

ATC130

ATCA Carrier for Two PCIe Gen3 Modules



ATC130

Key Features

- ATCA Carrier with two PCIe modules x16 slots
- Direct PCIe x16 connection to Zone 2
- Adjustable hold-down brackets to accommodate different PCIe edge style length
- Dual 10/100/1000Base-T Base Channels to Rear Transition Module (RTM)
- External Memory Components Integrity Check Mismatch via onboard FPGA for Tamper Detection
- FPGA Key secured by customer
- IPMI Management Controller with Serial Over LAN (SOL) capabilities

Benefits

- High performance rugged processor blade
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company



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ATC130

The ATC130 is a carrier module that provides two x16 PCIe Gen3 slots for standard PCIe edge style boards. One of the slots can take a standard extended size high-power PCIe board such as a General-Purpose Graphics Processing Unit (GPGPU) supporting up to ~300W power dissipation. The second PCIe slot is for a smaller PCIe edge style board. The total power available across both boards is ~450W. This modular approach allows an AdvancedTCA chassis to utilize widely available high-end PCIe cards, such as PC graphics cards, to capitalize on the economies of scale within the PC market.

The unit optionally includes a VadaTech third or fourth generation shelf manger, saving the need for a shelf slot within the ATCA Chassis (consult the VT003 or VT040 datasheet for more detail). If the chassis is configured with dual ATC130s then the shelf manger is redundant.

A powerful onboard FPGA can support Tamper Detection and Firmware Corruption checks. It can be programmed by the customer to hold a secure Key. With this capability the module supports External Memory Component Integrity Check Mismatch.

The ATC130 can be ruggedized for harsh environments. See customer ordering options for conformal coating.



