

## ATC126 – ATCA Rugged Blade Processor with Dual Xeon E5-26xx v4

ATCA 40GbE, Dual Intel Xeon E5



### 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
- 10/40GbE Fabric channels
- Dual 10/100/1000Base-T Base Channels
- Dual 10/100/1000Base-T egress ports
- Dual 10GbE Copper
- Two USB 2.0 and two USB 3.0 front panel ports
- Graphics and RS-232 front panel ports
- 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

**Advanced TCA®**

### Benefits of Choosing VadaTech

- High performance 40G rugged processor blade
- 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

The ATC126 is a high performance ATCA processor blade featuring dual 14 core Intel® Xeon® processor E5-2658 v4, E5-2680 v4, E5-2648L, 2618L, 2620 and 2630 v4, with eight banks of memory up to 256 GB DDR4 memory. Versatile connectivity includes two 10/40GbE 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 ATC126 has dual redundant BIOS-boot capability with multiple WDT for fail-safe, before and after OS boot.

The ATC126 can be ruggedized for harsh environments and comes with conformal coating per customer ordering options.

## BLOCK DIAGRAM

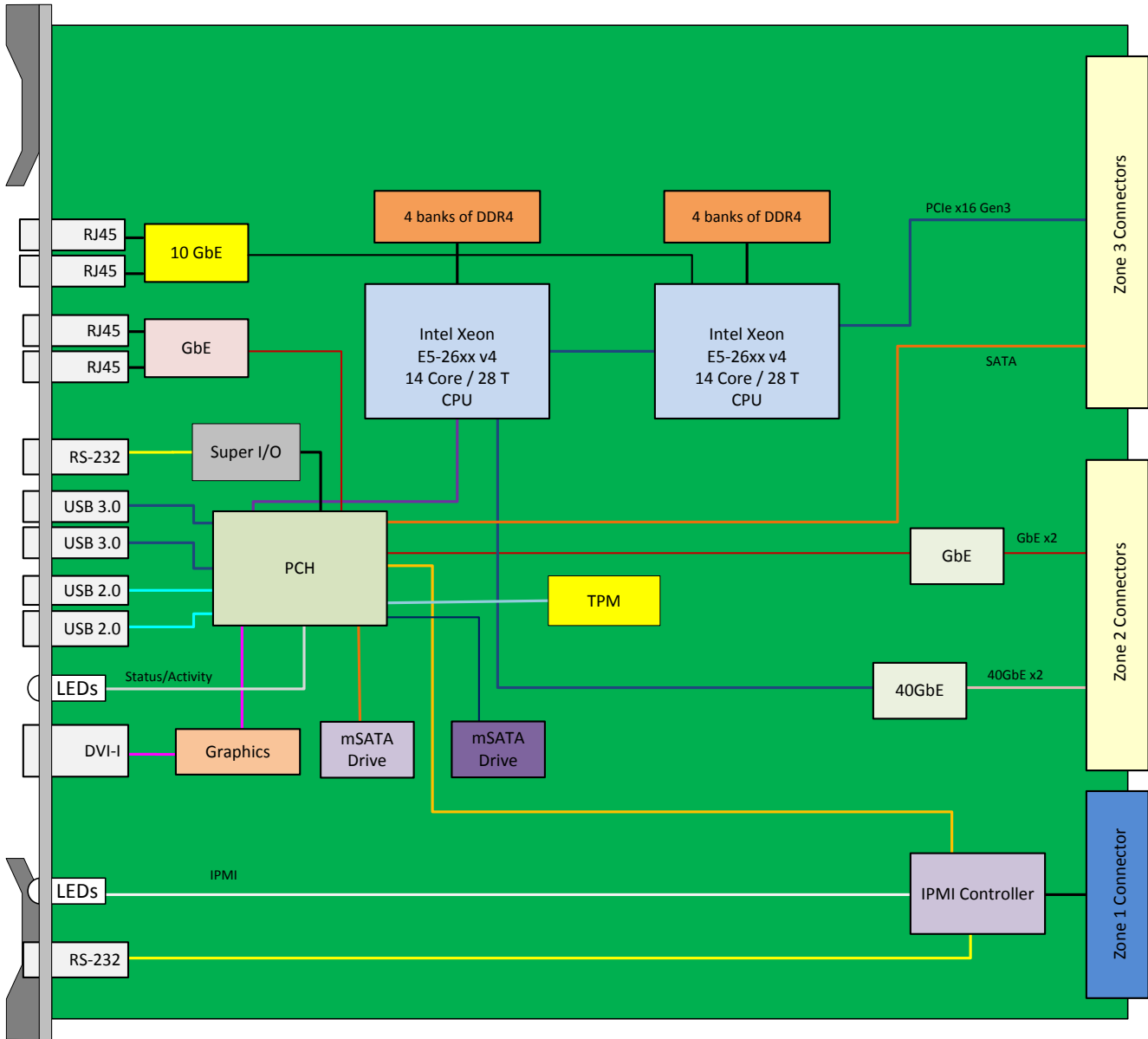


Figure 1: ATC126 Functional Block Diagram

# ATC126 – ATCA 40GbE Rugged Processor with Dual Xeon E5-26xx v4

## SPECIFICATIONS

Architecture		
Physical	Dimensions	Width: 12.68" (322.25 mm)
		Depth: 11.02" (280 mm)
Type	ATCA Processor	Dual Intel Xeon E5-2658 v4, E5-2680 v4 or E5-2648L v4
	Memory	Eight banks DDR4, up to 256 GB total
Standards		
Module Management	IPMI	IPMI version 2.0 and PICMG 3.0
Processor Type	MIPS	For management
PICMG	ATCA	PICMG 3.0 R3.0
Configuration		
