ATCA Rear I/O Transition Module

ART115

KEY FEATURES

- ATCA rear I/O Module for Blades (i.e. Sun Microsystems Netra Blade CP3260, CP3220, VadaTech ATC114, etc.)
- Dual DVI/VGA interface
- Resolution @ 1920x1200
- Dual 10GbE SFP+
- Removable on board 2.5" SAS/SATA Disk
- Two port USB 2.0 high speed (480Mbit/s)
- Front Blade Dual GbE to RJ-45 or LC Fiber (option for SX or LX)
- Front Blade Management RS-232 to RJ-45
- Dual RS-232 for the host blade
- IPMI 2.0 Management Controller
- RoHS compliant

The ART115 is a Rear Transition Module (RTM) module for ATCA Blades with Common Pinout definition on Zone three such as Sun Microsystems Netra CP3260, CP3220, VadaTech ATC104, etc. It brings expandability to the Blades/Carriers via Rear I/O. The ART115 has a removable 2.5" SAS/SATA drive for storage, Dual RS-232 ports for the host via micro DB-9, Dual DVI/VGA, Dual 10GbE and USB 2.0 high speed ports.

Further, the ART115 routes the front Blade GbE ports, LAN management to the rear transition. The GbE has options for copper or LC Fiber. The Fiber is available in SX (short reach) or LX (long reach).

The GPU (Graphic Processing Unit) is 2D 24-bit color with up to 1920x1200 resolution with capability to drive Dual Monitor. The GPU has 128MB of DDR memory.

The USB is 2.0 with two ports of High-Speed (480Mbits/s).

The SAS HBA has one port routed to the on board disk. The Disk is removable for ease of maintainability.

SPECIFICATIONS

Architecture		
Physical	Dimensions	Width: 12.687in. (322.25 mm)
		Depth: 3.701 in. (94.00 mm)
Type	Rear Transition	I/O Expansion
Standards		
ATCA	Type	ATCA Rear Transition
Configuration		
Power	ART115	typical 16W, 20W MAX
Environmental	Temperature	Operating Temperature: 0° to 65° C
		Storage Temperature: -40° to +90° C
	Vibration	1G, 5-500Hz each axis
	Shock	30Gs each axis
	Relative Humidity	5 to 95 percent, non-condensing
Rear Panel	Interface Connectors	Dual 10GbE via SFP+
		Dual 1000 GbE (RJ-45 for copper, LC style for Fiber)
		Dual USB (Type A receptacles)
		DVI/VGA via LFH-60 Connector
		Dual RS-232 via Micro DB-9
		Management LAN (RJ-45)
	LEDs	LNK/ACT per GbE port
		IPMI Management
		SAS ACT/FLT
		LAN Management LNK/ACT
	Mechanical	Hot Swap Ejector Handle
Other		
MTBF		MIL Spec 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
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. AdvancedMC^{TM} and the AdvancedTCA^{TM} logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.

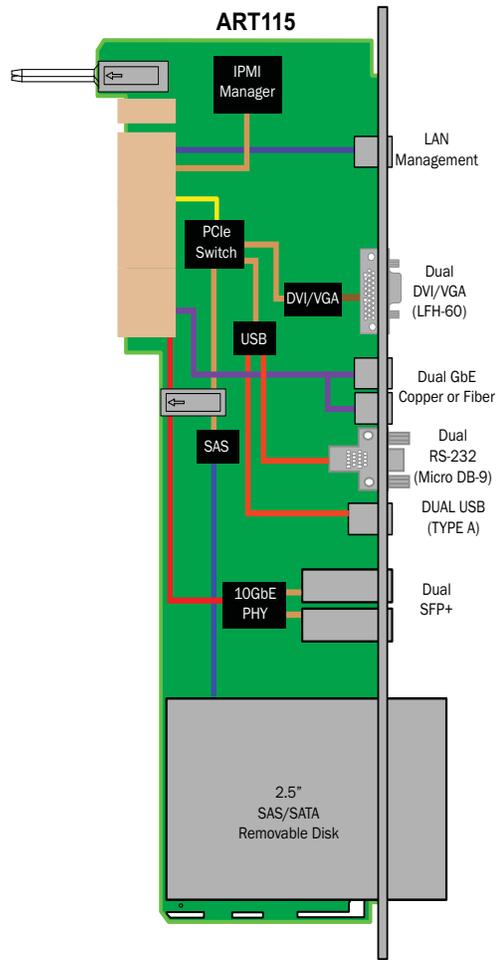**FIGURE 1.** ART115 Functional Block Diagram

Table 1. Comparison chart between ART112/113/114/115

Model	No. of Disks	No. of Host GbE Ports	No. of USB ports	No. of host serial ports	No. of Graphic Interfaces	Serial Management	Ethernet Management	Front Panel SAS Expander	Front Panel PCIe Expander	10GbE Ports
ART112	1	2	3	0	Single VGA	Yes	Yes	Yes	No	0
ART113	1	2	3	2	Single VGA	Yes	Yes	No	No	0
ART114	2	2	0	0	None	Yes	No	No	Yes	0
ART115	1*	2	2	2	Dual DVI/VGA	No	Yes	No	No	2
ART116	2	2	2	0	Single DVI-I	Yes	Yes	No	No	No

*The ART115 and ART116 Disks are removable via the front panel

ORDERING OPTIONS

ART115 - AOC - DEF - GHJ

A = SATA Drive Capacity

0 = None
1 = 250 GB
2 = 500 GB
3 = Reserved
4 = Reserved
5 = Reserved
6 = Reserved
7 = 2.5" Solid State Drive (SSD)
(Contact sales for availability)

D = SAS Drive Capacity

0 = None
1 = Reserved
2 = 146 GB
3 = 300 GB
4 = Reserved

E = GbE

0 = Copper
1 = Fiber LC SX
2 = Fiber LC LX

G = Micro DB-9 to DB-9 Cable

0 = none
1 = 18" cable one piece
2 = 18" cable two pieces

H = Adapter Cable

0 = None
1 = LFH to two Link DVI-I ("Y" Cable)
2 = LFH to two VGA ("Y" Cable)

C = Disk Temp

0 = Standard Temperature Range (0° C to +60° C)
1 = Extended Temperature Range* (-20° C to +80° C)

F = 10GbE option

0 = None**
1 = 10GBASE-SR
2 = Reserved
3 = 10GBASE-LRM
4 = 10GBASE-LR

J = Conformal Coating

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

*Available for the SSD option only

**With the option zero, the ART115 will not be loaded with the 10GbE Phy and the SFP+ cage. This is an option build during manufacturing and can not be added later.