AMC710C

PrAMC based on QorIQ P4040/P4080, 10 GbE, SFP+

AMC710C

Key Features

- Freescale QorIQ P4040/P4080 processor
- XAUI x4 on ports 4-7 (AMC.2)
- Single 10GbE SFP+ to the front panel
- Up to 16 GB of DDR3 w/ ECC
- IPMI 2.0 compliant

Benefits

- FMC site on a single module AMC
- 10GbE data path from front panel to backplane
- Strong mil/aero support
- 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 AMC710C is a flexible processor AMC for general purpose processing with the quad-core QorIQ P4040/P4080 with Data Path Acceleration Architecture intended for router and UTM (unified threat management) applications.

XAUI is routed to ports 4-7 and a front-panel SFP+ supports 10GbE, the unit architecture is balanced to provide a 10 G front-to-back connectivity

The module is available for rugged conduction-cooled (MTCA.2 or MTCA.3) applications.

Figure 1: AMC710C

Block Diagram

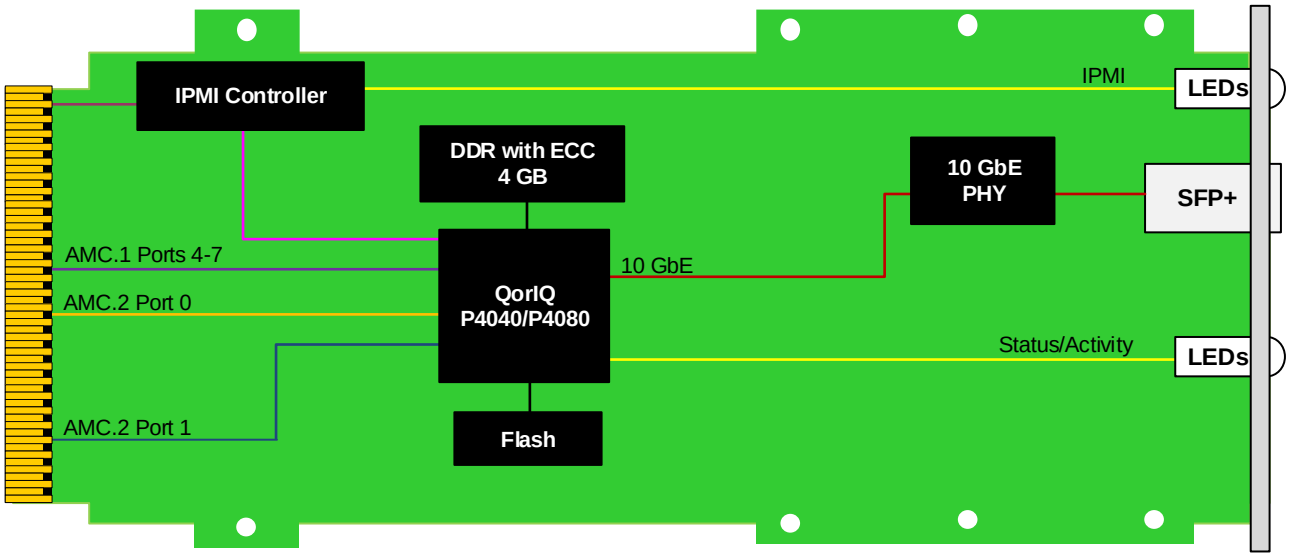

Figure 2: AMC710C Functional Block Diagram

Front Panel

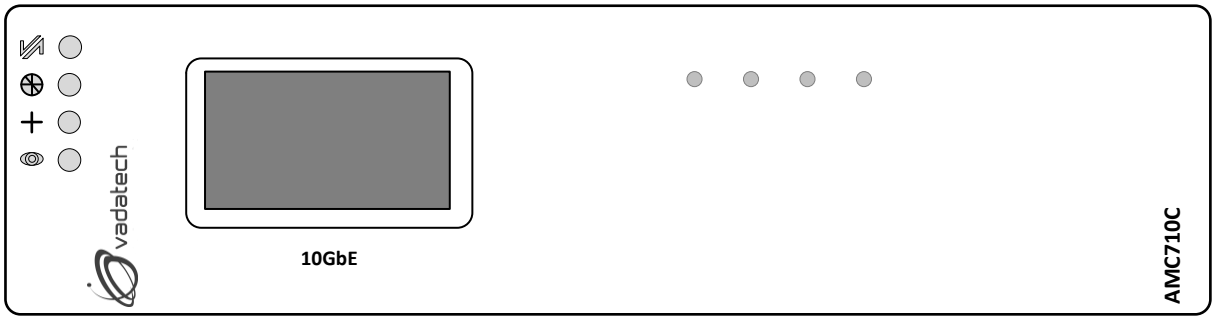

Figure 3: AMC710C Front Panel

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 Processor**	Freescale P4040/P4080
Standards		
AMC	**Type**	AMC.0, AMC.1 and AMC.2
Module Management	**IPMI**	IPMI v2.0
XAUI	**Lanes**	10GbE
Configuration		
Power	**AMC710C**	~35 W
Environmental	**Temperature**	See ordering options and environmental spec sheet
		Storage Temperature: –40° to +85°C
	Vibration	Per MTCA.2 and MTCA.3 ruggedization spec
	Shock	Per MTCA.2 and MTCA.3 ruggedization spec
	Relative Humidity	5 to 95% non-condensing
Front Panel	**Interface Connectors**	GbE via RJ45 (air-cooled only)
		10GbE via SFP+
		USB 2.0
	LEDs	IPMI management control
		Activity/Link user LEDs
	Mechanical	Hot swap ejector handle
Software Support	**Operating System**	Linux (consult factory for VxWorks, Windows, or other options)
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	

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

AMC710C – AB0-DE0-GHJ

A = CPU Speed	D = Ruggedization Level*	G = Clamshell
1 = 1.2 GHz 2 = 1.5 GHz 3 = Reserved 4 = Reserved	0 = No ruggedization 1 = Contact VadaTech 2 = Contact VadaTech 3 = Contact VadaTech	0 = Reserved 1 = MTCA.2 2 = MTCA.3
B = CPU	**E = SFP+ Transceiver**	**H = Temperature Range****
0 = P4040 1 = P4080	0 = No SFP+ 1 = 10GBASE-SR 2 = Reserved 3 = Reserved 4 = 10GBASE-LR	0 = Commercial (–5° to +55°C) 1 = Industrial (–20° to +70°C) 2 = Extended (–40° to +85°C)
		J = Conformal Coating
		0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Notes: * Ruggedization level is per the MTCA.2 and MTCA.3 specification.
** At the edge of the module for conduction-cooled.

Related Products

VT872

- MTCA.3 Conduction Cooled System Platform
- 1/2 Short Air Transport Rack (ATR) per ARNIC404A, with NO internal fan (12.62” deep without handle)
- Customized Front Input/Output (I/O) Panel Connector layout per customer requirement (option per MIL-DTL-M38999)

UTC003

- Single module, full size module per AMC.0
- 400 MHz RISC CPU with 64 MB DDR
- Redundant boot system

AMC524

- Quad ADC 16-bit @ 125 MSPS (AD9653)
- Dual DAC 12-bit @ 2.5 GSPS (DDS AD9915)
- Artix-7 FPGA with dual banks of DDR-3, 2 GB total

Contact

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