

AMC249

12 Port Managed Layer 2 or 3 GbE Switch, AMC



AMC249

Key Features

- Octal 10/100/1000BaseT Ethernet via RJ-45 ports on front panel
- Dual 10 GbE and dual 1GbE routed to the rear
- Support up to 32K MAC address
- Support for IEEE802.1ad, IEEE802.1ah and IEEE802.1Qay
- Synchronous Ethernet layer one clock recovery
- Packet-based time synchronization IEEE1588 and IEEE802.1AS

Benefits

- Layer 2 or 3 switch with 8 front panel RJ-45 ports
- 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

AdvancedMC™



AMC249

The AMC249 is a single module, full-size AdvancedMC (AMC) based on the AMC.2 specification. The AMC249 provides 8 front panel 10/100/1000 Ethernet ports via RJ-45. It routes two 1GbE to Ports 0 and 1. In addition it has two 10GbE routed to Ports 4-7 and 8-11.

The switch is managed via telnet and supports a rich set of features such as VLAN, RSTP, QoS, Mirroring, etc. The RS-232 interface in the front panel can also be used to manage the switch. The modules can support up to eight QoS queues per port with hierarchical minimum/maximum shaping per Class of Service (CoS), per queue, per port.

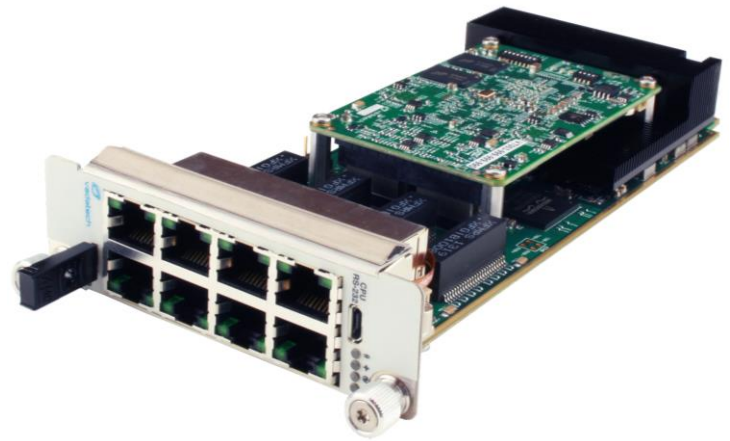


Figure 1: AMC249

Block Diagram

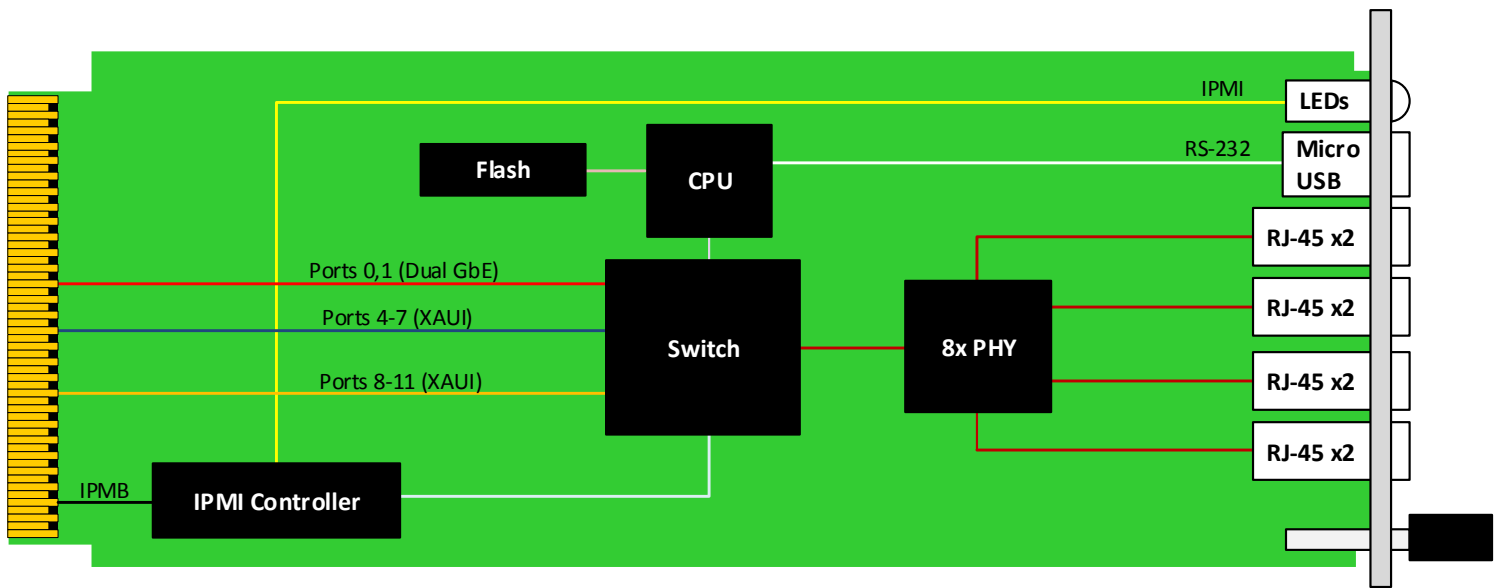


Figure 2: AMC249 Functional Block Diagram

Front Panel

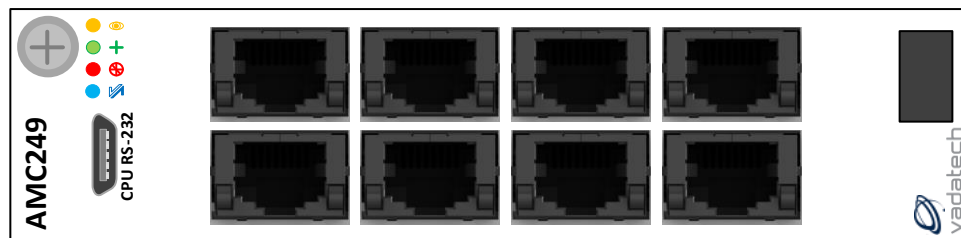


Figure 3: AMC249 Front Panel

Specifications

Architecture		
Physical	Dimensions	Single module, full-size
		Width: 2.89" (73.5 mm)
		Depth 7.11" (180.6 mm)
Type	AMC Ethernet	GbE Switch, 12 Ports (2 of 10GbE, 2 of GbE, 8 of 10/100/1000)
Standards		
AMC	Type	AMC.2
Module Management	IPMI	IPMI v2.0
Configuration		
Power	AMC249	15W
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
