 <b>Power Device</b>	EV Automotive Devices Inverter Motors Industrial robots Power Saving Devices  	IGBT SiC Diodes MOSFET	  <p>Sputtering Equipment      Evaporation Equipment</p>
 <b>Optical Device</b>	AR/VR Automotive instrument panels 3D Sensor  	$\mu$ OLED Anti-reflection film Band Pass Filter	  <p>Ion Implanter      CVD Equipment</p>
 <b>Communication Device</b>	Smartphones Wireless base stations  	SAW and BAW Filters RF Devices	  <p>Etcher Equipment      Ashing Equipment</p>
 <b>Packaging</b>	PC Smartphones Data Servers IoT devices  	FanOut WLP·PLP Info-package	
 <b>Electronics Device (MEMS)</b>	Fingerprint recognition LiDAR  	Piezo-MEMS	

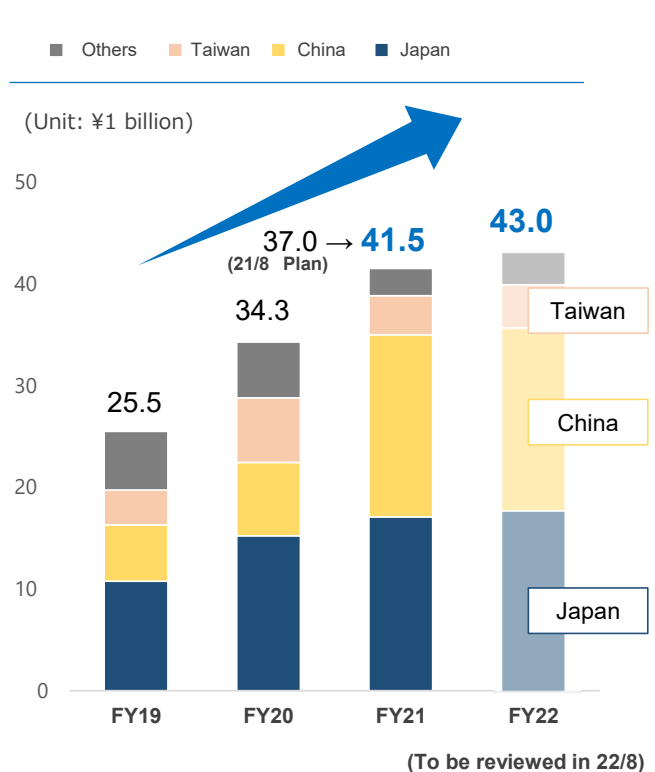
## 2-(2) Electronics: Growth mainly in China, also in Japan, Taiwan, etc.

- Active investment in power devices, optical devices, communication devices, etc., mainly in Japan and China
- Especially in China, the government's policy of domestic production has stimulated investment, mainly in the field of power devices.

### Orders Received Plan (by Segment)



### Orders Received Plan (by Region)



### Investment Trend

- With the expansion of new applications such as new energy shift (green energy conversion), digital infrastructure construction, and metaverse, the technological innovation and the demand for various devices are boosting.
  - Active capital investment
- China's domestic production policy and local government support will increase new entrants
  - Increased construction of electronic device factories, especially in coastal areas

### Orders Trend

- 1H: Increase mainly in power devices, communication devices, sensors, etc.
- 2H: Expected to remain at a high level mainly in power devices and optical devices
- Full-year: Expected to exceed the plan at the amount of ¥41.5 billion (+20% YoY)
- Continuing to grow with the active investment in power devices, optical devices (μOLEDs for AR·VR, etc.), communication devices (SAW·BAW filters), etc.



