

# ATC123

## PCIe Gen 3 ATCA Carrier with Low-Power Xeon E3



ATC123

## Key Features

- ATCA Processing Carrier with a standard PCIe edge Module
- Xeon E3-1268L V3 Processor with 32 GB ECC
- Quad Core @ 2.3 GHz or Turbo Frequency @ 3.3 GHz
- x16 standard PCIe Gen 3 slot (only x8 routed)
- Dual 40GbE to Fabric channels, Dual GbE to Base channels and Dual GbE to the front panel
- Dual Display Port (DP) and VGA
- TPM (Optional)

## Benefits

- Combined standard edge-type PCIe Gen 3 I/O with a lower power Xeon CPU
- 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 ATC123 is a Carrier Module with an on board x16 PCIe Gen3 slot (only x8 PCIe is routed to the slot) to accept any standard PCIe edge type module. The module has dual 40GbE going to the Fabric channels and dual GbE to the base channels. It comes with 32 GB of ECC memory. It has four USB 3.0, DP, VGA, RS-232, and dual GbE on the front panel. The ATC123 has an option for Trusted Platform Management (TPM).

The ATC123 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: ATC123

# Block Diagram

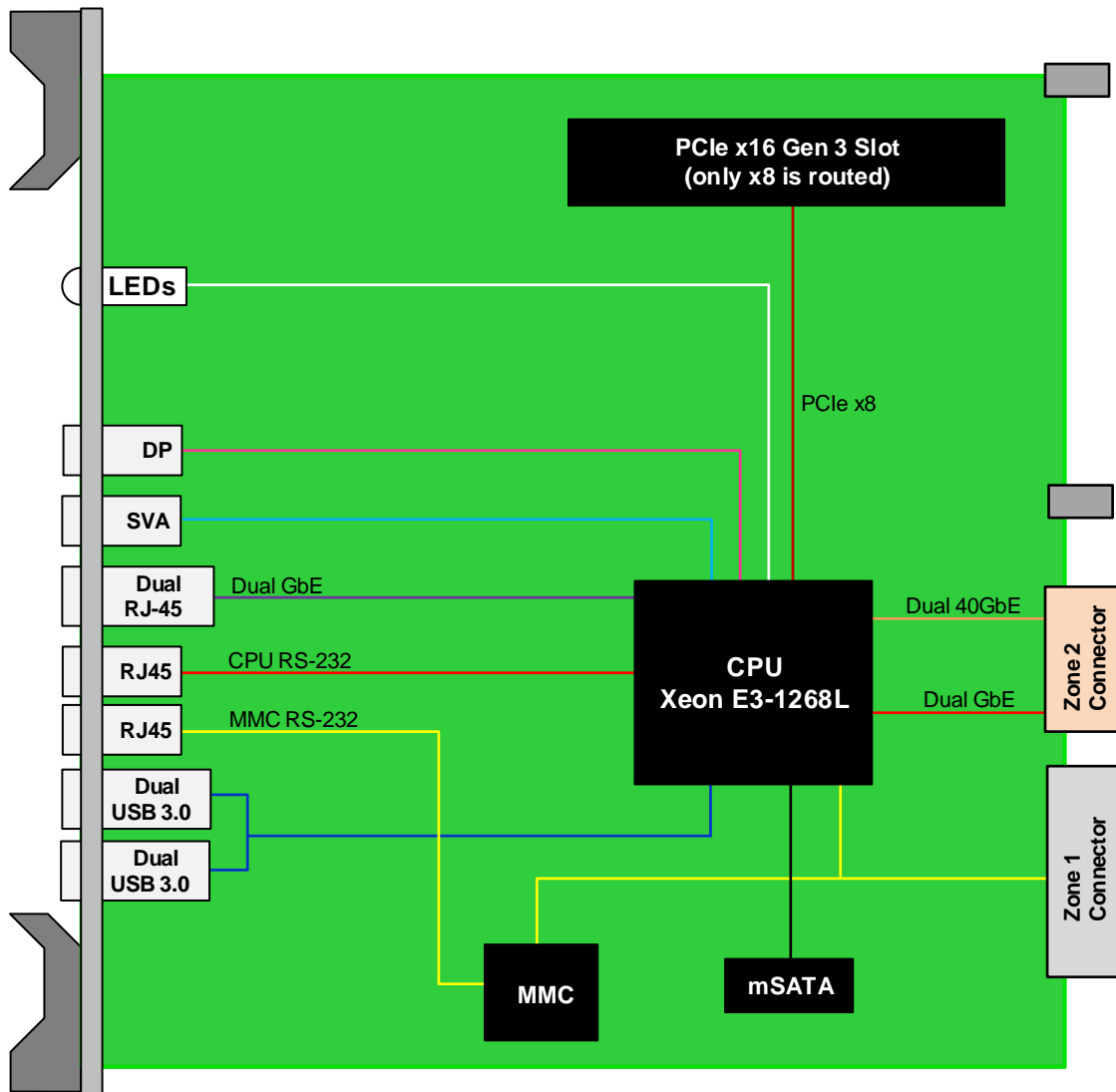


Figure 2: ATC123 Functional Block Diagram

# Front Panel

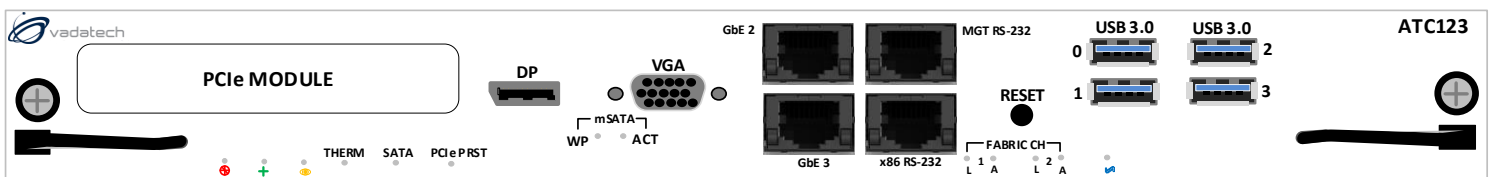


Figure 3: ATC123 Front Panel

# Specifications

Architecture	
<b>Physical</b>	<b>Dimensions</b> Width: 12.687" (322.25 mm) <b>FPGA</b> Depth: 11.024" (280 mm)
<b>Type</b>	<b>ATCA Carrier</b> PCIe x16 standard edge (only x8 routed)
Standards	
<b>PCIe</b>	<b>Type</b> x16 PCIe Gen3 (only x8 is routed)
<b>Module Management</b>	<b>IPMI</b> IPMI v2.0
<b>PICMG</b>	<b>ATCA</b> PICMG 3.0 revision 2.0
Configuration	
<b>Power</b>	<b>ATC123</b> 90 W without PCIe I/O module
