

CPU board for high power density for SWaP-optimized VPX applications

ECN Europe

Embedded World 2011 – Kontron expanded its VPX ecosystem with the [3U VPX CPU board VX3035](#) [1] based on the 2nd generation Intel Core i7 processor. Integrating the Intel Core i7 2655LE processor, Intel HD graphics and features such as Intel Turbo Boost technology and Intel Advanced Vector Extensions (Intel AVX), the new 3U VPX CPU board fits for SWaP (size, weight and power) optimized high-performance embedded computing applications.

VX3035 is designed as a drop-in replacement of the Kontron [VX3030](#) [2] based on the Intel Core i7 processors 620 LE or 610E, which can be ordered for serial production. Developers can start directly with the development and delivery of their applications and later upgrade to the second-generation platform. This helps OEMs to significantly reduce their time-to-market and increase the availability of their applications. Like all Kontron VPX products, the Kontron VX3035 is compliant with the OpenVPX specification (VITA 65).



[3] Picture: Kontron

VX3035 is based on the highly integrated and extremely energy-efficient Intel Core i7 2655LE processor with integrated Intel HD graphics and the Intel QM67 controller hub. This CPU architecture will also be available as a 6U VPX dual CPU solution. It supports up to 8 GB dual channel 1333 SDRAM with ECC and is available in three designs: standard air-cooled (0°C to +55°C), rugged air-cooled (-40°C to +70°C) or rugged conduction-cooled (-40°C to +85°C) for extreme environmental conditions. Customers can adapt the board exactly to the ambient conditions and benefit from an optimized total cost of ownership, regardless of the demanding conditions.

In addition, the Kontron VX3035 and the Kontron VX3030 integrate an extensive range of interfaces. On the backplane, along with PCI Express x4 (configurable via

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software also to 4x PCIe x1), it also implements 4x SATA II, 3x Gigabit Ethernet, 4x USB 2.0 and two serial interfaces (EIA232/EIA485). On the front panel, 1x GBit Ethernet, 1x USB 2.0 and a serial port are available, along with a VGA output. An on-board USB/SATA connection offers support for standard USB/SATA FlashDisk modules. On the lower side, a PCIe x1 interface allows expansion with application-specific I/O mezzanines.

It supports Windows Embedded Standard 7, Linux as well as VxWorks. For rapid prototyping and software development, Kontron will soon offer the EZ3-VX3035, a 3U VPX system based on the VX3035. OEMs and system developers benefit from a flexible and simple system build that requires no hardware skills. With these development tools, application developers can concentrate on their core competencies to improve time-to-market and application quality.

[SOURCE](#) [4]

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Links:

[1] <http://www.kontron.com/products/boards+and+mezzanines/3u+vpX/processor/vx3035.html>

[2] <http://www.kontron.com/products/boards+and+mezzanines/3u+vpX/processor/vx3030.html>

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