

Sanyo Epson Develops High-Resolution LCDs That Produce Clear Images from Any Angle

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Sanyo Epson today announced the development of high-resolution liquid-crystal displays featuring Photo Fine Vistarich wide viewing angle technology. The new technology enables the displays to produce beautiful images even when viewed from an angle of 90 degrees from the top, bottom, left, or right. Volume production of displays featuring this new technology, which are available in five sizes (2.4-inch, 2.5-inch, 2.8-inch, 7.0-inch, and 10.1-inch), will commence in Autumn 2006.

The fusion of telecommunications and broadcasting through digitization and the seamless integration of cable and mobile communications have

raised expectations for the next generation of mobile devices. As a consequence, consumers expect devices to bring more convenience, richer content, and more widespread service coverage. In particular, there are increasing demands for mobile devices to have small- and medium-sized LCDs with high resolution, a wide color gamut, a wide viewing angle, and quick response, as well as for them to be light, compact, and ultra energy-efficient. Driven by the burgeoning popularity and increasing resolution of digital cameras and digital-TV-compatible mobile phones, along with advances in mobile devices' functional capabilities, consumer demand for ever-more beautiful displays continues to grow.

Sanyo Epson, with a core role in achieving the i3 (imaging on glass - mobile displays) strategy of the Epson Group's SE07 mid-range business plan, develops products and technologies based on its HCL-S strategy (High quality, Compact design, Low power consumption, System solutions) to supply clear, user-friendly displays that can be used anytime, anywhere. In October 2005 Sanyo Epson achieved a quantum leap in color reproduction in mobile devices with the development of high-resolution LCDs featuring Photo Fine Chromarich wide color gamut technology that enables over 100% coverage of the NTSC color gamut.

Now, making use of its innovative alignment film and liquid crystal materials, Sanyo Epson has developed Photo Fine Vistarich wide viewing angle technology as part of the HCL-S strategy. By combining this with Photo Fine Chromarich wide color gamut technology, Sanyo Epson's LCD panels can now produce images that can be seen clearly from 180 degrees in all directions, without changes in color. Thanks to near-constant gray-to-gray response times, moving pictures are also crisp. In addition, the displays feature low-voltage, energy-saving design and can be manufactured in slim modules.

When watching a DVD in the back of a car, for example, the displays will provide a clear picture not only to viewers sitting directly in front of the screen but also to those at the side. Digital camera users, meanwhile, will be able to preview the images they are shooting in colors that remain true-to-life even when they are holding the cameras above their heads. And users of multi-functional mobile phones will also be able to enjoy a clear picture when viewing video clips and television broadcasts, without worrying about holding the screen at exactly the right angle.

Sanyo Epson intends to commercialize LCDs featuring Photo Fine Vistarich in five sizes (2.4-inch, 2.5-inch, 2.8-inch, 7.0-inch, and 10.1-inch) for use in such devices as in-car navigation and entertainment systems, digital cameras and multi-functional mobile phones that are compatible with "One Seg", a new terrestrial digital broadcasting service in Japan enabling TV programs to be played on mobile phones. In addition, Sanyo Epson is looking to develop new applications for the displays, whose main features and specifications are listed here.

Sanyo Epson will exhibit the five models (2.4-inch, 2.5-inch, 2.8-inch, 7.0-inch, and 10.1-inch) in the coming 2006 Automotive Engineering Exposition organized by the Society of Automotive Engineers of Japan, to be held from May 24 to 26 at Pacifico Yokohama.

Under the HCL-S strategy, Sanyo Epson will continue to develop clear, high-resolution displays that can be used anytime, anywhere, as it strives to become the world's leading manufacturer of small and medium-sized LCDs.

Source: Sanyo Epson

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