

## MARCH 2010

### KEY FEATURES

- AdvancedTCA 3.0 Release 2.0 compliant
- 2eSST VMEbus compliant
- 320 Mbyte/s transfer rate across the VMEbus
- VME System Controller or Peripheral slot (master or slave)
- PCIe up/downstream to another ATC113/114 /115/ATC116/ATC117/ATC118/AMC113 or the PCI113 carrier board via the rear
- PCIe up/downstream port available with either fiber or copper interface
- PCIe Expansion via front utilizing QSFP connectors
- P1, P2 and P0 connectors
- P0 Ethernet to Zone 2 (VITA 31.1)
- IPMI Version 2.0 compliant
- PCIMG 3.0 Base interface
- RoHS compliant

The ATC116 is VadaTech next generation ATCA carrier that hosts any single slot VMEbus board via a VME64x interface. The ATC116 has up/downstream ports to allow an outside host processor access to the VMEbus board without routing the VMEbus signals through the ATCA backplane. An external blade can use an AMC113 or PCI113 to link to the ATC116. The VME module can be configured to run in transparent, non-transparent mode or root complex mode.

The ATC116 can be linked to other VadaTech products such as the ATC113/ATC114/ ATC115/ATC117/ATC118/AMC113 and to other ATC116s via the PCIe up/downstream port so that all I/O modules are made available to the host seamlessly. This modular approach allows an AdvancedTCA chassis to integrate widely available VMEbus form factor boards into an ATCA chassis. The VMEbus interface utilizes the 2eSST VMEbus protocol with a 320 Mbyte/s transfer rate across the VMEbus. The ATC116 can also utilize the legacy protocol for older VMEbus products.

The VME modules that have the P0 connector per VITA31.1 the dual 10/100/1000 Mbit ethernet is routed to the ATCA Base Channel.

