Ampere Altra Dev Kit

COM-HPC Server Type Size E
Prototyping Development Kit
based on Ampere® Altra® SoC

Preliminary

Features

- COM-HPC-ALT Server Type Size E Module with Ampere® Altra® SoC
- COM-HPC Server Base carrier
- THSF-ALT-BL-S heatsink with fan
- 2x Power part heatsinks
- VGA to HDMI adapter

Specifications

Components	Computer-on-Module	COM-HPC R1.0 Server Type module with Ampere® Altra® 32/64/96/128-core SoC
	Carrier Board	COM-HPC Server Base in extended ATX form factor
	Memory	N/A
	Storage	N/A
Connectors	Expansion Buses	2 PCI Express x4 slot (PCIe lane 0-3, 4-7) 2 PCI Express x4 M.2 M-key connector (PCIe lane 8-11, 12-15) 3 PCI Express x16 slot (PCIe lane 16-31, 32-47, 48-63)
	POST LEDs Secondary	Onboard IO expander for BIOS POST code data, on I^2C bus
	BIOS COM-HPC	Onboard socket for secondary SPI flash
	Connectors Carrier	2x 400-pin (10mm height)
	BMC	ASPEED AST2500 provides VGA output, manages 5x system fans and out-of-band management through remote management LAN (TBC)
	SATA	2x SATA (depends on COM-HPC module)

Specifications

Headers & I/O	USB	4x USB 3.0/2.0/1.0 (USB 0-3) Type A connector on Rear I/O 2x USB 2.0 header (USB 4-5) for front panel usage (TBC) 1x USB 2.0 vertical connector (USB 7, TBC)
	Serial Port	1x DB-9 on rear I/O, 1x onboard 10-pin header
	VGA Port	1x VGA on rear I/O for development purposes (supported by Carrier BMC)
	Fan	1x 4-pin module fan connector (supported by COM-HPC module) 5x 4-pin system fan connectors (supported by the Carrier BMC)
	Feature Connectors	Header for SMBus, 2x I^2C, eSPI, GP_SPI, 12x GPIO, IPMB Header for front panel usage Jumpers for module control signals
	Buttons & LEDs	Power button, reset button, status LEDs
Operating Systems	Standard Support	Ubuntu Server, Windows PE, Fedora Server, FreeBSD, CentOS stream 9, Debian

Note: Please refer to our I-Pi page for detailed specifications and 'how to' procedures for out-of-the-box prototyping.