

# AMC702

## Processor AMC based on QorIQ T4240



AMC702

## Key Features

- Processor AMC with QorIQ T4240
- Single-module, mid-size per AMC.0
- Three banks of 64-bit DDR3 memory (up to 24 GB total)
- Front panel has 10GbE via SFP+ and GbE via RJ-45
- 128 MB NOR Flash and 512 MB NAND Flash
- 24 virtual cores at up to 1.8 GHz
- SRIO on ports 4-11

## Benefits

- Integrated control and data path processing in a single module
- 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

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# AMC702

The AMC702 is a Processor AMC (PrAMC) based on the Freescale QorIQ T4240 in a single-module, mid-size AdvancedMC™ (AMC) form factor based on the AMC.2 and the AMC.4 specifications.

The front panel provides access to GbE via a single RJ-45 connector and 10 GbE via SFP+ connector.

The AMC702 provides dual GbE to the rear per AMC.2 specification on ports 0 and 1. It has single GbE to the front. The module also provides SRIO 2.0 on ports 4-7 and 8-11.



Figure 1: AMC702

# Block Diagram

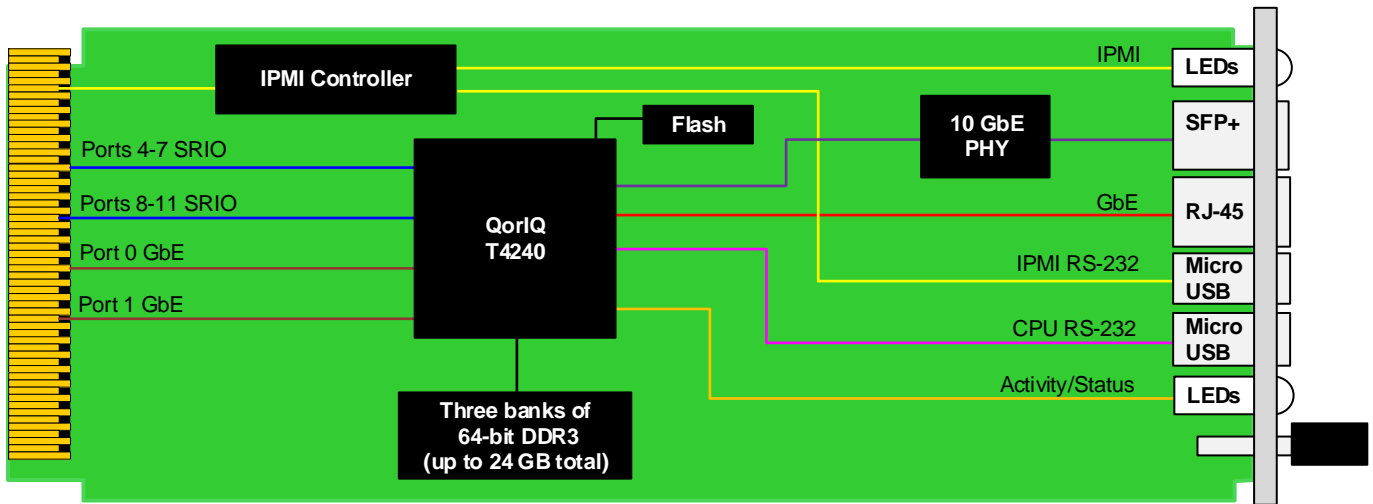


Figure 2: AMC702 Functional Block Diagram

# Front Panel

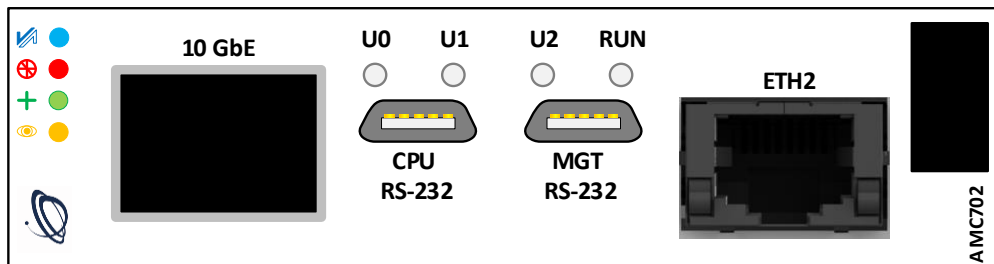


Figure 3: AMC702 Front Panel

# Specifications

Architecture	
<b>Physical</b>	<b>Dimensions</b> Single module, mid-size with full-size option Width: 2.89" (73.5 mm) Depth 7.11" (180.6 mm)
<b>Type</b>	<b>PrAMC</b> Freescale QorIQ T4240
Standards	
<b>AMC</b>	<b>Type</b> AMC.0, AMC.2 and AMC.4
<b>Module Management</b>	<b>IPMI</b> IPMI v2.0
<b>SRIO 2.0</b>	<b>Lanes</b> Dual x4
<b>10GbE</b>	<b>Lanes</b> 10GbE via front panel
<b>Ethernet</b>	<b>GbE</b> GbE on ports 0-1, single GbE via front panel
Configuration	
<b>Power</b>	<b>AMC702</b> ~TBD W
<b>Environmental</b>	<b>Temperature</b> See ordering options and <a href="#">environmental spec sheet</a> Storage Temperature: -40° to +85°C <b>Vibration</b> Operating 9.8 m/s <sup>2</sup> (1 G), 5 to 500 Hz on each axis <b>Shock</b> Operating 325 G/2 ms, 160G/1 ms <b>Relative Humidity</b> 5 to 95% non-condensing
<b>Front Panel</b>	<b>Interface Connectors</b> 10 GbE via SFP+ GbE via RJ-45 Dual RS-232 management ports via micro USB <b>LEDs</b> IPMI Management Control Link/Activity <b>Mechanical</b> Hot swap ejector handle