## 2-(3) Electronic growth factors: Power devices growth with the shift to green energy · EVs



- Power devices becomes a **growth engine** as the shift to green energy and EVs progresses.  
(Orders Received in 1H : 1.4x YoY)

	Market Environment	ULVAC's Strength
<b>IGBT</b> High voltage Large current	<ul style="list-style-type: none"> <li>• The number of power devices installed increased due to shift to EVs</li> <li>• Active investment by major Japanese companies</li> </ul>	<ul style="list-style-type: none"> <li>• High market share in sputtering equipment for back-surface electrodes</li> <li>• Extensive experience with major Japanese companies</li> </ul>
<b>SiC</b> High voltage Large current	(In China) <ul style="list-style-type: none"> <li>• Accelerating green energy investment</li> <li>• The government's domestic production policy and local government support</li> <li>• Expanding SiC Wafer Production</li> </ul>	(In China) <ul style="list-style-type: none"> <li>• More than 70% share for SiC ion implanter market in China</li> <li>• Mass production support for Chinese companies for the past 10 years</li> <li>• Technical sales force by dispatching resident engineers to China</li> </ul>
<b>Si-MOSFET</b> Low voltage Small current	(In China) <ul style="list-style-type: none"> <li>• Inverterization of home appliances, etc.</li> <li>• The government's domestic production policy and local government support</li> <li>• Strong demand for low to mid-end devices</li> </ul>	(In China) <ul style="list-style-type: none"> <li>• Price competitiveness through local production</li> <li>• Customization through local design</li> <li>• Establishment of supply chain system</li> </ul>

## 2-(4) Electronic growth factors: Accelerated growth of China's electronic device market

### Increased demand for electronic devices •

#### Dependence on imports

- Power devices
- High-frequency devices



### China's domestic production policy

- Stabilization of the supply chain
- Improvement of trade balance

### Local government support (various privileges and support)

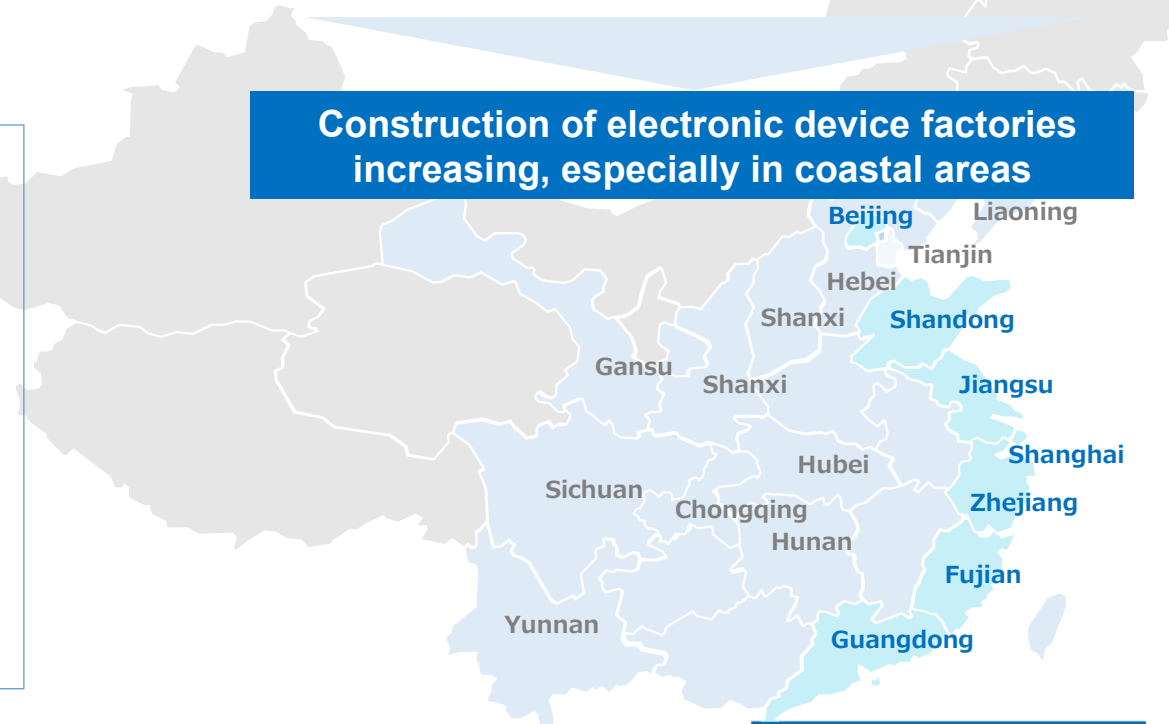
### New energy shift (Green Energy Conversion)

