

AMC704

QorIQ P5040 Processor AMC, PCIe



AMC704

Key Features

- PrAMC with NXP QorIQ P5040
- Up to 16 GB DDR3 with ECC
- PCIe Gen2 on Ports 4-7 and 8-11 per AMC.1
- Configurable as Host (Root Complex) or Agent
- 10GbE with SFP+ interface
- Dual GbE per AMC.2 on Ports 0-1
- SATA per AMC.3 on Ports 2 or 3
- Single-module, mid-size per AMC.0
- Option for up to 32 GB SDHC
- 64 GB of SSD on the module
- Conduction Cooled option available

Benefits

- High single-threaded performance for compute-plane applications
- Embedded data path acceleration for network processing
- PCIe dual x4 to backplane and 10GbE to front panel supports high-throughput communications
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader



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AMC704

The AMC704 is a Processor AMC (PrAMC) in a single module, mid-size AdvancedMC (AMC) form factor based on the NXP P5040 (quad core) processors. The unit provides dual x4 PCIe on Ports 4-7 and 8-11 per AMC.1 and the PCIe interface can be configured in Host or Agent mode.

AMC704 has Dual GbE on Ports 0-1 per AMC.2 and routes single SATA to Ports 2 or 3 per AMC.3. The front panel provides GbE via RJ-45, 10GbE via SFP+ and RS-232 via Micro USB connectors.

It also has option for up to 16 GB of DDR3 memory with ECC, 128 MB NOR flash, 8 MB SPI flash, 512 KB I2C flash, 64 GB of SSD and optional 32 GB SDHC.