<b>Software Support</b>	<b>Operating System</b> Linux (consult Sales for other OS options)
Other	
<b>MTBF</b>	MIL Hand book 217-F@ TBD hrs
<b>Certifications</b>	Designed to meet FCC, CE and UL certifications, where applicable
<b>Standards</b>	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards
<b>Warranty</b>	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

## AMC702 – ABC-0E0-00J

<b>A = Processor Option</b>		
0 = 1.8 GHz with SE 1 = 1.8 GHz without SE 2 = 1.5 GHz with SE 3 = 1.5 GHz without SE		
<b>B = DDR3 Memory</b>		<b>E = SFP+ TXCVR</b>
0 = 6 GB 1 = 12 GB 2 = 24 GB		0 = No TXCVR 1 = 10GBASE-SR 2 = Reserved 3 = Reserved 4 = 10GBASE-LR
<b>C = Front Panel</b>		<b>J = Temperature Range and Coating</b>
1 = Reserved 2 = Mid-size 3 = Full-size 4 = Reserved 5 = Mid-size, MTCA.1 (captive screws) 6 = Full-size, MTCA.1 (captive screws)		0 = Commercial (–5° to +55°C), No coating 1 = Commercial (–5° to +55°C), Humiseal 1A33 Polyurethane 2 = Commercial (–5° to +55°C), Humiseal 1B31 Acrylic 3 = Industrial (–20° to +70°C), No coating 4 = Industrial (–20° to +70°C), Humiseal 1A33 Polyurethane 5 = Industrial (–20° to +70°C), Humiseal 1B31 Acrylic 6 = Extended (–40° to +85°C), Humiseal 1A33 Polyurethane* 7 = Extended (–40° to +85°C), Humiseal 1B31 Acrylic*

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

## Related Products

AMC725



- Intel® Xeon E3 processor options with PCH
- DVI graphics (SM750 w/16 MB DDR), up to 1920x1440 resolution
- Optional up to 256 GB SSD with RAID option

VT811



- MTCA System Platform 19" x 8U x 14.9" deep (with handles 16.23" deep)
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and quad Power Modules
- Up to twelve AMCs: 12 front mid-size double module slots and RTM slots

VT814



- MicroTCA rack mount or desktop chassis platform, 19" x 2U x 14.2" deep
- Compliant to MTCA.4 specifications with rear IO for High-Energy Physics and other applications
- Supports up to six MTCA.4 mid-size, double module AMCs and RTMs

# Contact

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- System management
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- Accelerated deployment
- AS9100 accredited



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