Netarium™-2v2

3U 2-Slot AdvancedTCA Reference Platform
with Advantech Shelf Manager support



Features

- 3U 2-slot 19" rackmount ATCA shelf with integrated server blades
- 2 front slots with power distribution and cooling for up to 300W per slot
- 2 rear transition module (RTM) slots
- Supports two redundant Advantech Shelf Managers with Telco alarm signals
- 40G ATCA-compliant backplane with cross-connected Base and Fabric Interfaces, handles up to 10 Gbps and 3.125 Gbps per differential pair
- Redundant AC and DC power options
- Right-to-Left Push-Pull Cooling Mode
- Hot swappable FRUs (blades, RTMs, fan trays, power modules, and ShMM)
- PICMG 3.0 (AdvancedTCA Base Specification) Compliance

AdvancedTCA® RoHS COMPLIANT 2002/95/EC

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 higher performance, greater scalability and extreme flexibility by using 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, enabling a maximum number of processor cores, 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.

Netarium™-2v2, which supports Advantech's SMM-5060 Advanced Shelf Management Module, providing IPMI2.0 and ATCA compliant shelf management, is the ultimate in entry level flexibility. This 2-slot platform allows OEMs to redeploy common platform hardware which scales when needed. Based on the MIC-5333 it packs more processing power than previous generation 6-slot systems. With an increase in miniaturization and performance at the blade level it is accompanied by a new concept at the mezzanine level to bring more I/O and acceleration closer to the processing cores. With four FMM sites on each ATCA blade and RTM, the MIC-5333 integrated into the Netarium™-2 Reference System offers the broadest flexibility in entry level system performance on ATCA.

Many different payloads can be integrated into Advantech Netarium™ systems and configured to address diverse industry applications. For more details on integrating a specific configuration please contact your local sales representative.

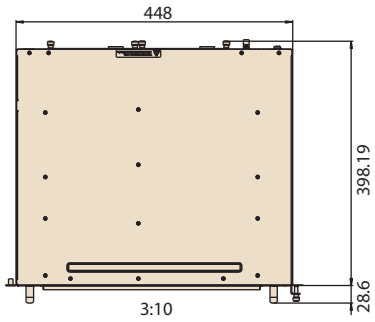
Specifications

Number of slots	Front blades	2 ATCA compliant node blades
	RTM's	2 ATCA rear transition modules
Backplane	IPMB	Bussed (radial available on request)
	Base interface	Dual star, 1000 Base-T
	Fabric interface	Full mesh, 3.125Gbps or 10Gbps 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	>CPTA B.4, 300W/slot
	Air filter	One hot swappable air filter on the right side of chassis
Accessibility	Front	ATCA blades, ShMC's, front fan trays
	Rear	RTM's, PEM's / AC PSU's
Power	AC	Integrated dual, redundant AC power supplies, 850W
	PSU cooling	Self cooled
	DC feed	2 redundant, hot swappable PEMs w. integrated EMI filters
	DC voltage	-36V to -72V (Nominal -48V)
	Current rating	30A per feed
Shelf management	Full featured	Dual, redundant enhanced shelf managers based on Advantech SMM-5060
	Interfaces	RMCP, SSH, SNMP, CLI, Web and serial interfaces
	Telco alarm	Telco alarm signals, populated on each ShMM
	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)	3U x 19" x 462 mm
	Weight	10kg (chassis weight only)

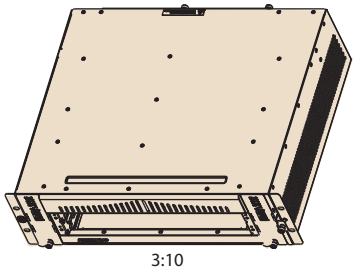
All product specifications are subject to change without notice
Last updated : 23-Jun-2014

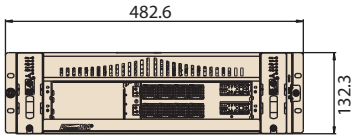
Dimensions

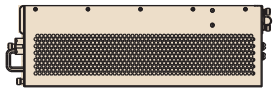
Unit: mm

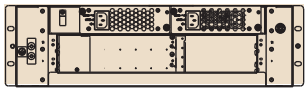


3U2S AC POWER
ATCA CHASSIS









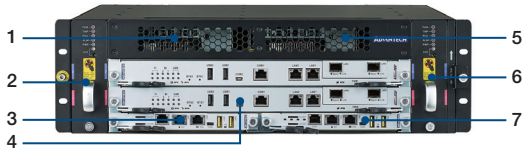
Specifications

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™-2v2 (AC)	3U, 2-slot ATCA chassis with 2x 850W AC PSUs, 2 fan trays, air filter, full mesh backplane, optional ShMM
Netarium™-2v2 (DC)	3U, 2-slot ATCA chassis with 2 PEMs, 2 fan trays, air filter, full mesh backplane, optional ShMM

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



1. PSU 1
2. Fan Tray 1
3. SMM-5060 Shelf Management 1
4. MIC-5333 node board
5. PSU 2
6. Fan Tray 2
7. SMM-5060 Shelf Management 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 Cavium Octeon® II CN6880 AdvancedTCA Node Blade with 40GbE Switch
ATCA-9112	40GbE AdvancedTCA Switch Blade, supports up to 16 slots
Telco Systems T-HUB4	40GbE AdvancedTCA Switch Blade, supports up to 16 slots
SMM-5060	Netarium™ System Management Module