SK506

PCIe/104(StackPC FPE module) Expand 4 extra 10/100/1000 mbps Gigabit Ethernet

Intel I350-AM4

LAN5-6

LAN1~LAN4

StackPC/PCIe/104
Connector

FPE
Connector
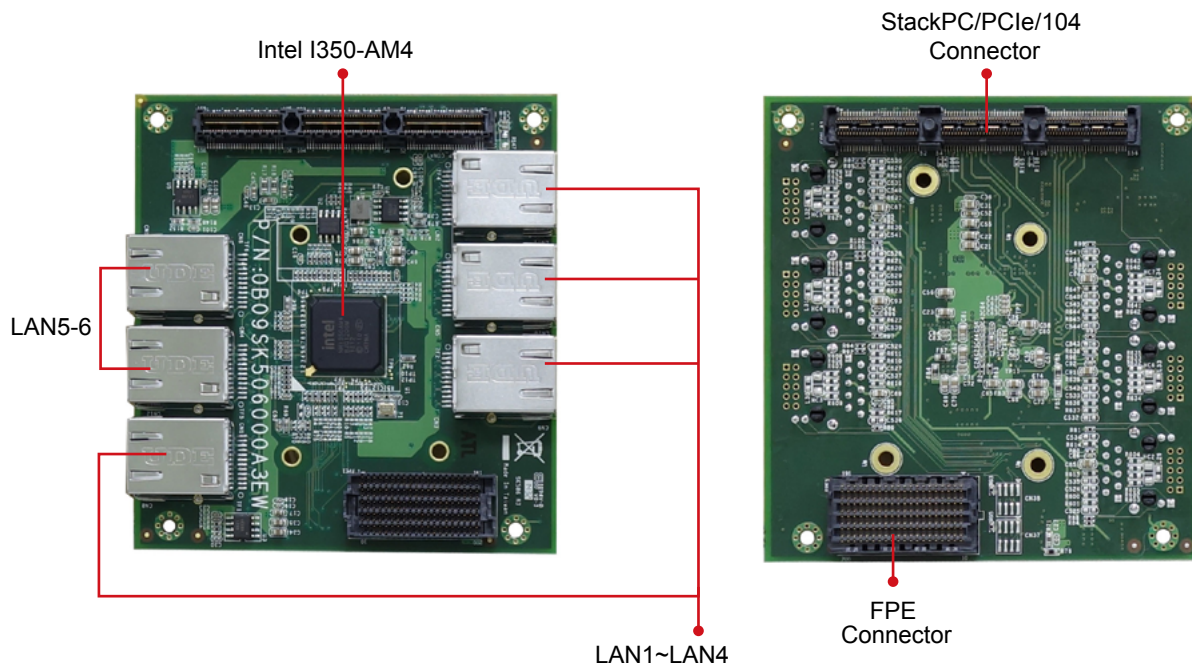
▶ Product Overview

SK506 is a PCIe/104(StackPC-FPE) peripheral module designed for stacking system, expanding four extra Gigabit Ethernet connections with two original Gigabit Ethernet ports. The board carries Intel i350-AM4 Ethernet controller onboard, supporting quad Gigabit Ethernet ports through PCIe/104 bus structure while the original dual Ethernet ports are supported by the host board. The StackPC Specification defines new approach to stackable systems design and development. The specification includes all valuable heritages of PCIe/104 standards along with the new features of StackPC connector, that is, StackPC can also support PCIe/104 signal. Currently, PERFECTRON released OXY5535B, a PCIe/104(StackPC) host board powered by Intel Ivy Bridge Core i7 CPU to work with SK506. To match the different system requirements, two types of interface are available, RJ45 and 5 x 2 pin-headers.
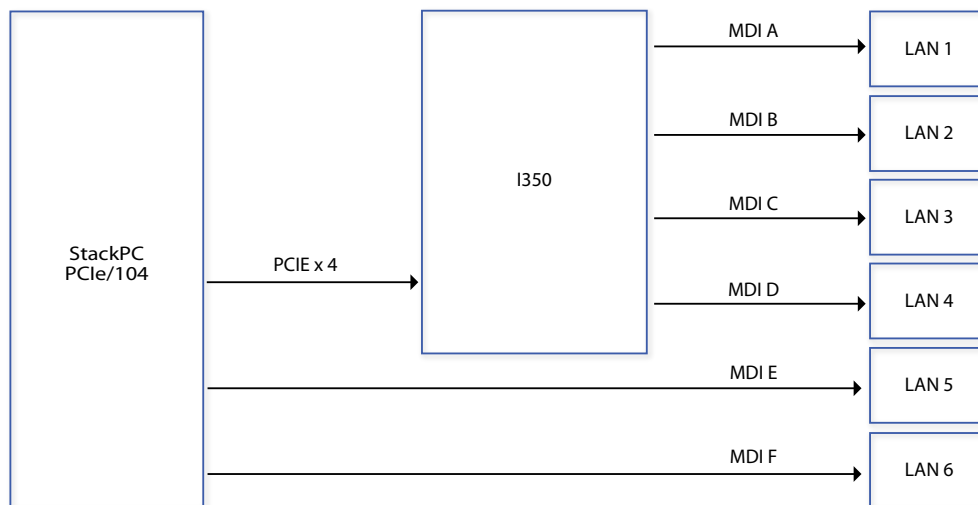
▶ Main Features

· StackPC-FPE form factor
· PCIe/104 stackable bus structure
· Reliable Ethernet technology from Intel i350-AM4 controllers
· total 6 independent LAN connections (2 from host board, 4 from Intel controllers)
· Flexible options for Ethernets through RJ45 or 10 pin-headers
· High-performing bridgeless design supporting PCI Express Gen 2.1 5GT/s
· Extended temperature -40 to 85℃

▶ Specifications

Function	Total 6 x 10/100/100 mbps Ethernet connections
Network controller	Intel i350-AM4 network controller *Max TDP 4W *EEE802.3/10BASE-T, 100BASE-TX, 1000BASE-T *Interrupt levels: INTA, INTB, INTC, INTD, MSI, MSI-X *Supports Jumbo Frames *Supports IEEE1588 *Supports Intel Data Direct I/O Technology *Innovative power management features including Energy Efficient Ethernet (EEE) and DDMA Coalescing for increased efficiency and reduced power consumption
Host Interface	PCIe x4 Interface to CPU through PCIe/104 bus StackPC compliant with PCIe/104 Type1 and Type2 buses
Physical connectors	4 independent LAN connections (from Intel i350-AM4) plus 2 independent LAN interface (from CPU host board) Type R: 6 x RJ45 jacks (10/100/1000 Mbps) Type P: 6 x FCI connectors (5 x 2 pin, 10/100/1000 Mbps)
Special Features	Intel Virtualization Technology for connectivity *Supports on-chip QoS and Traffic management *Supports Virtual Device Queues (VMDq) *Supports PCI-SIG* SR-IOV capable
Operating Temperature	Extended Temperature -40 to 85°C
Dimension	95 x 90 mm

▶ Block Diagram

▶ Ordering Information

SK506-P	SK506-R
6 x FCI connectors (5 x 2 pin) Gigabit Ethernet controller, Extended temp. -40°C to 85°C	6 x RJ45 jacks, Extended temp. -40°C to 85°C

*All specifications and photos are subject to change without notice.