AMC768

Intel® Core™ Processor i7-1185GRE, AMC (11th Generation)

AMC768

Key Features

- PrAMC based on Intel® Core™ Processor i7-1185GRE (Tiger Lake, Quad Core)
- 32GB of DDR-3 with in-band ECC
- On board M.2 NVMe Storage with PCIe x4 Gen4
- Front panel Quad DP++
- Front panel USB2.0/3.2 and dual USB2.0
- Front panel GbE
- Front panel three port RS-232
- PCIe Gen3 x4 to ports 4-7 and 8-11
- GbE to ports 0 and 1
- SATA to port 2
- Double module, mid-size (option for full-size) per AMC.0

Benefits

- High performance Core i-7 processor
- 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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AMC768

The AMC768 is a Processor AMC (PrAMC) in a double module, mid-size AdvancedMC (AMC) form factor based on the Intel® 11th Generation Core i-7 Processor i7-1185GRE. The processor base frequency is a quad core 1.8 GHz with max turbo frequency of 4.4 GHz. The module follows the AMC.1, AMC.2 and the AMC.3 specifications.

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

The AMC768 provides quad DP++ ports, single GbE, USB2.0/3.2, Dual USB2.0 and three RS-232 to the front panel. The module also has a single M.2 NVMe storage option which connects to the CPU via PCIe x4 Gen4.

The AMC768 provides 32 GB of DDR4 memory with in-band ECC. The module has Serial over LAN (SoL) capabilities. The BIOS allows booting from on-board M.2, off-board SATA, PXE boot and USB. Linux OS is standard on the AMC768, consult VadaTech for other options.

Figure 1: AMC768

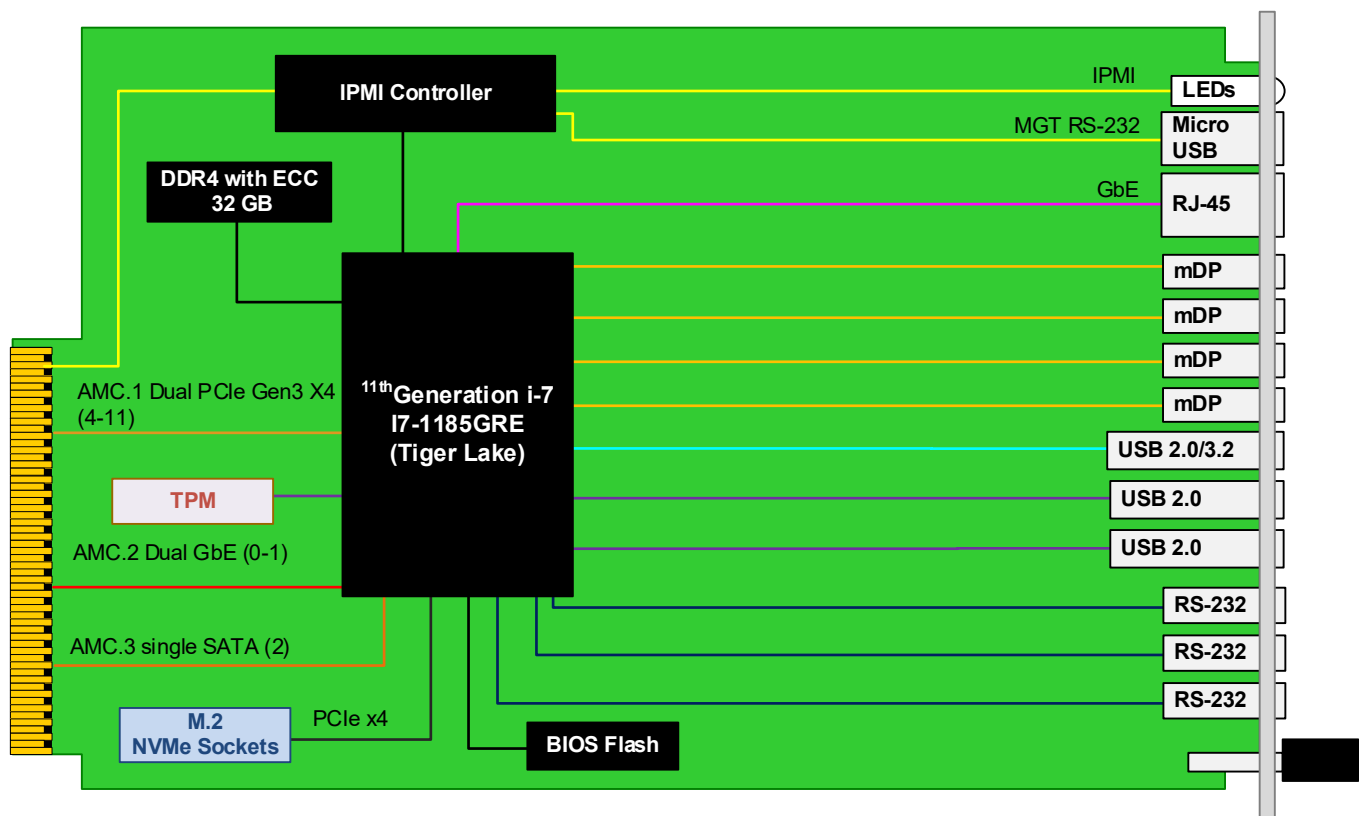*Figure 2: AMC768 w/ heatsink*

Block Diagram

Figure 3: AMC768 Block Diagram

Specifications

Architecture		
Physical	**Dimensions**	Width: 5.85" (148.5 mm)
		Depth: 7.11" (180.6 mm)
Type	**AMC Processor**	Intel Core i7-1185GRE
Standards		
AMC	**Type**	AMC.0, AMC.1, AMC.2 and/or AMC.3
Module Management	**IPMI**	IPMI v2.0
PCIe	**Lanes**	Dual x4 as PCIe Gen3
Configuration		
Power	**AMC768**	~38 W
Environmental	**Temperature**	See ordering options and environmental spec sheet
		Storage Temperature: –40° to +90°C
	Altitude	Chassis dependent
	Relative Humidity	5 to 95% non-condensing
Front Panel	**Interface Connectors**	1x RJ-45
		1x USB 2.0/3.2 Type-C and 2x USB 2.0 Mini-B
		4x Micro USB for RS-232 (3 to CPU and one to IPMI Management)
		4x Mini DisplayPort for graphics
	LEDs	IPMI, activity and user defined
	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 ISO9001:2000 and AS9100B:2004 standards	
Warranty	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

AMC768 – A0C-000-00J

A = M.2 NVMe Size		
0 = None 1 = 1 TB 2 = 2 TB 3 = 4 TB 4 = Reserved		
C = Front Panel Size		**J = Temperature Range and Coating***
1 = Reserved 2 = Mid-size (4 HP) 3 = Full-size (6 HP) 4 = 8HP 5 = Reserved 6 = Mid-size, MTCA.1 (captive screw) 7 = Full-size, MTCA.1 (captive screw) 8 = 8HP, MTCA.1 (captive screw)		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 -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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