MARCH 2010

ATC117KEY FEATURES

- AdvancedTCA 3.0 Release 2.0 compliant
- PICMG 2.16 (ANSI/VITA 31.1)
- PCI-X @ 133MHz
- System Controller/Host or Slave/Agent
- Shelf Manager or Node board
- Standalone or PCIe up/downstream to other ATC113/114/115/ 116/117/118 or the PCI113 carrier boards via the rear
- PCIe up/downstream via fiber or copper
- IPMI Version 2.0 compliant
- RoHS compliant

The ATC117 is VadaTech next generation Advanced Telecom Computing Architecture (AdvancedTCA) carrier which allows for the integration of a CompactPCI board into the AdvancedTCA environment. The ATC117 provides a PCI-X interface to the CompactPCI board which can operate at 133MHz. The ATC117 allows the CompactPCI board to be a Master or Slave. The ATC117 has a PCIe up/downstream port to interface to other blades or other VadaTech products, such as the ATC113/114/115/116/117/118, PCI113 and AMC113. This modular approach allows widely available cPCI form factor boards to be integrated into an ATCA chassis.

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

Advanced TCA®

SPECIFICATIONS

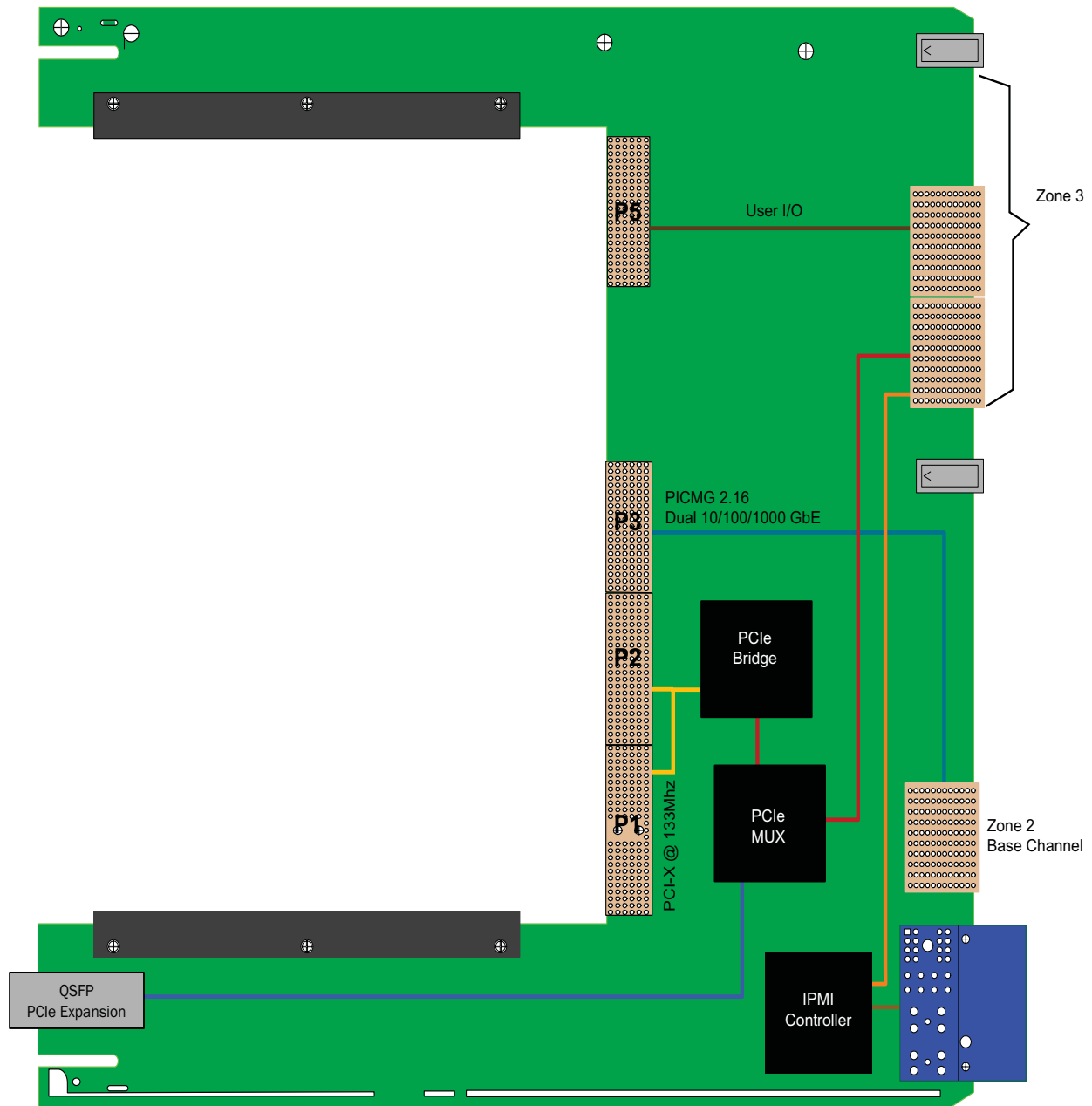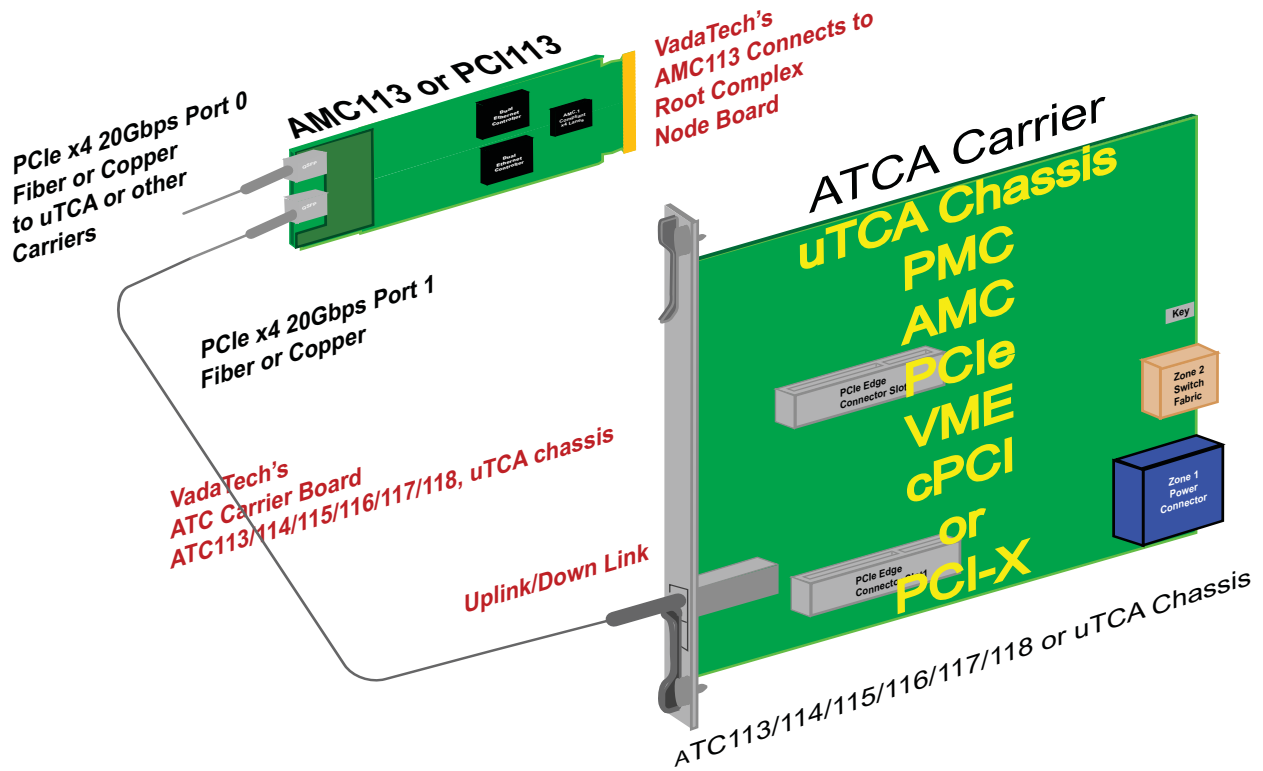| Architecture		
Physical	Dimensions	Width: 12.69 in. (322.25 mm)
		Depth: 11.02 in. (280 mm)
Type	ATCA Carrier	CompactPCI board
Standard		
CompactPCI	Type	PICMG 2.16 (ANSI/VITA 31.1)
Module Management	IPMI	IPMI Version 2.0
PICMG	ATCA	PICMG 3.0 R2.0
Configuration		
Power	ATC117	6W without cPCI board
