

Sundance Introduces High-Speed Analog Capture to PC/104 Stacks Fastest ever PC/104 Quad Channel ADC card is shipping

London, UK – 22th February 2012 – Sundance, a leading supplier and manufacturer of advanced digital signal processing and reconfigurable FPGA systems has introduced the SMT141, a PCIe/104 Type 2 card with two dual-channel analog-to-digital converters (ADCs). The latest addition to the Sundance line of PCIe/104 modules provides a quad channel ADC capable of 14-bit precision with sample rates up to 250 MHz. An optional dual fibre interconnect enables the SMT141 to be connected to other modules or data sources.

The SMT141 implements comprehensive clock circuitry that allows synchronisation among the individual converters and the use of an external reference clock. 512MB of DDR2 storage/capture memory and a 4-lane PCI Express interface support the high speed transfer of captured data to a suitable host controller.

The F100T variation has 3 banks of QDRII memory and dual fibre optical transceivers for secure and long-distance transfer to remote non PC/104 controllers. The onboard Virtex-5 FXT100 FPGA with a PowerPC processing core can be combined with IP cores that can be implemented for down conversation, run-length encoding and FFT processing on the fly. A dual SATA interface provides a connection to disk drives for in-line storage.

"Data acquisition on a PC/104 platform has previously been restricted to sub-50 MHz sampling per channel due to limited bandwidth, up to 150 Mbytes/sec, on the 32-bit PCI/104 bus PCIe/104 Type 1 modules. The 4-lane PCIe104 Type 2 interface with Gen 2 PCI Express on the SMT141 has a theoretical peak-bandwidth of 800 Mbytes/sec giving it room to handle the 250 MHz samples from quad channels," said Flemming Christensen, managing director of Sundance Multiprocessor Technology Ltd.

The SMT141 is designed to operate in a host-free, stand-alone environment for more deployment options. Linux support is available for the on-board PowerPC[®] 440 core and host interface software is either Windows 7 (32/64-bit) or Linux.

Typical applications require high-speed data acquisition, where the data collection might be in a remote location or hazardous environment. The SMT141 can transfer collected data via fibre to a host PC in a control center. The SMT141 provides a complete conversion solution and stands as a platform that can be part of a transmit/receive communication system.

Pricing for SMT141 starts at US \$5,490 quantity one. The SMT141 is available in most configurations from stock.

About Sundance Multiprocessor Technology Ltd

Sundance designs, develops, manufactures, and markets internationally high performance signal processing and reconfigurable systems for original equipment manufacturers in the wireless and signal processing markets. Leveraging its multiprocessor expertise and experience, Sundance provides OEMs with modular systems as well as data acquisition, I/O, communication and interconnectivity products that are essential to multiprocessor systems where scalability and performance are essential. With over fifty different modules and carriers for PC/104, PCIe/104, PXI Express, and standalone platforms, Sundance is a solution provider to semiconductor, pharmaceutical and factory automation industries. Sundance, founded in 1989 by the current directors, is a member of the TI Third Party Program, Xilinx Alliance Partner, PXI Alliance and MathWorks' Connection programs.



Sundance is a member of the PC/104 Consortium, the focal point for the entire PC/104 industry including manufactures and OEMs. It provides a place for information on current specifications, product offerings, news, and events and a place to advance and develop specifications that are consistent and stable for long-term use.

For more information visit <u>www.sundance.com</u>. Details on the SMT141 can be found at: <u>www.pci104.biz/product_info.php?products_id=37</u>