

ATC125

PCIe Gen 4 ATCA Carrier with Intel Xeon D-2796TE Processor



ATC125

Key Features

- ATCA Processing Carrier with a standard PCIe edge Module
- Intel® Xeon D-2796TE Processor (20 Cores)
- 128 GB of DDR4 memory
- x16 standard PCIe Gen 4 slot
- Dual 100GbE to Fabric channels, Dual GbE to Base channels and Dual 10GbE to the front panel
- M.2 NVMe socket
- Platform Firmware Resilience (PFR) via on board FPGA for security
- Trusted Platform Management (TPM)

Benefits

- Combined standard edge-type PCIe Gen 4 I/O with Intel® Xeon D-2796TE processor
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full ecosystem of front and rear boards, enclosures, specialty modules, and test/dev products from one source
- AS9100 and ISO9001 certified company

Advanced TCA®



vadatech
THE POWER OF VISION



ATC125

The ATC125 is a Carrier Module with an on board x16 PCIe Gen4 slot to accept any standard PCIe edge type module. The module has dual 100GbE connected to the Fabric channels and dual GbE to the base channels. The ATC125 comes with 128GB of DDR4 memory.

The module utilizes the Intel Bootguard PFR via on board FPGA and Trusted Platform Management (TPM). The FPGA can be reprogrammed by the customer to meet their security beyond what is provided by the PFR.

The front panel contains dual USB 3.0, video, 3x RS-232, and dual 10GbE. For on board storage the module has a M.2 NVMe socket.

The ATC125 can accommodate a dual width PCIe module with the dual width ATCA front panel option, expanding the board pitch from 1.2" to 2.4".



