

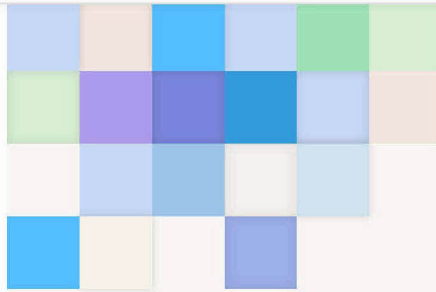
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VOL.21 Mass Production of AMOLED — Samsung's Dramatic Success That Changed the History of Displays

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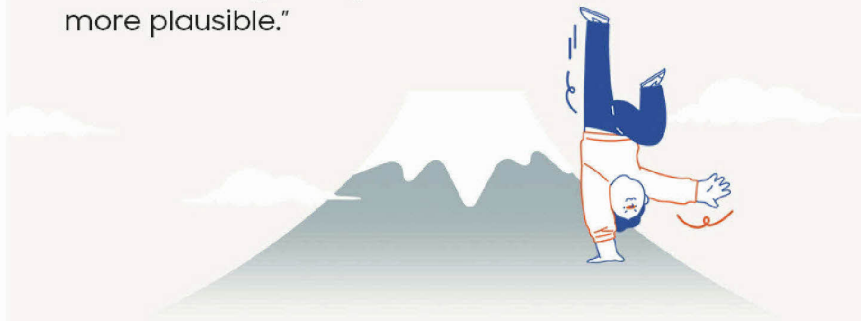
**THE DISPLAY****HISTORIC
MOMENTS
OF SAMSUNG DISPLAY****VOL. 21**

Mass Production of AMOLED – Samsung's Dramatic Success That Changed the History of Displays



In the early 2000s, companies that were closest to the commercialization of AMOLED technology were Japanese.

In fact, when Samsung began its attempt at mass-producing active matrix organic light-emitting diode (AMOLED) in 2005, Japan, which was a leader in AMOLED technology at the time, dismissed Samsung's effort and said, "Climbing Mt. Fuji in a handstand would be more plausible."



Such a reaction was not without reason – despite AMOLED's superior image quality compared to LCD, even Japanese companies that were ahead of Korea in research found it extremely challenging to successfully commercialize AMOLED.

Shattering this bias, however, Samsung became the world's first company to successfully mass-produce AMOLED in September 2007, ushering in an era of the self-emissive display - OLED.



about the future and made proactive investments to widen the gap with its competitors.



▲ The internal structure of the AMOLED mass-production line, taken in September 2007 (Left) and the "electronic garden," created with the first AMOLED product (Right).

As the world's largest Samsung OLED line (A1) with 4.5-generation substrate(730x920mm) was in full operation, mobile phones equipped with OLED such as "Anycall Haptic AMOLED" and "Galaxy S" began to appear in the market, and Samsung's OLED has since grown its reputation to be equated with premium smartphones. .

The development of AMOLED was a challenge that most companies were reluctant to take on due to a lack of business value and difficulty of commercialization, but the dramatic success of Samsung's AMOLED sent shock waves through the display market.

Samsung's commitment to turning the impossible into possible and its success served as a critical juncture that would become a foundation in the history of display innovation, including flexible and foldable displays.

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