

AMC728C – Intel Core i7 Processor AMC with PinoutPlus™, PCIe

Processor AMC, Core i7



KEY FEATURES

- Processor AMC with Intel® 4th Generation Core i7-4700EQ (Haswell) with QM87 chipset
- Up to 16 GB of DDR3 memory with ECC and 32 GB of Flash memory
- PCIe Gen3 x16 on ports 4-15 and 17-20
- PinoutPlus™ (Tongue 2 connector) for additional I/O
- On board mSATA device
- On board MicroSemi SmartFusion2 FPGA for secure boot and authentication (M2S090TS-1FG484I)

Benefits of Choosing VadaTech

- High performance Core i7 processor with QM87 PCH
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full ecosystem of front and rear boards, enclosures, specialty modules, and test/dev products from one source
- AS9100 and ISO9001 certified company

The AMC728C is a Processor AMC (PrAMC) in a double module, mid-size AdvancedMC (AMC) form factor based on the Intel® next generation Core™ i7 Processor (Haswell) with QM87 PCH. The module follows AMC.1 (PCIe), AMC.2 (GbE) and AMC.3 (storage) specifications.

The module provides PCIe Gen3 x16 on ports 4-15 and ports 17-20, dual GbE on ports 0 and 1 per AMC.2, and SATA on ports 2 and 3 per AMC.3. It also provides GbE, USB, DP and Management RS-232 to the front panel. On the PinoutPlus™, the module provides PCIe x4, dual RS-232/RS-422, USB and Audio In/Out as well as GPIO.

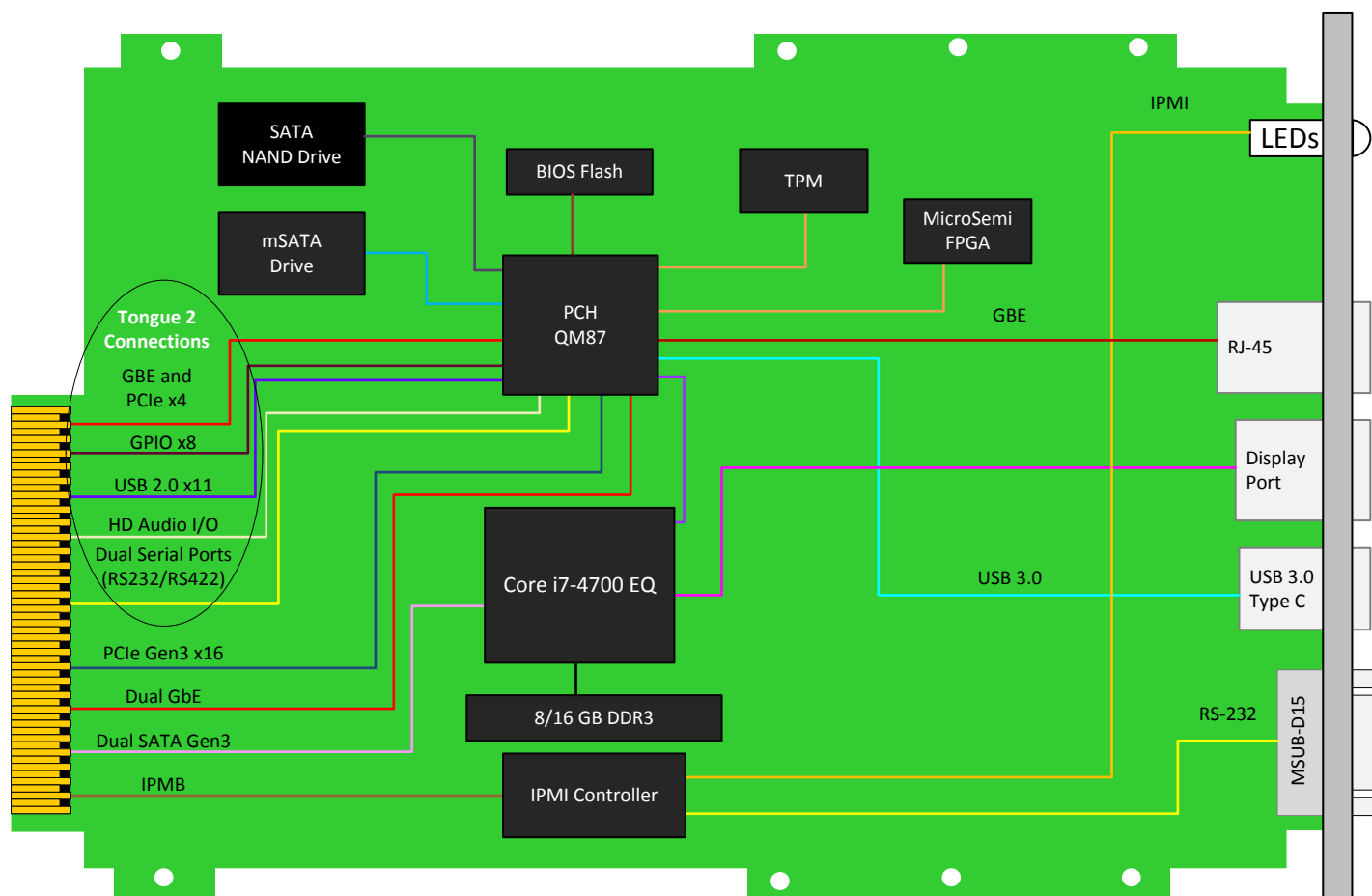
The AMC728C has up to 16 GB of DDR3 memory with ECC and 32 GB of Flash for OS. The module also provides an mSATA socket for additional storage. The module has Serial over LAN (SoL) with hardware Random Number Generator (RNG) as seed generator for authentication. The BIOS allows booting from on board NAND, off board SATA, PXE boot as well as USB.

