

# AMC758

## Intel Xeon E3 Processor AMC, PCIe Gen3



AMC758

## Key Features

- Processor AMC Intel® Xeon® Processor E3-1505M v6 (Kaby Lake)
- 64 GB of Flash memory with dual M.2 NVMe storage sockets
- Dual 10GbE via SFP+ and dual GbE on the front panel
- Dual Graphic output (DP++) and dual USB 3.0
- PCIe Gen3 x4 on ports 4-7 and 8-11 or single PCIe x8 on ports 4-11 (AMC.1)
- 16 GB of DDR4 memory with ECC
- Double module, mid-size (option for full-size) per AMC.0

## Benefits

- High performance Xeon E3-1505M processor with CM238 PCH
- 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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# AMC758

The AMC758 is a Processor AMC (PrAMC) in a double module, mid-size AdvancedMC (AMC) form factor based on the Intel® Xeon® Processor E3-1505M v6 (Kaby Lake) with CM238 PCH. The processor base frequency is 3.0 GHz with max turbo frequency of 4.0 GHz. The module follows the AMC.1, AMC.2 and the AMC.3 specifications.

The module provides dual PCIe Gen3 x4 or single x8 on ports 4-11 per AMC.1, GbE on ports 0 and 1 per AMC.2, and SATA on ports 2 and 3 per AMC.3.

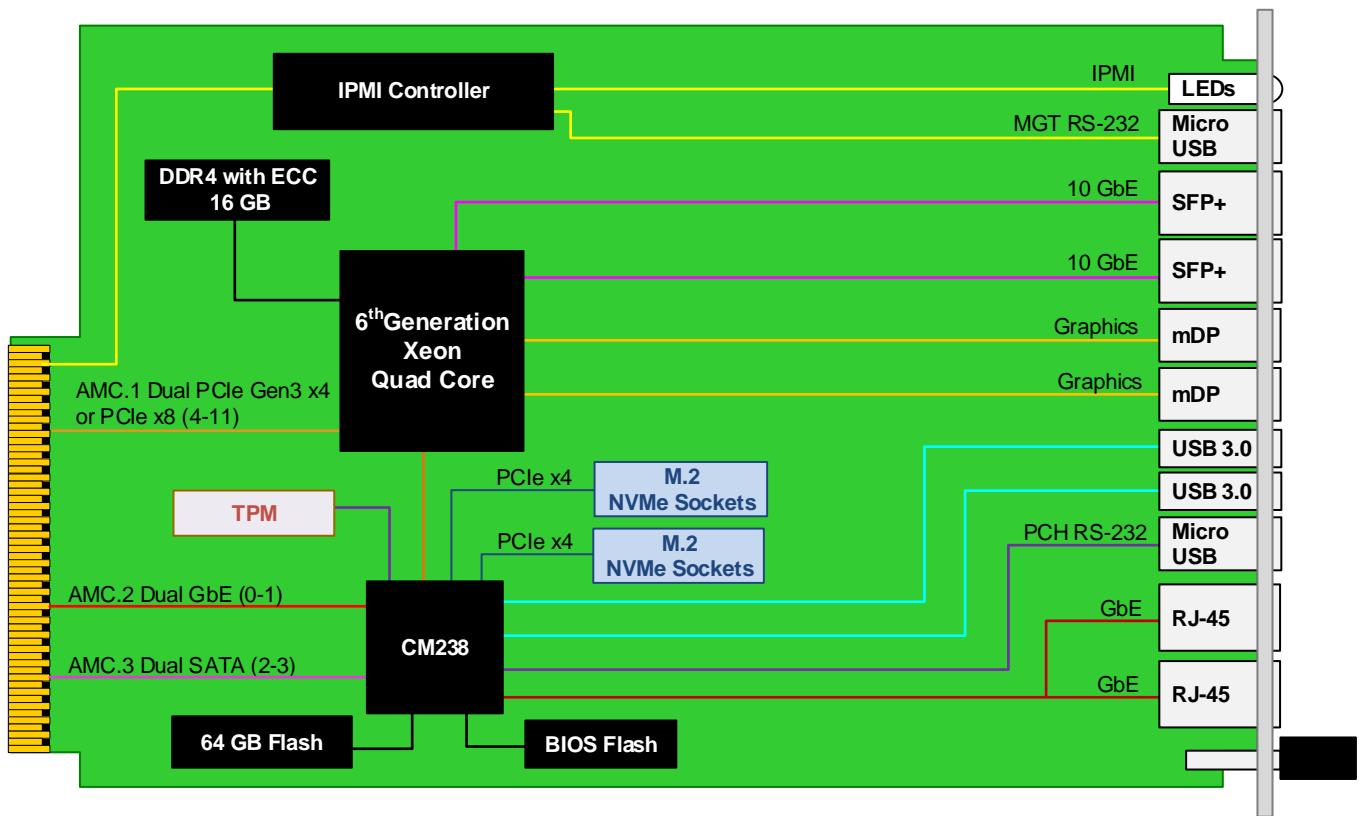
The AMC758 provides dual 10GbE via SFP+ and dual GbE to the front panel. The module also has dual M.2 NVMe storage option which connects to the CPU via PCIe x4.

