

# AMC 24-channel Isolated Input Module – AMC096



# **KEY FEATURES**

- 24-channel isolated input
- Single module, compact size (mid-size and full-size available)
- Front panel I/O connectivity in a half-size AMC compliant form factor
- Programmable de-bounce times are software controlled on a channel-by-channel basis
- 1 ms measurement interval
- Change-Of-State (COS) selections:
  - Disabled
  - Rising edge, low-to-high transition
  - Falling edge, high-to-low transition
  - Level sensitive
- Interrupt levels are user selectable
- AMC.1 compliant
- IPMI 2.0 compliant
- RoHS compliant



# **Benefits of Choosing VadaTech**

- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full ecosystem of front and rear boards, enclosures, specialty modules, and test/dev products from one source
- AS9100 and ISO9001 certified company

The AMC096 is a single module, compact size (mid-size and full- size options are available) AdvancedMC<sup>™</sup> (AMC) 24-channel isolated digital input board. The AMC096 has twelve voltage source +5 to +66V opto-isolated channels and twelve contact sense +5 to +66V opto-isolated channels.

The digital inputs can be simultaneously used in more than one of several modes. For example, each input channel can be used to periodically read the current state of a contact closure, and to count the number of times that the closure was opened or closed over a period of time (de-bounce time).

Each input channel is independent and is processed separately, so activity on one channel has no effect on other channels. A change of state on one channel can be detected and stored while the de-bouncer is timing on another channel.

See <u>Super Carrier</u> for high-density processing platforms compatible with this product.

# INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and MTCA 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.

# **BLOCK DIAGRAM**

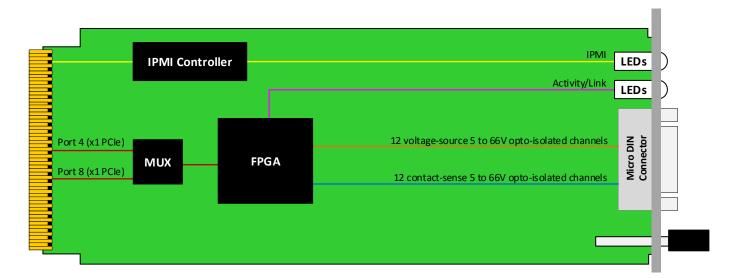


Figure 1: Block Diagram

### **FRONT PANEL**

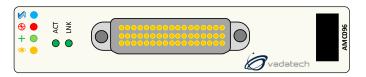


Figure 2: Front Panel



# **SPECIFICATIONS**

Architecture		
Physical	Dimensions	Width: 2.89" (73.5 mm)
		Depth 7.11" (180.6 mm)
		Single module, compact size (mid and full size options available)
Туре	AMC Input	24 inputs: Twelve voltage-source +5 to +66V opto-isolated channels, Twelve contact- sense +5 to +66V opto-isolated channels
Standards		
AMC	Type	AMC.0 and AMC.1
Module Management	IPMI	IPMI v2.0
PCle	Lanes	x4
Configuration		
Power	AMC096	3W
Environmental	Temperature	Operating temperature: -5° to 45°C (55°C for limited time, performance restrictions may apply), (See environmental spec sheet) Storage Temperature: -40° to +85°C
	Vibration	Operating 9.8 m/s² (1G), 5 to 500Hz on each axis
	Shock	Operating 9.6 m/s <sup>2</sup> (1G), 5 to 500H2 on each axis
	Relative Humidity	5 to 95% non-condensing
Front Panel	Interface Connectors	51-pin Micro DIN connector
FIGUR Faller	LEDs	<u> </u>
	LEUS	IPMI management control
	Machanical	Activity/Link/Status LEDs
Coffee Comment	Mechanical	Hot-swap ejector handle
Software Support	Operating System	Independent
Other	MIL II II I 047 F.O.	072.000
MTBF	MIL Hand book 217-F@ 273,000 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	Two (2) years, see <u>VadaTech Terms and Conditions</u>	
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	

### **ORDERING OPTIONS**

AMC096 - 00C - 000 - 00J

### C = Front Panel

- 1 = Compact-size
- 2 = Mid-size
- 3 = Full-size
- 4 = Compact-size, MTCA.1 (captive screw)
- 5 = Mid-size, MTCA.1 (captive screw)
- 6 = Full-size, MTCA.1 (captive screw)

# J = Temperature Range and Coating

- 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\*

#### Notes:

\*Conduction cooled; temperature is at edge of module. Consult factory for availability.

### RELATED PRODUCTS



UTC008 µTCA JTAG Switch Module (JSM)



VT866 5U Chassis Platform



UTC004
MicroTCA Carrier Hub (MCH)

### **CONTACT US**

### **VadaTech Corporate Office**

198 N. Gibson Road, Henderson, NV 89014 Email: info@vadatech.com

Telephone: +1 702 896-3337 Fax: +1 702 896-0332

### **Asia Pacific Sales Office**

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

Email: <u>info@vadatech.com</u> Telephone: +886-2-2627-7655 Fax: +886-2-2627-7792

### VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR Email: <a href="mailto:info@vadatech.com">info@vadatech.com</a>

Telephone: +44 2380 016403