- Shift to Renewable Energy
- Increase in new energy vehicles
- Increase in LiB production

### Digital Infrastructure Construction

- 5G base station
- Data Center

### Construction of electronic device factories increasing, especially in coastal areas

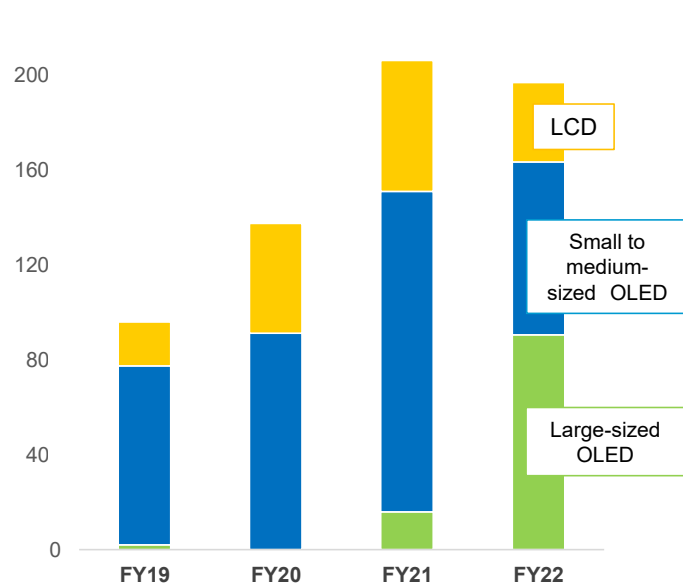


### 3. FPD: Orders increased in 1H, Mid-to-Long Term growth by OLED-shift · Battery-related

- 1H: Active investment in LCD for IT panels; significant increase in orders for both LCD and OLED
- Progress in the shift to OLED (mobile + IT panel + TV) ⇒ **Active investment in large substrate (G8.5) OLED from FY2022**
- **Roll-to-roll deposition equipment for EV batteries also expected to contribute to the sales from FY2023**

#### FPD Capex Forecast (Unit: ¥1billion) (Evaporation · Sputtering)

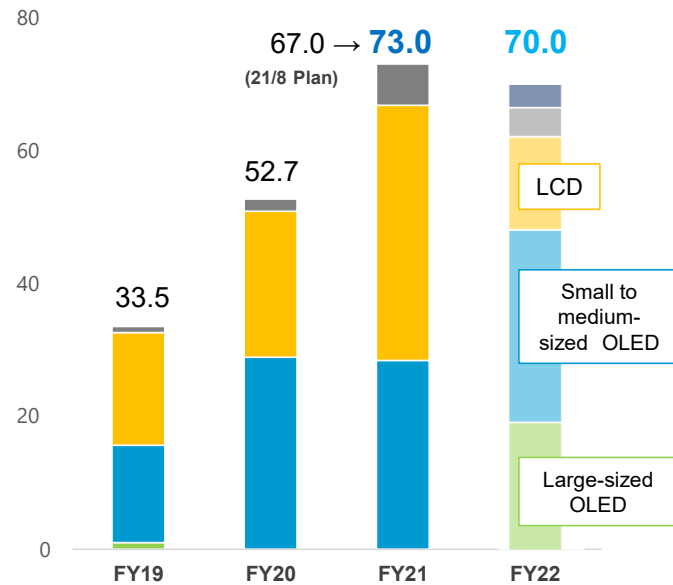
■ Large sized OLED ■ Small to medium sized OLED ■ LCD



