Netarium™-6

6U 6-Slot AdvancedTCA Reference Systems

Preliminary

Features

- 6U 6-slot 19" rackmount ATCA shelf with integrated switches and server blades
- 4 node + 2 hub slots with power distribution and cooling for up to 350W per slot
- 6 rear transition module (RTM) slots
- Supports two Pigeon Point System redundant Shelf Managers, and one optional Shelf Alarm Panel
- 40G ATCA-compliant backplane, with triple full mesh on fabric channel and dual star on base channel, supports up to 10 Gbps and 3.125 Gbps per differential pair
- Redundant AC and DC power options
- Right-to-Left Push-to-Pull Cooling Mode
- Hot swappable FRUs (blades, RTMs, fan trays, power modules, ShMM, and Telco alarm module)
- PICMG 3.0 (AdvancedTCA Base Specification) Compliance

AdvancedTCA®

Introduction

Advantech's Netarium™ series of ATCA reference systems are specifically targeted to help network equipment providers reach superior levels of performance over traditional rackmount servers or appliances and extend their product range at the high end. The series represents a new generation of systems which offer superior performance, scalability and flexibility with the latest 40 Gigabit Ethernet (40G) backplanes, switches and application blades. Advantech optimizes the systems to achieve the highest possible density at the rack level, with a maximum number of payload blades, network ports and switching capacity.

Each system is tailored for customers to rapidly deploy in data communication markets for applications which require faster and deeper packet processing such as policy and charging enforcement, network security, real-time traffic monitoring, load balancing, subscriber analytics and content optimization among others. As ATCA was designed to meet the carrier-grade constraints of the telecom industry, the systems integrate the chassis, cooling, power distribution and shelf management into an off-the-shelf platform solution capable of superior 5 NINES availability and reliability.

The mid-range Netarium-6 focuses on the high performance needs of large enterprise customers in a cost effective system loaded with four MIC-5333 dual Intel® Xeon® blades and 40G switches in a dual-star configuration. The system provides up to 1.28 Tbps switching capacity and each MIC-5333 blade with RTM pair can accommodate up to 4 FMMs for over 100 Gbps egress per blade with high-speed encryption using FMM-based acceleration modules. The system is an ideal platform for cloud-based security services in private or data center clouds.

