

aTCA-6890

Dual-64-bit Intel® LV Xeon® Octet Gigabit Ethernet AdvancedTCA® Processor Blade



The aTCA-6890 is a Dual-Intel® Xeon® processor with 800 MHz-FSB based AdvancedTCA blade. It supports Intel® EM64T 64-bit technology and dual-channel DDR2-400 REG/ECC up to 16 GB capacity. For data transport connectivity, it features dual-1000BASE-T GbE Base Interface channels and field-configurable quad-1000BASE-BX GbE Fabric Interface ports compliant with PICMG® 3.1 Option1/2. Front panel I/O includes dual-64-bit 66/100/133 MHz PCI™/PCI-X™ PMC sites, USB 2.0 ports, 1000BASE-T GbE ports, one analog video and serial console. On-board peripherals includes two ATA100 channels with on-board DMA-enabled CF slot and one SATA 2.5" HDD site. Compatible Rear Transition Module (RTM) features RAID0/1 SATA 2.5" HDD and PMC I/O module (PIM). The Serial-Attached-SCSI (SAS) and Encryption expansion modules are also available.

Features

- 800 MHz FSB, 1 MB L2 Cache, Hyper-Threading Processors
- Intel® EM64T 64-bit Extended Memory Technology
- Dual-DDR2-400 REG/ECC Channels with 16 GB Maximum Capacity
- Intel® E7520/6300ESB/6700PXH Chipset
- Dual-64-bit 33/66/100/133 MHz PCI™/PCI-X™ PMC with PIM
- Quad-1000BASE-BX GbE Fabric Interface Channels
- Configurable PICMG® 3.1 Option1/2 Compliant
- RAID 0/1 Enabled RTM

Ordering Information

aTCA-6890	Dual-Intel® 64-bit LV-Xeon® AdvancedTCA® Processor Blade
aTCA-6890A/DX28/M1G	Dual-Intel® 64-bit LV-Xeon® AdvancedTCA® Processor Blade with 1 GB DDR2 ECC/Reg Memory
aTCA-6890A/DX28/M1G/H60G	Dual-Intel® 64-bit LV-Xeon AdvancedTCA® Processor Blade with 1 GB DDR2 ECC/Reg Memory and 2.5" 60 GB HDD

Specifications

CPU / Chipset / RAM

CPU	Dual-Intel® 64-bit LV-Xeon® 2.8 GHz Processors
Chipset	Intel® E7520 MCH, 6300ESB ICH, 6700PXH Bridge
Memory	Four DDR2-400 REG/ECC 240-pin DIMM slots, up to 16 GB capacity

BIOS

Flash	Award BIOS with 4 Mb flash memory
Features	Intel® PXE pre-boot Remote Console

I/O Interfaces

Graphics	ATI RageXL with 8 MB VRAM, up to SXGA (1280 x 1024) resolution
PMC	PMC1: PCI™/PCI-X™ 64-bit 66/100/133 MHz capable with PIM PMC2: PCI™/PCI-X™ 64-bit 66/100/133 MHz capable
LAN	Intel® 82546GB PCI-X™ dual-port Gigabit Ethernet controllers Dual-10/100/1000BASE-T Base interface channels Quad-1000BASE-BX fabric interface channels Dual-10/100/1000BASE-T front panel access
Storage	Dual-ATA-33/66/100 channels On-board DMA-enabled CompactFlash® socket On-board 2.5" ATA/SATA HDD kits
USB	Dual-USB v2.0 ports
Front Panel I/Os	PMC1/2, VGA, USB1/2, LAN1/2, COM1

