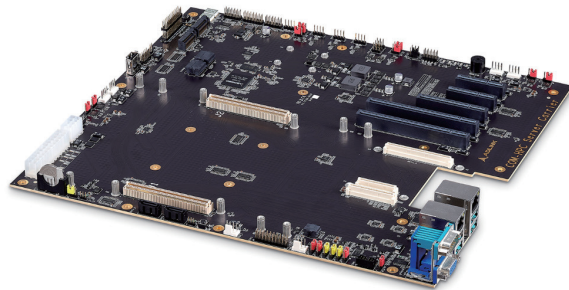


COM-HPC Server Base

COM-HPC[®] Server Type Reference Carrier Board in Extended-ATX Form Factor

Preliminary



Specifications

	COM-HPC Server Base
Core Module Interface	PICMG COM-HPC Revision 1.0 Support Server Type module in Size E or Size D form factor
Dimension	305 mm x 330 mm (Extended-ATX)
Expansion Busses	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) 2 PCI Express x16 slot (PCIe lane 16-31, 32-47) 1 PCI Express x8 slot (PCIe lanes 48-55)
POST LEDs	Onboard IO expander for BIOS POST code data, on I ² C bus
Secondary BIOS	Onboard socket for secondary SPI flash
COM-HPC Connectors	Two x 400-pin (10mm height)
OCP Mezzanie like Ethernet	Three connector (A,B,C) on carrier on Rear side Mezz_C: 4x KR input (ETH 0-3), supports ADLINK OCP Mezzanie like Ethernet card Mezz_B: 4x KR input (ETH 4-7), supports ADLINK OCP Mezzanie like Ethernet card Mezz_A: x8 PCIe lanes input (PCIe lane 56-63) & NC-SI (from Carrier BMC), supports OCP Mezzanie 2.0 Ethernet card
General Purpose LAN	2500/1000/100/10BASE-T compatible RJ-45 on Rear I/O 2500BASE-T depends on COM-HPC module
Remote Management LAN	1000/100/10BASE-T compatible RJ-45 on Rear I/O source from the Carrier BMC
Carrier 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)
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 I2C, eSPI, GP_SPI, 12x GPIO, IPMB Header for front panel usage Jumpers for module control signals
Miscellaneous	Power button, reset button, status LEDs

COM-HPC Server Base

Functional Diagram

