Single board computer enables fast and reliable data transfer in extreme rugged and mobile environments

ADLINK Technology releases its newest Extreme Rugged CoreModule offering. The ADLINK CoreModule 920, with outstanding mechanical, thermal and power design, is able to support Intel Core i7 performance with low power consumption in a small PC/104 form factor, making it an ideal choice for mission-critical applications in space-constrained environments such as transportation, aviation and defense/homeland security.

Integrating a dual-core 3rd generation Intel Core i7 processor running at up to 2.8GHz with Turbo Boost, up to 4GB of solder-down DDR3 ECC memory, 8 GB of industrial grade SSD and a fast data-transfer SATA 6 Gb/s interface, the CoreModule 920 boasts the highest specification of PC/104 products available on the market and supports rich graphics performance with versatile video outputs, including HDMI, VGA and LVDS. The advanced capabilities of the CoreModule 920 are intended to usher in many new applications for embedded systems, and an economically priced Intel Celeron CPU option is also available.

Compliant with the PCI/104-Express Type 1 standard, the CoreModule 920 provides both PCIe and PCI connectivity and allows for SATA 6 Gb/s data transfer. Space- and cost-savings are provided by the PC/104 family’s inherent self-stacking bus, which allows modules to stack together like building blocks without backplanes or card cages. This stacking feature also delivers high reliability, using four-corner mounting holes that can resist shock and vibration. The Extreme Rugged

CoreModule 920 offers specially designed PCB, which is 50% thicker than ordinary PCBs, and an extended operating temperature range of -40oC to +85oC.

The CoreModule 920 implements a heat spreader design, which allows for more flexible thermal solutions to enable a higher component density not common to its PC/104 family predecessors. Its customized BIOS allows users to “underclock” the CPU and reduce total power consumption and heat generation.

The CoreModule 920’s unique mechanical, power-saving and thermal design maximize the outstanding features of the PCI/104-Express form factor, setting a new benchmark for embedded solutions in the PC/104 family at comparatively low power consumption and cost.

For more information, please go to http://www.adlinktech.com/rugged [1].

Source URL (retrieved on *04/26/2015 - 4:13pm*):
http://www.ecnmag.com/product-releases/2013/03/single-board-computer-enables-fast-and-reliable-data-transfer-extreme-rugged-and-mobile-environments

Links:
[1] http://www.adlinktech.com/rugged