

# ATC127

## ATCA PCIe Rugged Processor with Dual Xeon E5-26xx v4



ATC127

## Key Features

- Dual 14-core Intel® Xeon® E5-2658, 2680, 2648L, 2618L, 2620, 2630 v4 processors
- Eight banks of DDR4 for up to 256 GB memory
- PCIe Gen3 x16 Fabric channels
- GbE and 10 GbE, graphics and USB on front panel
- IPMI Management Controller with Serial Over LAN capabilities (SOL)
- Trusted Platform Module (TPM)
- BIOS redundancy boot with multiple Watch Dog Timers (WDT) for fail-over, before and after BIOS boot

## Benefits

- High performance PCIe rugged processor blade
- Electrical, mechanical, software, and system-level expertise in house
- AS9100 and ISO9001 certified company

**Advanced TCA®**



**vadatech**  
THE POWER OF VISION



# ATC127

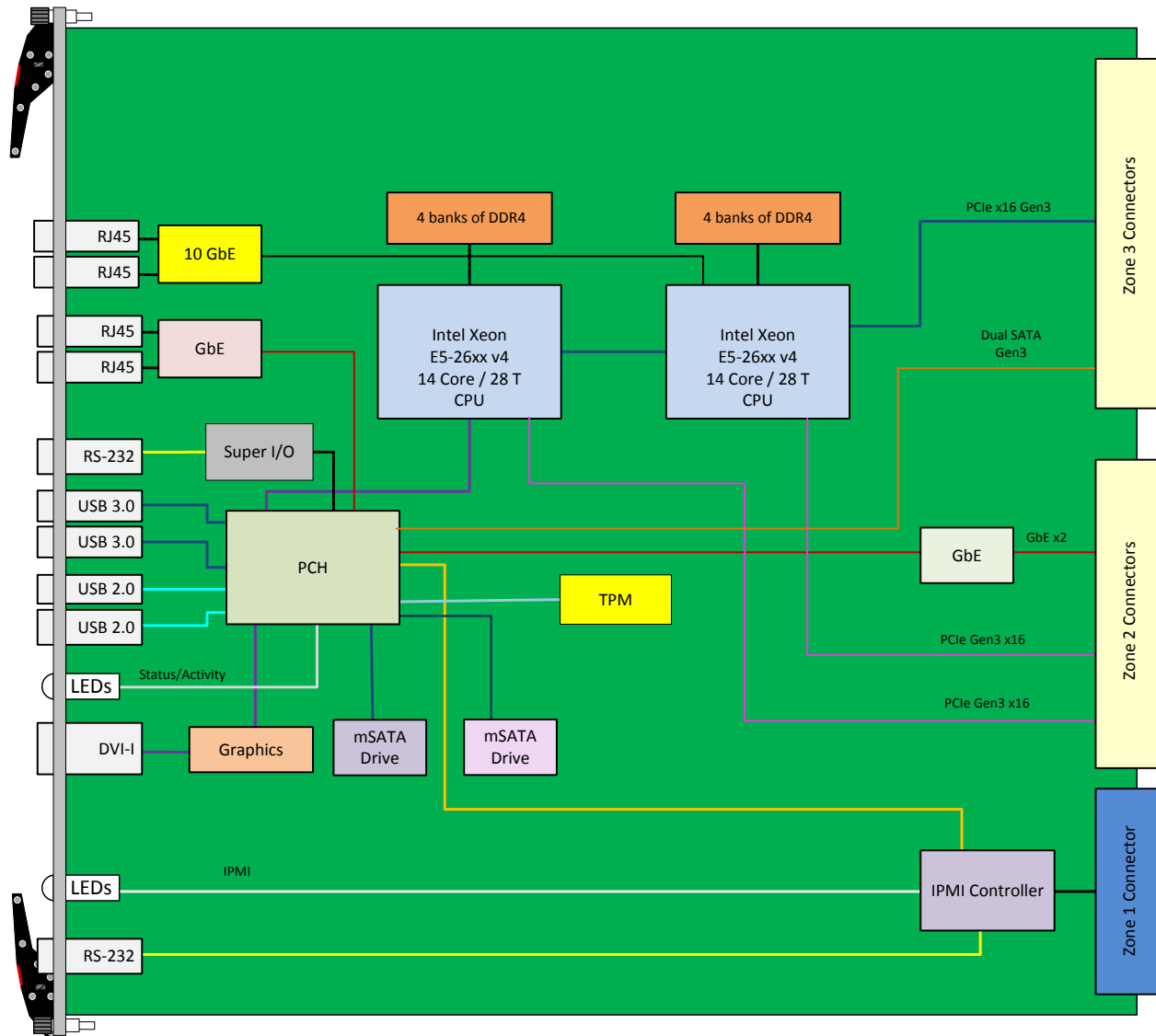
The ATC127 is a high performance ATCA processor blade featuring dual 14-core Intel® Xeon® processor (E5-2658 v4, E5-2680 v4, E5-2648L, 2618L, 2620 or 2630 v4), with eight banks of memory up to 256 GB DDR4 memory. Versatile connectivity includes two PCIe Gen3 x16 Fabric Interfaces, dual GbE Base Interfaces, dual front panel GbE egress ports, front panel dual RS-232 and USB 3.0/2.0 ports and front panel DVI-I connector. On-board mSATA storage is available for local boot.