	Shock	30Gs on each axis
	Relative Humidity	5 to 95% non-condensing
Front Panel	Interface Connectors	RJ-45 for 10/100/1000BaseT Ethernet
		Micro USB for RS232 Port
	LEDs	IPMI management control
		Activity/Link user LEDs
		Mechanical Hot-swap ejector handle
Software Support	Operating System	Independent
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

AMC249 – ABC-00F-GHJ

A = AMC Ports 4-11 as 10GbE 0 = No 10GbE 1 = Ports 4-7 2 = Ports 8-11 3 = Ports 4-11		G = Front Panel 0 = MicroTCA.0 1 = MicroTCA.1 2 = SLF*
B = Layer 2/3 Managed 1 = VadaTech stack 2 = Reserved		H = Temperature Range** 0 = Commercial (–5° to +55°C) 1 = Industrial (–20° to +70°C) 2 = Extended (–40° to +85°C)
C = Front Panel Size 1 = Reserved 2 = Reserved 3 = Full-size	F = Clock Holdover Stability 0 = Standard (XO) 1 = Stratun-3 (TCXO)	J = Conformal Coating 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Notes: *The VadaTech Single Latching Flange (SLF) design provides one latching flange and screw on the left side of the AMC front panel

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

Related Products

AMC213



- Converts ports zero and one which are 1000Base-BX for GbE applications to Copper (1000Mbit)
- AMC.2 compliant (1000-BaseBX)
- GbE via RJ-45

AMC735



- Core processors from 8 to 16 and speeds from 800 MHz to 1.2 GHz
- Dual SFP+ socket supporting 10GbE
- PCIe Gen2 x4 or XAUI to Ports 4-7 and XAUI to Ports 8-11

UTC002



- 400 MHz CPU with 64 MB DDR for MCMC (MicroTCA Carrier Management Controller) and Shelf Manager
- Layer 2 managed GbE to each AMC (optional)
- Non-blocking PCIe Gen 3 (x4), to each slot with option for SRIO or 10 GbE (Layer 2 managed)

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