AMC708

LS1046A Processor AMC, PCIe

AMC708

Key Features

- PrAMC with NXP Layerscape LS1046A (A72 Core)
- Front Panel 10GbE via SFP+
- 8 GB DDR4 with ECC
- PCIe Gen3 on Ports 4-7 or 8-11 per AMC.2
- Dual GbE per AMC.2 on Ports 0-1
- Front panel GbE
- Dual USB3.0
- 64 GB of Flash
- Serial Over Lan (SOL)
- Single-module, mid-size per AMC.0
- Conduction Cooled option available

Benefits

- High single-threaded performance for compute-plane applications
- Embedded data path acceleration for network processing
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

AdvancedMC™

vadatech
THE POWER OF VISION

AMC708

The AMC708 is a Processor AMC (PrAMC) in a single module, mid-size AdvancedMC (AMC) form factor based on the NXP LS1046A (quad core) processor. The unit provides PCIe Gen3 on Ports 4-7 or 8-11 per AMC.1.

AMC708 has Dual GbE on Ports 0-1 per AMC.2. The front panel provides 10GbE via SFP+ and GbE via RJ-45, and RS-232 via Mini USB connectors. It also provides Serial Over Lan (SOL) to access the module serial port over IP. Further the module has dual USB3.0 in the front panel.

The module comes with 8 GB of DDR4 memory with ECC, 128 MB NOR flash, 8 MB SPI flash, 512 KB I2C flash, and 64 GB of eMMC.

AMC708 is also available for rugged conduction-cooled applications (MTCA.2 or MTCA.3).

Figure 1: AMC708

info@vadatech.com | www.vadatech.com

Block Diagram

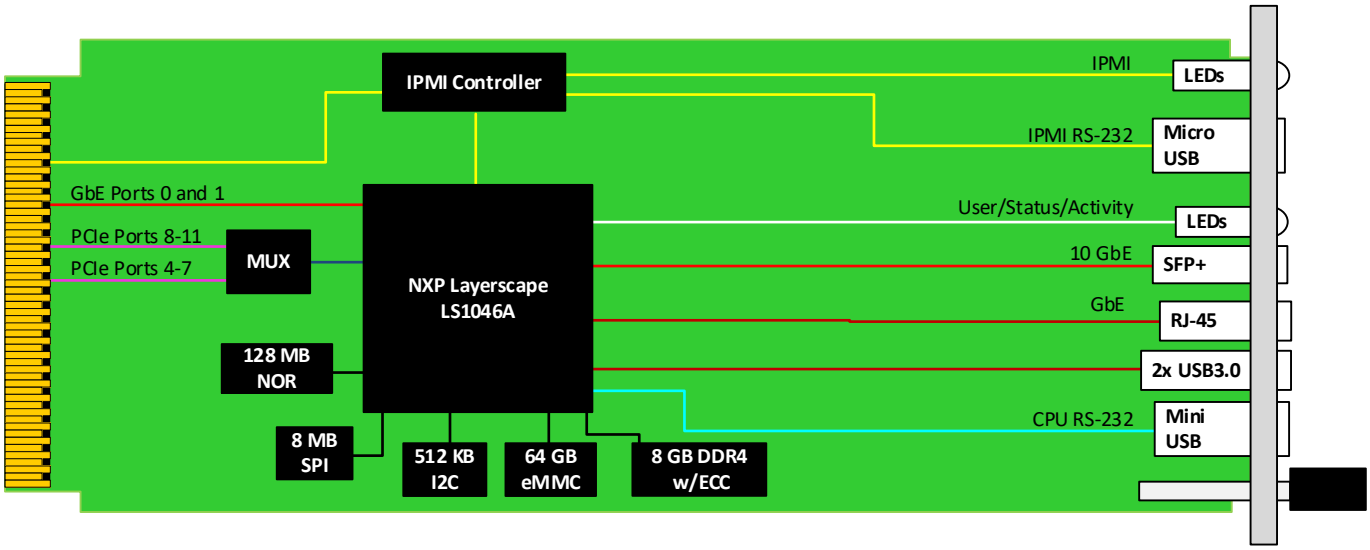

Figure 2: AMC708 Functional Block Diagram

Front Panel

Figure 3: AMC708 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**	LS1046A (quad-core) processors
Standards		
AMC	**Type**	AMC.0, AMC.1, AMC.2 and AMC.3
Module Management	**IPMI**	IPMI v2.0
PCIe	**Lanes**	On Ports 4-7 and 8-11
Configuration		
Power	**AMC708**	~25W
Environmental	**Temperature**	See Ordering Options and Environmental Spec Sheet
		Storage Temperature: –40° to +90°C
	Vibration	Operating 9.8 m/s2 (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, 10GbE via SFP+
		RS-232 for the CPU via Mini USB
		RS-232 IPMI via MicroUSB, Dual USB3.0
	LEDs	IPMI management control
		Activity/Link user LEDs
	Mechanical	Hot-swap ejector handle
Software Support	**Operating System**	Linux and VxWorks
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

AMC708 – ABC-000-0HJ

A = CPU Speed		
0 = 1.8 GHz with Encryption 1 = Reserved		
B = DDR4		**H = Operating Temperature**
0 = 8 GB 1 = Reserved		0 = Commercial 1 = Industrial 2 = Extended
C = Front Panel Size		**J = Temperature Range and Coating**
1 = Reserved 2 = Mid-size 3 = Full-size		0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

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, Wenhu 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

Choose VadaTech

We are technology leaders

- First-to-market silicon
- Constant innovation
- Open systems expertise

We commit to our customers

- Partnerships power innovation
- Collaborative approach
- Mutual success

We deliver complexity

- Complete signal chain
- System management
- Configurable solutions

We manufacture in-house

- Agile production
- Accelerated deployment
- AS9100 accredited

vadatech
THE POWER OF VISION

DOC NO. 4FM737-12 REV 01 | VERSION 1.3 – MAY/21