

Samsung Highlights 40" OLED, 82" LCD TV, Other LCD Technologies at IMID

20 July 2005



Samsung Electronics announced that it will showcase its largest line-up of leading-edge information display technology ever exhibited in Asia - during the IMID (International Meeting on Information Display) 2005, an international information display conference and exhibition held in Seoul from July 19 to 23.

Sang Wan Lee, president of Samsung Electronics' LCD Business, stated, "IMID is truly a global stage for the latest in display technology and Samsung is proud to introduce our most advanced technologies at this event." He adds, "Samsung's line-up includes the world's largest 82" TFT LCD, a 40" OLED using an a-Si backplane, and new LED backlight and mobile display technologies.

Highlights from Samsung's exhibition booth at IMID are:

-- **40" Active Matrix OLED:** Recognized with the Top Industry Technology Award by the Ministry of Commerce, Industry and Energy, the 40" OLED display is the world's largest and first to be

developed as a single-sheet glass plate with WXGA (1280 x 800 pixels) HD-class resolution using an amorphous silicon backplane. It has a maximum brightness of 600 nits, a shade ratio (black-and-white contrast ratio) of at least 5,000:1, and color saturation of at least 80%. Its ultra-slim design allows for the development of TV sets that are a mere 3cm thick or less.

-- **82" LCD TV Panel:** The largest LCD ever developed, the 82" LCD was produced at the company's newest and the world's largest TFT-LCD production line, the 7th Generation (1,870mmx2,200mm glass substrates) line located in Tangeong. It features an unparalleled viewing angle of 180° and boasts a color saturation of 92% and video quality response speeds of 8ms or less.

-- **"Always-on" Section Display:** A mobile phone display that requires virtually no power on standby mode, Samsung's section display has a dual-window structure that divides the "indicator" display and main window. The indicator window, which only consumes 0.45mw of power, shows the time, day of week, remaining battery life, antenna status and mailbox status.

-- **2.22" RGB Backlight LCD:** The first public display in Asia, Samsung's 2.22" RGB backlight LCD boasts an enhanced color saturation of up to 82%, which is a vast improvement over the conventional 60% rendering. It uses a three-wave LED light source of red, green and blue instead of the traditional two-wave, white LED of blue and yellow. The resulting display produces lifelike colors and hues enabling a new generation of mobile multimedia devices.

-- **"Xmitter" LED Technology:** The Xmitter technology incorporates Samsung's proprietary optical structural design to enhance light efficiency by more than 40% over the conventional side scan method. Power consumption was reduced by 40% compared to existing LED products and color

saturation stands at 107% while brightness is at 500 nits. The product is drawing attention as the next-generation light source as it meets new environmental regulations which will go into effect in Europe in 2006.

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