

June 15, 2022

China Display Industry Trends Report

June, 1st Report

Contents

1.	Trend by Panel Maker	3
	1.1 BOE	
	1.2 Visionox	
2.	Miscellaneous Trends	7
	2.1 Ministry of Industry and Information	
	Technology (工信部)	
	2.2 Material Science	
	2.3 Beijing Ruibo Technology Co., Ltd.	

1. Trend by Panel Maker ESEARCH

Trend by Panel Maker

1.1 BOE

Business Status

- BOE's operating profit for the first quarter was 4.4 billion yuan (about 840 billion won). The target operating profit for the second quarter was 1.6 billion yuan (about 300 billion won) but it is difficult to generate the exact operating profit. Losses are expected from 3Q.
- This year, BOE's operating sales target is 220 billion yuan (about 42 trillion won) and operating profit target is 12.6 billion yuan (about 2.4 trillion won).

 The OLED business division is expected to experience a loss of 10 billion yuan (about 1.9 trillion won).
- OLED smartphones shipments to Oppo and Vivo in the second half of the year are expected to decrease by 20%.
- Dell and HP's LCD notebook shipments in the second half of the year are expected to decline by 30%. Lenovo is expected to retain its existing volume.
- BOE's iPhone13 panel price is about \$50, which is lower than that of Samsung Display or LG Display. The recent module line trends seem to indicate that BOE's iPhone 13 production has the possibility to be raised from 3 million units to 10 million units

B11 Module Line Status

- Currently, B11 has a total of 20 module lines for Apple. These are 14 existing lines, 1 line transferred from B12 to B11, and 5 lines added in 1Q.
- iPhone12 and iPhone13 have the same module line process, while iPhone14 has a different process.
- 14 existing lines can be used for iPhone 12 and iPhone 13. 1 line out of the 14 lines is planned to be modified for iPhone 14. Six additional lines are planned for iPhone 14.
- iPhone 13 production was restarted from early June. iPhone 14 production is preparing to start operating with three lines and a monthly capacity of 1 million units.

Trend by Panel Maker

1.1 BOE

■ 6G LTPO LCD Line New Investment Review

- BOE is considering new investment in 6G LTPO LCD line with a monthly capacity of 5K, 28 billion yuan (about 5.34 trillion won).
- The products produced are AR/VR, M LED, and smartphones. AR/VR is mainly produced and the remaining capacity is expected to be used for the M LED backplane.
- The Beijing Municipal Government has requested the investment and it is expected to be finalized in June.

WRGB OLED Production Possibility

- Recently, WRGB OLED production has been mentioned in the media.
- From what we know, BOE's WOLED design capacity is 4K per month and the actual production is 1,500 sheets per year.
- There is an issue with the reliability of the panel but it is found that it has passed 1,500 hours of process testing at a temperature of 50 degrees. This is only 50% of the original plan.
- Practically, any meaningful mass production is expected to be difficult.

Trend by Panel Maker

1.2 Visionox

Status of Business with Honor

- Visionox was allocated 70-80% of Honor's production through cooperative efforts and is recording a high operation rate, but the performance is unsatisfactory.
- Honor requested a 30% price reduction for panels, which was already in the mid-\$30 range. The more Visionox operates this line, the more likely it will experience losses, especially due to lack of government support.
- It is understood that Visionox is currently running a deficit of about 200 million yuan (about 38 billion won) per month.
- Visionox's operating profit last year was 5 billion yuan (about 950 billion won). This year, Visionox is expected to lose about 1 billion yuan (about 190 billion won).



2. Miscellaneous Trends RESEARCH

Miscellaneous Trends

2.1 Ministry of Industry and Information Technology

- China's Ministry of Industry and Information Technology (工信部) is planning a large-scale support project for display-related materials, equipment, and parts for domestic consumption in China.
- Materials, parts, and equipment companies apply for subsidy support to each province and submit an application to the Ministry of Industry and Information Technology. It appears that those approved will receive a large subsidy. Small and medium-sized enterprises (SMEs) will also receive support of about 50 million yuan (about 9.5 billion won).

2.2 Material Science

- Cooperating with 华显 (China Display Optoelectronics Technology) to supply B prime to TCL CSOT. It was applied to the C6 model and mass production is scheduled to begin in July.
- For Visionox, R prime is being evaluated as a low-cost model for the V1 line that does not have the same structural name as VM. It is carried out in cooperation with Q Star (Shanghai illuminant company) and mass production can be expected by the end of the year.

2.3 Beijing Ruibo Technology Co., Ltd.

- Beijing Ruibo Technology is a company that develops and produces polarizer retardation film for OLED and LCD.
- It has been confirmed to build a factory in Chengdu and has received more capital from other investments including Core Dynamics Investment and Deyuan Town.
- The general manager is Wang Wei, a former personnel of BOE, with Koreans as technical staff.
- The main product is retardation film, and there is a possibility of developing surface treatment products such as AG (anti glare)/AR (anti reflection) in the future.
- The bringing in of equipment is schedule for the end of 2023. Mass production is planned to begin in early 2024 with a monthly capacity of 3.3 million m².