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

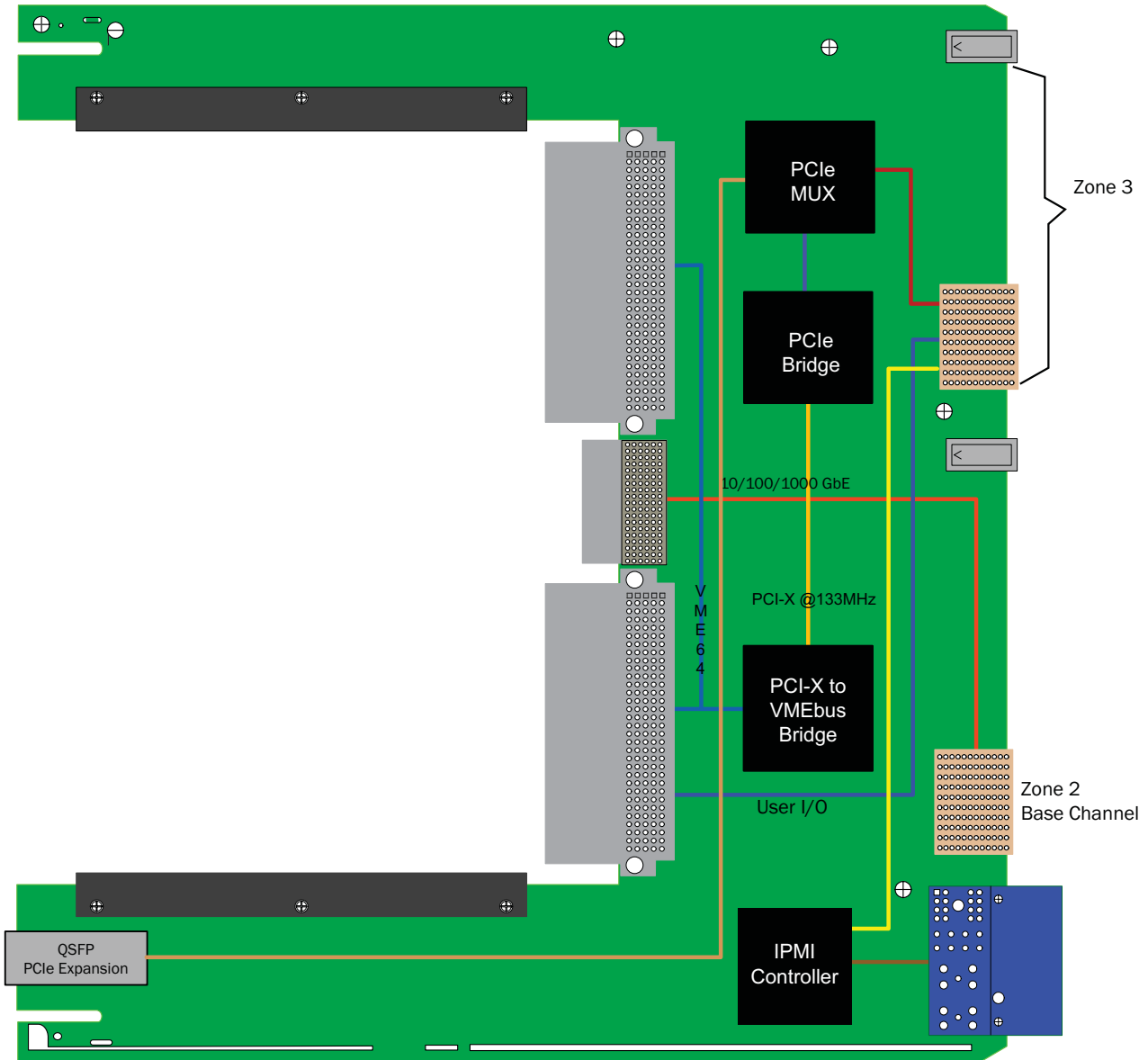
**AdvancedTCA®**

# ATCA Carrier for VMEbus Board

## SPECIFICATIONS

Architecture		
Physical	Dimensions	Width: 12.69 in. (322.25 mm)
		Depth: 11.02 in. (280 mm)
Type	ATCA Carrier	VME64x VMEbus board (2eSST compatible)
Standard		
VME	Type	VITA 1.5-199x 2eSST
	VITA 31.1	P0 routed to Zone 2 (Base Channel)
Module Management	IPMI	IPMI Version 2.0
PICMG	ATCA	PICMG 3.0 R2.0
Configuration		
Power	ATC116	10W without VME board
		Up to 150 watts is available for the VMEbus board
Environmental	Temperature	Operating Temperature: 0° to 60° C (Air flow requirement is to be greater than 200 LFM)
		Storage Temperature: -40° to +90° C
	Vibration	1G, 5-500Hz each axis
	Shock	30Gs each axis
Expansion	PCle	5 to 95 percent, non-condensing
		Expansion to another ATC116 or to AMC113, ATC114, ATC115, ATC116, ATC117, ATC118 and the PCI113 via rear I/O (Zone three) or front via QSFP
Rear I/O	Zone Three**	VME P2 connector (Row A and C) routes to Zone 3
		PCle Expansion
		IPMI RS-232 port
Front Panel	LEDs	PCle Lane Good
		QSFP for PCle Expansion
	Mechanical	Hot Swap Ejector Handle
Software Support	Operating Systems	Linux, Windows, Solaris and VxWorks
Other		
MTBF	MIL Spec 217-F > 260,000 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.	

# ATCA Carrier for VMEbus Board

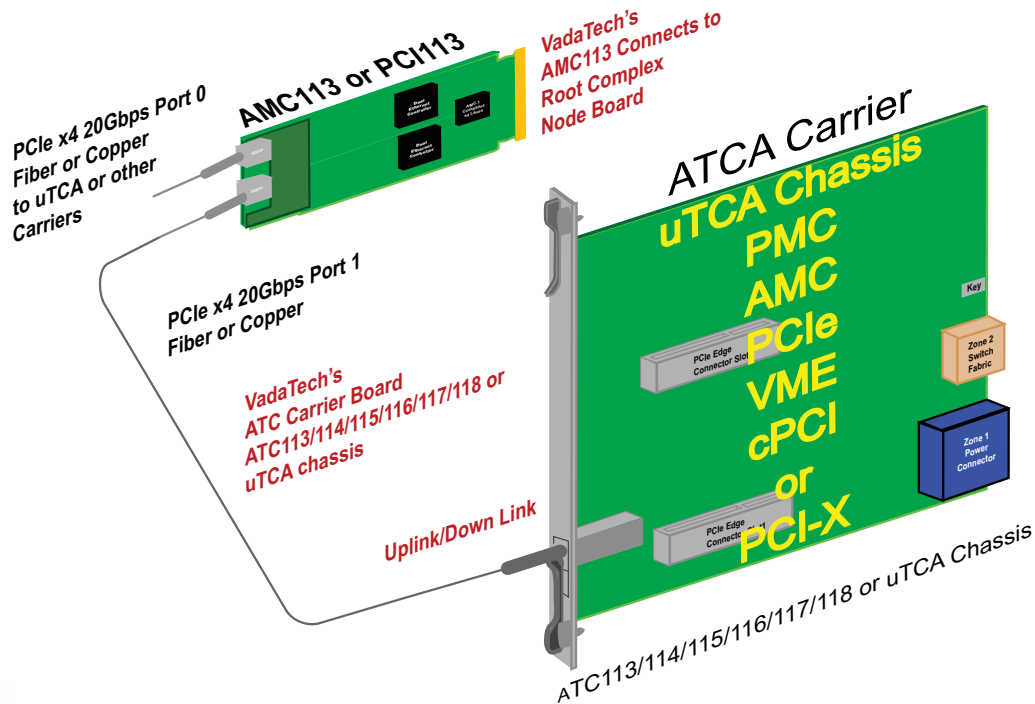


**FIGURE 1.** ATC116 Functional Block Diagram

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

# ATCA Carrier for VMEbus Board

FIGURE 1. Typical application (the module could run standalone)



## ORDERING OPTIONS

ATC116 - A00 - 000 - 00J\*

A = VMEbus Option

- 0 = With VMEbus interface
- 1 = Without VMEbus interface

J = Conformal Coating

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

\*Vadatech can design custom Rear Transition Modules (RTMs) for this product or any ATCA carrier board with a minimum order and no NRE.

Document No \_\_\_\_\_ Date: January 2010 Pass one

