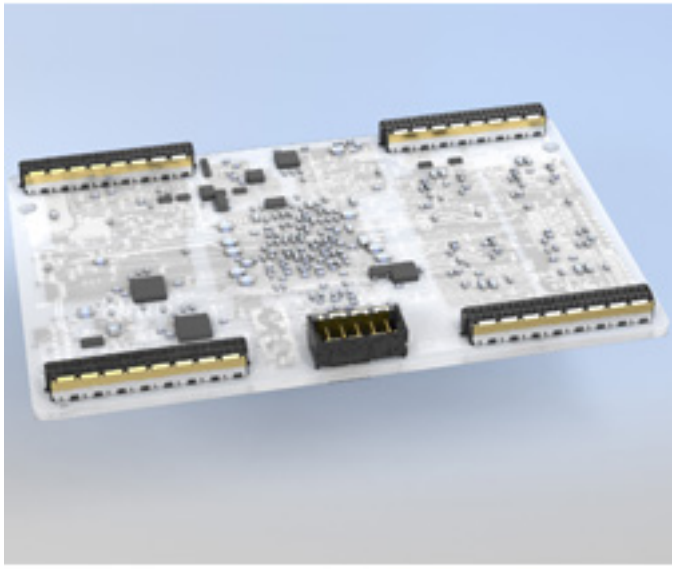
ERNI Electronics Enters the COM Market



Adelberg/Germany, January 30, 2012 – ERNI Electronics announced its entry into the growth market of computer-on-modules (COM). At Embedded World in Nuremberg (28 February to 1 March 2012), the company is presenting the first products of the new WHITEspeed family. With these products, ERNI is addressing the requirements of the market for powerful, reliable and space-saving embedded computers. In developing these COM products, ERNI has been able to draw on its extensive experience in the field of board and backplane design in addition to its core competency in compact and high performance connectors. The implementation of the new WHITEspeed interface standard benefits from the high speed and reliability of the MicroSpeed connectors. With this, the company is in particular addressing applications in harsh and demanding industrial environments such as in the field of transport, heavy engineering and automation exposed to high shock and vibration loads.

The popular ARM technology has now attained a level of performance that makes it attractive also for sophisticated embedded computing applications. Comprehensive operating systems and software support simplifies the development of software for numerous applications. With a new standard for ARM-based computer-on-modules, ERNI simplifies system development on hardware level and offers high signal integrity leveraging from the benefits of the MicroSpeed connectors.

The portfolio comprises a family of pin-compatible ARM-based mezzanine modules, which differentiate in terms of the CPU performance (clock rate, number of cores, coprocessors) and I/Os and memory capacity. In addition, a fully equipped, adaptable baseboard is available, which can be supplied also with an optional display. This carrier board is the development platform for the application software and, at the same time, the basis for customer-specific boards. Using four MicroSpeed signal connectors and one MicroSpeed power module, ERNI realises the

new standardised interface (WHITEspeed 1.0) of the modules to the baseboard, which supports the following: Ethernet 10MB/100MB/1GB, SATA, PCIe x1/x4, Express Card, UART, USB 2.0 High Speed, CAN, I2C, SMB (system management bus), SPI, LVDS LCD display, SDVO (serial digital video out), HDA (high definition audio), SecureDigital memory card interface, GPIOs, RESET, Watchdog, PWM and optionally a camera interface.

On a credit card format (85mm x 55mm), the new mezzanine boards offer a powerful i.MX537 CPU from Freescale with an ARM Cortex-A8 core. To permit high-speed and reliable connection to the baseboard and I/Os, two-row 50-pin MicroSpeed connectors are available. The MicroSpeed connectors are characterised by the proven dual-leaf spring contact and the effective shielding. This allows high data rates (up to 10Gbps) to be transmitted reliably. This makes extremely compact, high-speed and reliable connections possible also in harsh industrial environments.

The use of MicroSpeed connectors offers decisive advantages with regard to reliability and robustness compared with alternatives using card-edge connectors or connectors with only one contact point. Thanks to the dual-leaf contacts, the MicroSpeed connectors not only offer high contact reliability but also an excellent mating tolerance.

As a CPU option for modules, ERNI Electronics initially offers an i.MX537 with ARM Cortex A8 (up to 800 MHz at -40°C to 85°C). The on-board memories include DDR3-RAM (1 to 2GB), reliable NOR flash (64 to 256MB) for the boot code, NAND flash (2 to 4GB) and I2C-EEPROM with up to 128KB for the configuration data. The CPUs also offer comprehensive power management functions.

For the product launch, Linux support is provided by a board support package (BSP). Real-time Linux, Windows (Windows Embedded) as well as additional operating systems are to follow on request.

More information can be found at www.erni.com [1]

Links:
[1] http://www.erni.com