The AMC758 provides up to 16 GB of DDR4 memory with ECC and 64 GB of Flash for the OS. The module has Serial over LAN (SoL). The BIOS allows booting from on-board Flash, off-board SATA, PXE boot and USB. There are dual USB 3.0 type C connectors for extended storage or peripherals. Linux OS is standard on the AMC758, consult VadaTech for other options.



Figure 1: AMC758

# Block Diagram



# Specifications

Architecture	
<b>Physical</b>	<b>Dimensions</b> Width: 5.85" (148.5 mm)
	Depth: 7.11" (180.6 mm)
<b>Type</b>	<b>AMC Processor</b> Intel Xeon E3 Processor AMC, Quad Core, 4.0 GHz
Standards	
<b>AMC</b>	<b>Type</b> AMC.0, AMC.1, AMC.2 and/or AMC.3
<b>Module Management</b>	<b>IPMI</b> IPMI v2.0
<b>PCIe</b>	<b>Lanes</b> Single x8 or dual x4 as PCIe Gen3
Configuration	
<b>Power</b>	<b>AMC758</b> ~65 W
<b>Environmental</b>	<b>Temperature</b> See ordering options and <a href="#">environmental spec sheet</a> Storage Temperature: -40° to +90°C
	<b>Altitude</b> Chassis dependent
	<b>Relative Humidity</b> 5 to 95% non-condensing
<b>Front Panel</b>	<b>Interface Connectors</b> 2x RJ-45 for GbE and 2x SFP+ for 10GbE
	2x USB type C connectors for USB 3.0
	2x Micro USB for RS-232
	2x Mini DisplayPort for graphics
	<b>LEDs</b> IPMI, activity and user defined
	<b>Mechanical</b> Hot swap ejector handle
<b>Software Support</b>	<b>Operating System</b> Linux (consult VadaTech for other 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

## AMC758 – ABC-DEF-00J

<b>A = DDR4 Memory</b> 0 = Reserved 1 = 16 GB	<b>D = NVMe Storage Socket One</b> 0 = No NVMe 1 = 512 GB 2 = 1 TB 3 = 2 TB	
<b>B = Flash Storage</b> 0 = Reserved 1 = 64 GB	<b>E = NVMe Storage Socket Two</b> 0 = No NVMe 1 = 512 GB 2 = 1 TB 3 = 2 TB	
<b>C = Front Panel Size</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)	<b>F = SFP+ Transceivers**</b> 0 = No TXCVRS 1 = SR 2 = LR 3 = 10GbE Copper	<b>J = Temperature Range and Coating*</b> 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: \*Edge of module for conduction cooled boards, consult factory for availability  
 \*\*Two identical are included (for other combinations please contact VadaTech Sales)

## Related Products

UTC004



- Unified 1 GHz quad-core CPU for MCMC, Shelf Manager, Clocking, and Fabric management
- Automatic fail-over with redundant UTC004s
- Full Layer 2 or 3 managed Ethernet switches

UTC020



- Single module, full-size per AMC.0
- Dual -36 V DC to -75 V DC input, 936 W (available in 468 W)
- Hot swappable with support for power module redundancy

VT853



- MicroTCA 1U 19" rack mount chassis platform
- Six mid-size AMC slots per 1U Carrier or two double module mid-size with two mid-size AMC slots
- Front to back cooling

# Contact

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