Swiss Made Intel® Atom™ (Bay Trail) Rugged Embedded Computer Family (CEC)

MPL has developed an ultra compact Computer Product Family with a case dimensions of only 62x162x118mm, based on the Intel Atom E3800 processor. Despite the small footprint, the system still has MPL's typical product characteristics like; robustness, the highest reliability, long-term availability of 10 years, lowest power consumption in the industry, extended temperature (-40°C to 85°C), passive cooling (fanless), and easy expansion.

Dättwil Switzerland, August 2014

The New Generation CEC is a highly integrated, compact and robust embedded computer system, based on the long-term available Intel® Atom™ Processor E3800 Series with single, dual, and quad core CPUs. It is a small and cost optimized solution for tasks like simple monitoring, up to more demanding communication, controlling, and visualization jobs where reliability is key.

MPL typical, the system will operate within a wide supply range of 8-36 Volts without a fan, heat-pipes, or case openings. Besides the low power consumption of 8-18 watts, the CEC offers a configurable power management to provide sleep currents down to 100µA, supporting wake capability (Ignition/RI). Various wake sources (Ignition signal, RS232 Ring indicator, or Wake On LAN), mass storage choices of mSATA, 2,5" HD, or soldered down eMMC opens a wide range of application options.

For maximum robustness the CEC is designed to operate in the range of -40°C up to 85°C and withstand reverse polarity voltage, overvoltage, surge and burst voltages, as well as electromagnetic discharges targeting the MIL-STD-461E, IEC60945 and EN50155 standards.

To reach a maximum system stability, reliability, and availability (even in 24/7 operation) the CEC is designed for ECC-RAM and only uses ceramic capacitors to maximize the mean time between failure (MTBF) values.

Main Board IOs
The single board solution consists of up to 5 x RJ45 Gigabit Ethernet ports, 3 x USB, 1 x USB Device, Display Port, 1 x RS232 interface, and a mPCIe/mSATA full size slot. An additional RS232 or RS422/RS485 can be added. The main board can also be offered as depopulated version. The RJ45 connectors can be replaced with M12 connectors or SFP cages, to mention just a few of the possibilities with the CEC Family.

Customizable IO Board
The new CEC is highly expandable through a board interface which offers 2 x PCIe, 2 x HSIC, 2 x UART, SATA, SDIO, LPC and I2C. This allows a maximum on customization for any I/O Boards, allows to extend the system with additional interfaces. For example: GPIOs, additional serial ports, Gigabit Fiber, CAN , miniPCIe slots even PCI/104-Express port.

The new CEC Family is available with a DIN-Rail or flange mount aluminum housing, a MIL housing with 38999 connectors according customer requirements, or as open frame solution. OEM version of the CEC are available too.

About the Company
MPL AG is located in Switzerland in the town of Dättwil near Zurich. It was founded 1985 by Rudolf Hug. Since 1985, MPL AG has been developing and manufacturing rugged embedded computers and Ethernet solutions (boards and systems), and industrial controls with a high quality standard. The success of the company is based on unique solutions: a rugged, PC compatible industrial concept, long-term availability of our products, low power consumption, extended temperature range, and passive cooling concepts (fanless).

For further information, please visit - http://www.mpl.ch

contact information
Remy Lörtscher
MPL AG
Täfernstrasse 20
CH-5405 Dättwil, Switzerland
phone: +41 (0)56 483 34 34
sales@mpl.ch - **www.mpl.ch**

MPL

High-Tech • Made in Switzerland