AMC344

AMC Graphic Board with 4 Mini Display Ports



Key Features

- AMC Mid-size or Full-size option
- AMC.1 PCIe Gen3 x8 or x4
- Based on AMD graphics processor E9171
- Support for four displays 4096x2160 (4K display)
- Support for one 5120x2880 @ 60 Hz single cable
- Support for two 5120x2880 @ 60 Hz dual-cable
- 4 GB of GDDR5 Memory
- Optimized for DirectX 12

Benefits

- Uses high performance graphics processor
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company



AMC344

The AMC344 is a third generation VadaTech graphics module designed to meet the high-performance needs of Military, Industrial and Telecom applications. The mid-size board is one of the fastest and most advanced, high-performance 2D and 3D graphics processors available for the ATCA/uTCA embedded market.

The module is compliant to the AMC.1 specification with PCIe x4 or x8.

The module offers 4 GB of GDDR5 memory and supports up to four independent displays with resolutions of 4096x2160 @ 60 Hz (4K Display). The module could also support one 5120x2880 @ 60 Hz single-cable or dual 5120x2880 @ 60 Hz dual-cable.



Figure 1: AMC344

Block Diagram

-	ІРМВ	IPMI Controller		IPMI RS-232	LE Ds) Micro USB	1
				 	DP	
	AMC.1 PCle x4 or x8		E9171		DP	
		- I			DP	
			L		DP	

Figure 2: AMC344 Functional Block Diagram

Front Panel



Specifications

Architecture				
Physical Dimensions		Single-Width, Mid-Size or Full-Size		
		Width: 2.89" (73.5mm)		
		Depth 7.11" (180.6mm)		
Туре АМС		AMC.1 Graphics board		
	Ports	4 Mini Display Ports		
Video Resolution		4096x2160 @ 60 Hz (4K Display)		
	Memory	4 GB GDDR-5		
PCle	Lanes	x4 or x8 (ports 4-7 or 4-11)		
Standards				
CompactPCI Type		AMC.0 and AMC.1		
Module Management IPMI		Version 2.0		
Configuration				
Power	AMC	40 W		
Environmental Tempe		e See Ordering Options		
		Storage Temperature: -40° to +90°C		
	Vibration	Operating 9.8 m/s ² (1G), 5 to 500 Hz on each axis		
	Shock	Operating 30G on each axis		
	Relative Humidity	5 to 95% non-condensing		
Front Panel	Interface Connectors	Mini Display Port		
	LEDs	DP detect and power fail		
	Mechanical	Hot-swap ejector handle		
Software Support	Operating System	Linux and Windows		
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 ISO9001:2015 and AS9100D standards			
Warranty	arranty Two (2) years, see <u>VadaTech Terms and Conditions</u>			
-	· · ·			

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

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

Ordering Options

AMC344 – A0C-000-00J

A = PCle Lanes	
0 = x4 1 = x8	
C = Front Panel	J = Temperature range and Conformal Coating
1 = Reserved 2 = Mid-size 3 = Full-size 4 = Reserved 5 = Mid-size, MTCA.1 (captive screw) 6 = Full-size, MTCA.1 (captive screw)	0 = Commercial (-5° to +55° C), No coating 1 = Commercial (-5° to +55° C), Humiseal 1A33 Polyurethane 2 = Commercial (-5° to +55° C), Humiseal 1B31 Acrylic 3 = Industrial (-20° to +70° C), No coating 4 = Industrial (-20° to +70° C), Humiseal 1A33 Polyurethane 5 = Industrial (-20° to +70° C), Humiseal 1B31 Acrylic 6 = Extended (-40° to +85° C), Humiseal 1A33 Polyurethane ** 7 = Extended (-40° to +85° C), Humiseal 1B31 Acrylic**

Notes: ** Conduction cooled temperature is at edge of module. Consult factory for availability

Related Products

UTC004



- Unified 1 GHz quad-core CPU for MCMC, Shelf Manager, Clocking, and Fabric management
- Automatic fail-over with redundant UTC004s
- Full Layer 2 or 3 managed Ethernet switches

UTC020



- Single module, full-size per AMC.0
- Dual -36V DC to -75V DC input, 936W (available in 468W)
- Hot swappable with support for power module redundancy



5

- MTCA System Platform 19" x 5U x 10.5" deep (with handles 12" deep)
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and dual Power Modules
- Up to 12 AMCs in single width/full-size

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, Wenhu 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





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.

© 2019 VadaTech Incorporated. All rights reserved. DOC NO. 4FM737-12 REV 01 | VERSION 1.1 – SEP/211

