AMC325

vadatech
™ THE POWER OF VISION

KEY FEATURES

- Full-Height AdvancedMC
- AMC.1 compliant
- PCIe x4 lanes
- HDLC, ASYNC, BISYNC, and Transparent mode capabilities
- Multiprotocol transceiver modes:
  — RS-232 (V.28)
  — X.21 (V.11)
  — RS-449/V.36
  — EIA-530/530A (V.10 and V.11)
  — V.35 (V.35 & V.28)
- Dual Micro-DB25 connectors
- 256 Mbytes of SDRAM
- Up to 128 Mbytes of flash memory
- 8 Mbyte boot flash
- IPMI 2.0 compliant
- RoHS compliant
- OS support for:
  — Linux
  — Windows
  — Solaris
  — VxWorks

The AMC325 is a single-width, full-height AdvancedMC^{TM} (AMC) based on the AMC.1 specification. The AMC325 provides two Serial Communications Controller (SCC) serial ports using two Micro-DB25 connectors.

The AMC325 features the MPC8247 PowerPC processor. The processor is a dual-core processor that combines the 603e core with a separate RISC-based Communications Processor. The two SCCs can be configured independently with different protocols for bridging, routing, or gateway functions and to interface with a wide variety of standards. Associated with each SCC is a digital phase-locked loop for external clock recovery that supports NRZ, NRZI, FM0, FM1, Manchester, and differential Manchester encodings. If the clock recovery function is not required, the DPLL is disabled (in which case only NRZ and NRZI are supported).

All interface modes are configured via software, including operations in DTE or DCE mode, termination resistors, loopback, etc.

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

AdvancedMC™

SPECIFICATIONS

Architecture		
Physical	**Dimensions**	Single-Width, Full-Height Front Panel
		Width: 2.89 in. (73.5 mm)
		Depth: 7.11 in. (180.6 mm)
Type	**AMC Serial**	All configurations are via software (no switch settings)
		Supports V.10, V.11, V.28, V.35 and the V.36 Specifications
		Internal transceiver termination resistors (can be disabled for line monitoring applications)
		Capable of data rates up to 20Mbps
		MPC8247 PowerPC Processor
		Two Serial Communications Controller (SCC) interfaces
		256Mbyte of SDRAM, 64 or 128Mbyte of Flash Memory (option dependent) and 8 Mbyte of Boot Flash

Standards		
AMC	**Type**	AMC.1
Module Management	**IPMI**	IPMI Version 2.0
PCIe	**Lanes**	x4

Configuration		
Power	**AMC325**	5W
Environmental	**Temperature**	Operating Temperature: 0° to 65° 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
Front Panel	**Interface Connectors**	Dual Micro-DB25 Connectors
	Debug Port	Dedicated RS-232 Debug port
	LEDs	IPMI Management Control
		Activity
	Mechanical	Hot Swap Ejector Handle
Software Support	**Operating Systems**	Linux, Windows, Solaris and VxWorks

Other	
MTBF	MIL Spec 217-F > 225,000 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. 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.
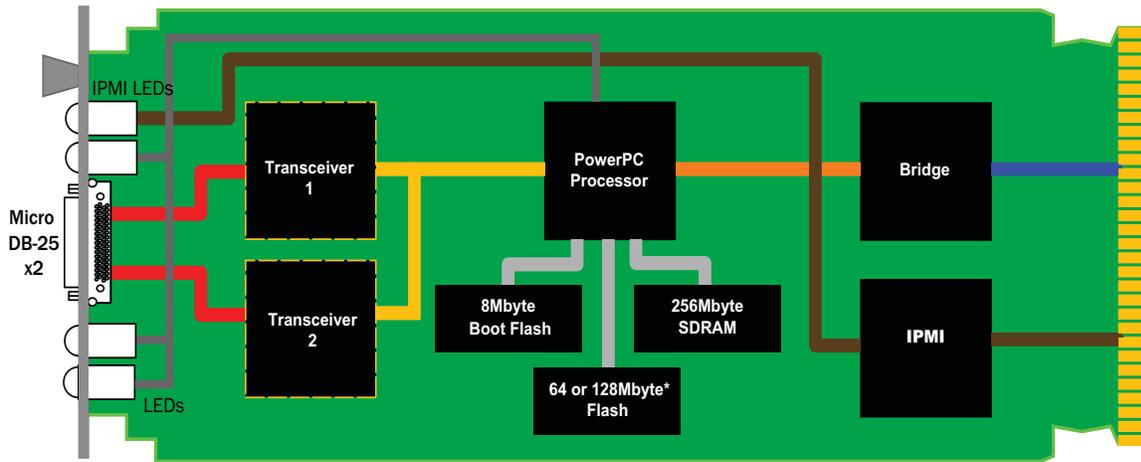
NOTE: *See ordering options for Flash Memory options.

FIGURE 1. AMC325 Functional Block Diagram
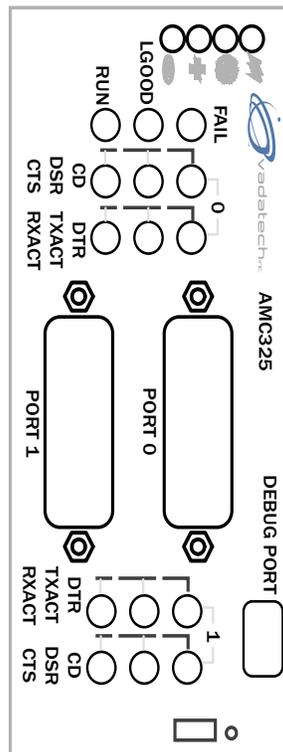
FIGURE 2. AMC325 Front Panel

ORDERING OPTIONS

AMC325 - A0C - 000 - 00J

A = Flash Memory

   1 = No flash memory*
   2 = 64 MB flash memory*
   3 = 128 MB flash memory*

J = Conformal Coating

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

C = Front Panel Height

   1 = Reserved
   2 = Reserved
   3 = Full-Height

NOTE: *The 8 MB of boot flash comes with all options.

Document No_____ Date:. July 20 2007