

AMC082

High Density Isolated Serial I/O Module



AMC082

Key Features

- AMC module with 32 serial-in and 32 serial-out via front panel
- RS-422/423 (ANSI TIA/EIA-422B, TIA/EIA-423-B)
- Conduction cooled version available
- Front panel I/O via High Density Connector (HDC)
- Five LVDS Input/Output via uDP Connector
- PCIe x1 to Port 4 or Port 8
- Dual GbE
- Single module, mid-size per AMC.0
- IPMI 2.0 compliant

Benefits

- Fully reconfigurable by FPGA
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

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The AMC082 is a flexible serial I/O module providing 32 input and 32 output channels, all of which are individually isolated. I/O transceivers meet or exceed the requirements of ANSI TIA/EIA-422-B, TIA/EIA-423-B, and ITU Recommendations V.10 and V.11. The Module has PCIe x1 route to Port 4 or Port 8 via a MUX. In addition, the module has a uDP (Micro Display Port) connector to bring in 5x LVDS input/output.

The module has a reconfigurable FPGA which can easily be modified to meet user needs such as de-bouncing signals, delaying signals in feedback system, dynamic time delay with precision, etc.

The module routes the TCLKA, B, C and D to the FPGA via a clock crossbar switch w/ jitter cleaner so the I/O's can be synchronized to any of the input clocks.

The unit interfaces to the system via GbE via Ports 0-1 (AMC.2).

The AMC082 is available in both air-cooled (MTCA.0 and MTCA.1) and rugged conduction-cooled versions (MTCA.2 or MTCA.3), please contact sales for details.

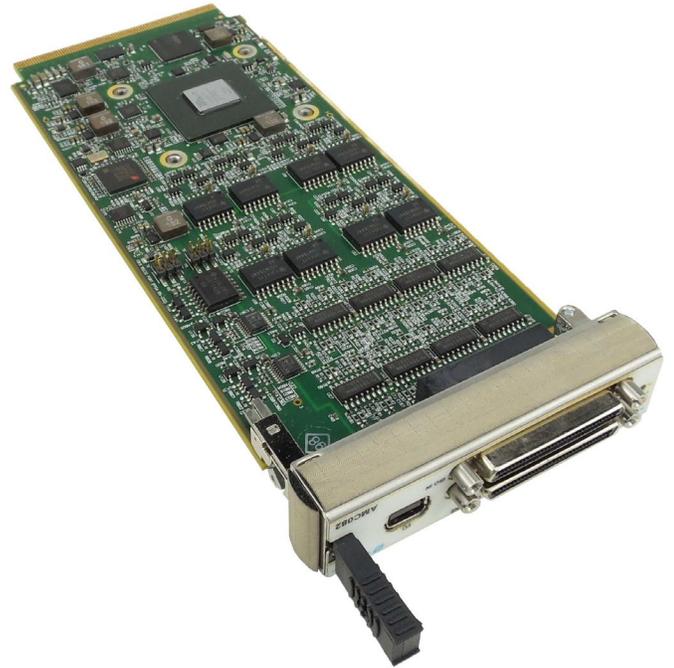


Figure 1: AMC082

Specifications

Architecture		
Physical	Dimensions	Single module, mid-size (full-size optional) Width: 2.89" (73.5 mm) Depth 7.11" (180.6 mm)
Type	AMC I/O	Isolated GPIO
Standards		
AMC	Type	AMC.1 PCIe / AMC.2 GbE
Module Management	IPMI	IPMI v2.0
PCIe / GbE	Lanes	x1 / x2
Configuration		
Power	AMC082	7W
Environmental	Temperature	See Ordering Options and Environmental Spec Sheet Storage Temperature: -40° to +85°C
	Vibration	Operating 9.8 m/s ² (1G), 5 to 500 Hz on each axis
	Shock	Operating 325G/2 ms, 160G/1 ms
	Relative Humidity	5 to 95% non-condensing
Front Panel	Interface Connectors	Micro USB connector for MGT RS-232 and FPGA RS-232 High-Density Connector
	LEDs	IPMI management control Activity
	Mechanical	Hot-swap ejector handle
Software Support	Operating System	Linux, Windows, Solaris and VxWorks
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, see VadaTech Terms and Conditions

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 pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

Ordering Options

AMC082 – 00C-000-00J

C = Front Panel Size		J = Temperature Range and Coating
1 = Reserved 2 = Mid-size 3 = Full-size 4 = Reserved 5 = Reserved 6 = Mid-size, MTCA.1/4 7 = Full-size, MTCA.1/4 8 = Reserved		0 = Commercial (–5° to +45°C), No coating 1 = Commercial (–5° to +45°C), Humiseal 1A33 Polyurethane 2 = Commercial (–5° to +45°C), Humiseal 1B31 Acrylic 3 = Reserved 4 = Industrial (–20° to +70°C), Humiseal 1A33 Polyurethane 5 = Industrial (–20° to +70°C), Humiseal 1B31 Acrylic

For operational reasons VadaTech reserves the right to supply a higher speed FPGA device than specified on any particular order/delivery at no additional cost, unless the customer has entered into a Revision Lock agreement with respect to this product.

Related Products

VT950



- MicroTCA rugged 1U 19" rackmount chassis platform
- Meets MIL-STD-810F, MIL-STD-901D for shock/vibration
- Meets MIL-STD-461E for EMI

AMC626



- Host Bus Adapter (HBA) for external SATA III (6.0 Gbps) or SAS-3 (12 Gbps) drives
- AMC.1 compliant, PCIe Gen3 x8 or x4
- Support for 8 SAS/SATA ports

AMC629



- Host Bus Adapter (HBA) for external SATA III (6.0 Gbps) or SAS-3 (12 Gbps) drives
- Conduction cooled version available
- Integrated RAID 0, 1, 1E, and 10

Contact

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