# AMC Telco/Fabric Clock Breakout

# AMC002





# **KEY FEATURES**

- Single-width, half- height (mid or full-height option)
- AMC v1 and AMC v2 clocking compliant
- Selectable CLK1/TCLKA/TCLKC via SMB connector as input
- Selectable CLK2/TCLKB/TCLKD via SMB connector as input
- Selectable CLK1/TCLKA/TCLKC via SMB connector as output
- Selectable CLK2/TCLKB/TCLKD via SMB connector as output
- CLK3 (M-LVDS) or FCLKA (HCSL) option via SMB connector as output
- Front panel clock transceiver enable switches
- IPMI 2.0 compliant
- HPM.1
- RoHS compliant

The AMC002 provides a convenient way to monitor and/or inject Telco clocks with a  $\mu$ TCA/ATCA system utilizing either AMC v1 or AMC v2 clock pin-out definitions. Two clocks may be injected while at the same time three clocks may be monitored. The clocks in use for both input and output are selectable by on-board switches.

Clock signals are automatically converted between M-LVDS backplane signaling and front panel +3.3V LVCMOS signaling. An option is provided for monitoring the fabric (i.e. PCIe) clock using HCSL signaling under AMC v2 or CLK3 using M-LVDS signaling under AMC v1. Clocks are conditionally driven to the backplane based on front panel clock transmit enable switches.

Indicators on the front panel clearly show the current clocking configuration of the board.

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



## **SPECIFICATIONS**

Architecture		
Physical	Dimensions	Single-width, half-height option for mid or full-height
		Width: 2.89 in. (73.5 mm)
		Depth: 7.11 in. (180.6 mm)
Product Type	AMC Clock	Telco/Fabric Control/Monitor
Standards		
AMC	Туре	AMC.0
Module Management	IPMI	IPMI Version 2.0
Configuration		
Power	AMC002	2W
Environmental	Temperature	Operating Temperature: -20° to 75° C
		Storage Temperature: -40° to +95° C
	Vibration	1G, 5-500Hz each axis
	Shock	30G each axis
	Relative Humidity	5 to 95 percent, non-condensing
Front Panel	Interface Connector	RS-232
		5 SMB for clock input/output
		IPMI Management Control
	LEDs	Clock Status
	Mechanical	Hot-swap ejector handle
Other		
MTBF	MIL Hand Book 217-F > TBDHrs.	
Certifications	Designed to meet FCC, CE and UL certifications where applicable	
Standards	VadaTech is certified to both the IS09001:2000 and AS9100B:2004 standards	
Compliance	RoHS and NEBS	
Warranty	Two (2) years.	
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FIGURE 1. AMCOO2 Functional Block Diagram



FIGURE 2. AMC002 Front Panel

## **ORDERING OPTIONS**

### A = CLK3/FCLK

- 1 = MLVDS
- 2 = HCSL

#### C = Front Panel Height

- 1 = Half-height
- 2 = Mid-height
- 3 = Full-height

#### AMC002 - A0C - 000 - 00J

#### J = Conformal Coating

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





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