ATC145

PCIe Gen 4 ATCA Carrier with Intel® Ice Lake-D Processor Xeon® D-2896TER

ATC145

Key Features

- ATCA Processing Carrier with a standard PCIe edge Module
- Xeon D-2896TER or other socket compatible CPU within the family
- 20 Core @ 2 GHz or Turbo Frequency @ 3.2 GHz
- x16 standard PCIe Gen 4 slot
- Dual 10GbE to Fabric channels, Dual GbE to Base channels with dual GbE via RJ-45 in the front
- Dual Display Port (DP) in with DP to DVI-D converter with Dual DVI-D output via DP
- Dual USB 3.0 type C and DP for graphic output
- On board M.2 socket
- Root of Trust based on the Intel PFR and TPM
- Option for on-board VadaTech VT040 fourth generation shelf manager

Benefits

- Combined standard edge-type PCIe Gen4 I/O with Ice Lake-D CPU
- VadaTech's Scorpionware® Shelf Management Software included at no additional cost
- 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

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The ATC145 is a PCIe Gen4 Carrier Module. The ATC145 has an on board x16 PCIe Gen4 slot to accept any standard PCIe edge type module. The ATC145 comes with 128 GB of ECC memory. It has dual on-board Display Port (DP) to DVI-D converter. The on-board processor provides dual GbE, USB3.0, DP and RS-232 on the front panel. In addition, the front panel has dual DP input to dual DVI output via DP connectors. The ATC145 has an option for the TPM (Trusted Platform Management) with the root of trust utilizing Intel PFR. The BMC has a GbE and a RS-232 to the front panel.

The ATC145 has an option for the VadaTech Shelf Manager VT040 (VadaTech fourth generation shelf manager) which allows the elimination of the shelf slot in the chassis.

An ATC145 can mate with the Rear Transition Module (RTM) such as ART145A/ART120/ART121. Custom RTM can be designed based on the customer specification.

Sales and/or export restrictions may apply to some option combinations of this product. Please contact VadaTech sales for details or consider ATC125 as an alternative.