Source: ULVAC's forecasts

#### Orders Received Plan (Unit: ¥1billion)

■ Large-sized OLED ■ Small to medium sized OLED  
■ LCD ■ Capacitor · Battery  
■ Others



(To be reviewed in 22/8)

#### Investment Trend

- Active investment in high-definition, wide viewing angle LCDs for IT panels (tablets, PCs, medical, automotive, games, etc.)
- Progress in shift to OLED (mobile + IT panel + TV)
- Development of roll-to-roll deposition system for EV batteries' miniaturization, high capacity and safety improvement

#### Orders Trend

- LCD and OLED orders received ahead of schedule (approx. ¥20 billion); full-year order plan is expected to increase by ¥6 billion
- From FY 2022 onward, we expect a order bases of approx. ¥70 billion due to the progress in shift to OLED and EV battery business, etc.
- For large substrate OLEDs, we leverage strengths in large substrate sputtering equipment, transport technology, and high-definition support

## 4. Stable business bases also strong

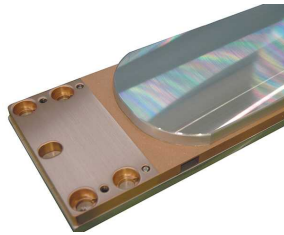
### Components (1H : +30%YoY)



Leak Detection

- Strong orders due to active investment in semiconductor electronics, FPD, and consumer electronics.
- Strong sales of leak detectors (HELIOT series) used for product inspection of air-conditioning parts, etc.
- Some orders were received ahead of schedule due to longer delivery times for parts.

### Materials (1H:+40%YoY)



Sputtering Target for FPD production equipment

- Orders were strong due to the rise in equipment utilization rate for semiconductor electronics and FPD related products
- Expanding sales of high-definition LCD panels (IGZO), sintering targets for semiconductor electronics (W, WSi, etc.), and metal targets (Al, Ti), etc.

### Customer Support (1H:+20%YoY)



- Orders for semiconductor electronics and FPD-related products were strong due to increased investment and higher equipment utilization rates.
- Orders for in-vehicle capacitors were also strong due to the accelerating shift to EVs.
- Expansion of CIP business for high value-added panels
- Expansion of OLED cryopump overhaul business



