Veloxity™ 200

Board Specifications

FPGA	• AMD Xilinx Virtex Ultrascale Plus XCVU13PFHGA2014-2L-E • Speed Grade -2, Low Power • Extended temperature range
On-board Flash	• 2Gbit Flash memory for booting FPGA
DRAM	• 2x DDR4 DIMM Slots (256GB Total, 2x 128GB) • 2400MHz
Host interface	• PCIe Gen3 x 16 interface direct to FPGA, connected PCI-e hard IP
QSFP28 cage	• 400 Gbps (8x 50 Gbps PAM4) • PAM4: 2x 200GbE, 4x 100GbE, 8x 50GbE • NRZ: 2x 200GbE, 4x 100GbE, 8x 50GbE, 16x 10/25 GbE • Multi-rate hard MAC supports all combinations
NVME	• 1x M.2 NVMe Connector
SlimSAS	• 2x SlimSAS, 2x 200Gbps Connectors
External Power Pin	• 1 PCIe Slot (75W) • 2 8-Pin connectors (up to 150W each, 300W Total)
VCCINT Supply	• 200 A
Config Port	• PMBus, Soft Processor JTAG

SD Card	• Boot drive for soft core processor • Data storage expansion
Cooling	• Standard: single-width passive heat-sink
Electrical	• PCIe slot (75W), 2x 8-pin External PCIe 12V connectors (2x 150W) • Up to 375W total
Environmental	• Operating Temperature: 0˚C - 100˚C
Quality	• Manufactored to IPC-A-610 • Class 2 • RoHS compliant • CE, FCC, UKCA & ICES approvals
Form factor	• Full height, 3/4 length PCIe double-slot board • Size: 111.15 mm x 252 mm • (4.37 in x 10 in)

Development Tools

System development	• Pascaline SDK including PCI-e driver, Host software, libraries, and board utilities
Application development	• C High level synthesis, AMD Vivado Tools (HDL and VHDL)

To learn more, visit

www.pascalinetechnology.com

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