

COM-HPC Server Base

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



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 connector (PCIe lane 8-11, 12-15) |
| | 2 PCI Express x16 slot (PCIe lane 16-31, 32-47) |
| | 1 PCI Express x8 or x16 slot (PCIe lane 48-55) (TBC) |
| POST LEDs | Onboard IO expander for BIOS POST code data, on I ² C bus |
| Secondary BIOS | Onboard socket for secondary SPI flash |
| Connectors | Two x 400-pin (10mm height) |
| OCP Mezzanie like Ethernet | Three connector (A,B,C) on carrier on Rear side |
| | Connector C: 4x KR input (ETH 0-3) and support ADLINK OCP Mezzanie like Ethernet card |
| | Connector B: 4x KR input (ETH 4-7) and and support ADLINK OCP Mezzanie like Ethernet card |
| | Connector A: x8 PCIe lanes input (PCIe lane 56-63) & NC-SI (from Carrier BMC) and support 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 | Carrier BMC is in a module style (Remote BMC Module) and plug-in to carrier through an around 160pins |
| | connector for the out-of-band management |
| SATA | 2x SATA (with power for SATA DOM devices) |
| USB | 4x USB 3.2/2.0/1.0 (USB 0-3) Type A connector on Rear I/O |
| | 2x USB 2.0 header (USB 5-6) for front panel usage |
| | 1x USB 2.0 Vertical connector (USB 7) |
| Serial Port | 1x DB-9 (UART 0) on Rear I/O, 1x onboard 10-pin header (UART 1) |
| VGA Port | 1x VGA on Rear I/O for development purpose |
| | source from the Carrier BMC |
| FAN | 1x 4-pin FAN connector (source from COM-HPC module) |
| | 5x 4-pin FAN connector (source from the Carrier BMC) |
| KB/Mouse | 2x 6-pin mini DIN |
| Feature Connectors | Header for SMBus, 2x I2C, eSPI, GP_SPI, 12x GPIO, IPMB (source from the Carrier BMC) |
| | Header for front panel usage |
| | Others for module control signals |
| Miscellaneous | ON/OFF, Reset, Power LED, HDD LED, Buzzer (TBC) |

COM-HPC Server Base

Functional Diagram



