

ART145A

ATCA Rear Transition (ART) Module for VadaTech ATC145 Blade

ART145A



vadatech
THE POWER OF VISION

Key Features

- AdvancedTCA RTM (Rear Transition Module) for VadaTech ATC145 Blade
- 100GbE via QSFP28
- Dual 10GbE
- Dual USB2.0 Fiber
- Five USB Copper Ports
- Managed Layer two GbE Switch with Dual Fiber Optics and Dual copper
- IPMI 2.0 compliant

Benefits

- Expertise in RTM design
- Full ecosystem of AdvancedTCA switches, processors, chassis platforms, and specialty blades
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- AS9100 and ISO9001 certified company

AdvancedTCA®



ART145A

The ART145A provides multi-functional I/O for the ATC145 Blade via Rear Transition Module (RTM). The module has a MAC/PHY that provides 100GbE via QSFP28. The MAC/PHY interfaces to the front blade via PCIe x16 Gen3.

The ART145A has a USB2.0 HUB that provides five USB ports via Micro-DB25. The module converts two of the USB1.0 ports coming from the ATC145 into optical interface via SFF optical.

The ART145 has a managed layer two GbE with dual GbE via RJ-45 and Dual SFF optical.

Further the ART145 provides dual 10GbE via SFP+ which is coming from the front Blade.