<b>Environmental</b>	<b>Temperature</b> See ordering options and <a href="#">environmental spec sheet</a> (Air flow requirements are to be greater than 200 LFM) Storage Temperature: -40° to +60°C
	<b>Vibration</b> 0.5G RMS, 20 to 20000 Hz random (operating) 6Gs RMS (non-operating)
	<b>Shock</b> Operating 30 Gs on each axis
	<b>Relative Humidity</b> 5 to 95% non-condensing
<b>Front Panel</b>	<b>Interface Connectors</b> 4x USB 3.0 VGA 2x RJ-45 GbE DP 2x RJ-45 RS-232
	<b>LEDs</b> Status
<b>Software Support</b>	<b>Operating System</b> Linux, VxWorks and Windows
Other	
<b>MTBF</b>	MIL Hand book 217-F@ TBD hrs
<b>Certifications</b>	Designed to meet FCC, CE and UL certifications, where applicable
<b>Standards</b>	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards
<b>Warranty</b>	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

## ATC123 – ABC-000-0HJ

<b>A = ATCA Panel</b> 0 = Standard width (1.2") 1 = Double width (2.4") to accept dual width PCIe module		
<b>B = mSATA Size*</b> 0 = No mSATA 1 = 1 TB 2 = Reserved 3 = Reserved 4 = Reserved		<b>H = Temperature Range</b> 0 = Commercial (–5° to +55°C) 1 = Industrial (–20° to +70°C)
<b>C = TPM</b> 0 = No TPM 1 = Installed		<b>J = Conformal Coating</b> 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Notes: \*Please call VadaTech Sales for mSATA size

## Related Products

VT830



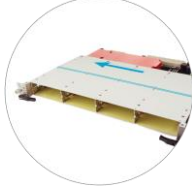
- 19" rackmount 6U ATCA Chassis with integrated Switch and Shelf Manager
- 10GbE/GbE Managed Layer 2
- 40GbE/10GbE/GbE Managed Layer 3

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

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