PICMG Standard

Standards	PICMG® 3.0 R2.0 ECN001 PICMG® 3.1 Ethernet/Fiber Channel Over PICMG® 3.0 R1.0 , Option1/2
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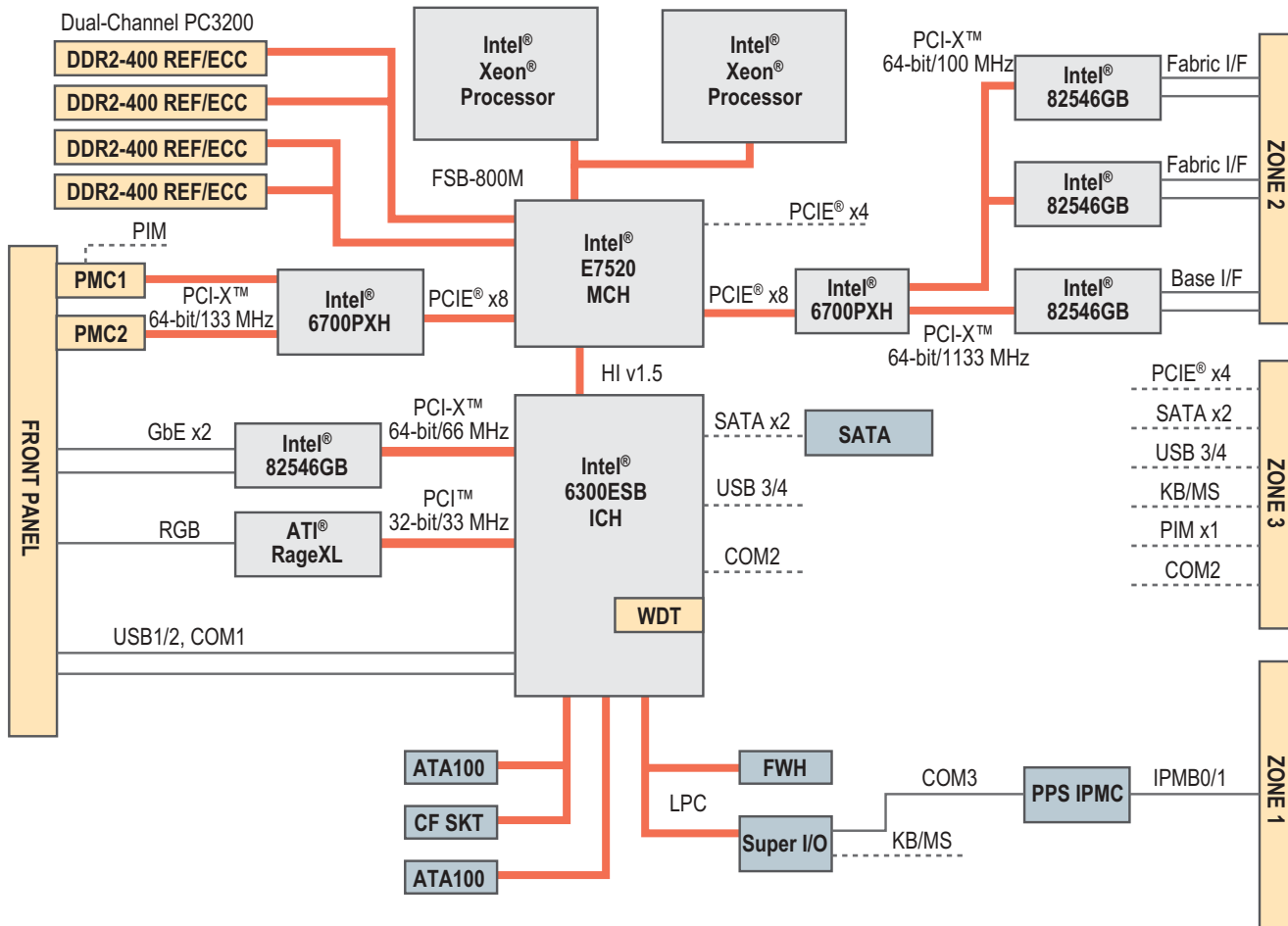
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Mechanical and Environmental

Form Factor	PICMG® 3.0 R2.0 ECN001 AdvancedTCA®
Dimensions	322.25 mm x 280 mm x 6 HP (L x W x H)
Weight	3.6 kg 8 lbs
Operating Temp.	0°C to 45°C
Storage Temp.	-20°C to 80°C
Humidity	5% to 95%, non-condensed
Shock	15 G peak-to-peak, 11 ms duration, non-operation
Vibration	Non-operation: 1.88 Grms, 5-500 Hz each axis Operation: 0.5 Grms, 5-500 Hz each axis
Power Consumption	aTCA-6890A/Dual-LV-Xeon® 2.8 GB / 4 GB: 175 W aTCA-6890B/Dual-Xeon® 3.2 G / 4 GB: 280 W
Certification	FCC, CE, CUL, NEBS Level 3 (Design)

Block Diagram



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AdvancedTCA
Products

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6U cPCI
SBC

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6U cPCI
Platforms

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3U cPCI
SBC

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3U cPCI
Platforms

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