Figure 1: ART145A

Figure 2: ART145A Front View

Block Diagram

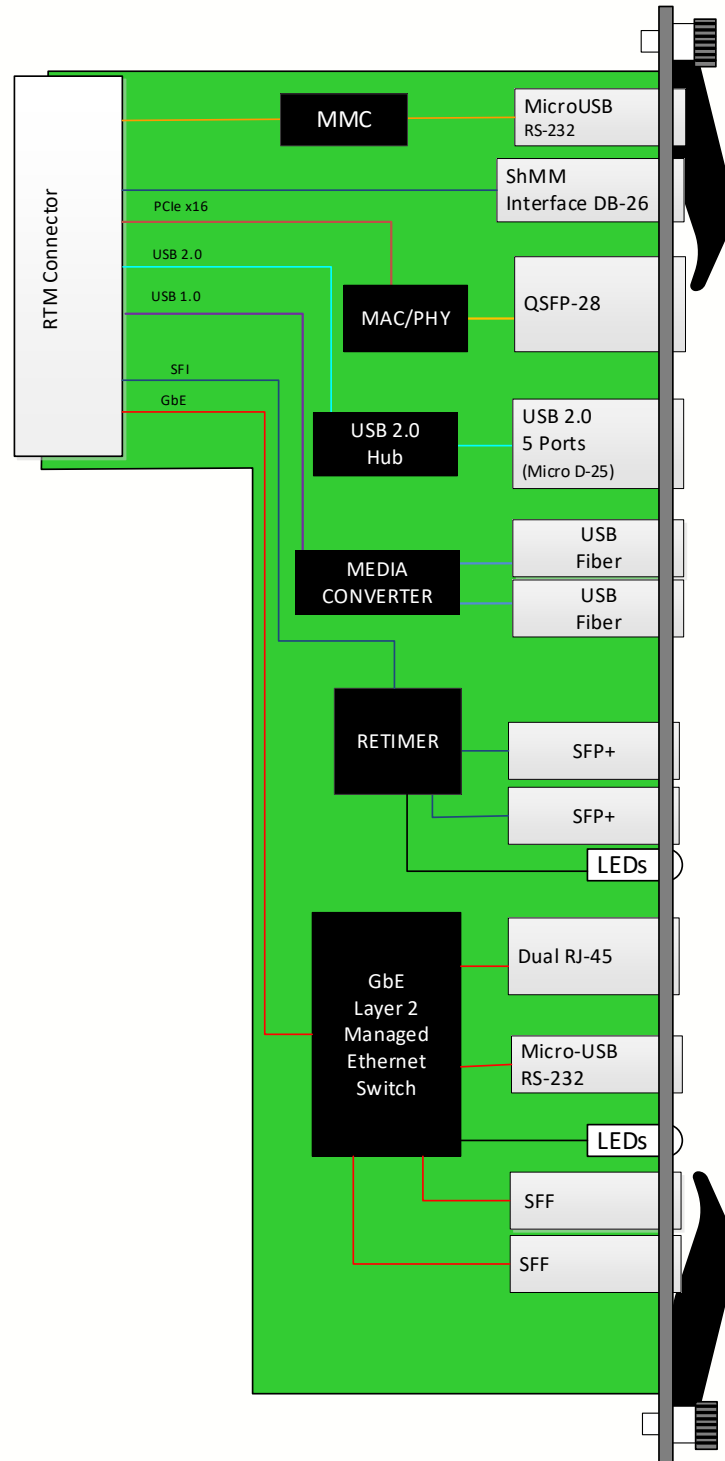


Figure 3: ART145A Functional Block Diagram

Specifications

Architecture		
Physical	Dimensions	Weight: TBD Width: 12.69" (322.25 mm) Depth: 3.7" (94 mm)
Type	ATCA RTM	I/O for the VadaTech ATC145A
Standards		
PICMG	ATCA	PICMG 3.0 revision 2.0
Module Management	IPMI	IPMI version 2.0
Configuration		
Power	ART145A	~15 W
Environmental	Temperature	Operating temperature: -5° to 55° C (65°C for limited time, performance restrictions may apply), industrial and extended versions also available (See environmental spec sheet) Storage Temperature: -40° to +90°C
	Vibration	Operating 9.8 m/s ² (1G), 5 to 500Hz on each axis
	Shock	Operating 30G on each axis
	Relative Humidity	5 to 95 per cent, non-condensing
Front Panel	Interface Connectors	Dual USB 2.0 and Dual USB1.0 Optical Five ports USB2.0 via Micro DB-25 Dual GbE via RJ-45 with Dual Optical via SFF 100GbE via QSFP-28 Dual Micro USB for the RS-232 DB-26 for the Shelf Interface
	Mechanical	Hot swap ejector handle
Software Support	Operating System	Agnostic
Conformal Coating		Humiseal 1A33 Polyurethane (Optional) Humiseal 1B31 Acrylic (Optional)
Other		
MTBF		MIL Hand book 217-F@ TBD 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
Warranty		Two (2) years

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and μ TCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

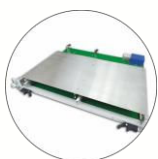
Ordering Options

ART145A – ABC-000-00J

A = Dual SFP+ Transceivers		
0 = None 1 = 10GBASE-SR (10/1GbE) 2 = 10GBASE-LR (10/1GbE) 3 = 10GBASE-SR (10GbE ONLY) 4 = 10GBASE-LR (10GbE ONLY) 5 = 1GBASE-SR (GbE ONLY) 6 = 1GBASE-LR (GbE ONLY)		
B = 100G MAC/PHY		
0 = Intel E830 1 = Intel E835		
C = QSFP-28 Transceiver		J = Temperature Range and Coating
0 = None 1 = 100G MTP/MPO SR 2 = 100G MTP/MPO LR (1km) 3 = 100G MTP/MPO LR (10km) 4 = 100G CWDM-SR 5 = Reserved		0 = Commercial, No coating 1 = Commercial, Humiseal 1A33 polyurethane 2 = Commercial, Humiseal 1B31 acrylic 3 = Industrial, No coating 4 = Industrial, Humiseal 1A33 polyurethane 5 = Industrial, Humiseal 1B31 acrylic 6 = Extended, Humiseal 1A33 polyurethane 7 = Extended, Humiseal 1B31 acrylic

Related Products

ATC139



- Carrier for dual Shelf Manager slots (VadaTech's VT011)
- PICMG 3.0 Rev 3.0 compliant
- Redundant failover between the two shelf managers

VT830



- 19" rackmount 6U ATCA Chassis with integrated Switch and Shelf Manager
- 10GbE/GbE Managed Layer 2
- 40GbE/10GbE/GbE Managed Layer 3

VT011



- Shelf manager for AdvancedTCA systems
- Utilizing VadaTech Third Generation Shelf Manager VT003
- Quad Core ARM Freescale processor @ 1 GHz per core

Contact

VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

Asia Pacific Sales Office

7 Floor, No. 2, Wenhui Street, Neihu District, Taipei 114, Taiwan

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

info@vadatech.com | www.vadatech.com

Choose VadaTech

We are technology leaders

- First-to-market silicon
- Constant innovation
- Open systems expertise

We commit to our customers

- Partnerships power innovation
- Collaborative approach
- Mutual success

We deliver complexity

- Complete signal chain
- System management
- Configurable solutions

We manufacture in-house

- Agile production
- Accelerated deployment
- AS9100 accredited



vadatech
THE POWER OF VISION

Trademarks and Disclaimer

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.

© 2017 VadaTech Incorporated, All rights reserved.
DOC NO. 4FM737-12 REV 01 | VERSION 1.0– JUN/25