High-definition LCD module designed for portable broadcasting equipment

KAWASAKI, SANTA CLARA, Calif., DUSSELDORF, Germany, May 16, 2012 --- NLT Technologies, together with its sales and marketing channels in the Americas and Europe, Renesas Electronics America and Renesas Electronics Europe GmbH, announced the successful development of a new 9.0-inch (23 centimeters diagonal) full high-definition (FHD) LCD module that delivers superior viewing performance in a mid-size form factor. The new display module, part number NL192108AC10-01D, incorporates NLT's proprietary Super Fine TFT [1] (SFT) technology to achieve ultra-wide viewing angles without compromising brightness or color gamut, while providing FHD (1920x1080) resolution for portable broadcasting equipment and other for industrial applications.

"The demand for higher resolution and color saturation is growing for display devices used in portable broadcasting equipment and cameras, as these applications are required to display increasingly diverse and complex information in a variety of conditions," said Omid Milani, Vice President, Displays, Renesas Electronics America. "Developed with these industry needs in mind, the new 9.0-inch FHD LCD module is the latest example of how NLT is innovating LCD display module devices to address the complexities of portable devices with FHD capabilities, and further demonstrates the companies' ongoing commitment to the industrial display market."

Using NLT's proprietary SFT technology, one of the company's core technologies comparable to in-plane switching (IPS) technology, the new 9.0-inch LCD module

delivers excellent viewing performance even in off-angle viewing conditions. The display provides high-quality moving images, high luminance, a wide color gamut, high transmissivity, clear, and vivid color reproduction. These features are key for use in preview monitoring and verification in broadcasting equipment, as well as high-end display applications like portable medical diagnostic imaging equipment.

With support for FHD resolution, an exceptionally high pixel density of 245 pixels per inch and a 103.5 micron meter pixel pitch, the new LCD module provides high resolution in a mid-size amorphous-silicon (AS) TFT color LCD. The 9.0-inch LCD achieves an ultra-wide viewing angle of 176 degrees horizontally and vertically, and high luminance of 400 candelas per square meter (cd/m^2). The SFT technology also reduces color shift that may occur with changes in the viewing angle. The combination of high resolution and pixel density with off-angle viewability allows the 9.0-inch FHD LCD module to display information, including microscopic patterns, quickly, precisely and without visual stress in a variety of viewing angles in either portrait or landscape orientation.

The new LCD also achieves a wide color gamut of 72 percent (NTSC ratio), nearly equivalent to the European Broadcasting Union (EBU) standard – the de-facto standard in broadcast fields. This produces high-quality color video images that can be confirmed through a viewfinder equipped with the display. The form factor is convenient for use in standard broadcasting studio equipment, which allows for two displays of up to 9 inches maximum.

The new LCD module will be showcased in Renesas Electronics America and NLT Technologies' booth (#343) at Display Week 2012, June 5-7, at the Boston Convention and Exhibition Center.

For specifications on the new 9.0-inch FHD LCD module, model NL192108AC10-01 D, please refer to the separate spec sheet.

Additional information about these LCD display products, manufactured by NLT Technologies and represented by Renesas Electronics America in the Americas, can be found at http://www.am.renesas.com/prod/displays [2].

Links:
[1] http://www.nlt-technologies.co.jp/en/technology/sft_viewing_angles.html
[2] http://www.am.renesas.com/prod/displays