		Up to 150 watts is available for the cPCI 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	PCIe	Expansion to another ATC117 or to AMC113, ATC114, ATC115, ATC116, ATC117, ATC118, or the PCI113 via Zone 3 or front panel QSFP
Rear I/O	Zone Three	CompactPCI P5 connector routes to Zone 3
		PCIe x4 routed to the rear for expandability
		IPMI Management RS-232 port
	Zone Two	P3 connector of the cPCI to Zone 2 Base channel
Front Panel	LEDs	PCIe Expansion via QSFP connector
		PCIe Lane Good
	Mechanical	Hot Swap Ejector Handle
Software Support	Operating Systems	Linux, Windows, Solaris and VxWorks
Other		
MTBF	MIL Spec 217-F > 220,000 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.	

FIGURE 1. ATC117 Functional Block Diagram

FIGURE 2: Typical application (the module could run standalone)[†]

PCle x4 20Gbps Port 0
Fiber or Copper
to uTCA or other
Carriers

AMC113 or PCI113

VadaTech's
AMC113 Connects to
Root Complex
Node Board

ATCA Carrier

uTCA Chassis
PMC
AMC
PCle
VME
cPCI
or
PCI-X

PCle x4 20Gbps Port 1
Fiber or Copper

VadaTech's
ATC Carrier Board
ATC113/114/115/116/117/118, uTCA chassis

Uplink/Down Link

ATC113/114/115/116/117/118 or uTCA Chassis

Key

Zone 2
Switch
Fabric

Zone 1
Power
Connector

PCle Edge
Connector Slot

ORDERING OPTIONS

ATC117 - 000 - 000 - 00J*

J = Conformal Coating

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

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

Document No_____ Date:. January 2010 Pass one

VadaTech Incorporated • 11540 South Eastern Avenue, Henderson, NV 89052 • Tel: (702) 896-3337 • Fax (702) 896-0332
Email: info@vadatech.com • www.vadatech.com