

GigE camera module increases data transfer speed and distance

Tipping point reached as GigE technology delivers on promise in camera module market



Sony has unveiled its first GigE camera module, vastly increasing data transfer speeds and opening up a raft of new commercial applications. The inclusion of GigE by Sony's Image Sensing Solutions (ISS) division highlights that the transmission standard has matured with initial concerns surrounding the technology being solved.

The new camera module enables organisations to transmit uncompressed image data, at 1000Mbps, over distances of 100m. Available output modes are 5-megapixel and UXGA for high resolution; SXGA for high sensitivity and VGA, which delivers 90 frames per second.

The module is capable of recognition, measurement and pattern matching. Alignment is also possible in VGA mode and ITS, for high end security, is enabled in 2/3" SXGA mode. These image processing capabilities, combined with its high resolution, make it ideally suited to a vast range of applications, including those in the aerospace, robotics, pharmaceutical and automotive sectors.

Sony engineers have addressed issues associated with GigE's use in camera modules, raised in a recent study by the Fraunhofer Institute and Sony (tinyurl.com/4o4ys8). The 2007 whitepaper concluded that, whilst GigE was capable of better performance in long distance

applications than the IEEE 1394b standard, it was then not suited to transmitting real time data. The report also highlighted that performance had previously been compromised and the difficulties in using GigE made it unrealistic for 2007 camera modules.

Commenting on the new technology, Sony ISS's European marketing manager, Arnaud Destruels, stated: "The inclusion of GigE builds on the XCD's strength and will break further barriers in smart camera usage. Sony's commitment to quality means a lot of work has been undertaken to bring GigE to the point where it can be used alongside [IEEE]1394."

The module has been unveiled at this year's VISION show in Stuttgart and will go into mass production in the second quarter of 2009. A colour module will be available shortly thereafter.

The C mounted camera measures 44x33x67.5mm, delivers a resolution depth up to 12 bits per pixel, has a shutter speed of 1/100,000s and enables 0 – 18dB of gain control with 0-6dB of digital gain.

The module supports GVCP, GVSP, UDP / OPv4, DHCP client and LLA client protocols. It comes with a choice of Windows Filter Driver or High performance driver software and a GenICam compliant XML file to provide XML to applications when the camera is booted.

Sony will be on hand to discuss its use of the GigE standard and its complete range of cameras on show throughout VISION 2009.

ENDS

Editors note:

To book a stand tour or interview with a Sony Image Sensing Solutions representative at VISION 2009 please contact Oliver Davies or Rob Ashwell from the PR agency Publitek.

Ref: SISS0071

For more information, please contact:

Oliver Davies, Rob Ashwell, Publitek

Tel. +44 (0) 1225 470000 / fax +44 (0) 1225 470047 / email: oliver.davies@publitek.com

Matthew Swinney, Sony Corporate Communications Europe

Tel. +44 (0) 1932 817402 / fax +44 (0) 1932 816649 / email: matthew.swinney@eu.sony.com