

# ATC129

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



ATC129

## 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



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**100G**



# 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. 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 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.



Figure 1: ATC129



Figure 2: ATC129 Top View Without CPU and Heatsinks



Figure 3: ATC129 Front Panel View

# Block Diagram

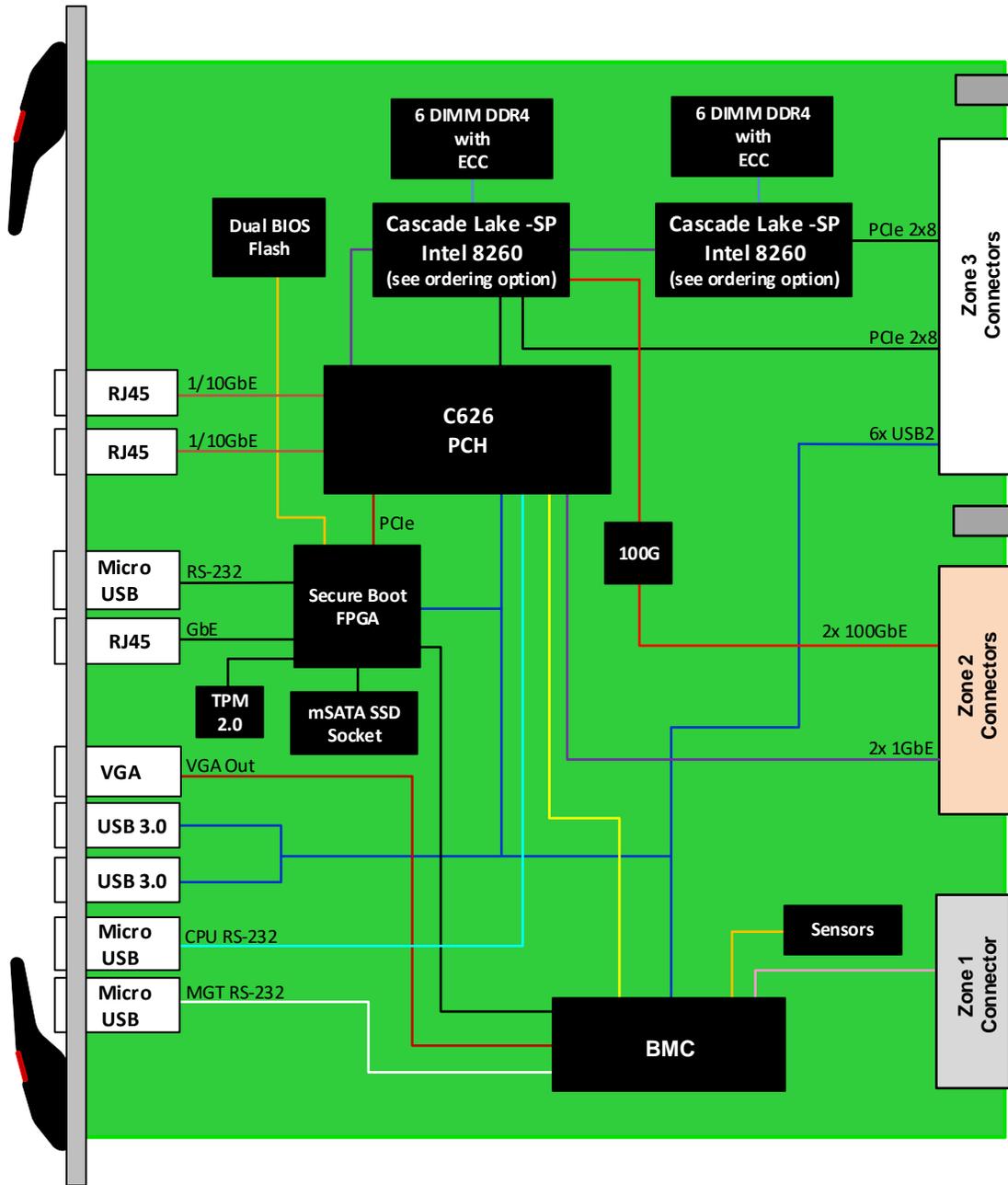


Figure 4: ATC129 Functional Block Diagram

# Specifications

Architecture	
<b>Physical</b>	<b>Dimensions</b> Width: 12.687" (322.25 mm)
	Depth: 11.024" (280 mm)
<b>Type</b>	<b>ATCA Processor</b> Dual Intel Xeon
	<b>Memory</b> 2 banks of DDR4 with 6 DIMM per socket
Standards	
<b>ATCA</b>	<b>Type</b> PICMG 3.0 Revision 3.0
<b>Module Management</b>	<b>IPMI</b> v2.0
Configuration	
<b>Power</b>	<b>ATC129</b> ~350W (CPU SKU and memory dependent)
<b>Environmental</b>	<b>Temperature</b> See <a href="#">Ordering Options</a> Storage Temperature: -40° to +85°C
	<b>Vibration</b> 0.5G 5 to 500 Hz on each axis
	<b>Shock</b> Operating 30Gs on each axis
	<b>Relative Humidity</b> 5 to 95% non-condensing
<b>Front Panel</b>	<b>Interface Connectors</b> x2 USB 3.0
	x3 RJ-45 for 1/10GbE
	x3 Micro USB for Serial Management Ports
	VGA
	<b>LEDs</b> IPMI, Activity, Status and User defined
	<b>Ejector Handles</b> Hot swap with micro-switch
<b>Software Support</b>	<b>Operating System</b> Linux
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, see <a href="#">VadaTech Terms and Conditions</a>

## 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

## ATC129 – ABC-DE0-0HJ

<b>A = Processor Xeon SKU*</b> 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	<b>D = DRAM per Processor**</b> 0 = 384 GB 1 = 192 GB 2 = 96 GB	
<b>B = Number of Processor</b> 0 = Dual 1 = Single	<b>E = mSATA SSD Socket</b> 0 = No disk 1 = One TB 2 = Two TB	<b>H = Temperature Range</b> 0 = Commercial 1 = Industrial
<b>C = Panel size*</b> 0 = 6 HP 1 = 9 HP 2 = 12 HP		<b>J = Conformal Coating</b> 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

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

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

## Related Products

ATC126



- 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)
- PCIe Fabric and expansion channels

VT830



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

# 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

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

info@vadatech.com | www.vadatech.com

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