The AMC728C, in addition, has a MicroSemi FPGA (MS2S090TS-1FG484I) for secure boot and encryption code.

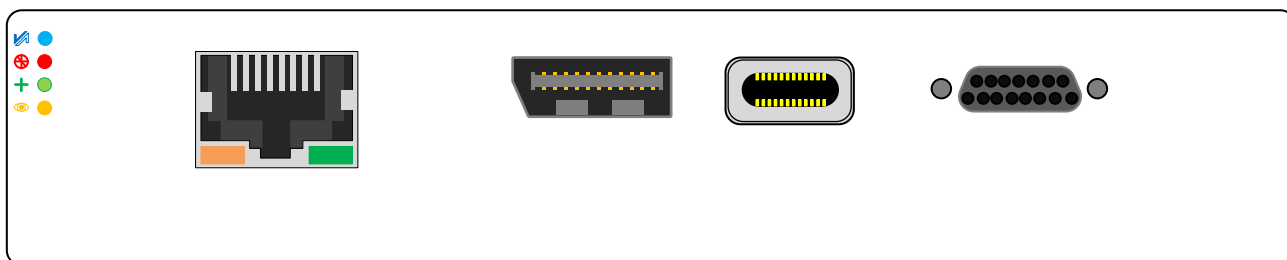
Linux OS is standard on the AMC728, consult VadaTech for other options.

AMC728C

BLOCK DIAGRAM



FRONT PANEL



SPECIFICATIONS

Architecture		
Physical	Dimensions	Double module, Mid-size (Full-size options)
		Width: 5.85 in. (148.5 mm)
		Depth: 7.11 in. (180.6 mm)
Type	AMC Processor	Intel® 4th Generation Core i7 with four cores up to 3.4 GHz
Standards		
AMC	Type	AMC.1, AMC.2 and/or AMC.3
Module Management	IPMI	IPMI Version 2.0
PCIe	Lanes	x16 Gen3 and x4 Gen2
Configuration		
Power	AMC728	58 Watt
Environmental	Temperature	See ordering option
		Storage Temperature: –45° to +90°C
	Vibration	Per uTCA.3 Specification
	Shock	Per uTCA.3 Specification
	Relative Humidity	5 to 95 percent, non-condensing
Front Panel	LEDs	IPMI Management Control
		Activity and User defined
	I/O	GbE via RJ-45 front panel
		USB 3.0 via Type C connectors
		RS-232 via micro DSUB-15
		Display Port
Software Support	Operating Systems	Linux, VxWorks and Windows
Other		
MTBF	Per MIL-217F Handbook > 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	
Compliance	RoHS and NEBS	
Warranty	Two (2) years	

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and μ TCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), 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.

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ORDERING OPTIONS

AMC728C – A0C – 000 – 00J

A = DDR3 Memory

0 = 8 GB
1 = 16 GB

C = Ruggedization Level*

0 = None
1 = Contact Vadatech
2 = Contact Vadatech
3 = Contact Vadatech

* Ruggedization level is per the uTCA.2 and uTCA.3 specifications

** Edge of module

J = Temperature Range and Coating**

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 = Military (–40° to +85° C), Humiseal 1A33 Polyurethane
7 = Military (–40° to +85° C), Humiseal 1B31 Acrylic

RELATED PRODUCTS



VT878 Compact Conduction Cooled
MTCA Chassis, 2 AMCs



UTC040C Conduction Cooled MCH
for uTCA Chassis (3rd generation)



AMC740C Tiler GX72
Processor AMC

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