ATCA Carrier for VMEbus Board

ATC106





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 ATC103/104 /105/ATC106/ATC107/ ATC108/AMC103 or the PCI103 carrier board via the rear
- PCle up/downstream port available with either fiber or copper interface
- P1, P2 and P0 connectors
- PO Ethernet to Zone 2 (VITA 31.1)
- IPMI Version 2.0 compliant
- PCIMG 3.0 Base interface
- RoHS compliant
- · OS support for:
 - Linux
 - Windows
 - Solaris
 - VxWorks

The ATC106 is an ATCA carrier that hosts any single slot VMEbus board via a VME64x interface. The ATC106 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 AMC103 or PCl103 to link to the ATC106. The VMEbus board can be configured to run in transparent, non-transparent mode or root complex mode.

The ATC106 can be linked to other VadaTech products such as the ATC103/ATC104/ ATC105/ATC107/ATC108/AMC103 and to other ATC106s via the PCle 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 ATC106 can also utilize the legacy protocol for older VMEbus products.

The ATC106 can be configured as a Shelf Manager or a Node board. As a Shelf Manger, the ATC106 eliminates the need for other shelf managers in the system which reduces the total system cost. The shelf manager implements IPMI management, FRU management, and shelf environment management for power, thermal, E-keying, etc.



ATCA Carrier for VMEbus Board

SPECIFICATIONS

Architecture	Dimensions	Width: 12.69 in. (322.25 mm)
Physical	Dimensions	· · · · · · · · · · · · · · · · · · ·
T	4704.0	Depth: 11.02 in. (280 mm)
Туре	ATCA Carrier	VME64x VMEbus board (2eSST compatible)
Standard		
VME	Туре	VITA 1.5-199x 2eSST
	VITA 31.1	P0 routed to Zone 2
Module Management	IPMI	IPMI Version 2.0
PICMG	ATCA	PICMG 3.0 R2.0
Configuration		
Power	ATC106	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
	Relative Humidity	5 to 95 percent, non-condensing
Expansion	PCle	Expansion to anther ATC106 or to AMC103, ATC104, ATC105, ATC106, ATC107, ATC108 and the PCI103 via rear I/O
Rear I/O	Zone Three**	VME P2 connector (Row A and C) routes to Zone 3
		PCI-X @ 133MHz routed to the rear for expandability
	LEDs	IPMI Management Control
		PCIe Lane Good
Front Panel	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 TM and the AdvancedMC TM logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.	

Email: info@vadatech.com • www.vadatech.com

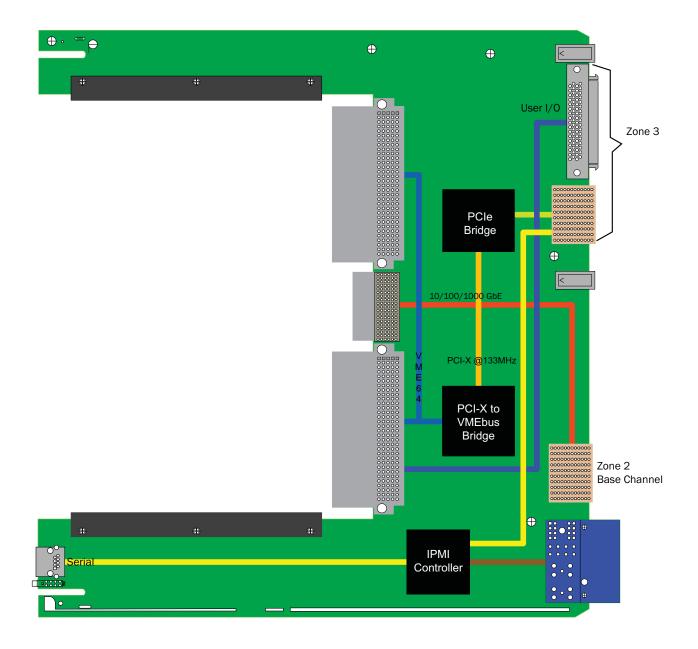
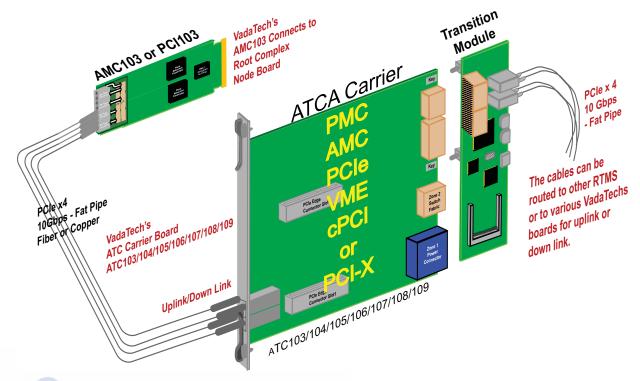


FIGURE 1. ATC106 Functional Block Diagram

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

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



†Note: The ATC106 PCle up/downstream is only available via the RTM

ORDERING OPTIONS

ATC106 - ABO - 000 - 00J

A = VMEbus Option

0 = With VMEbus interface

1 = Without VMEbus interface

B = Configuration*

0 = Node board

1 = Shelf Manager

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:. July 20 2007

^{*}The ATC106 can be purchased as either a Shelf Manager or Node board (contact your Sales representative for information).