VadaTech Announces a 6U VPX, 3rd Generation Zynq RFSoC UltraScale+

Henderson, NV – May 18, 2023 – VadaTech, a leading manufacturer of integrated systems, embedded boards, enabling software and application-ready platforms, announces the VPX579. The VPX579 is a 6U VPX RFSoC FPGA based on Xilinx XCZU49DR MPSoC FPGA with front I/O access. The module has an on-board, reconfigurable FPGA which interfaces directly to the VPX P1-P2 with high speed SERDES. The SERDES are configurable to run multiple protocols such as PCIe, Aurora, SRIO, XAUI, 40G, 100G, etc. For the PCIe option the module could run as single x16/x8/x4, dual x4/x4 or dual x8/x8.

The VPX579 CPU (Processing System “PS”) has interface to a single bank of DDR4 memory channel (64-bit wide with ECC) with total capacity of 8 GB. The PL (Programmable Logic) interfaces to 8GB of DDR-4. This allows for large buffer sizes to be stored during processing as well as for queuing the data to the host. The module has onboard 64 GB of SATA NANDrive Flash, 128 MB of Boot Flash, and an SD Card option.

The VPX579 has 16 ADC channels capable of sampling at 2.5GSPS and 16 DAC channels capable of sampling at 9.85 GSPS (the FPGA speed of -I2 ordering option can go up to 10GSPS). It has 8 ADC channels capable of sampling at 5GSPS and 8 DAC channels capable of sampling at 9.85 GSPS (the FPGA speed of -I2 ordering option can go up to 10GSPS). The VPX579 provides Display Port (DP), 32 General Purpose I/O, 20 LVDS, and four RS-485 through the front panel. The I/O is provided via a High-Density Connector (HDC). There are three RS-232 ports that are routed to a RS-232 to a USB device. The module also has a GbE to the front panel from the PS. Lastly, it also has an onboard microcontroller that implements Tier-2 health management. Please consult with VadaTech Sales to discuss ordering options.

About VadaTech

VadaTech provides innovative embedded computing solutions from board-level products, chassis-level platforms, to configurable application-ready systems. With a focus on AdvancedTCA, MicroTCA, VPX and PCIe solutions, the company offers unmatched product selection and expertise. A unique combination of electrical, mechanical, software, and system-level expertise, enables VadaTech to provide customized commercial or rugged computing solutions to meet the most complex customer requirements. VadaTech also offers specialized product solutions for VME, CompactPCI, and other architectures. A member of PICMG and VITA, VadaTech has headquarters, design and manufacturing facilities in Henderson, NV with design, support and sales offices in Europe and Asia Pacific.

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