# **Progress of Mid-term Management Plan**

# Progress of Mid-term Management Plan (Summary)

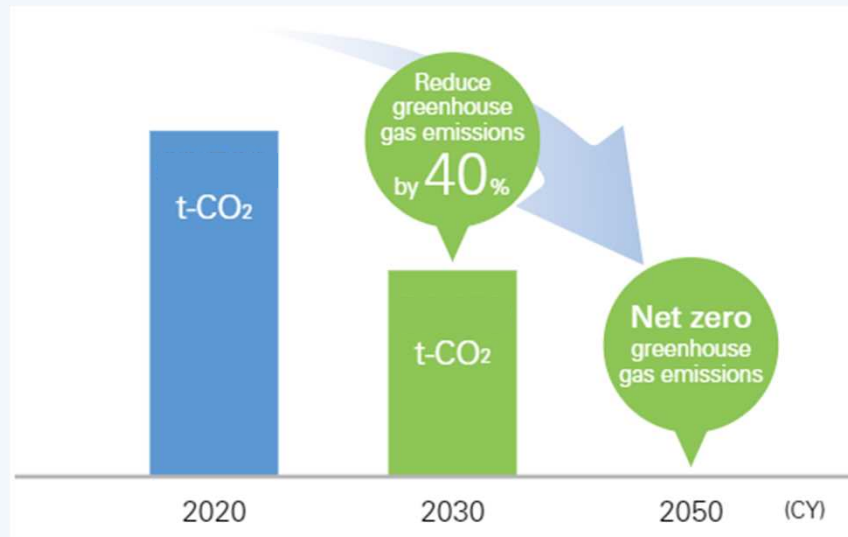
	Mid-term Management Plan Activities		Evaluation of results and progress	
Strengthening the Growing Business	Semiconductor	<ul style="list-style-type: none"> <li>New entry into logic miniaturization process</li> <li>Memory investment resumed, new process entry</li> </ul>	<ul style="list-style-type: none"> <li>Active investment in logic and memory ⇒ Orders exceeding plan</li> <li>Growth through MHM process and development of other processes</li> </ul>	
	Electronics	<ul style="list-style-type: none"> <li>Expand proposed equipment through modularization</li> <li>Strengthen development, sales, and support systems in China</li> </ul>	<ul style="list-style-type: none"> <li>Active investment in power, optical, communication devices, etc. ⇒ Exceeded order plan mainly from Japan and China</li> <li>Expansion of proposed equipment with modularized "uGmni Series"</li> <li>Exceeded order plan by strengthening sales and technical support system in China</li> </ul>	
	FPD	<ul style="list-style-type: none"> <li>Development of large substrate OLED mass production</li> <li>Conversion to a profitable structure</li> </ul>	<ul style="list-style-type: none"> <li>Orders exceeded the plan due to continued LCD investment and the shift to OLED</li> <li>Steadily strengthening manufacturing capabilities and profit margin improvement</li> </ul>	
Strengthening Manufacturing Capabilities	<ul style="list-style-type: none"> <li>Promoting production reform on all processes from engineering and design to the production system → Improvement of profit margins by improving productivity</li> </ul>		<ul style="list-style-type: none"> <li>Steady implementation of various measures ⇒ Steady improvement in profit margin</li> </ul>	
Enhancing Group Management Efficiency	<ul style="list-style-type: none"> <li>Business Unit Management Promotion</li> <li>Strengthening the management of group companies that have their own products</li> </ul>		<ul style="list-style-type: none"> <li>Integration of Korean Group Companies</li> <li>The merge of two domestic manufacturing subsidiaries decided</li> <li>Promotion of management reform in each group company</li> </ul>	
Strengthening Financial Base	<ul style="list-style-type: none"> <li>Human resource development and revitalization</li> </ul>		<ul style="list-style-type: none"> <li>Introduction of new personnel system</li> <li>Development of next-generation leaders</li> </ul>	
	<ul style="list-style-type: none"> <li>Strengthen information system infrastructure</li> </ul>		<ul style="list-style-type: none"> <li>Steady implementation of various system improvements for productivity improvement</li> </ul>	
	<ul style="list-style-type: none"> <li>Strengthen financial base</li> </ul>		<ul style="list-style-type: none"> <li>Equity ratio: 56.1%</li> </ul>	

## Revision of Environmental Targets

We will strive to curb greenhouse gas emissions and address climate change through a variety of activities, including energy conservation efforts in Japan and overseas, the introduction of renewable energy sources with low greenhouse gas emissions, and the development of environmentally friendly products.

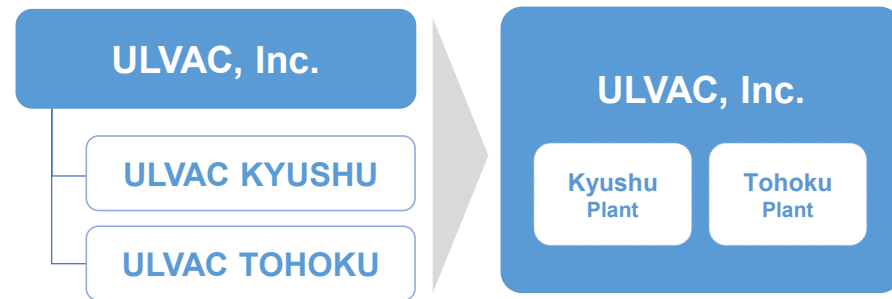
### 「Greenhouse Gas Emission Targets」

- ① Reduce greenhouse gas emissions in 2030 by 40% compared with 2020
- ② Achieve net zero greenhouse gas emissions by 2050



## Merger of Wholly Owned Subsidiaries

In order to accelerate the "Strengthening of the manufacturing capability", two major domestic manufacturing subsidiaries will be merged by absorption, aiming to further improve productivity and profitability by incorporating a wide variety of product manufacturing technologies. This merger is scheduled to take place in July 2022.



