AMC766

Intel® Core™ i7-1185GRE, Processor AMC

AMC766

Key Features

- Intel® Core™ Processor i7-1185GRE (Tiger Lake)
- PCIe x4 Gen3 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

- 11th 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™

vadatech
THE POWER OF VISION

AMC766

The AMC766 is a Processor AMC (PrAMC) in a single module, mid-size Advanced Mezzanine Card (AMC) form factor based based on the 11th 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 PCIe x4 Gen3 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 AMC766 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: AMC766

Figure 2: AMC766 Front Panel View

Figure 3: AMC766 without Heatsink

Figure 4: AMC766 with Heatsink

Block Diagram

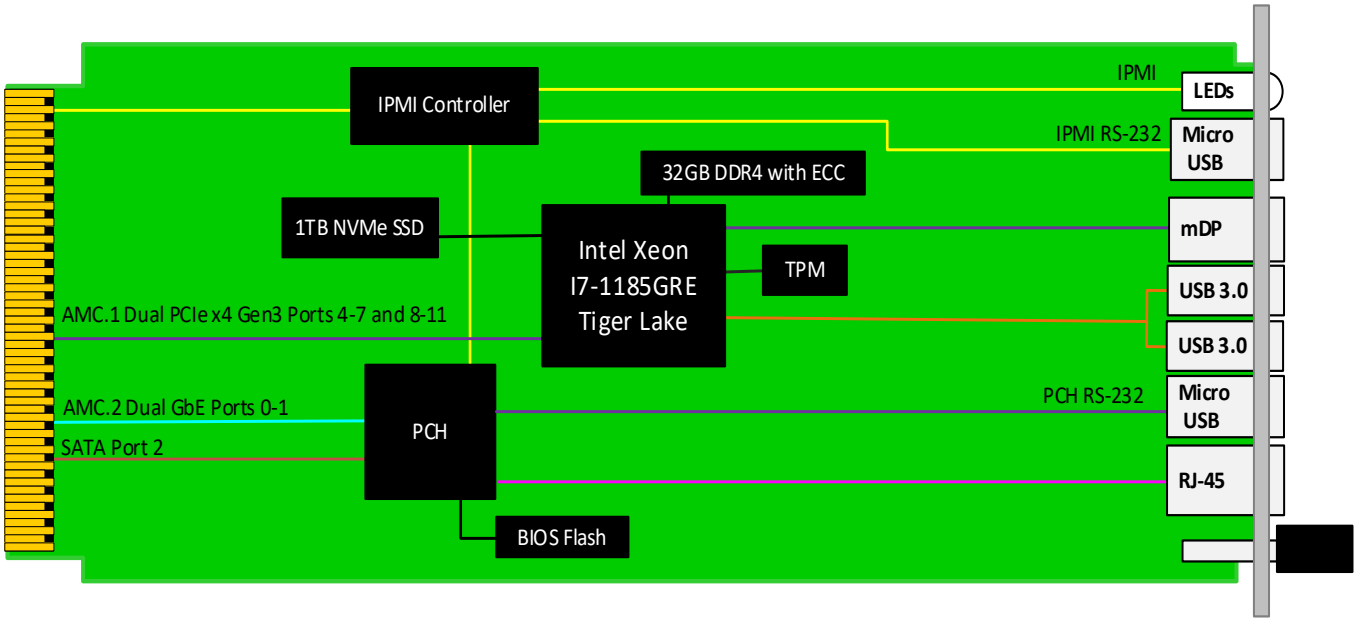

Figure 2: AMC766 Functional Block Diagram

Specifications

Architecture		
Physical	**Dimensions**	Width: 2.89” (73.5 mm)
		Depth: 7.11” (180.6 mm)
Type	**AMC Processor**	Intel® Core™ Processor i7-1185GRE
Standards		
AMC	**Type**	AMC.1, AMC.2, AMC.3 (only port 2)
Module Management	**IPMI**	IPMI v2.0
PCIe	**Lanes**	Dual x4
Configuration		
Power	**AMC766**	~25W
Environmental	**Temperature**	See Ordering Options
		Storage Temperature: –40° to +90°C
	Altitude	Chassis dependent
	Relative Humidity	5 to 95% non-condensing
Front Panel	**Interface Connectors**	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
	LEDs	IPMI, activity
	Mechanical	Hot-swap ejector handle
Software Support	**Operating System**	Linux (consult VadaTech for other options)
Other		
MTBF	MIL Hand book 217-F@ TBD hrs	
Certifications	Designed to meet FCC, CE and UL certifications, where applicable	
Standards	VadaTech is certified to both the ISO9001:2015 and AS9100D standards	
Warranty	Two (2) years, see VadaTech Terms and Conditions	

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

AMC766 – ABC-D00-00J

A = DDR4 Memory	D = CPU	
0 = Reserved 1 = Reserved 2 = 32 GB	0 = i7-1185GRE	
B = Flash Storage		
0 = Reserved 1 = 1 TB NVMe		
C = Front Panel Size		**J = Temperature Range and Coating***
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		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

VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014
Phone: +1 702 896-3337 | Fax: +1 702 896-0332

Asia Pacific Sales Office

7 Floor, No. 2, Wenhu Street, Neihu District, Taipei 114, Taiwan
Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR
Phone: +44 2380 016403

info@vadatech.com | www.vadatech.com

Choose VadaTech

We are technology leaders

- First-to-market silicon
- Constant innovation
- Open systems expertise

We commit to our customers

- Partnerships power innovation
- Collaborative approach
- Mutual success

We deliver complexity

- Complete signal chain
- System management
- Configurable solutions

We manufacture in-house

- Agile production
- Accelerated deployment
- AS9100 accredited

vadatech
THE POWER OF VISION

DOC NO. 4FM737-12 REV 01 | VERSION 1.5 – JAN/23