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



Figure 1: AMC704

Block Diagram

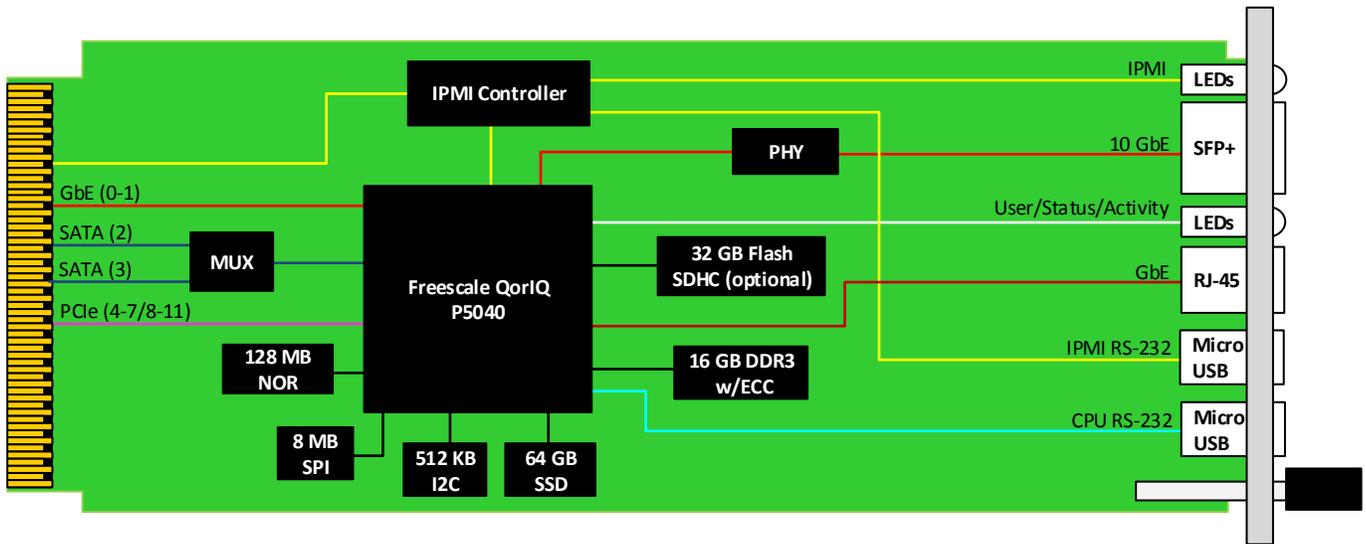


Figure 2: AMC704 Functional Block Diagram

Front Panel

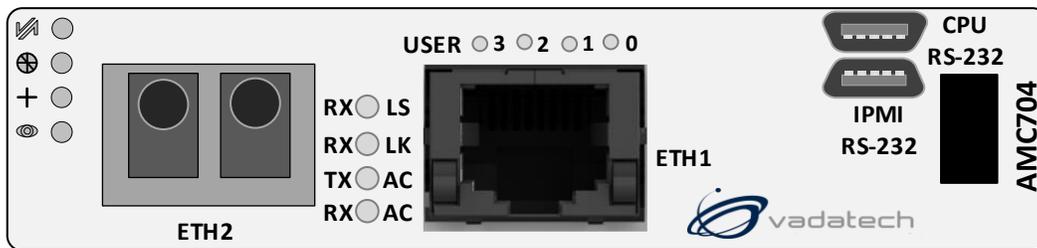


Figure 3: AMC704 Front Panel

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 P5040 (quad-core) processors
Standards	
AMC	Type AMC.0, AMC.1, AMC.2 and AMC.3
Module Management	IPMI IPMI v2.0
PCIe	Lanes Dual x4 Gen2 or single x8
Configuration	
Power	AMC704/AMC704C ~60W
Environmental	Temperature See Ordering Options and Environmental Spec Sheet Storage Temperature: -40° to +90°C
	Vibration Operating 9.8 m/s ² (1G), 5 to 500Hz on each axis
	Shock Operating 325G/2 ms, 160G/1 ms
	Relative Humidity 5 to 95% non-condensing
Front Panel	Interface Connectors Single GbE via RJ45 (air-cooled only) 10GbE via SFP+ x2 RS-232 for CPU and IPMI via Micro USB
	LEDs IPMI management control Activity/Link user LEDs
	Mechanical Hot-swap ejector handle
Software Support	Operating System Linux and Windows
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 ISO9001:2015 and AS9100D 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

AMC704 – ABC-DE0-0HJ

A = CPU Speed 1 = P5040 @ 2.2 GHz SEC Present 2 = P5040 @ 2.2 GHz no SEC* 3 = P5040 @ 2.0 GHz SEC Present* 4 = P5040 @ 2.0 GHz no SEC* 5 = P5040 @ 1.8 GHz SEC Present* 6 = P5040 @ 1.8 GHz no SEC*	D = SDHC 0 = No SDHC 1 = 16 GB 2 = 32 GB	
B = DDR3 0 = 4 GB 1 = 8 GB 2 = 16 GB	E = SFP+ TXCVR 0 = No SFP+ 1 = 10GBASE-SR 2 = Reserved 3 = 10GBASE-LRM 4 = 10GBASE-LR	H = Operating Temperature 0 = Commercial 1 = Industrial 2 = Extended
C = Front Panel Size 1 = Reserved 2 = Mid-size 3 = Full-size		J = Temperature Range and Coating 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Notes:

*Minimum order quantity required.

Related Products

AMC718



- Processor AMC with QorIQ P40x0
- PCIe on Ports 4-11
- 16 GB DDR3 memory with ECC

UTC004



- Unified 1 GHz quad-core CPU for MicroTCA Carrier Management Controller (MCMC), Shelf Manager, Clocking, and Fabric management
- Automatic fail-over with redundant UTC004s
- 1GbE base switch with dual 100/1000/10G uplink

VT866



- MTCA System Platform 19" x 5U x 17"
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and dual Power Modules
- Up to 12 AMCs in single width/full-size

Contact

VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

Asia Pacific Sales Office

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

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

info@vadatech.com | www.vadatech.com

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DOC NO. 4FM737-12 REV 01 | VERSION 1.2 – JAN/20