VT808

3U Rugged Chassis to accommodate four x16 PCIe Edge Card Modules

VT808

Key Features

- 3U Chassis that accepts four standard x16 PCIe Gen5 style modules
- The chassis is design specially for the FPGA modules that allows SERDES to be re-configured to any protocol
- 400W per module
    - The modules do not need active cooling (chassis will provide the cooling to each module) which is more efficient vs. active cooling.
- Universal AC, +28V DC and +48V DC input option
- Redundant power 2+2
- Base Management Controller (BMC) for health management
- GbE switch
- Front to back cooling

Benefits

- Turnkey solution and all integration done at VadaTech
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

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VT808

The VT808 is a four-slot chassis that accommodates four x16 PCIe style modules.

Power Supplies

The VT808 can accept up to four power supplies that can provide 2+2 redundancy. The VT808 has a Power Entry Module (PEM) that manages power to each slot. The VT808 power supplies has option for Universal AC, +28V DC and +48V DC.

Cooling

The VT808 has intelligent fan controller and the cooling is front to back.

Routing between modules

The VT808 chassis provides x4 lanes to each slot as a full mesh as data plane as well as an x1 lane full-mesh between each slot for control plane.

Integrated GbE

The VT808 has a GbE on board that allows each of the PCIe modules to connect via a cable or use the 16th SERDES on the PCIe Edge to connect to the switch as 1000Base-BX.

Figure 1: VT808 Front View

Integrated BMC

The VT808 has a health management controller on board which follows the IPMI specification. This allows dynamic cooling of the chassis as well as provide health management to the upper protocol.

Integrated USB HUB

The VT808 has a USB Hub on board that allows each module to connect via cable to the HUB.

Integrated JTAG Switch Module (JSM)

The VT808 has a JSM to allow all four slots to be managed thru a single JTAG connector or via GbE thru Virtual Probe.

Chassis Locator

Each chassis could be assigned a unique Chassis Locator (CL) to uniquely identify the chassis among multiple chassis in the system.

