

SAMSUNG Electronics Showcases Innovative Display Technology

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[Samsung](#) LCD Business, a division of Samsung Electronics Co., Ltd. and the world's largest provider of [TFT-LCD](#) display panels, today unveiled a wide range of display components and technologies at the International [Display](#) Research Conference (Asia Display '04) and the 4th International Meeting on Information Display (IMID '04). The conferences are being held jointly at the Exhibition & Convention Center (EXCO) in Daegu, Korea, August 23-27. Samsung's new technologies include a 17" and 21" light-emitting diode ([LED](#)) backlights for LCD monitors, an innovative one-piece 2.32" touch screen panel for mobile LCDs and a 46" portrait LCD panel.

To be consistent with new worldwide environmental regulations, this next-generation LED backlight contains no mercury. In addition, color saturation, color stability, product durability and compactness have all

been greatly improved.

The 21.3” LED backlight for LCD monitors is only half as thick as other models of its size. The 17” version delivers brightness of up to 500 nits as compared to other models that average 250 nits. Color saturation is at almost 92 percent, meaning that the colors it reproduces are very close to those found in nature.

Today, smart phones and PDAs have a separate touch screen panel attached on top of the LCD. Samsung has developed a way to build the touch screen function into the LCD itself. Optical sensors measure the various light volumes coming into the panel when objects touch the panel surface, then the light is converted into electric signals for recognition. Application of this technology reduces production cost and enables a thinner design.

Traditionally used only for television, Samsung has turned the 46” LCD panel into a portrait configuration and is targeting various commercial applications such as billboards, picture frames, menus, fashion shows and interior decoration. Conventional portrait products are used only to display graphics, but Samsung has developed software for its new product to accommodate B2B and B2C customers.

At the show, Samsung also unveiled its new 2.6” VGA (300 pixels per inch) amorphous silicon LCD. The display enables users of mobile products to receive the same resolution provided by a notebook PC.

Source: Samsung

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