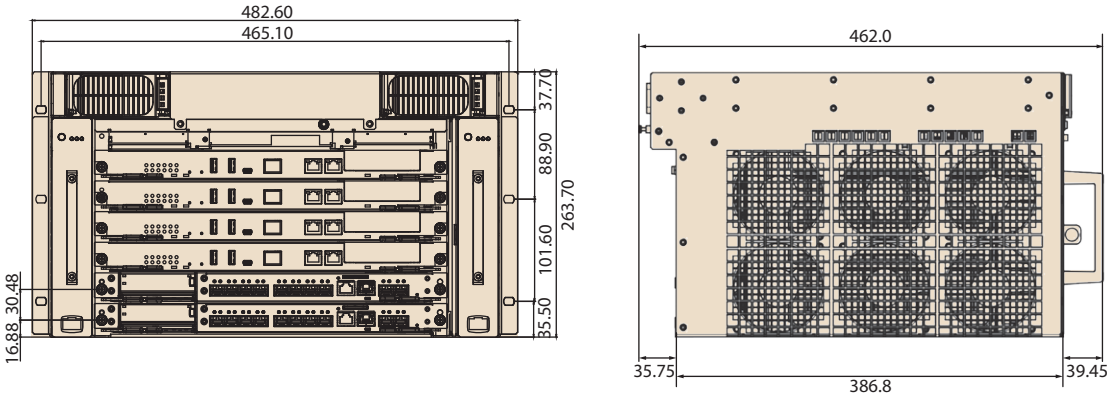
Specifications

Number of slots	Front boards	6 ATCA compliant node or hub boards (4 node boards and 2 hub boards)
	RTM's	6 ATCA rear transition modules
Backplane	IPMB	Bussed (radial available on request)
	Base interface	Dual star, 1000 Base-T
	Fabric interface	Triple replicated Full mesh, up to 10Gbps and 3.125Gbps per differential pair
Cooling	Technology	Two front pluggable, hot swappable push-pull fan trays with N+1 redundant fans (no degradation with a single fan failure)
	Max. Capacity	3350W/slot with △t=12K
	Air filter	Front replaceable air inlet filter with presence monitoring
Accessibility	Front	Front boards, ShMC's, front fan trays
	Rear	RTM's, PEM's / AC PSU's, rear fan trays
Power	AC	Integrated dual, redundant AC power supplies, 2725W 230V @ 50.5A or 115V @ 22A (with limited performance) per AC inlet
	PSU cooling	Self cooled
	DC feed	2 redundant, hot swappable PEMs w. integrated EMI filters
	DC voltage	-54V (Nominal -48V)
	Current rating	50A per feed
Shelf management	Full featured	Dual, redundant Shelf Manager ACB-V, SW executes on the Pigeon Point Shelf Management Mezzanine 500 (ShMM-500)
	Interfaces	RMCP, SSH, SNMP, CLI, Web and serial interfaces
	Telco alarms	Optional Telco alarm panel (with three Telco alarm LEDs and one DB15-male Telco alarm connector)
	Sensors	FRU presence, fan health, PSU health, temperatures, input voltages
Miscellaneous	ESD plug	Front and rear
	Cable management	Front / rear cable trays (optional)
Physical Characteristics	Dimensions (H x W x D)	6U x 19 x 462 mm
	Weight	23 kg (chassis weight only)

Last updated : 27-May-2014

Dimensions

Unit: mm



Specifications

Environment		Operating	Non-operating
	Temperature	0 ~ 55° C (32 ~ 131° F)	- 40 ~ 70° C (-40 ~ 158° F)
	Humidity	5 to 93% @ 40°C (non condensing)	95% @ 40° C (non-condensing)
	Altitude	Up to 1800m (w/o cooling degradation)	Up to 4000m
Compliance	Environment	ETSI EN300019-2-1 Class1.2, EN300019-2-2 Class 2.3, ETSI EN300019-2-3 Class 3.1E	
		Designed to meet GR63-CORE	
	PICMG	3.0 R3.0, 3.1 R1.0, HPM.1	
	Safety & EMC	CB report (IEC60950-1), CE mark (EN60950-2001), UL60950-1/CSAC22.2 FCC47 CFR Part15, Class A, CE Mark (EN55022/EN55024/EN300386) Designed to meet GR1089-CORE	

Ordering Information

Model Series	Configuration
Netarium™-6 (AC)	6U, 6+6 Slot ATCA chassis with 2 2725W AC PSUs, 2 fan trays, air filter, triple replicated full mesh backplane, optional ShMM & Shelf Alarm Module
Netarium™-6 (DC)	6U, 6+6 Slot ATCA chassis with 2 PEMs, 2 fan trays, air filter, triple replicated full mesh backplane, optional ShMM & Shelf Alarm Module

Note: Please contact your local Advantech sales representative for more information.

1. PSU 1
2. Pigeon Point System Shelf Manager 1
3. Fan Tray 1
4. MIC-5333 node board
5. Switch board
6. PSU 2
7. Optional Telco Alarm Panel
8. Pigeon Point System Shelf Manager 2
9. Fan Tray 2

Related Products

Model Series	Description
MIC-5333	AdvancedTCA Dual Socket CPU Blade with Intel Xeon E5 Series Processors, Dual-Dual 40G Fabric Interface and Acceleration Support
RTM-5106P	AdvancedTCA RTM for MIC-5333
MIC-5332	AdvancedTCA 10GbE Dual Socket CPU Blade with Intel Xeon E5-2600 Processors
RTM-5104	AdvancedTCA RTM for MIC-5332
ATCA-7310	Dual CN6880 AdvancedTCA Node Blade with 40GbE Switch
ATCA-9112	40GbE AdvancedTCA Switch Blade support up to 16 slots
Telco Systems T-HUB4	40GbE AdvancedTCA Switch Blade support up to 16 slots