

Epson launches volume production of world's first reflective HTPS panels

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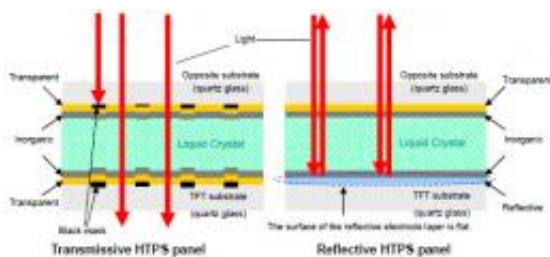
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Seiko Epson today announced that it has developed and begun volume production of the world's first reflective high-temperature polysilicon (reflective HTPS) TFT liquid crystal panels for 3LCD projectors. The new panels, which measure 0.74 inches on the diagonal, support full high-definition (1920 x 1080 pixels) content.

The increasing availability of high-resolution, high-quality source images due to the growing popularity of HD media players and digital HD broadcasts are pushing demand for more convenient large-screen viewing options in the home. Higher contrast is in demand especially for movies, where the reproduction of natural-looking colors and deep blacks is critical.

The new liquid crystal panels fuse reflective [display technology](#) with the storehouse of HTPS technology Epson has accumulated in shipping more than 60 million panels for 3LCD projectors. They provide a device-level contrast ratio of 100,000:1 or higher while taking full advantage of the ability of HTPS panels to reproduce bright, natural-looking images and deliver rich gradations.

Epson has long been the leading supplier of high-quality transmissive HTPS panels for 3LCD home projectors. Now, with the addition of reflective HTPS panels to its product lineup, Epson is enabling high-end 3LCD projectors with premium contrast and image quality.



Cross-sectional views of transmissive HTPS and reflective HTPS panels

The new reflective HTPS panels are based on the proven, reliable structure used for transmissive HTPS panels. The main structural difference is that reflective panels have a reflective electrode instead of a transparent electrode on the TFT substrate. The C2 Fine technology that enabled high contrast ratios in transmissive HTPS panels has been optimized for the reflective HTPS panels, and Epson's unique planarization technology is used to make the reflective layer almost perfectly flat so as to control the scattering of light. The result is panels that offer a device-level [contrast](#) ratio of 100,000:1 or higher.

Source: Epson

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