



KEY FEATURES

- Eight AMC.1 and/or AMC.2 slots
- Slot B4 is routed to slot B3 via AMC.3
- IPMI as Shelf Manager or Node board
- PCIe up/downstream on any AMC with expansion capability via fiber/copper
- PCIe expansion to ATC103/104/105/106/107/108/109 or any external host
- 32-lane PCI Express switch
- Managed layer two GbE switch
- Per port performance monitoring such as average packet size, number of packets, CRC error and Poison bit
- Custom RTMs available
- IPMI 2.0 compliant
- PCI Express specification, R1.0a
- RoHS compliant
- OS support for:
 - Linux
 - Windows
 - Solaris
 - VxWorks

The ATC104 is an AdvancedTCA carrier that provides eight half-height AMC slots that can accept any AMC.1 or AMC.2. In addition, slot B4 and slot B3 also have their AMC.3 routed together.

The ATC104 can be connected via the PCIe up/downstream port to other server blades or additional carriers such as the ATC103/ATC104/ATC105/ATC106/ATC107/ATC108 or ATC109. The ATC104 can be utilized in distributed as well as non-distributed applications. Any of the ATC104 slots can be used as the upstream port for a PrAMC (Processor AMC) as the root complex. If the root complex is not a PrAMC, the ATC104 may use an external blade as its root complex. The ATC104 supports Non-Transparent mode on any of its AMC slots. This feature allows two root complexes to co-exist in the same system. In addition, the ATC104 has a managed layer two switch GbE switch which connects to seven of the AMC slots.

The ATC104 can be configured as a Shelf Manager or a Node board. As a Shelf Manager, the ATC104 eliminates the need for other shelf managers which reduces the total system cost. The shelf manager implements IPMI management, FRU management, and shelf environment management for power, thermal, E-keying, etc.

AdvancedTCA®

ATCA Carrier for Eight AMC Modules

SPECIFICATIONS

Architecture		
Physical	Dimensions	Width: 12.687in. (322.25 mm)
		Depth: 11.024 in. (280 mm)
Type	AMC Carrier	Eight AMC.0
		Layer two managed GbE switch
		PCIe x32 lane switch
Standards		
AMC	Type	AMC.1 and AMC.2 (Slot A1 does not have GbE routed from the switch). AMC.3 between Slot B4 and B3
PCIe	Lanes	Each AMC slot may negotiate PCIe x1, x2 or x4 lanes
GbE	1000-BX	Two GbE SerDes per AMC
Module Management	IPMI	IPMI Version 2.0
Configuration		
Power	ATC104	14W with no AMCs
		Up to 150 watts is available for the AMCs
Environmental	Temperature	Operating Temperature: 0° to 60° C (Air flow requirement is to be greater than 300 LFM)
		Storage Temperature: -40° to +90° C
	Vibration	0.5Gs RMS, 20-2000Hz random (Operating): 6Gs RMS (non-operating)
	Shock	30Gs each axis
Conformal Coating		Humiseal 1A33 Polyurethane
		Humiseal 1B31 Acrylic
Other		
MTBF	MIL Spec 217-F@ 155,000 Hrs.	
Certifications	Designed to meet FCC, CE and UL certifications where applicable	
Standards	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards	
Compliance	RoHS and NEBS	
Warranty	Two (2) years	
Trademarks and Logos	The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™ and the AdvancedMC™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.	