Figure 1: ATC125



Figure 2: ATC125 Front Angle



Figure 3: ATC125 Front Panel View

Block Diagram

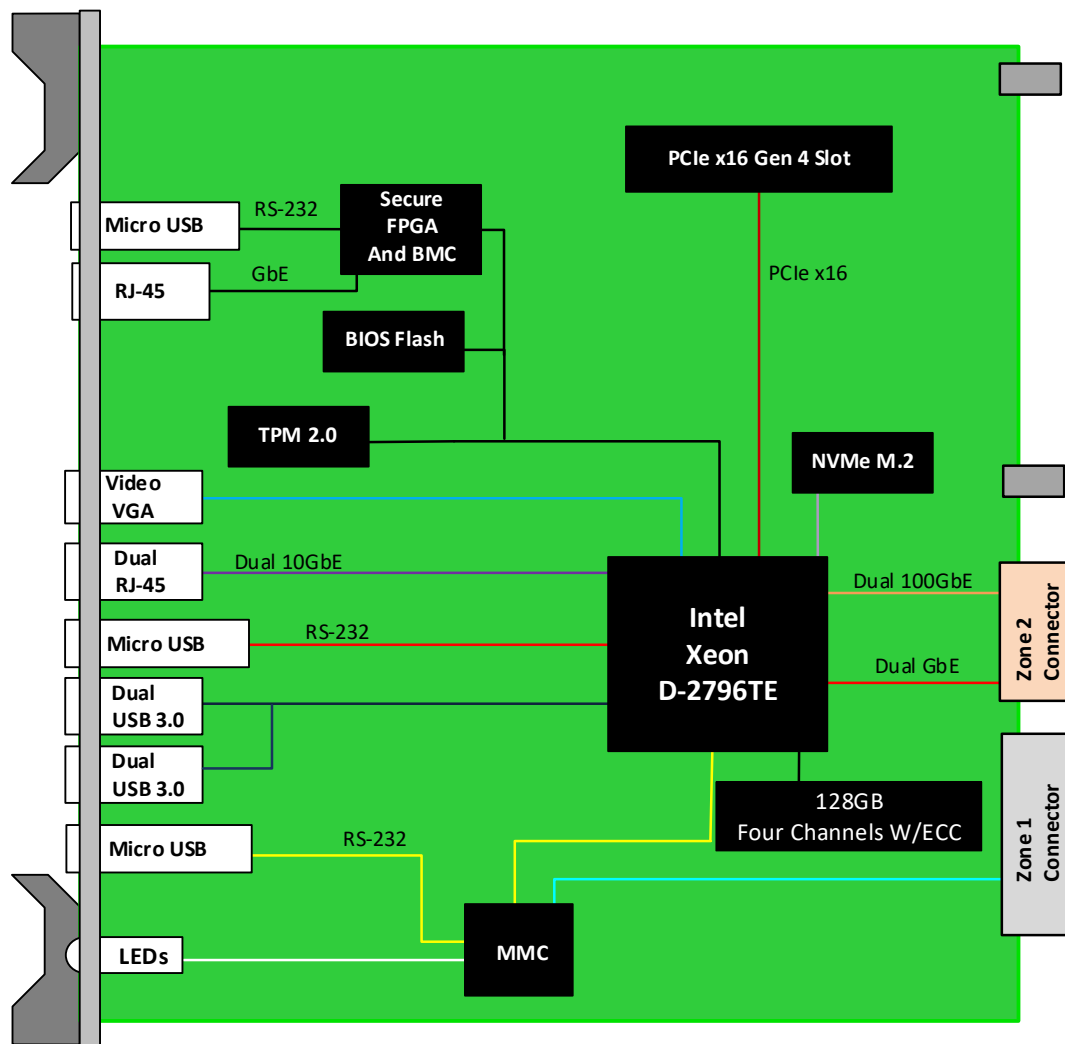


Figure 2: ATC125 Functional Block Diagram

Front Panel

Figure 3: ATC125 Front Panel

Specifications

Architecture		
Physical	Dimensions	Width: 12.687" (322.25 mm)
	FPGA	Depth: 11.024" (280 mm)
Type	ATCA Carrier	PCIe x16 standard edge
Standards		
PCIe	Type	x16 PCIe Gen4
Module Management	IPMI	IPMI v2.0
PICMG	ATCA	PICMG 3.0 revision 2.0
Configuration		
Power	ATC125	~150W without PCIe I/O module (CPU SKU dependent)
Environmental	Temperature	See Ordering Options (Air flow requirements are to be greater than 200 LFM) Storage Temperature: -40° to +60°C
	Vibration	0.5G RMS,20 to 20000 Hz random (operating) 6Gs RMS (non-operating)
	Shock	Operating 30Gs on each axis
	Relative Humidity	5 to 95% non-condensing
Front Panel	Interface Connectors	4x USB 3.0
		Video
		2x RJ-45 10GbE
		3x Micro USB RS-232
	LEDs	Status
Software Support	Operating System	Linux, VxWorks and Windows
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 ISO9001:2000 and AS9100B:2004 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

ATC125 – AB0-DE0-0HJ

A = ATCA Panel*	D = Processor	
0 = Standard width (1.2") 1 = Double width (2.4"), accepts dual width PCIe module 2 = Standard width, solid f/panel (no PCIe module slot)	0 = Reserved 1 = Xeon D-2796TE (20 cores) 2 = Reserved 3 = Reserved 4 = Reserved 5 = Reserved	
B = NVMe Size**	E = DDR4 Memory	H = Temperature Range
0 = No NVMe 1 = 1 TB 2 = 2 TB 3 = Reserved 4 = Reserved	0 = 128GB (panel can be 1.2")	0 = Commercial (–5° to +55°C) 1 = Industrial (–20° to +70°C)
		J = Conformal Coating
		0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Notes: *VadaTech recommends 2.4" for chassis that cannot cool the module.

**Please call VadaTech Sales for other NVMe size.

Related Products

VT830



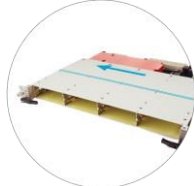
- 19" rackmount 6U ATCA Chassis with integrated Switch and Shelf Manager
- 10GbE/GbE Managed Layer 2
- 40GbE/10GbE/GbE Managed Layer 3

ATC806



- 40G or 10G ATCA switch, compliant to PICMG 3.1 specifications
- Scalable throughput based on desired performance level
- Managed Layer 3 software

ATC133



- 10G ATCA Carrier
- Xilinx Virtex-7 FPGA (XC7V690T in FFG1761 package)
- Four full-size AMC slots

Contact

VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

Asia Pacific Sales Office

7 Floor, No. 2, Wenhui Street, Neihu District, Taipei 114, Taiwan

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

info@vadatech.com | www.vadatech.com

Choose VadaTech

We are technology leaders

- First-to-market silicon
- Constant innovation
- Open systems expertise

We commit to our customers

- Partnerships power innovation
- Collaborative approach
- Mutual success

We deliver complexity

- Complete signal chain
- System management
- Configurable solutions

We manufacture in-house

- Agile production
- Accelerated deployment
- AS9100 accredited



vadatech
THE POWER OF VISION

Trademarks and Disclaimer

The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™ and the AdvancedMC™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.

© 2019 VadaTech Incorporated. All rights reserved.
DOC NO. 4FM737-12 REV 01 | VERSION 1.3 – APR/24