

Ampere Altra Developer Platform

COM-HPC Server Type Size E
 Reference Development Platform
 based on Ampere® Altra® SoC

Preliminary



Features

- Ampere® Altra® SoC (Arm Neoverse N1 architecture)
- 32/64/80 cores
- DDR4 with 6 individual memory channels (32/64/128GB)
- 64 PCIe Gen4 lanes (3 x16, 2 x4, and 2 M.2 slots)
- Open source firmware (EDKII bootloader with TianoCore/UEFI)
- Arm SystemReady SR, Ubuntu Server 20.04 certified

Specifications

Components	Computer-on-Module	COM-HPC Server Type module with Ampere® Altra® 32/64/80-core SoC with open source EDKII compliant with PICMG COM-HPC: Rev 1.0
	Carrier Board	COM-HPC Server Base in extended ATX form factor
	Memory	32/64/128GB DDR4 RDIMM memory with individual memory channels
	Storage	128GB NVMe M.2 SSD
Front I/O	USB	2x USB 3.0/2.0/1.1
	LED button	Toggles through the LED lighting modes of the 5 ARGB system fans
	Power button	Turns the system on/off
	Audio port	Inactive
Rear I/O	GbE	Intel® MAC/PHY based on Intel® Ethernet Controller I210 Interface: 10/100/1000 Mbit/s Ethernet connection
	Mgt. GbE	Up to 100 Mbit/s based on Intel® I210 and AST2500, with out of band management (TBD)
	USB	4x USB 3.0/2.0/1.1
	VGA	Analog VGA display
	Serial	Serial console for debugging
	Power input	100-240V
	Power switch	Runs power to the system (without booting up)

Specifications

Power	PSU	750 watts
Cooling Solution	Liquid Cooler	Pump and radiator with single/dual fan
Operating Systems	Preinstalled	Ubuntu Server 20.04.3
	Standard Support	Windows PE (10.0.22000.1), VMware ESXi-Arm Fling v1.8, Fedora Server 35, FreeBSD 13.0-RELEASE, CentOS Stream 9
Mechanical	Dimensions	492mm x 220mm x 441mm (HxWxD)

Ordering Information

Module Number	Description/Configuration
AADP-32	COM HPC with Ampere Altra Q32-17 SOC, COM-HPC Server Base, 2x 16GB DDR4 DRAM, 128GB M.2 SSD Tower Chassis with Liquid Cooling 120, 750-watt power supply
AADP-64	COM HPC with Ampere Altra Q64-22 SOC, COM-HPC Server Base, 4x 16GB DDR4 DRAM, 128GB M.2 SSD Tower Chassis with Liquid Cooling 240, 750-watt power supply
AADP-80	COM HPC with Ampere Altra Q80-26 SOC, COM-HPC Server Base, 4x 32GB DDR4 DRAM, 128GB M.2 SSD Tower Chassis with Liquid Cooling 240, 750-watt power supply

*For SKUs not listed, please contact your ADLINK representative for availability.

