VadaTech Announces a 6U VPX Processor, Layerscape LX2160A with PCIe/40G/10G/1G

Henderson, NV – April 25, 2024 – VadaTech, a leading manufacturer of integrated systems, embedded boards, enabling software and application-ready platforms, announces the VPX706. The VPX706 is a Layerscape Processor in 6U form factor based on the NXP LX2160A (16-core) processor. The module provides PCIe Gen3 x8 or Dual PCIe Gen3 x4 on P1 connector ports 0-7. Also, on the P1 connector the module has eight reconfigurable SERDES that are routed to ports 8-15. Below are some examples of the available SERDES configurations:

- Dual PCIe Gen3 x4
- 4x GbE with PCIe Gen3 x4
- 4x 10GBASE-KR with PCIe Gen3 x4
- 8x GbE
- PCIe Gen3 x4 with 4x 10GBASE-KR
- 4x 10GBASE-KR with 4x GbE
- 8x 10GBASE-KR
- PCIe Gen3 x4 with PCIe Gen3 x2 with 2x GbE
- 2x 40GBASE-KR4

The module includes 32 GB of DDR4 memory with ECC, SDHC Socket, 64 MB SPI flash, 512 KB I2C flash, 8 GB of eMMC, and 1TB NVMe storage. Additionally, the VPX706 can host two XMC modules which interfaces to the host processor via PCIe Gen3 x4. The XMC I/Os are routed to the backplane per VITA 46.9 as P3w1-P64s+P4w1-X12d+X8d and P5w1-P64s+P6w1-X12d+X8d. The module also routes RS-232 from management, dual RS-232, dual RS-422 from host, a USB 3.0/2.0 and 1000Base-T to the front panel and P2 connector. The RS485/RS422 termination and slew rates are software configurable. The CPU has Secure Boot capabilities from power-on and hard reset. Please consult with VadaTech Sales to discuss ruggedization and other specific 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.

VadaTech, Inc. www.vadatech.com 198 N. Gibson Henderson, NV 89014