VadaTech Announces a 6U VPX Zynq UltraScale+ FPGA Carrier Board with Dual FMC+ sites

Henderson, NV – August 15, 2019 – VadaTech, a leading manufacturer of integrated systems, embedded boards, enabling software and application-ready platforms, announces the VPX580 rugged DSP blade. The VPX580 is a 6U VPX board based on Xilinx UltraScale+ XCZU19EG MPSoC FPGA with dual FMC+ sites, coupling real-time processing capability with high speed I/O and making it suitable for radar, signal intelligence and image processing applications.

The XCZU19EG FPGA has 1968 DSP Slices and 1143K logic cells, and includes a quad-core ARM Cortex-A53 processor, dual-core ARM Cortex-R5 and ARM Mali™-400 MP2 GPU. The Cortex-A53 Dual GbE is accessible directly from 1000-BaseBX connection to P1. The FPGA interfaces directly to the VPX P1-P2 connectors via LVDS, GPIO and high-speed SERDES, and to FMC+ DP0-15 and all FMC LA/HA/HB pairs.

Each FMC+ site has 16 GTP SERDES routed from the FPGA and each site is supported by an Interlaken hardcore processor. The boards provide 8GB of DDR4 via a 64-bit wide memory channel, allowing for large buffer sizes to be stored during processing as well as for queuing data to a host processor. The module also includes 64 GB of Flash, 128 MB of Boot Flash and a SD Card option.

An on-board microcontroller implements Tier 2 system management per VITA 46.11, supporting advanced features such as sensor management and event logging, making the unit suitable for deployment in large and complex systems.

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.