Power	Power consumption	~ 250W for E5-2658A v4, ~ 300W for E5-2680 v4
Environmental	Temperature	Operating Temperature: 0° to 55°C commercial, -20° to 70°C industrial-grade
		Storage Temperature: -40° to +70°C
	Vibration	0.5G, 5 to 500 Hz on each axis
	Shock	20 Gs peak, 11 ms duration, non-operational
	Relative Humidity	5 to 95 per cent, non-condensing
Front Panel	Interface Connectors	Dual RJ-45 Gb; Dual RJ-45 10GbE
		Dual RS-232
		Dual USB 2.0 and dual USB 3.0 ports
		DVI-I port
	LEDs	IPMI management control
		Activity / Link user LEDs
	Ejector Handles	Hot swap with micro-switch
Software Support	Operating System	Windows Server 2008 R2, Red Hat Enterprise Linux 6, Intel® DPDK supported
Other		
MTBF	MIL Handbook 217-F@TBD Hrs	
Certifications	Designed to meet FCC, CE and UL certifications where applicable	
Compliance	PICMG 3.0 Rev 3.0, RoHS 2.	
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.

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## ORDERING OPTIONS

### ATC126 – AB0 – DE0 – 0HJ

#### A = Processor

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 = DDR4 Memory Size (Total)\*

0 = Reserved  
1 = 128 GB  
2 = 256 GB  
3 = Reserved

#### D = First mSATA Drive\*

0 = 1 TB  
1 = Reserved

#### E = Second mSATA Drive\*

0 = 1 TB  
1 = Reserved  
9 = None

#### H = Temperature Range

0 = Commercial  
1 = Industrial

#### J = Conformal Coating

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

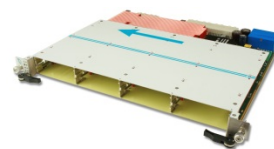
## RELATED PRODUCTS



VT830 – 6U ATCA Shelf



ATC136 – 2.6 GSPS  
A/D Converter



ATC133 – 10G Switch/Carrier  
+ FPGA

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