

# AMC765

Intel® Core™ i7-1185GRE,  
Processor AMC

AMC765



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## Key Features

- Intel® Core™ Processor i7-1185GRE (Tiger Lake)
- 10G XAUI on ports 4-7 and 8-11
- Dual GbE to ports 0-1 and a GbE to Front
- SATA on Port 2
- Dual USB 3.2, Dual RS-232 and Mini Display Port (DP++) to Front
- 32GB of DDR4 with in-band ECC
- 1TB of NVMe SSD
- TPM (Trusted Platform Management)
- Health Management through dedicated Processor
- Single module, mid-size (option for other size) per AMC.0

## Benefits

- 11<sup>th</sup> Gen i7 Intel® Core™ Processor
- Availability of chassis supporting high-speed backplanes
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- RoHS compliant, AS9100 and ISO9001 certified company

**AdvancedMC™**



# AMC765

The AMC765 is a Processor AMC (PrAMC) in a single module, mid-size Advanced Mezzanine Card (AMC) form factor based based on the 11<sup>th</sup> Generation of Intel® Core™ i-7Processor i7-1185GRE (Tiger Lake). The processor base frequency is a quad core 1.8 GHz with max turbo frequency of 4.4 GHz.

The unit provides Dual 10G XAUI on ports 4-7 and 8-11, dual GbE on Ports 0 and 1 per AMC.2, and SATA on Ports 2. It also provides GbE to the front panel.

The AMC765 has up to 32GB of DDR4 memory with in-band ECC and 1TB of NVMe SSD for OS. The BIOS allows booting from onboard Flash, PXE, and/or USB.

The module provides TPM (Trust Management Platform) for secure boot.

*Figure 1: AMC765*

*Figure 2: AMC765 Front Panel View*

*Figure 3: AMC765 without Heatsink*

*Figure 4: AMC765 with Heatsink*

# Block Diagram

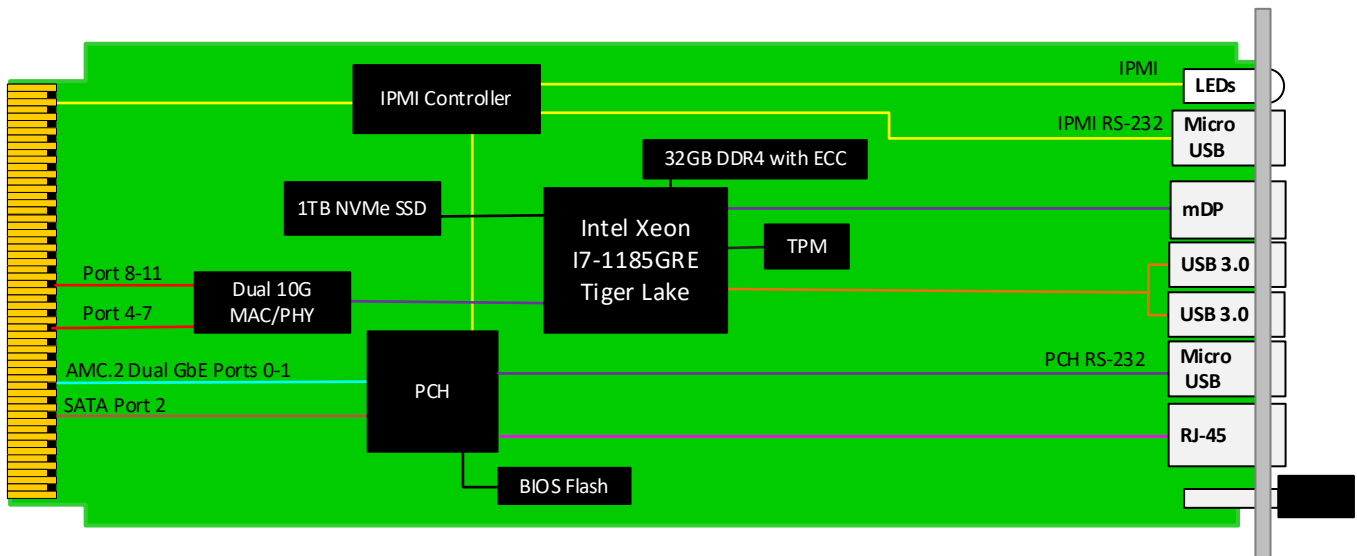


Figure 2: AMC765 Functional Block Diagram

# Front Panel

Figure 3: AMC765 Front Panel

# Specifications

Architecture	
<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® Core™ Processor i7-1185GRE
Standards	
<b>AMC</b>	<b>Type</b> AMC.1, AMC.2, AMC.3 (only port 2)
<b>Module Management</b>	<b>IPMI</b> IPMI v2.0
<b>10GbE XAUI</b>	<b>Lanes</b> Port 4-7 and 8-11
Configuration	
<b>Power</b>	<b>AMC765</b> ~31W
<b>Environmental</b>	<b>Temperature</b> See <a href="#">Ordering Options</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> 1x RJ-45 for GbE 2x USB type C connectors for USB 3.2 2x Micro USB for IPMI RS-232 and PCH RS-232 1x Mini Display Port (DP++) for graphics
	<b>LEDs</b> IPMI, activity
	<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 ISO9001:2015 and AS9100D standards
<b>Warranty</b>	Two (2) years, see <a href="#">VadaTech Terms and Conditions</a>

## 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

## AMC765 – ABC-D00-00J

<b>A = DDR4 Memory</b> 0 = Reserved 1 = Reserved 2 = 32 GB	<b>D = CPU</b> 0 = i7-1185GRE	
<b>B = Flash Storage</b> 0 = Reserved 1 = 1 TB NVMe		
<b>C = Front Panel Size</b> 1 = Reserved 2 = Mid-size 3 = Full-size 4 = 8HP 5 = Reserved 6 = Mid-size, MTCA.1/4 7 = Full-size, MTCA.1/4 8 = 8HP, MTCA.1/4		<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

## 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, 936W (available in 468W)
- Hot swappable with support for power module redundancy

VT866



- MTCA System Platform 19" x 5U x 10.5" deep (with handles 12" deep)
- 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

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- Open systems expertise

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- Partnerships power innovation
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## We deliver complexity

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- System management
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