# ♦ TANC-5260 TANC

The best computing node card for your ATCA modular system

### AdvancedTCA™ (ATCA)

AdvancedTCA™ stands for Advanced Telecom Computing Architecture and was specified by PICMG (PCI Industrial Computer Manufacturers Group) as PICMG 3.x in December, 2002 and then amended by ECN001 in January 2004. It's a blade-based architecture based on high performance switched fabrics, with features designed to support 99.999%+ levels of availability to enable next generation platforms with terabit switching capacity within a single chassis. It is intent of PICMG 3.x family to accommodate a wide variety of switch fabrics in a layered set of specifications that evolves over time along side the evolution of fabric technologies. The specification defines new generation architecture for building high-end "CARRIER GRADE" equipment and includes following subsidiary:

- PICMG 3.0: The base spec covers mechanical, power-, cooling-, interconnect- and RASM properties of AdvancedTCA family of specs.
- PICMG 3.1: Ethernet and Fiber Channel Transport
- PICMG 3.2: InfiniBand Transport
- PICMG 3.3: StarFabric Transport
- PICMG 3.4: PCI-Express Transport
- PICMG 3.5: Advanced Fabric Interconnect / Serial Rapid IO

AdvancedTCA™ achieved a set of standards for building Industrial Standard Based Platforms by choosing to buy hardware as Commercial Off The Shelf or to design, manufacture and support selected elements in house. Through this the development expense, lifecycle costs and time to market risks can be reduced.

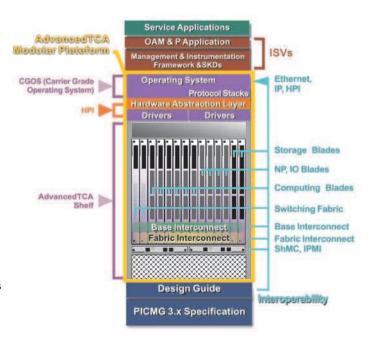
### **Target Market**

The PICMG 3.x specifications are designed to provide an open, multi-vender architecture that is originally aimed at Central Office telecom applications, but its high bandwidth communications capability, unprecedented processor density and extremely robust mechanical and electrical definitions are also attractive for many other market segments such as military communication equipment. In summary, the applications which can take advantage of IP data transportations, like wireless access, Voice/Video over IP as well as high-end Firewall and security application, are typical key target applications for AdvancedTCA<sup>TM</sup>.

### **Platform Architecture**

AdvancedTCA™ system consists from standard based modular building blocks with interoperability and includes the following components:

- AdvancedTCA Shelf The shelf is built with backplane with preferred star or mesh topology.
- 2. Front Board There are two key categories:
  - a. Node Card: Storage blades, NP/IO blades and computing blades.
  - b. Switching Board: Switching blade supports base and fabric interface.
- 3 Shelf Manager Manage/Track the FRU population and common infrastructure of a shelf, especially the power, cooling and interconnect. It enables the System Manager to join in that management/tracking through the System Manager Interface (IPMI).
- 4. RTM, Rear Transition Module RTMs are optional for system service. It simplifies servicing of front boards by putting I/O cable assemblies on the RTM. I/O signals from the front board are routed to Zone3 where a user-defined connector mates with the RTM and takes the signals outside the rear of the shelf.



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## **FEATURE**

- High computing power of dual Intel<sup>®</sup> LV Xeon<sup>™</sup> processors with Intel® NetBurst™ microarchitecture and 400/533 MHz FSB
- Six 64-bit Gigabit Ethernet ports based on Intel® 82546EB, provide high performance capability
- Intel® E7501 chipset
- One 64-bit/66 MHz PMC interface
- **Intelligent Platform Management Controller** (IPMC) performs via dual Intelligent Platform Management Bus (IPMB) to enhance system reliability
- Support most major OS



CPU Board	Dual LV Intel® Xeon™ processors up to 2.4 GHz	
Chipset	Intel® E7501	
System Memory	Up to 4GB DDR266 ECC registered memory on two angled	
	184 pin socket	
BIOS	Award BIOS	
Storage Devices	- Support one 2.5" HDD at UMDA33/66/100 - One on-board Compact Flash socket for type-I CF card	
Ethernet	<ul> <li>- 4x 64bit/133MHz Gigabit Ethernet ports with RJ45 connectors</li> <li>- 2x 64bit/133MHz Gigabit Ethernet ports with SFP connectors</li> <li>- 2x 64bit/133MHz Gigabit Ethernet ports for backplane connection</li> </ul>	
I/O	- One RJ-45 system console	
	One dual-USB connector     Zone 3 connector for RTM connection	
Expansion Interface	One 64bit/66MHz PMC interface	
LEDs	Power status, System health, HDD activity, Ethernet Connection/Speed	
	•	
Hardware Monitoring	- Build-in IPMC - Dual IPM Bus (IPMB) provide improved system reliability	
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#### **Available Accessories**

TAM-001

The RTM (Rear Transition Module) with VGA, PS2, dual-USB, 80 port and J-Tag header for system programming, debugging or other services on AdvancedTCA boards.



#### **ORDERING GUIDE**

Part No.	Ethernet Interface	PMC Interface
TANC-5260	- 2 SFP - 4 Copper GbE	1