Figure 2: VT808 Rear View

Motherboard Topology Options

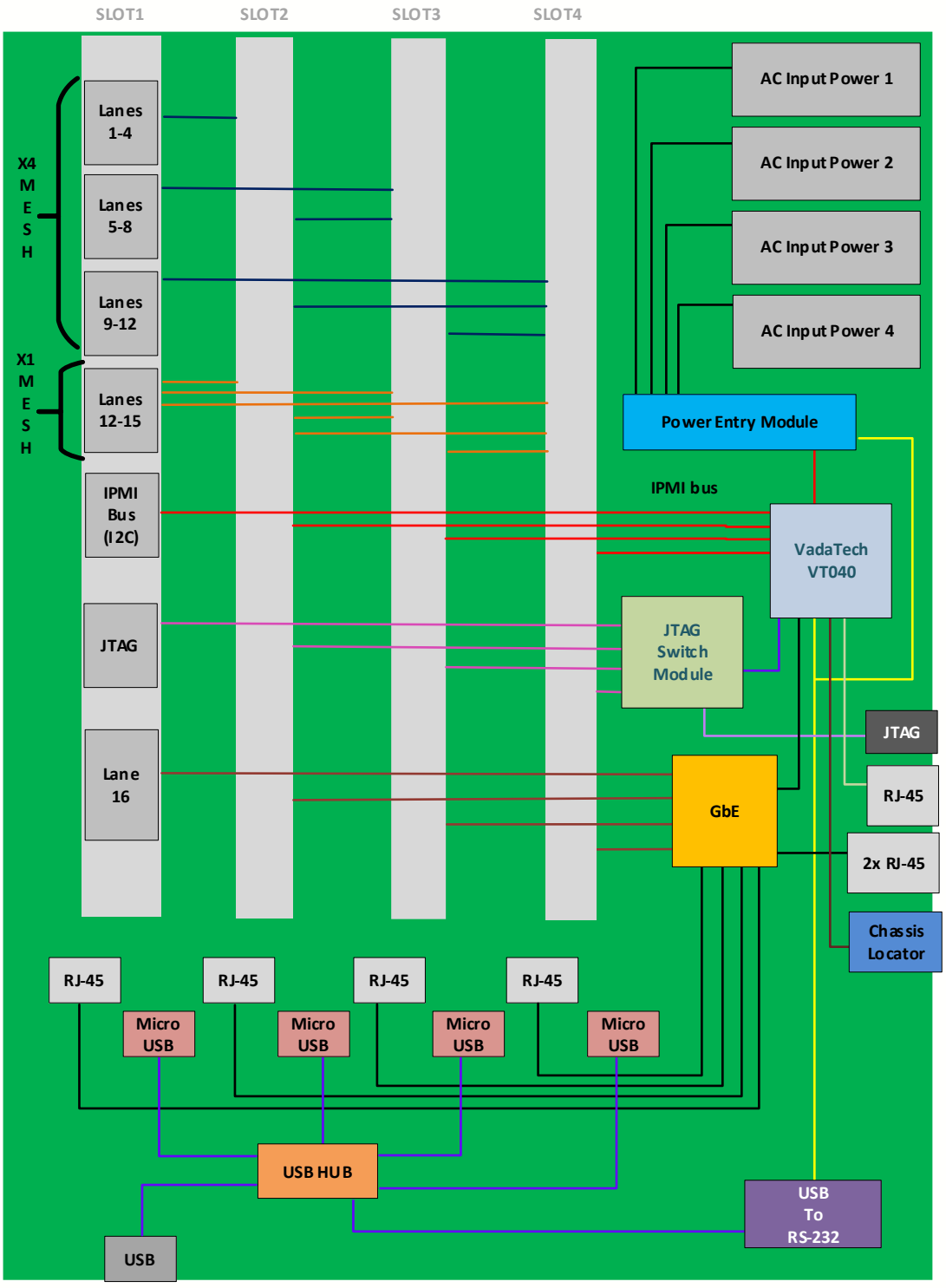

Figure 3: VT808 Backplane Connections (VadaTech can modify the motherboard for different topology)

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Specifications

Architecture		
Physical	**Dimensions**	Height: 3U
		Width: 19”
		Depth: 24.4”
		Weight: TBD
Type	**PCIe Edge style**	X16 PCIe full length
Standards		
PCIe Sig	**PCIe**	PCIe Sig specification Gen5
Configuration		
Power	**VT808**	Universal AC input, +28V DC or +48V DC
Environmental		See Ordering Options
Cooling		Front to Back
Other		
MTBF	MIL Hand book 217-F@ TBD hrs	
Certifications	Designed to meet FCC, CE and UL certifications, where applicable	
Standards	VadaTech is certified to both the ISO9001:2015 and AS9100D standards	
Warranty	One (1) year, see VadaTech Terms and Conditions	

OpenVPX allows for a wide range of pin assignments and use cases. Prior to purchasing VadaTech products as standalone items (i.e., not part of an integrated platform) please consult with VadaTech on the system architecture to ensure compatibility.

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of OpenVPX, ATCA and MTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTMs), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

Ordering Options

VT808 – A00-D00-0HJ

A = Number of Power Supplies	D = Motherboard topology	
0 = Single 1200W (~200W per slot) 1 = Dual 1200W (400W per slot) 2 = Triple 1200W (2+1) 3 = Quad 1200W (2+2) 4 = Dual 18-36V DC (1200W total) 5 = Quad 18-36V DC (3+1) 6 = Dual 36V-75 DC (2000W total) 7 = Quad 36V-75V DC (2+2)	0 = Per figure 3 1 = Reserved 2 = Reserved	
		H = Environmental
		0 = Commercial 1 = Industrial
		J = Conformal Coating
		0 = No coating 1 = Humiseal 1A33 polyurethane 2 = Humiseal 1B31 acrylic 3 = Parylene

Related Products

PCI596

- PCIe x16 FPGA carrier for FMC+ per VITA 57.4
- Xilinx UltraScale+™ VU13P FPGA
- Allows expansion of a daughter card on top of the FMC for more I/O
- Active cooling for FPGA, FMC+ and the daughter card module

PCI597

- Dual PCIe x16 FPGA
- 72 fiber transceivers egress ports
- Optical speed choice of 10G or 28G per link
- Xilinx UltraScale+™ VU13P FPGA

PCI592

- PCIe FPGA carrier for FMC+ per VITA 57
- Xilinx Kintex UltraScale™ XCKU115 FPGA
- Active cooling for FPGA and FMC+
- Dual x8 lanes for direct connection to neighbouring FPGA card(s)

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