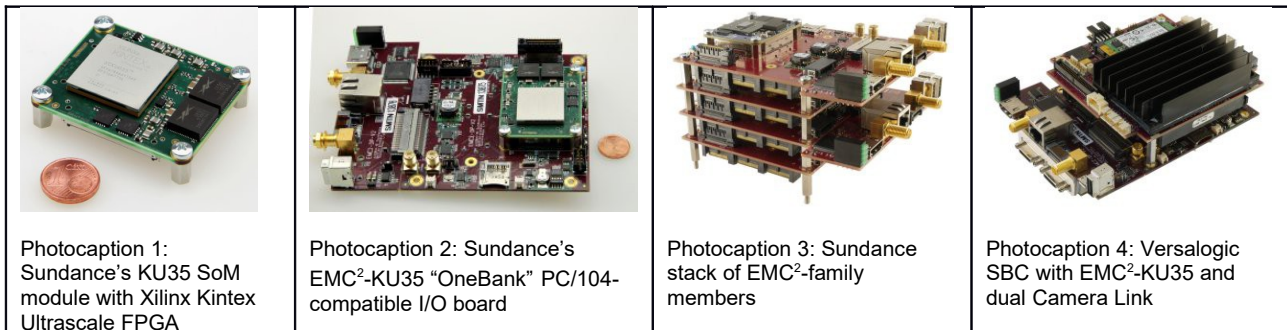


PRESS RELEASE

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Sundance adds Xilinx's new Kintex UltraScale FPGA to its EMC²-family of PCIe/104 "OneBank" compatible I/O boards

The new EMC²-KU35 is a stackable FPGA module with Gen2 PCI Express interfaces that are "OneBank" compatible and has a VITA57.1 FMC I/O slot controlled by a Kintex UltraScale KU35 FPGA, and is fully supported by the latest Xilinx Vivado tools.



Chesham, UK – 13th June 2016. Sundance Multiprocessor Technology Ltd., an established supplier and manufacturer of embedded modules, has announced that it has integrated Xilinx's smallest Kintex UltraScale FPGA with its EMC²-family of embedded boards for the "OneBank" PC/104-compatible format.

Sundance's EMC²-family is a range of industrial-grade and deployment-ready PC/104 boards that feature either a Xilinx Zynq SoC or Xilinx Artix/Kintex FPGAs. The EMC²-KU35 is the latest member and has two banks of 16-bit DDR4 with close to 2Gbytes/sec bandwidth each. It also has four-lanes of PCI-Express and a VITA57.1 FMC-LPC module expansion for a range of COTS or bespoke I/O modules for custom expansion.

The FMC Modules has one high-speed serial lane, running at up to 12.5Gbit that could be used for a 10Gbit Ethernet module. It also has 34x pairs of low-voltage differential parallel lines for interfacing to "real-world" interfaces, like analog/digital signals or various camera interfaces.

The EMC²-family is designed to the latest, yet long-established, PC/104 small-form-factor 90mm by 96mm boards called "OneBank" and, using PCI Express switches, allows an infinite number of boards to be stacked for very demanding applications. The typical board-to-board bandwidth is above 500Mbytes/s and peak bandwidth is up to 2Gbytes/s using the "OneBank" connectors, whereas a possible bandwidth to an FMC I/O module can exceed 6Gbytes/s.

"The evolution of Sundance's EMC²-family of boards with either low-cost/low-power Artix-7 family or the fully integrated Zynq SoC with Dual-Core ARM-A9 has been significantly improved with the addition of the Kintex UltraScale family of FPGAs," said Flemming Christensen, Managing Director of Sundance Multiprocessor Technology Ltd. "While the EMC²-Z7030 board with an ARM9 Zynq SoC is a single-board computer with some FPGA fabric for I/O and pre/post processing and is ideal for low-cost systems, the newly launched EMC²-KU35 provides a magnitude more performance"

The EMC²-KU35 can also combine with one of the many x86-based SBCs that are manufactured by PC/104 Consortium members. One such example is the Versalogic "Bengal" with Intel Atom E3845 quad-core running at 1.9GHz per core and supporting Windows 7 Embedded. Adding an FMC module with two Camera Link ports will provide interfaces to high-resolution and very fast cameras in a stereo-vision setup for autonomously controlled vehicles or planes.

The EMC²-family benefits significantly from the PC/104 stackable concept that allows multiple boards to be integrated into a multi-processing system using PCI Express or Ethernet for inter-connection between each board in the system for a heterogeneous and asymmetrical computing platform. The concept is being developed by Sundance as part of \$100 million industry-wide EU R&D program into Embedded Multi-Core Systems for Mixed Criticality, the Artemis-EMC² Project

The EMC²-KU35 is priced at \$3,225.00 for the extended industrial temperature variation and medium speed-grade of FPGA. Slower, faster and commercial variations are available. The 100+ price is below \$1,800.00. The EMC²-KU35 and its variations are typically available on a lead-time of one to three weeks.

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About Sundance Multiprocessor Technology

Sundance designs, develops, manufactures, and markets internationally high performance signal processing and reconfigurable systems for original equipment manufacturers in embedded applications. Leveraging its multiprocessor expertise and experience, Sundance provides OEMs with modular systems as well as data acquisition, I/O, communication and interconnectivity products that are essential to multiprocessor systems where scalability and performance are essential. Sundance, founded in 1989 by the current directors, is a member of the Xilinx Alliance and MathWorks' Connection programs. Sundance is also a member of the PC/104 Consortium, the focal point for the entire PC/104 industry including manufactures and OEMs. It provides a place for information on current specifications, product offerings, news, and events and a place to advance and develop specifications that are consistent and stable for long-term use. For more information about Sundance Multiprocessor Technology and its products, visit <http://www.sundance.com>.

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