



NEWS RELEASE

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Contact:
Flemming Christensen
Managing Director
+44 7 850 911 417
Flemming.C@sundance.com
Skype: Flemming_Sundance

Sundance's PC/104 PSU Modular Power Supply is shipping

“SMT1024 is probably the most versatile PC/104 PSU in the World”

London, UK – 3rd October 2013 – Sundance, an established supplier and manufacturer of Embedded Computing Modules, has announced the immediate availability of the SMT1024, a modular PC/104 Power Supply Unit (PSU) that can be purpose built for individual systems to provide optimal DC-DC efficiency and variable wattage outputs on any of the voltage-rails.

“The legacy of PC/104 goes back more than 20 years and it was the norm to have multiple power-rails, as most semiconductors required +/- 12V and +/-5V, whereas current semiconductor require an even longer list of voltage-rails from 0.8V to 5V,” stated Flemming Christensen, Managing Director of Sundance Multiprocessor Technology Ltd. *“The PC/104 world was calling for a better PC/104 PSU design concept and the SMT1024 is Sundance's reply.”*

The lower voltages are typically provided on the individual PC/104 cards from a single rail on the PC/104 Bus-Stack using small DC-DC converters. This typically means that the other voltage rails are 100% idle, simply consuming energy and generating heat. The SMT1024 can be built and even upgraded after deployment with any combination of 30W of +3.3V; 30W of +5V; 30W of +12V or a nominal 3W for the -12V voltage-rail to offer legacy PCI/104 compatibility.

The SMT1024 overcomes another design requirement of the modern embedded system in respect to 1500V total I/O isolation between the ‘Consuming’ power and the ‘Providing’ power. This has been enabled with [Traco](#) Ultra Compact DC/DC converter modules with 92% efficiency, at full industrial temperature range and fully protected for surge transients up to EN-61000-4-5 level. Additionally, the SMT1024 has thermal protection that will shut-down the PSU at 115 degrees (Celsius).

The conventional way to build embedded solutions for the typical PC/104 enclosures has involved multiple cables from the PC/104 PCB to either a side-panel or a bottom-panel of a PC/104 canister enclosure. Although

flexible, as individual proprietary connectors can be chosen, it does introduce a high level of manual handling with risk of mistakes, cable faults and shorts from overheating. Many High Reliability systems stipulate that internal casing cables are no longer an acceptable option. The SMT1024 has eliminated this issue with a break-out PCB that holds the 10V to 36V DC input power connectors. Variations are possible that provide IP-68 ingress protection in suitable enclosures, like the ICE range from ICOP Technologies Inc.

The SMT1024 has an optional Power-over-Ethernet (PoE) module, based on the [Infomart PEM3100 series modules](#), that replaces the typical AC/DC brick PSU and at the same time connects to an infrastructure network, either locally or globally.

“The SmartPhone is a disruptive innovation in terms of our social life for good and bad, but the SmartPhone has driven the semiconductor industry forward during the current down-turn and has created a whole new level of integration to reduce the overall power-consumptions. This ultimately has benefits for the Embedded Computer market”, continues Flemming Christensen, *“as it’s now possible to design a complete PC-solution on a power budget below 24 watts. The significant of the 24W is important in the ‘Always Connected World’ of ours, as that is the limited of the current Power-Over-Ethernet [IEEE 802.3at-2009](#) standard.”*

Pricing for SMT1024 starts at US \$395.00 for a single power-rail. The SMT1024 and all its variations are available on typical 6-8 weeks lead-time.

More information

Media release: http://www.sundance.com/Docs/SMT1024_Oct2013.pdf

High resolution images:

Top: http://www.sundance.com/images/high_res/SMT1024-12-05-33-PoE-PCI-1_top.JPG

Bottom: http://www.sundance.com/images/high_res/SMT1024-12-05-33-PoE-PCI-1_btm.JPG

Product page: http://www.sundance.com/prod_info.php?board=SMT1024

About Sundance

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 3rd 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 www.sundance.com