

# aTCA-6891

Dual-64-bit Intel® LV Xeon® Dual-10GbE Links AdvancedTCA® Processor Blade



The aTCA-6891 features dual-10Gigabit Ethernet (10 GbE) links, powered by Intel® 82598 PCI-E® 10 Gigabit Ethernet controller, routed to backplane Zone 2 connector to support PICMG® 3.1 option 1/9 connectivity. The 10GbE ports, also known as XAUI, support 10GBASE-KX4 and 1000BASE-KX as in IEEE 802.3ap. Therefore the aTCA-6891 is the key element to form the 10 GbE ATCA system with 10 GbE switch blade to provide a complete 10 GbE interconnect solution to the industry.

The dual-Intel® 64-bit LV-Xeon® processors and the up to 16 GB dual-channel PC3200 DDR2 REG/ECC memory provide aTCA-6891 unlimited computing power to accomplish any critical mission.

Various I/O features, includes VGA output, USB v2.0 ports, and serial console are available for front access. A PCI™/PCI-X™ 64-bit/133 MHz capable PMC site is designed for further function expansion. A SATA RAID 0/1 enabled RTM interface is also reserved.

## Features

- Dual-10Gigabit Ethernet (XAUI) Links
- 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
- Dual-64-bit 33/66/100/133 MHz PCI™/PCI-X™ PMC Sites
- Dual-10GBASE-KX4/1000BASE-BX Fabric Interface Channels
- PICMG® 3.1 Option 1/9 Compliant
- RAID 0/1 Enabled RTM

## Ordering Information

aTCA-6891	Dual 64-bit LV-Xeon® Dual-10GbE AdvancedTCA® Processor Blade
aTCA-6891/DX28/M2G	Dual 64-bit LV-Xeon® 2.8 GHz, Dual-10GbE AdvancedTCA® Processor Blade with 2 GB PC3200 DDR2 REG/ECC DIMM

## 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	Dual-PCI™/PCI-X™ 64-bit 66/100/133 MHz sites
Data Transport	Dual-10/100/1000BASE-T Base Interface channels Dual-10GBASE-KX4/1000BASE-BX Fabric Interface channels Dual-10/100/1000BASE-T GbE Egress ports
Storage	Dual-ATA-66/100 channels On-board DMA-enabled CompactFlash® socket On-board 2.5" ATA HDD kits
USB	Dual-USB v2.0 ports
Front Panel I/Os	PMC1/2, VGA, USB1/2, LAN1/2, COM

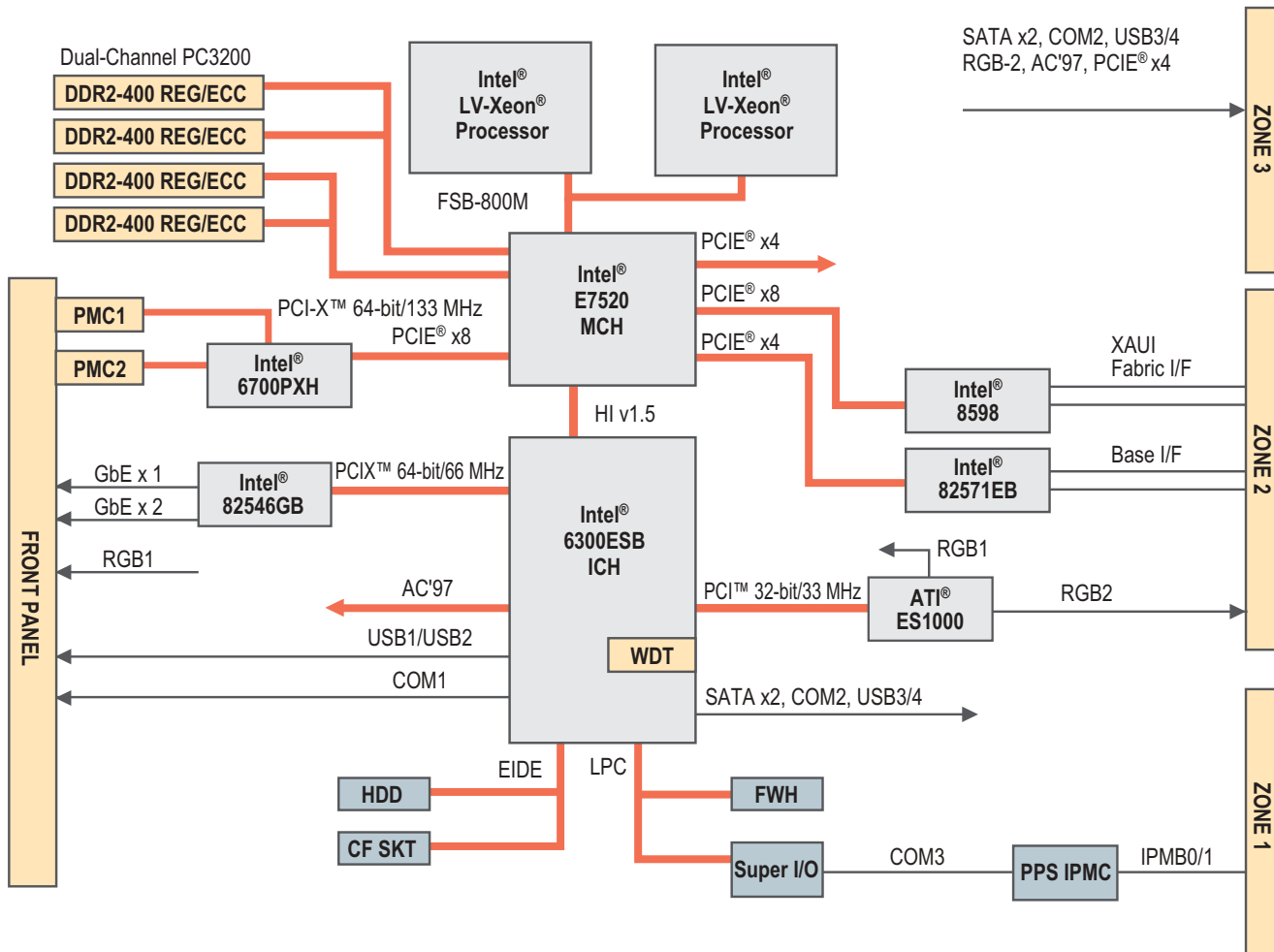
### PICMG® Standard

Standards	PICMG® 3.0 R2.0 ECN001 PICMG® 3.1 Ethernet/Fiber Channel Over PICMG® 3.0 R1.0, Option1/9
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## Block Diagram



1  
AdvancedTCA  
Products

2  
6U cPCI  
SBC

3  
6U cPCI  
Platforms

4  
3U cPCI  
SBC

5  
3U cPCI  
Platforms

6  
SBC & IMB

7  
Industrial  
Chassis

8  
Computer  
On Modules

9  
Network  
Security  
Appliances

10  
Panel PC

11  
IPC  
Accessories