## Value Report 2021 Issued

- Strengthening disclosure on sustainable management
- Initiatives concerning human rights and climate change
- Creating value for the company from the perspective of outside directors



(For English)



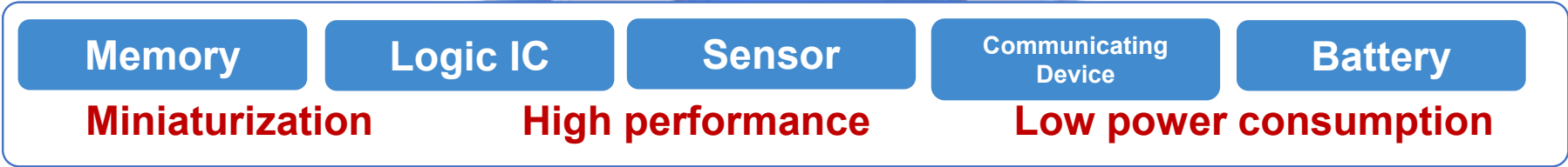
Breakthrough 2022

**Smart and Digital Society  
Realization**



**Green Energy Conversion  
Low Power Consumption**

**Smart Society ⇒ Solving Social Problems**







# Appendix

# Quarterly Business Results

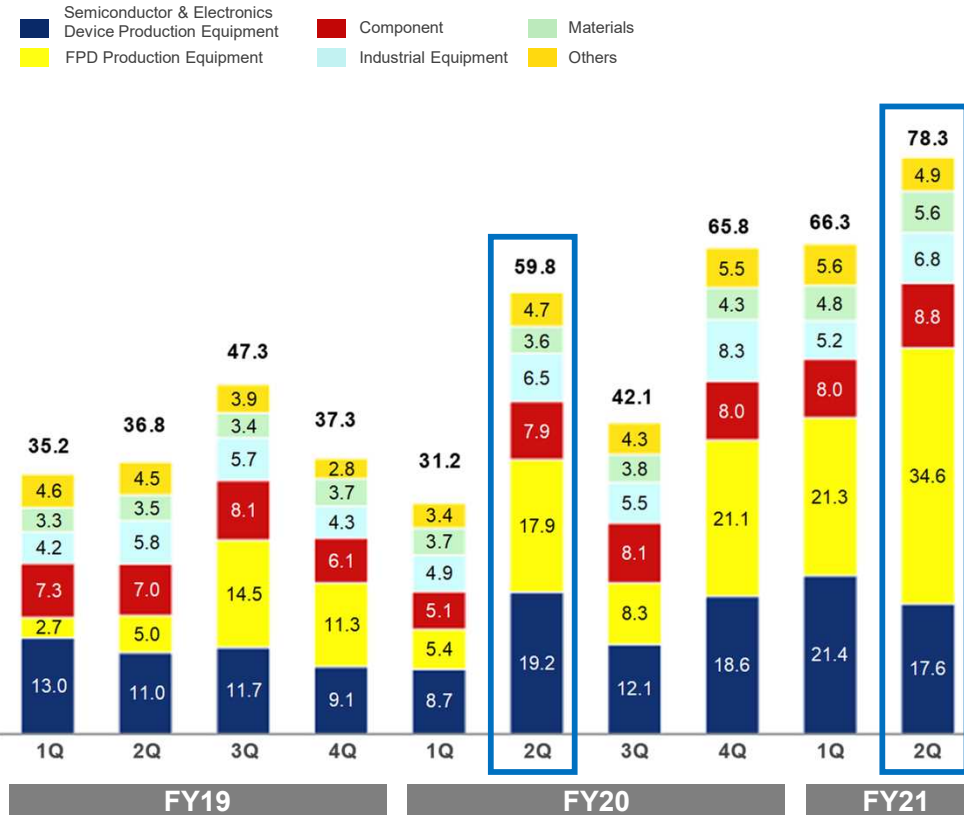


(Unit: ¥1 billion)	FY2020				FY2021			
	1Q	2Q	3Q	4Q	1Q	2Q	YoY	
							Amount	Ratio
