

FOR IMMEDIATE RELEASE

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Signatec Creates Industry's First ExpressCard High-Speed Digitizer

Newport Beach, California – September 8, 2009 – Signatec Inc. today released the EC14150 wideband signal acquisition card for commercial laptop computers. The compact, low-power form-factor offers 150 MHz sampling rate on two channels, 14-bit resolution and 512 MB onboard RAM, yet consumes only 4.5 W, ideal for mobile data acquisition applications.

Signatec's EC1450 is a 54mm-compliant ExpressCard board equipped with standard 'Plug and Play' features common in PCI systems. The entire 512 MB memory may be used as an exceptionally large FIFO for acquiring data directly to the ExpressCard bus continuously—referred to as Continuous Record Mode—or in Data Transfer Mode, block acquisitions to RAM and transfers to PC modes.

“At 4.5 W, the EC14150 represents one of the lowest power consuming high performance digitizers ever created for its class,” said Anthony Hunt, Signatec's Vice President and Chief Technology Officer. “Signal frequencies up to 200 MHz can be accurately captured in band—or in higher-order Nyquist zones using under-sampling techniques—and continuously streamed to the laptop, an excellent capability, especially for Signals Intelligence (SIGINT) applications.”

High PCI Express Throughput Rates

In either Continuous Record Mode or Data Transfer Mode, Signatec's EC14150 is capable of sustaining 180 MB/s transfers over the ExpressCard PCI Express (PCIe) x1 data link bus interface. Significant test data show recordings with the EC14150's large 512 MB FIFO buffering the recording process can be sustained continuously at up to 90 MSPS, even when operating in traditional non real-time environments such as the Windows operating system.

Maximized Signal Quality

The EC14150 was designed to maximize the quality of the captured signal in terms of signal-to-noise ratio and spurious-free dynamic range over a very wide frequency range. A 24 dB amplifier/attenuator circuit is at the input of both analog channels, where 20 dB of amplification and 4 dB of attenuation are available for selection in steps of 1 dB giving the EC14150 voltage ranges from 100 mVp-p to 3 Vp-p.

Both input channels implement a transformer coupled input for best possible signal performance. The EC14150 bandwidth ranges from 200 KHz to 200 MHz, and can be set to trigger from the input data channels, the external trigger signal input or via software command and supports single shot, segmented, and pre-trigger triggering modes.

Adjustable Sampling

A frequency synthesized clock allows the ADC sampling rate to be set to virtually any clock value up to 150 MHz, offering maximum flexibility for sampling rate selection. This frequency selection flexibility comes at no cost to the acquisition clock quality/performance when locked to either the onboard 10 MHz, 5 PPM reference clock or to an externally provided 10 MHz reference clock via the onboard clock input connector. This same sync clock input connector can also be used for applying an external clock to the EC14150's onboard ADCs.

“Signatec's ability to leverage the ExpressCard form factor and bring high-speed data acquisition performance capabilities directly into the ubiquitous laptop opens new markets both in laboratory

environments as well as within SIGINT communities” said Tom Wagner, Director of Marketing at Signatec. “Serving the aerospace, defense and intelligence communities for over 20 years, Signatec continues to deliver industry leading solutions for its customers within the high-speed communications community.”

Software and Development Tools

Signatec’s EC14150 comes with the following:

- Windows 2000/XP/Vista drivers
- C Function Library with source code
- Turnkey signal recording software application
- Software manual that describes how to use the available library of functions or API to create larger applications or systems.
- SDK offering many multiple coding examples

Pricing and Availability

Signatec is now taking orders for the EC14150 with a shipping forecast of 4 to 8 weeks. For the latest pricing and availability, please contact Tom Wagner, Signatec’s Director of Marketing, at twagner@signatec.com.

About Signatec, Inc.

Delivering advanced system solutions since 1988, Signatec is a leading designer and manufacturer of high-speed data acquisition, parallel digital signal processing, continuous signal data recording and arbitrary waveform generation systems. Signatec differentiates itself by being one of the only single-source suppliers that works with its customers to build affordable, real-time signal technology systems for advanced radar, SIGINT, ultrasound, imaging and other high-speed communications systems. For more information, visit Signatec online at www.signatec.com