HS-ADC Supercomputer

24-channel @ 2.7 GSPS

Picture of similar system

High speed ADC System 24-Channels

- MicroTCA system 19“, 5U with 12 single-width, full-size AMC-slots and 1000W AC power supply, advanced clock redundancy
- 1x MCH with fully managed Gigabit Ethernet switch, PCIe switch, Stratum-3 clock and JTAG virtual probe
- 6x AMC Kintex Ultrascale FPGA with 4x ADC 2.7 GSPS@12-bit, high FPGA speed
- 1x AMC Intel x86 Core i7 CPU, 8GB SDRAM and 500GB Samsung SSD on carrier
- 1x Clock Distribution Module with 2x 6-channel synchronous clock (2.7GHz / 100MHz) including cables

The **HS-ADC Supercomputer** consists of a 5U MicroTCA system with MCH with full-managed Gigabit Ethernet switch and PCIe switch, 6 Kintex Ultrascale FPGA Boards with 4 ADCs 2.7 GSPS @ 12-bit each, Intel x68 Core i7 CPU board with 8GB SDRAM and 500GB SSD on carrier, Synchronous Clock-Distribution Module with 2x 6 channels.

MicroTCA System Features	**FPGAs** **CPU** **Memory** **Storage**	Xilinx Kintex Ultrascale Intel x68 Core i7 8 GB DDR3 500 GB SATA SSD
Interfaces (Frontpanel)	**Ethernet** **Analog** **USB** **Graphic Ports** **Serial Ports** **Clocks**	2x Gigabit Ethernet RJ-45 on CPU, 2x Gigabit Ethernet and 1x 100BaseT RJ-45 on MCH 24x analog input SMPM on FPGA boards 1x USB 2.0 on CPU 1x Mini-Displayport on CPU 1x RS-232 on CPU, 6x RS-232 on FPGA boards and 1x RS-232 on MCH 12x clock output SMPM on clock distribution module and 12x clock input SMPM on FPGA boards
Software Support	**Linux on CPU**	Ubuntu 18.04
Mechanical	**Mounting** **Dimensions (W x H x D)** **Weight**	Desktop or rack-mount 19“ x 5U x 10,5“ without handles TBD
Power	**Input Voltage Range**	240 VAC
Power Consumption	**Typical**	TBD
Environment	**Operating Temperature** **Storage Temperature**	0°C to 45°C (55°C for limited time) -40°C to +70°C

Ordering Information:

Configuration	Description	Order Code
HS-ADC Supercomputer	High-Speed ADC System 24 channels @ 2.7 GSPS	**A09653**

EMCOMO Solutions AG
Industriestr. 10
89231 Neu-Ulm
Germany

tel +49 (731) 880351-0
info@emcomo.de
www.emcomo.de

Copyright © 2019 EMCOMO Solutions AG. All data is for information purposes only. All information has been checked carefully and is accurate to our best knowledge. However EMCOMO shall bear no responsibility for inaccuracies. All licenses and trademarks are the property of their respective owners. DS-HSADC Rev.EW21