



# NEWS RELEASE

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IPS Alpha Technology Ltd.

## **IPS Alpha Technology develops 32" model IPS LC panels for full high-vision TVs**

IPS Alpha Technology Ltd. ("IPS Alpha" / President and Director: Mr. Fumiaki Yonai) today announced it has developed IPS LC panels (the IPS Alpha Panels) for 32" model full high-vision and definition TVs (Number of display pixels: 1920 [horizontal] × 1080 [vertical]) to meet the need for higher definition LC TVs. The company plans to commence commercial manufacture in 2008.

Demand for flat-screen TVs has increased dramatically in advance of world-class sporting events, such as the 2008 Beijing Olympic Games, in addition to the fully-fledged expansion of digital broadcasting. This has led to considerable growth in demand for IPS Alpha Panels that offer "beautiful pictures from any angle." IPS Alpha started the commercial production of the IPS Alpha Panels for 37" model full high-vision TVs in April 2007 to respond to the growing interest of consumers in full high-vision TVs, which allow the precise reproduction of images in digital high-vision TV broadcasting.

IPS Alpha Panels for full high-vision TVs offer almost double the definition of conventional high-vision panels (Number of display pixels: 1366 [horizontal] x 768 [vertical]) and support for the video performance of 120Hz has been enabled by installing new features, a LC controller and panel characteristics. In addition, the high transmittance design of the IPS Alpha Panels has achieved low power consumption, by limiting the electric power consumption of backlight, which normally increases when definition is enhanced to a level almost equivalent to that of conventional models.

### ■ Main features of the new IPS Alpha Panels for 32" model full high-vision TVs

1. Displays natural and beautiful pictures from any angle with a wide viewing angle of 178 degrees both vertically and horizontally

The wide viewing angle of 178 degrees, both vertically and horizontally, allows the display of natural and beautiful pictures from any angle, limiting changes in hue due to the viewing angle.

2. Improvement in the video response speed and contrast ratio

An industry first LC controller with a 2-channel low-voltage differential transmission system feature (\*1) has been developed as a form of 120Hz responsive technology for full high-vision panels. Consequently, images that support 120Hz can be inputted and a video response speed at a level of 8ms is supported.

Furthermore, for the LC panels, the front side contrast ratio has been improved by 20% compared to conventional products by reducing the scattering of panel materials.

\*1 Researched by IPS Alpha Technology.

■ Main features of the new IPS Alpha Panels for 32" model full high-vision TVs

Item	Specification
Display size	80cm (32" model: 698mm × 392mm)
Display pixels	1920 (horizontal) × 1080 (vertical)
Pixel pitch	0.36375 (horizontal) × 0.36375 (vertical) mm
Number of colors	16,777,216
View angle	178° or more vertically and horizontally
Luminance	500cd/m <sup>2</sup>
Backlight power consumption	105W
Weight	7.2kg

■ About the IPS LC and IPS Alpha Panels

IPS LC is an abbreviation of In-Plane-Switching (i.e. horizontal electric field) TFT LC and an LC mode with high image quality, which facilitates the display of “beautiful pictures from any angles.” The IPS method is based on the inclusion of a wide viewing angle, with features giving flat colour tones from any viewing position, and which allows images to appear naturally from any viewing angle. In particular, the company has developed IPS-Pro technology<sup>\*2</sup> with higher image quality developed for TVs, transmittance 1.8 times and contrast ratio 4.5 times superior to those of the early IPS method respectively. IPS Alpha distributes panels produced using this technology as “IPS Alpha Panels” worldwide.

\*2 In-Plane Switching Projectus: Projectus means “innovation” in Latin.