The ATCA blade is PXI-boot capable via any of the on-board Ethernet interfaces. It offers Serial over LAN (SOL) utilizing Hardware Random Number Generation (RNG) to form a secure session. The ATC127 has dual redundant BIOS-boot capability with multiple WDT for fail-safe, before and after OS boot.

The ATC127 can be ruggedized for harsh environments and comes with conformal coating per customer ordering options.



# Block Diagram



# Specifications

Architecture		
Physical	Dimensions	Width: 12.68" (322.25 mm) Depth 11.02" (280 mm)
	Type	<b>ATCA Processor</b> Dual Intel Xeon E5-2658 v4, E5-2680 v4 or E5-2648L v4
	<b>Memory</b>	Eight banks DDR4, up to 256 GB total
Standards		
PICMG	<b>ATCA</b>	PICM 3.0 R3.0
Module Management	<b>IPMI</b>	IPMI version 2.0
Configuration		
Power	<b>ATC127</b>	~ 250W for E5-2658A v4, ~ 300W for E5-2680 v4
Environmental	<b>Temperature</b>	Operating temperature: -5° to 45° C (55°C for limited time, performance restrictions may apply), industrial versions also available (See <a href="#">environmental spec sheet</a> )
		Storage Temperature: -40° to +70°C
	<b>Vibration</b>	Operating 9.8 m/s <sup>2</sup> (1G), 5 to 500Hz on each axis
	<b>Shock</b>	Non-operating 20Gs peak, 11 ms duration
	<b>Relative Humidity</b>	5 to 95 per cent, non-condensing
Front Panel	<b>Interface Connectors</b>	Dual RJ-45 Gb; Dual RJ-45 10GbE
		Dual RS-232
		Dual USB 2.0 and dual USB 3.0 ports
	<b>LEDs</b>	IPMI management control Activity / Link user LEDs
	<b>Mechanical</b>	Hot swap with micro switch
Software Support	<b>Operating System</b>	Windows Server 2008 R2, Red Hat Enterprise Linux 6, Intel® DPDK supported
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 ATCA and  $\mu$ TCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), 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.

### 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.

# Ordering Options

## ATC127 – AB0-DE0-0HJ

<b>A = Processor</b> 0 = Xeon E5-2658 v4, 2.3 GHz, 14 core 1 = Xeon E5-2680 v4, 2.4 GHz, 14 core 2 = Xeon E5-2648L v4, 1.8 GHz, 14-core 3 = Xeon E5-2618L v4, 2.2GHz, 10-core 4 = Xeon E5-2620 v4, 2.10GHz, 8-core 5 = Xeon E5-2630 v4, 1.8GHz, 10-core	<b>D = First mSATA Drive*</b> 0 = 1 TB 1 = Reserved	
<b>B = DDR4 Memory Size (Total)*</b> 0 = Reserved 1 = 128 GB 2 = 256 GB 3 = Reserved	<b>E = Second mSATA Drive*</b> 0 = 1 TB 1 = Reserved 2 = None	<b>H = Temperature Range</b> 0 = Commercial 1 = Industrial
		<b>J = Conformal Coating</b> 0 = None 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

\* VadaTech reserves the right to supply larger capacity unless specifically stated otherwise on the Purchase Order

## Related Products

ATC126



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

ATC136



- Xilinx Virtex-7 FPGA
- Four core QorIQ P2040 Power PC
- Eight channel EV10AS150B ADC, Single AD9129 DAC, 14-bit @ 2.8 GSPS

ATC121



- Processing Carrier w/ PCIe edge Module
- Xeon E3-1268L V3 Processor with 32GB ECC
- x16 standard PCIe Gen 3 slot

# 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, Wenhua Street, Neihu District, Taipei 114, Taiwan

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

## VadaTech European Sales Office

Ocean Village Innovation Centre, Ocean Way, Ocean Village,  
Southampton, SO14 3JZ

Phone: +44 2380 381982 | Fax: +44 2380 381983

[info@vadatech.com](mailto:info@vadatech.com) | [www.vadatech.com](http://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.

© 2017 VadaTech Incorporated, All rights reserved.  
DOC NO. 4FM737-12 REV 01 | VERSION 1.0- SEP/17