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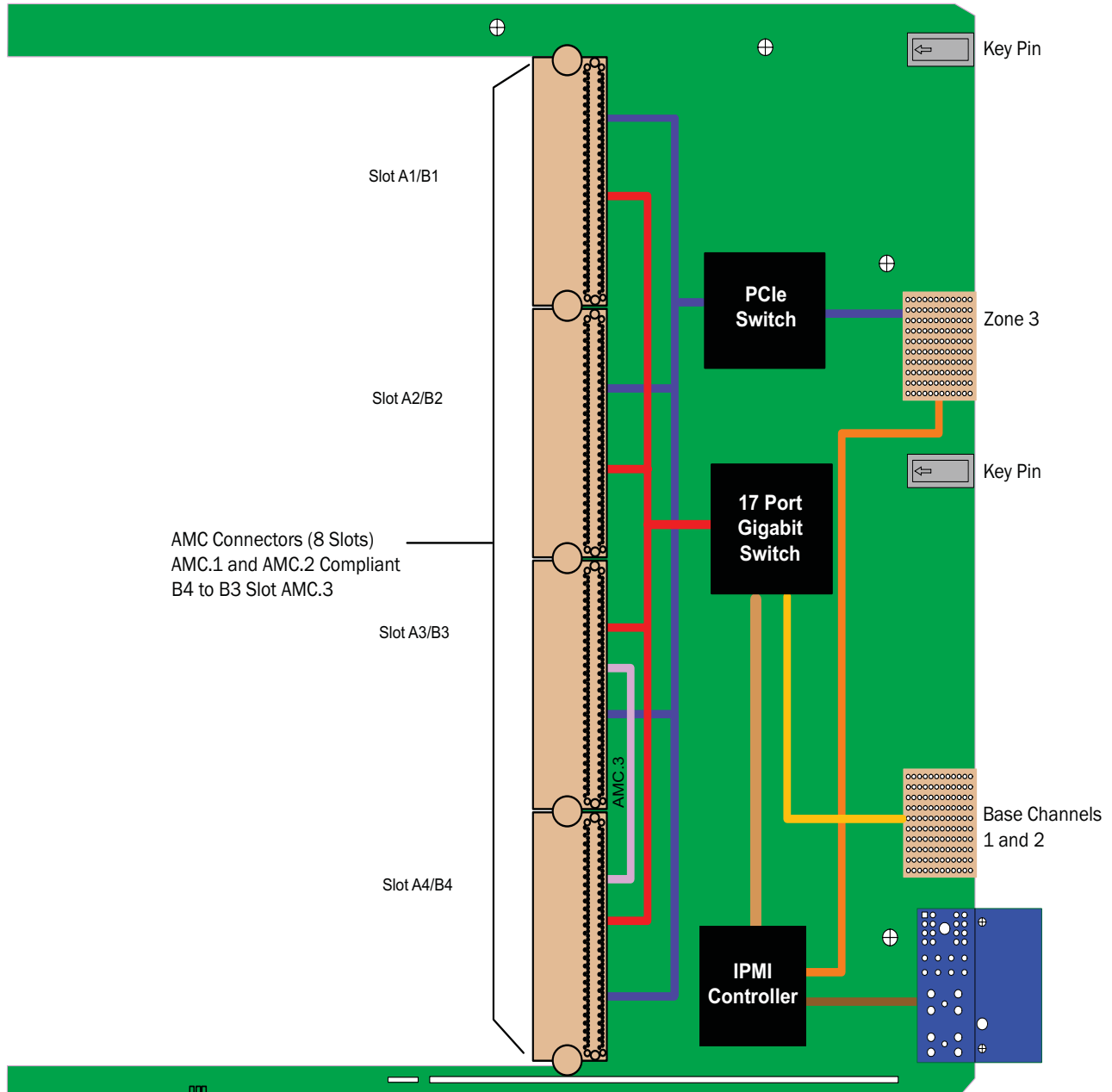
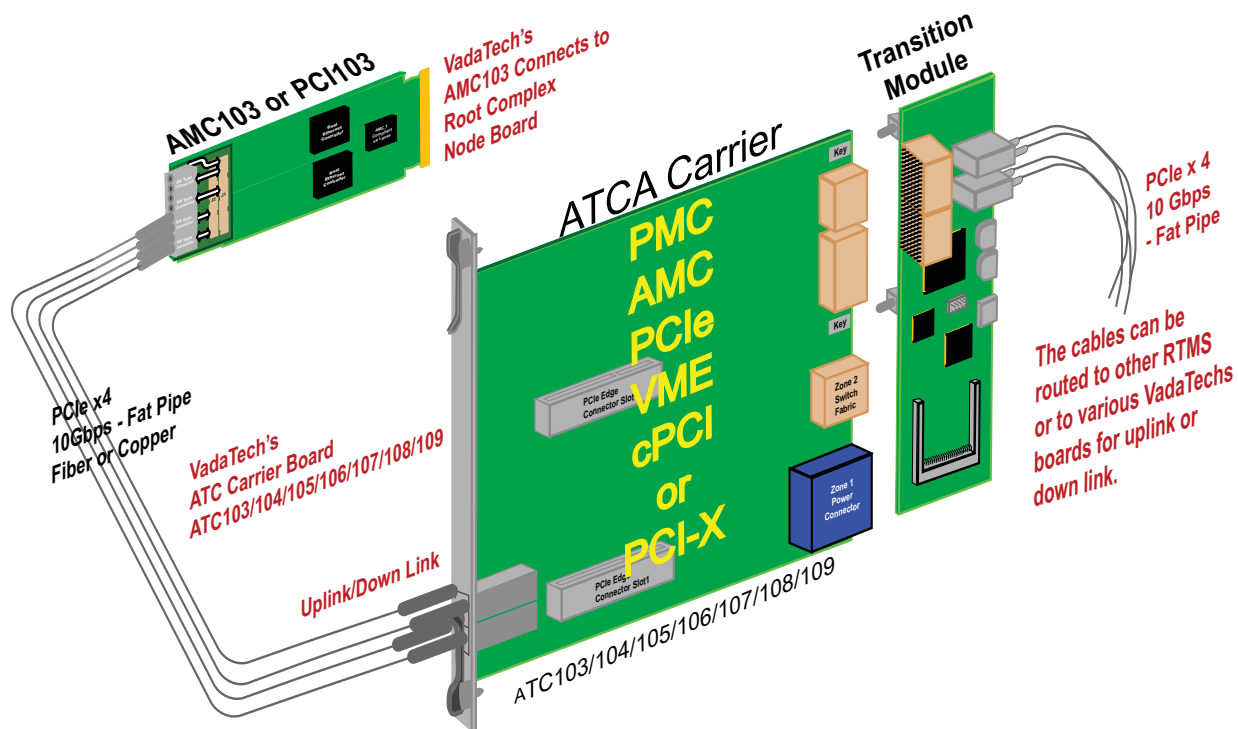


