First SBC with Configurable Intel® Atom™ E600C processor series

Kontron introduces the world's first PCIe/104 embedded single board computer (SBC) based on the Intel® Atom™ E600C processor series with industrial temperature range, which pairs an Intel® Atom E600 series processor with an Altera Field Programmable Gate Array (FPGA) in a single package. With the new Intel® Atom E600C processor series, along with IP definable applications, the Kontron MICROSPACE® MSMST adds significant flexibility to SBC based applications. OEMs will benefit from a simplified application design, reduced development efforts, faster time to market and lower total cost of ownership.

With flexible FPGA I/O options, the Kontron MICROSPACE® MSMST allows OEMs to efficiently develop designs with the exact I/O requirements needed to address applications in markets such as automation, medical, transportation, energy, military and communications. Validated IP cores are available for CAN-bus, serial interfaces (SPI Master / UART) and PCI-Express, I2C and GPIO. This makes configuring the platform a quick and easy task. OEMs only need the required IP core and corresponding High-Speed Mezzanine Cards (HSMC) to carry out the interfaces.

For further I/Os, Kontron also offers FPGA programming services. This flexibility, combined with the x86/FPGA technology ecosystem of IP cores and HSMCs, makes the Kontron PCIe/104™ MICROSPACE® MSMST an ideal SBC for dedicated RISC platforms.

The Kontron PCIe/104? MICROSPACE® MSMST is equipped with the Intel® Atom E600C processor series ranging up to 1.3 GHz with up to 2 GB onboard DRAM system memory. Since all components are validated for the extended temperature range from -40°C to +85°C, the Kontron MICROSPACE® MSMST is industrial temperature capable by design.

The power optimized Intel® Graphics Media Accelerator (Intel® GMA 600) with up to 128 MByte, 18/24 Bit LVDS and SDVO interface is integrated in the processor. Video signals are carried out by optional media boards for VGA or DVI. Optional SPDIF (out) and two analog stereo connections for line-out and mic-in take care of the high-definition audio signals. Storage media can be connected by 2x SATA300. 2 x USB 2.0 and an optional 1x Gigabit LAN are also available.

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