Figure 1: ATC145 Front View

Block Diagram

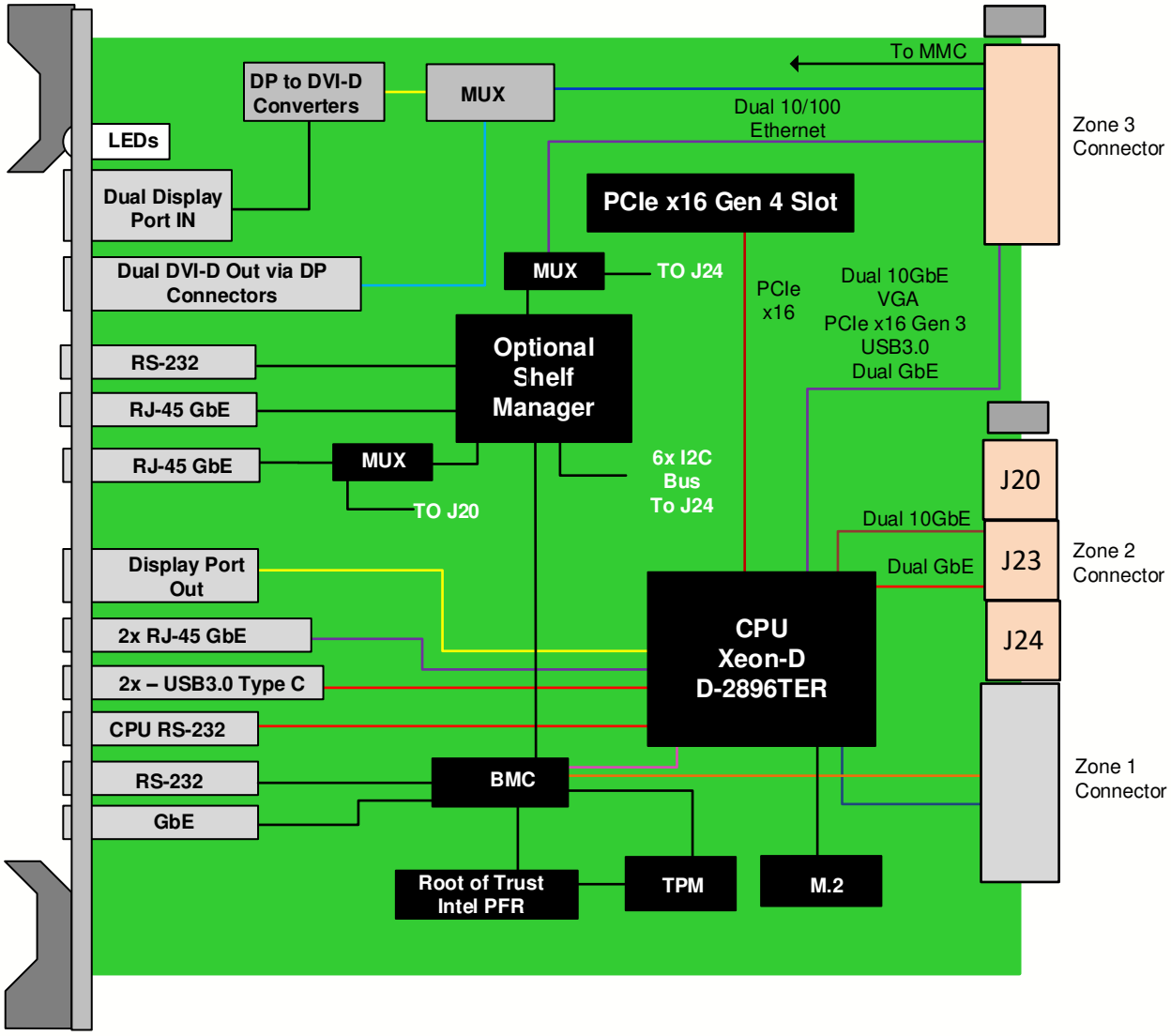


Figure 2: ATC145 Simplified Functional Block Diagram

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	**ATC145**	150 W without PCIe I/O module and with CPU D-2896TER
Environmental	**Temperature**	See ordering options and environmental spec sheet
		Storage Temperature: –40° to +60°C
	Vibration	0.5 G RMS,20 to 20000 Hz random (operating)
		6 Gs RMS (non-operating)
	Shock	Operating 30 G on each axis
	Relative Humidity	5 to 95% non-condensing
Front Panel	**Interface Connectors**	2x USB 3.0; single DP
		5x RJ-45 GbE
		2x DP output as DVI
		2x DP input
		5x Micro USB for 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	

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

ATC145 – ABC-DE0-0HJ

A = On-Board Shelf Manager	D = DDR-4 Memory	
0 = No on-board shelf manager 1 = VT040 included	0 = 64GB 1 = 128GB 2 = Reserved	
B = Storage M.2 Size	**E = CPU**	**H = Temperature Range**
0 = No Storage 1 = 1 TB 2 = 2 TB 3 = 4TB 4 = Reserved*	0 = D-2896TER 1 = D-2832NT 2 = Reserved 3 = Reserved	0 = Commercial (–5° to +55° C) 1 = Industrial (–20° to +70° C)
C = TPM		**J = Conformal Coating**
0 = No TPM 1 = Installed		0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Notes: *Please call VadaTech Sales for other capacity;

Related Products

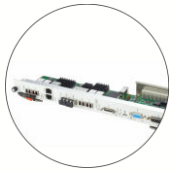
VT830

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

ATC806

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

ART121



- AdvancedTCA RTM for ATC145
- Layer 2 managed Ethernet switch
- USB Ports

Contact

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