FIGURE 1. ATC104 Functional Block Diagram

VadaTech can modify this product to meet special customer requirements without NRE (minimum order placement is required).

ATCA Carrier for Eight AMC Modules

FIGURE 2. An Example of using the carrier with the PCIe up/downstream ports



ORDERING OPTIONS

ATC104 - ABC - D00 - 00J

A = PCIe Upstream Port

- 0 = Slot B4
- 1 = Rear Zone 3*
- 2 = Slot A1
- 3 = Slot B1
- 4 = Slot A2
- 5 = Slot B2
- 6 = Slot A3
- 7 = Slot B3
- 8 = Slot A4

C = IPMI Configuration

- 0 = Node board
- 1 = Shelf Manager

*Rear PCIe option removes the PCIe from Slot A1

B = Non-Transparent Port

- 0 = None
- 1 = Slot A1
- 2 = Slot B1
- 3 = Slot A2
- 4 = Slot B2
- 5 = Slot A3
- 6 = Slot B3
- 7 = Slot A4
- 8 = Slot B4

D = A1 PCIe slot option

- 0 = Standard (A1 slot has the PCIe routed)
- 1 = Rear Zone 3 (A1 slot does not have the PCIe routed, instead routed to the Zone 3)

J = Conformal Coating

- 0 = None
- 1 = Humiseal 1A33 Polyurethane
- 2 = Humiseal 1B31 Acrylic