Figure 1: ATC130

Block Diagram

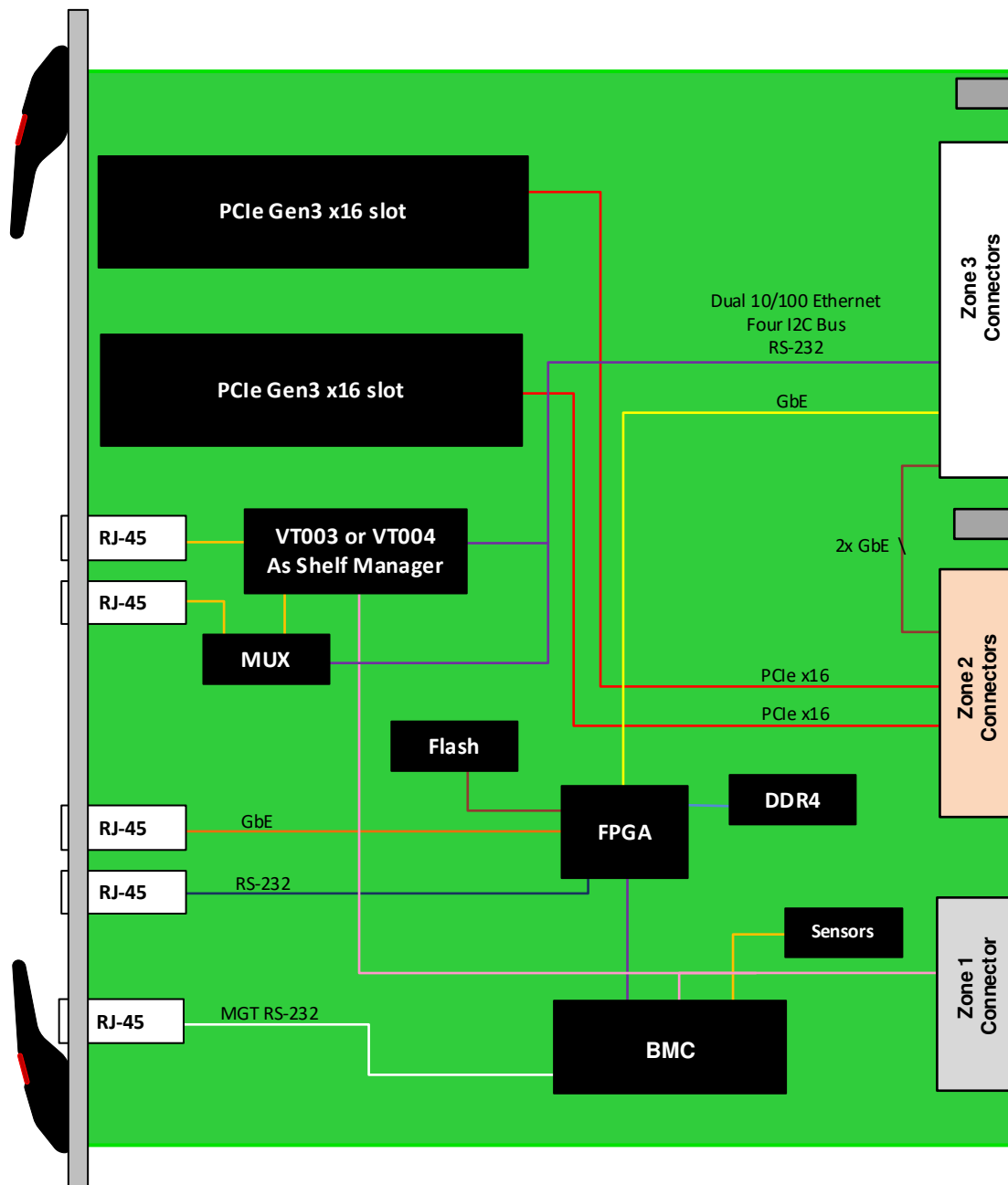


Figure 2: ATC130 Functional Block Diagram

Specifications

Architecture		
Physical	Dimensions	Width: 12.687" (322.25 mm)
		Depth: 11.024" (280 mm)
Type	ATCA Carrier	Dual PCIe Edge style
	Memory	2 banks of DDR4 for FPGA
Standards		
ATCA	Type	PICMG 3.0 Revision 3.0
Module Management	IPMI	IPMI v2.0
Configuration		
Power	ATC130	PCIe edge module installed dependent (without any PCIe modules 10W)
Environmental	Temperature	See Ordering Options
		Storage Temperature: -40° to +85°C
	Vibration	0.5G 5 to 500 Hz on each axis
	Shock	Operating 30Gs on each axis
	Relative Humidity	5 to 95% non-condensing
	Interface Connectors	x2 RS-232 via RJ-45
Front Panel	LEDs	X2 GbE via RJ-45
		IPMI, Activity, Status and User defined
Software Support	Ejector Handles	Hot-swap with micro-switch
	Operating System	Linux
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	Two (2) years, see VadaTech Terms and Conditions	

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

ATC130 – A00-000-0HJ

A = Shelf Manager		
0 = No Shelf Manager 1 = VT003* 2 = VT040*		
		H = Temperature Range
		0 = Commercial 1 = Industrial
		J = Conformal Coating
		0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Notes:

*VadaTech recommends VT040 for any new projects. A=0 is normal where separate shelf manager installed.

Related Products

ATC126



- Dual 14-core Intel® Xeon® E5-2658, 2680, 2648L, 2618L, 2620, 2630 v4 processors
- Eight banks of DDR4 for up to 256 GB memory
- 10/40GbE Fabric channels

ATC129



- Dual socket 24-core Intel® Xeon® Platinum Processors - Scalable Performance (SP)
- Twelve banks of DDR4 for up to 384 GB with ECC per socket (total of 768 GB)
- Dual 100G ethernet to Zone Two

VT830



- 19" rackmount 6U ATCA Chassis with integrated Switch and Shelf Manager
- 10GbE/GbE Managed Layer 2
- 40GbE/10GbE/GbE Managed Layer 3

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