<b>Orders Received</b>	31.2	59.8	42.1	65.8	66.3	78.3	+18.5	+31%
<b>Net Sales</b>	36.6	47.3	44.7	54.5	47.4	58.3	+11.0	+23%
<b>Gross Profit</b>	9.4	13.9	13.4	17.1	13.2	18.9	+5.0	+36%
Gross Profit Margin	25.7%	29.5%	29.9%	31.4%	27.9%	32.4%	-	+3.0pt
<b>SG&amp;A</b>	8.4	9.1	9.0	10.1	9.7	11.0	+2.0	+22%
<b>Operating Profit</b>	1.0	4.9	4.3	7.0	3.6	7.8	+3.0	+61%
Operating Margin	2.7%	10.3%	9.6%	12.9%	7.5%	13.5%	-	+3.2pt
<b>Profit attributable to owners of parent</b>	0.3	4.2	3.7	6.6	2.2	5.9	+1.7	+40%
To net sales ratio	0.9%	8.9%	8.3%	6.7%	4.7%	10.1%	-	+1.2pt

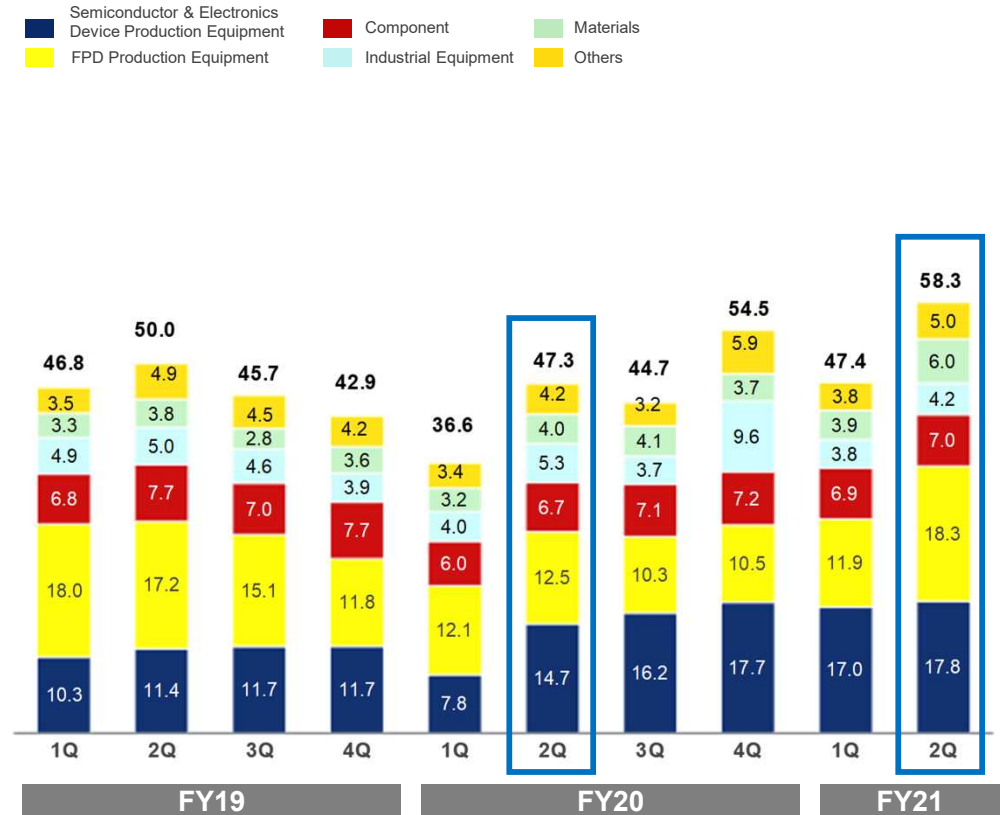
# Orders and Net Sales by Segment (Quarterly)



