## **ATC129**

ATCA Rugged Blade Processor with Dual Xeon Cascade Lake-SP, 100G Ethernet

# **Key Features**

- Dual socket 24-core Intel® Xeon® Platinum Processors -Scalable Performance (SP)
- Multiple SKU support (i.e. 8256, 8253, 6238T, 6230T, 5220T, 5218T, 4209T, etc.)
- Twelve banks of DDR4 for up to 384 GB with ECC per socket (total of 768 GB)
- Dual 100G ethernet to Zone Two
- Dual 10/100/1000Base-T Base Channels
- Dual 10GbE Copper via front panel
- Dual USB 3.0
- IPMI Management Controller with Serial Over LAN capabilities (SOL)
- BIOS redundancy boot with multiple Watch Dog Timers (WDTs) for fail-over, before and after BIOS boot

### **Benefits**

- High performance rugged processor blade
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company





## **ATC129**

The ATC129 is a high performance ATCA processor blade featuring dual 24 core Intel® Xeon® processors, each with six banks of memory providing up to a total of 384 GB DDR4 memory with ECC per socket (total blade memory is 768 GB).

ATC129 is versatile in connectivity and includes two 100GbE Fabric Interfaces, PCIe to RTM expansion, dual GbE base Interfaces, dual front panel GbE egress Ports, front panel Micro USB (RS-232), USB 3.0 Ports and front panel VGA connector. Onboard 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 ATC129 has dual redundant BIOS-boot capability with multiple WDTs for fail-safe, before and after OS boot. The ATC129 has a on board FPGA which allows secure boot of the system. The FPGA can be reprogrammed by the customer to meet their security requirement.

The Unit uses one of the most feature rich Health Management Module in the industry, incorporating HTTP and HTTPS support, Web Interface, added security with SSL, multiple user permission level, etc.

The ATC129 can be ruggedized for harsh environments. See customer ordering options for conformal coating.

# **Block Diagram**

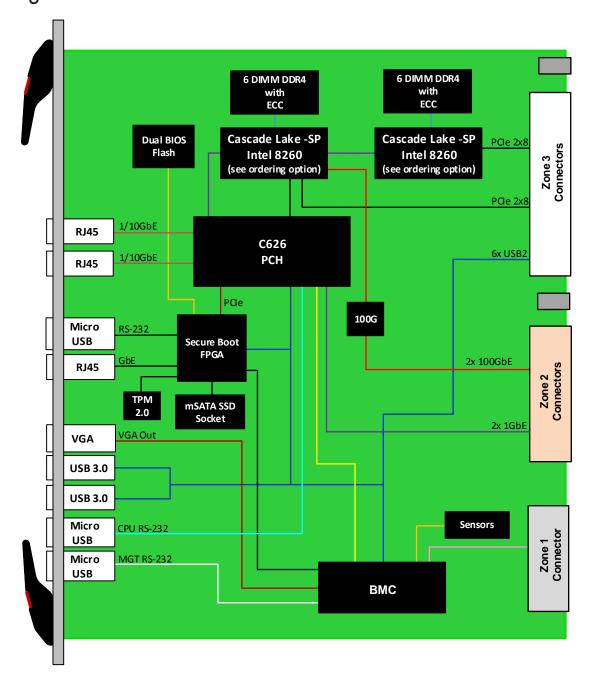


Figure 1: ATC129 Functional Block Diagram

# **Specifications**

Physical  Dimensions Width: 12.687" (322.25 mm)  Depth: 11.024" (280 mm)  Type  ATCA Processor  Memory  2 banks of DDR4 with 6 DIMM per socked  Standards  ATCA  Type  PICMG 3.0 Revision 3.0  Module Management  IPMI v2.0	t		
Type ATCA Processor Dual Intel Xeon  Memory 2 banks of DDR4 with 6 DIMM per socket  Standards  ATCA Type PICMG 3.0 Revision 3.0	t		
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ATCA Type PICMG 3.0 Revision 3.0			
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Module Management IPMI v2.0			
Configuration			
Power ATC129 ~350W (CPU SKU and memory depende	ent)		
Environmental Temperature See Ordering Options			
Storage Temperature: –40° to +85°C			
Vibration 0.5G 5 to 500 Hz on each axis			
Shock Operating 30Gs on each axis			
Relative Humidity 5 to 95% non-condensing			
Front Panel Interface Connectors x2 USB 3.0			
x3 RJ-45 for 1/10GbE			
x3 Micro USB for Serial Management Por	rts		
VGA			
LEDs IPMI, Activity, Status and User defined			
Ejector Handles Hot swap with micro-switch			
Software Support Operating System Linux			
Other			
MTBF MIL Hand book 217-F@ TBD hrs	MIL Hand book 217-F@ TBD hrs		
<b>Certifications</b> Designed to meet FCC, CE and UL certifications, where applicable	Designed to meet FCC, CE and UL certifications, where applicable		
Standards VadaTech is certified to both the ISO9001:2000 and AS9100B:2004	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards		
Warranty Two (2) years, see <u>VadaTech Terms and Conditions</u>	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 preconfigured Application-Ready Platforms. Please contact VadaTech Sales for more information.

## **Ordering Options**

### ATC129 - ABC-DE0-0HJ

A = Processor Xeon SKU*	D = DRAM per Processor**	
0 = Reserved 1 = 8256 3.8 GHz, 4 cores 2 = 8253 2.2 GHz, 16 cores 3 = 6238T 1.9 GHz, 22 cores 4 = 6230T 2.1 GHz, 20 cores 5 = 5220T 1.9 GHz, 18 cores 6 = 5218T 2.1 GHz, 16 cores 7 = 4209T 2.2 GHz, 8 cores 8 = Reserved 9 = Reserved	0 = 384 GB 1 = 192 GB 2 = 96 GB	
B = Number of Processor	E = mSATA SSD Socket	H = Temperature Range
0 = Dual 1 = Single	0 = No disk 1 = One TB 2 = Two TB	0 = Commercial 1 = Industrial
C = Panel size*		J = Conformal Coating
0 = 6 HP 1 = 9 HP 2 = 12 HP		0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Notes: \*Other SKU's are support please contact VadaTech sales

### **Related Products**





- 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

ATC128



- Dual socket 24-core Intel® Xeon® Platinum Processors Scalable Performance (SP)
- Twelve banks of DDR4 for up to 384 GB with ECC per socket (total of 768 GB)
- PCle Fabric and expansion channels





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

<sup>\*\*</sup> The DRAM is per socket. For example, D = 0 (total memory 768 GB)

### **Contact**

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