

# AMC754

## Intel Xeon D-15xx Processor AMC



AMC754

## Key Features

- Processor AMC Intel® 5th Generation Xeon D-1520, D-1548 or D-1577 (Broadwell) SoC
- Dual PCIe Gen3 x4 or single PCIe x8 on ports 4-11 (AMC.1)
- GbE to port 0 and 1 (AMC.2) and SATA to ports 2 and 3 (AMC.3)
- 10GbE 10000BASE-T to the front panel
- Video output via micro HDMI connector
- Single module, mid-size (option for full-size) per AMC.0
- 16 GB of DDR4 memory with ECC
- 32 GB of Flash memory
- TPM (optional)

## Benefits

- Efficient SoC design with integrated PCH technology
- Lower power consumption and cost-effective for high performance
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader

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# AMC754

The AMC754 is a Processor AMC in a single module, mid-size based on the Intel® 5th generation Xeon 8-core D-1548, 4-core D-1520 Processor or 16 core D-1577 (Broadwell). The efficient SoC design has low power consumption and integrated PCH technology. 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. It also provides 100 Mbit/1 GbE/10 GbE to the front panel (the module can auto-negotiate down to 100 Mbit Ethernet but not 10 Mbit).

The AMC754 provides 16 GB of DDR4 memory with ECC and 32 GB of Flash for the OS. The BIOS allows booting from on board Flash, off-board SATA, PXE boot and USB. There are dual USB for extended storage or peripherals.

Linux OS is standard on the AMC754, consult VadaTech for other options.



Figure 1: AMC754

# Block Diagram

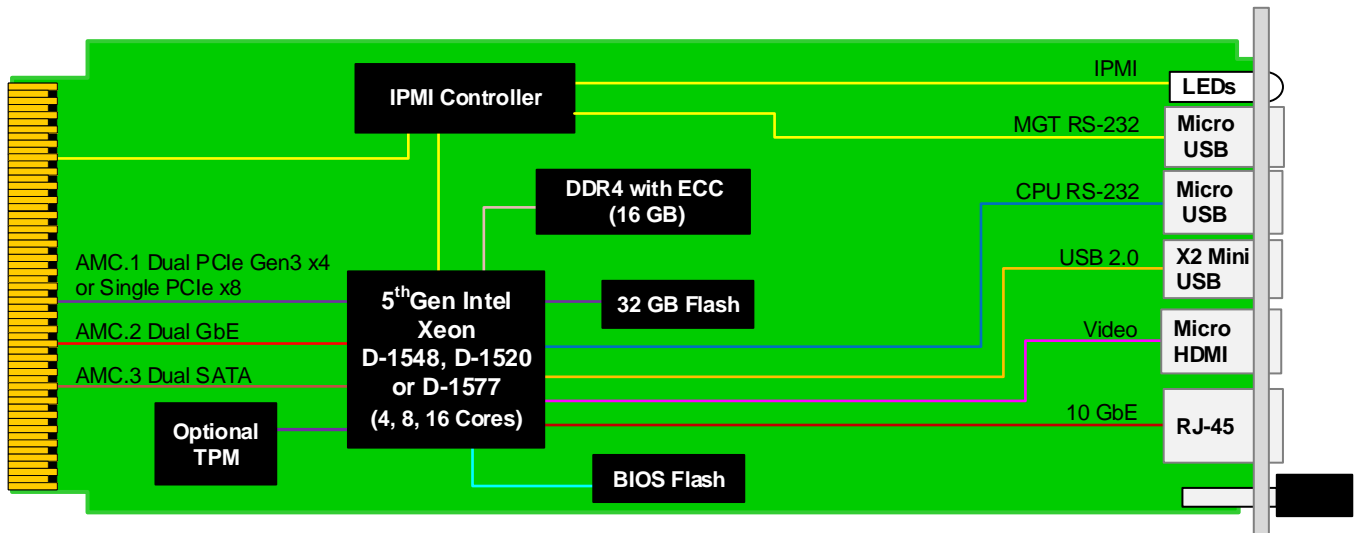


Figure 2: AMC754 Functional Block Diagram

# Front Panel

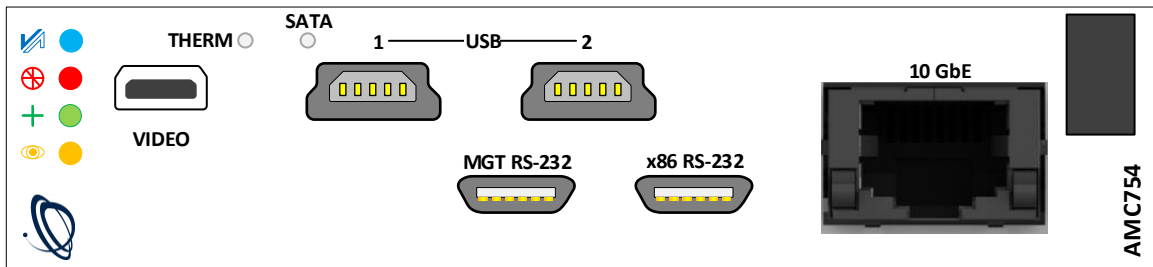


Figure 3: AMC754 Front Panel

# Specifications

<b>Architecture</b>	
<b>Physical</b>	<b>Dimensions</b> Width: 2.89" (73.5 mm) Depth: 7.11" (180.6 mm)
<b>Type</b>	<b>AMC Processor</b> Intel® 5th Generation Xeon D-1548, D-1520 or D-1577
<b>Standards</b>	
<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
<b>Configuration</b>	
<b>Power</b>	<b>AMC754</b> ~55 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), 5-500 Hz
	<b>Shock</b> Operating 325 G/2 ms, 160 G/1 ms
	<b>Relative Humidity</b> 5 to 95 per cent, non-condensing
<b>Front Panel</b>	<b>Interface Connectors</b> 1x RJ-45 for 10GbE 2x USB for USB 2x Micro USB for RS-232 1x Micro HDMI 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)
<b>Other</b>	
<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

## AMC754 – 00C-DE0-00J

	<b>D = Processor Type</b> 0 = 4C, 2.2 GHz, 6 MB LLC, Xeon D-1520 1 = 8C, 2.0 GHz, 12 MB LLC, Xeon D-1548 2 = 16C, 1.3 GHz, 24 MB LLC, Xeon D-1577 3 = 4C, 1.6 GHz, 6 MB LLC, Xeon D-1513N 4 = 4C, 2.2 GHz, 6 MB LLC, Xeon D-1520 5 = 16C, 1 to 3 GHz, 24 MB LLC, Xeon D-1577 6 = 8C, 1 to 6 GHz, 12 MB LLC, Xeon D-1539	
	<b>E = TPM</b> 0 = No TPM 1 = TPM Installed	
<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>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 = Reserved 7 = Reserved

## 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 -36V DC to -75V 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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DOC NO. 4FM737-12 REV 01 | VERSION 5.1 – AUG/18