## Orders received (Unit: ¥1 billion)



## Net sales (Unit: ¥1 billion)

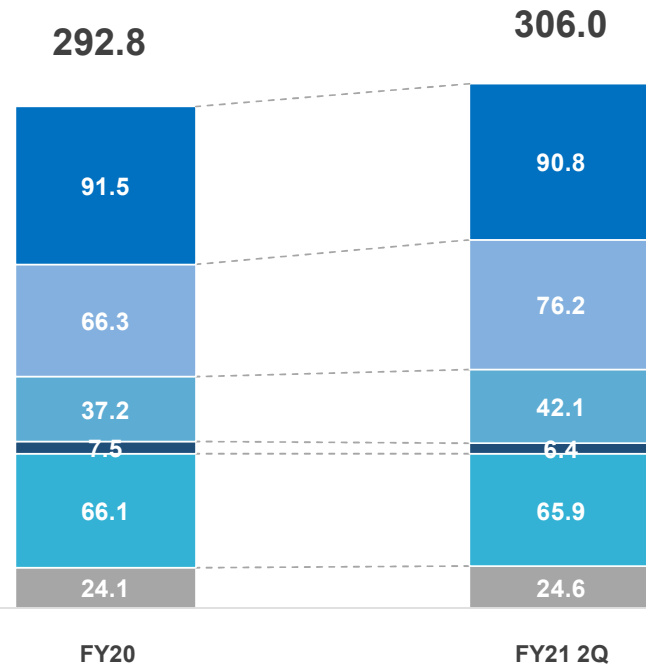


# Consolidated Balance Sheet



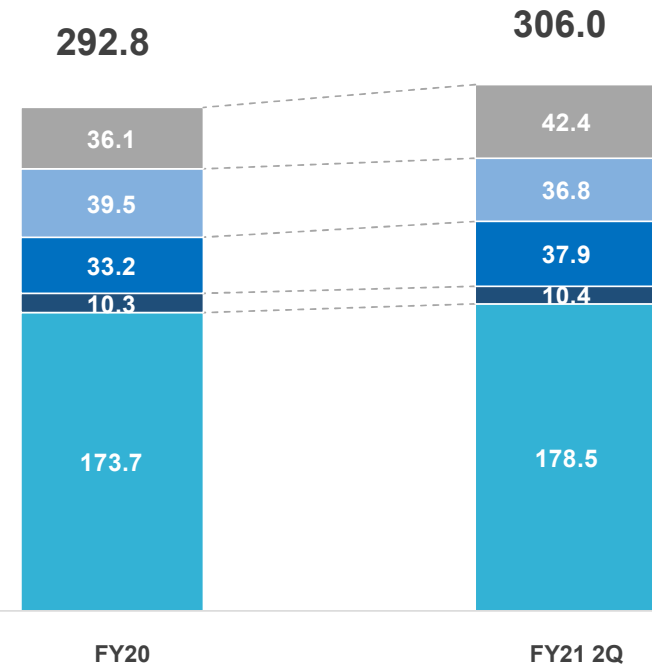
## Assets (Unit: ¥1 billion)

- Investment securities etc.
- Property, plant and equipment
- Other current assets
- Inventories
- Notes and accounts receivable, trade
- Cash on hand and in banks



## Liabilities and Net Assets (Unit: ¥1 billion)

- Net Assets
- Other Long-term liabilities
- Other current liabilities
- Interest-bearing debt
- Note and accounts payable, trade



# ULVAC Vacuum Technology Contributes to Many Industries and Applications



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