aTCA-6900

Dual Quad-Core LV Xeon® 10 Gigabit Ethernet AdvancedTCA® Processor Blade



Features

- Two Quad-Core or Dual-Core Intel® LV Xeon® processors
- Intel® EM64T 64-bit Extended Memory Technology
- DDR2-667 REG/ECC memory up to 32 GB maximum capacity
- Intel® 5100/ICH9R chipset
- Dual AMC.0 Mid-size bays
- Dual 10GBASE-KX4/1000BASE-BX Fabric interface channels
- RAID 0/1/10 SATA/SAS ports
- Optional on-board 24-port Gigabit Ethernet Switch-on-Chip

Specifications

CPU / Chipset / Memory

CPU	Two Quad-Core Intel® Xeon® L5408 2.13 GHz, FSB 1066 MHz, 12 MB L2 Cache (FC-LGA6)
	Two Dual-Core Intel® Xeon® 5138 2.13 GHz, FSB 1066 MHz, 4MB L2 Cache (FC-LGA6)
Chipset	Intel® 5100/ICH9R Chipset
Memory	Four DDR2-667 240-pin RDIMM sockets, up to 32 GB

BIOS

Chip	AMIBIOS®8 on SPI flash memory
Features	Intel® PXE pre-boot
	Remote Console

I/O Interfaces

Graphics	ATI ES1000 with 64 MB VRAM, up to UXGA 1600 x 1200 resolution
AdvancedMC	AMC1: AMC.0 Mid-size, AMC.1 Type4, AMC.2 E2/Type3, AMC.3 S2
	AMC2: AMC.0 Mid-size, AMC.1 Type1, AMC.2 E2/Type3, AMC.3 S2
Ethernet	Dual 10/100/1000BASE-T Base Interface channels
	Dual 10GBASE-KX4/1000BASE-BX Fabric Interface channels
	Dual 10/1001000BASE-T Egress ports
	Optional on-board 24-port Gigabit Ethernet Switch-on-Chip
Storage	Dual AMC.3 SATA 3 Gb/s ports (Port2)
	Dual AMC.3 SAS ports (Port3)
	On-board bootable 4 GB USB flash memory
USB	Three USB 2.0 ports
Front Panel I/O	AMC1/2, VGA, USB1/2/3, LAN1/2, COM1

PICMG Standard

AdvancedTCA	PICMG® 3.0 R2.0 ECN001
	PICMG® 3.1 Ethernet Over PICMG 3.0 R1.0 , Option1/9
AdvancedMC	PICMG® AMC.0: Advanced Mezzanine Card Specification R2.0
	PICMG® AMC.1: PCI Express and Advanced Switching R1.0
	PICMG® AMC.2: Gigabit Ethernet R1.0
	PICMG® AMC.3: Storage Interfaces R1.0

Other Features

Operating System	Windows® XP Professional, Windows® Server 2003, Fedora™ 8 and 9, Red Hat Enterprise Linux® 5.2

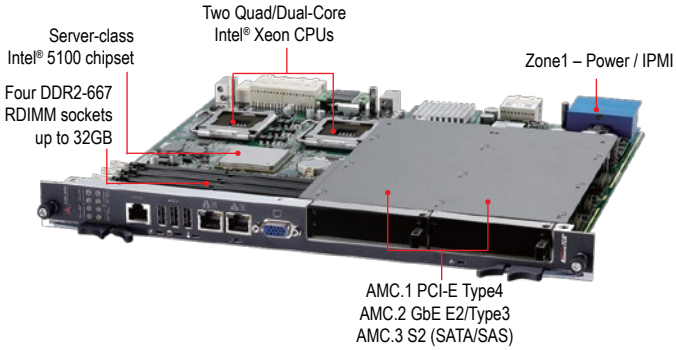
Mechanical and Environmental

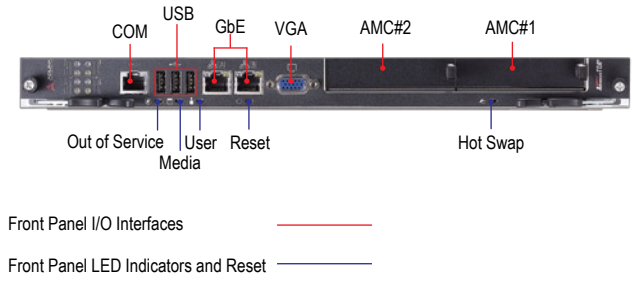
Form Factor	PICMG® 3.0 R2.0 ECN001 AdvancedTCA®
Dimensions	322.25mm x 280mm x 6HP (L x W x H)
Weight	2.8 kg / 6 lbs
Operating Temp.	0˚C to 50˚C
Storage Temp.	-20˚C to 80˚C
Humidity	5% to 95%, non-condensing
Shock	15G peak-to-peak, 11ms duration, non-operation
Vibration	Non-operation: 1.88Grms, 5-500Hz each axis Operation: 0.5Grms, 5-500Hz each axis
Power Consumption	168W (Dual Quad-Core Intel® Xeon® L5408 with 100% CPU Usage)
Certifications	FCC, CE, CUL, NEBS Level 3 (design)

Ordering Information

Model Number	Description/Configuration
aTCA-6900/D5138	Two LV-5138 Dual-Core 2.13GHz Xeon® 10GbE processor blade
aTCA-6900/D5408	Two L5408 Quad-Core 2.13GHz Xeon® 10GbE processor blade
aTCA-6900S/D5138	Two LV-5138 Dual-Core 2.13GHz Xeon® 10GbE processor blade w/ switch
aTCA-6900S/D5408	Two L5408 Quad-Core 2.13GHz Xeon® 10GbE processor blade w/ switch
AMC-7000/SATA250G	Mid-size SATA 1.5 Gb/s 250GB AMC HDD module
aTCA-R6905	Rear Transition Module with SFP GbE x2, USB x2, SAS/SATA HDD bay x2, COM x1

Mechanical Layout





Functional Diagram

