

AMC709

LS1046A Processor AMC, 10GbE



AMC709

Key Features

- PrAMC with NXP Layerscape LS1046A (A72 Core)
- 8 GB DDR4 with ECC
- 10GbE on Ports 4-7 and 8-11 per AMC.2
- Dual GbE per AMC.2 on Ports 0-1
- SATA per AMC.3 on Port 2
- Front panel GbE
- 64 GB of Flash
- Dual USB3.0
- 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



AMC709

The AMC709 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 10GbE on Ports 4-7 and 8-11 per AMC.2.

AMC709 has Dual GbE on Ports 0-1 per AMC.2. The front panel provides GbE via RJ-45 plus dual USB 3.0 and RS-232 via MiniUSB connectors. The AMC709 has SATA routed to Port 2 of the AMC per AMC.3 specification. It also provides Serial Over Lan (SOL) to access the module serial port over IP.

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.

AMC709 is also available for rugged conduction-cooled applications (MTCA.2 or MTCA.3).



Figure 1: AMC709



Figure 2: AMC709 Conduction Cooled

Block Diagram

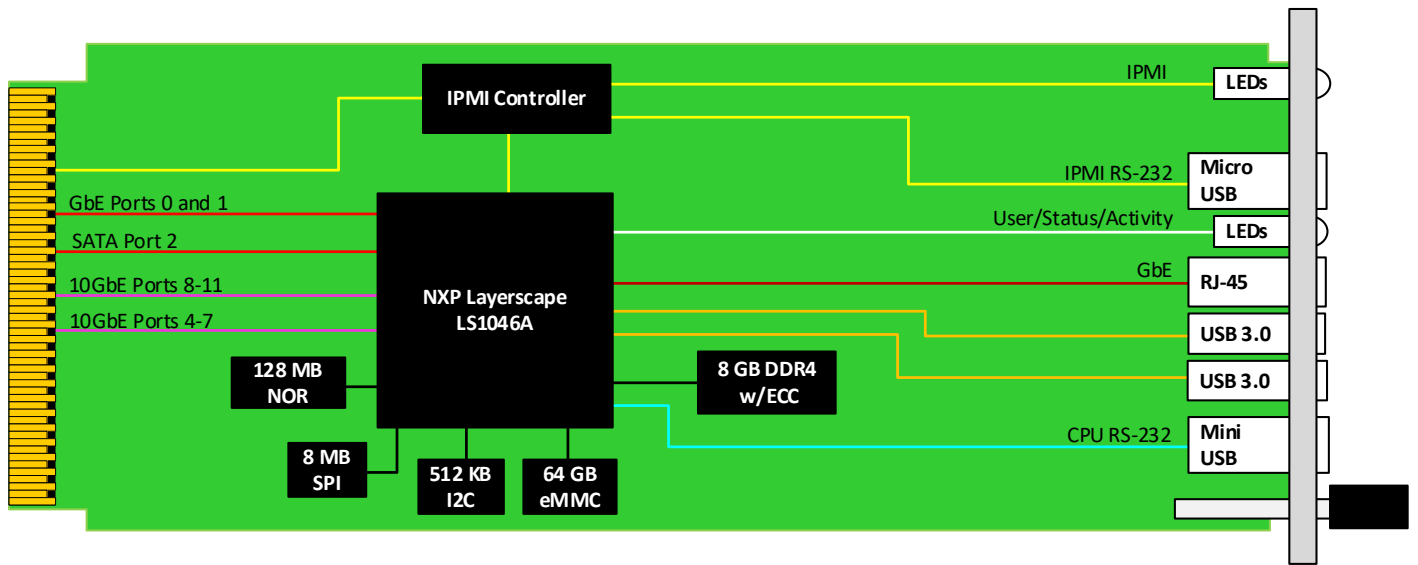


Figure 3: AMC709 Functional Block Diagram

Front Panel



Figure 4: AMC709 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.2 and AMC.3
Module Management	IPMI IPMI v2.0
10GbE	Lanes On Ports 4-7 and 8-11
Configuration	
Power	AMC709/AMC709C ~28W
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 Dual USB 3.0 RS-232 IPMI via MicroUSB and RS-232 for CPU via MiniUSB
	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

AMC709 – 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, 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

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

Trademarks and Disclaimer

The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™ and the AdvancedMC™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.

© 2019 VadaTech Incorporated. All rights reserved.
DOC NO. 4FM737-12 REV 01 | VERSION 1.1 – FEB/2321