

SCB-1941

Performance Network Appliance

AEWIN Technologies Co., Ltd.

The SCB-1941 is a 1U Rackmount Single 4th Gen Intel Xeon Scalable Processor (Sapphire Rapids-SP) and Intel® C741 PCH Network System, support 8 DDR5 RDIMM up to 512GB, 4x PCIe 5 x 8 slot for Network Expansion Module, 1x 2.5" Internal SATA HDD, IPMI, 2 USB 3.0, 2x 1GbE, 1x Console, mSATA/mini-PCIe, M.2 2280 (PCIe x 4/SATA) with VROC RAID support, BMC, Redundant PSU



Features

- Support Single 4th Gen Intel Xeon Scalable Processors (Sapphire Rapids-SP), Socket E FCLGA4677
- 8x DDR5 RDIMM memory, up to 4800 MHz
- Support Intel QAT on processor
- 2x 1GbE RJ45 ports (MGMT / IPMI) , 4x PCIe Gen5 Expansion Module bays
- 1x 2.5" Internal SATA HDD, 2x M.2 2280 (PCIe x 4/SATA) with VROC RAID support, 1x mSATA
- IPMI v2.0, Optional Intel AEWIN TSB V2 module

Description

The SCB-1941 is a 1U Rack-Mount hardware networking system. Supporting 4th Gen Intel® Xeon® Scalable Processors (Sapphire Rapids) and Intel® C741 PCH. The new generation platform provides remarkable performance with increased CPU cores (up to 32C per CPU) and 4 Ultra Path Interconnect (UPI) links up to 16 GT/s.

The SCB-1941 supports 8x channels DDR5 register ECC RDIMM (up to 4800 MHz) and maximum memory capacity is up to 512GB . With 80 PCI Express lanes per CPU, the SCB-1941 can support up to 4 x PCIe Gen 5 x 8 slots for Network Expansion Modules for flexible port configuration, such as 1/10/40/100 Gigabit fiber, Gigabit Copper/Fiber with or without Bypass function. The SCB-1941 also provides 1x PCIe x16 slot for standard PCIe form factor which can install off-the-shelf add-on card for additional function required.

The strong IO elements of SCB-1941 include two management port (one for management, another for option IPMI function), a console port, USB ports, LEDs for power/HDD/2x GPIO. In addition, the SCB-1941 also supports 1 Internal 2.5" SATA HDDs/SSDs and onboard m-SATA/mini-PCIe, M.2 slot for network storage application.

Specifications

▼ Processor System

CPU	Support Single 4th Intel Xeon Scalable Processor (Sapphire Rapids-SP), Socket E, FCLGA4677pin
Chipset	Intel® Emmitsburg C741
System Bus	UPI up to 16GT/s
BIOS	AMI® UEFI BIOS

▼ Memory

Technology	Total 8 DIMMs (8 channels per CPU, 1x DIMM per channel, 8 DIMMs per CPU) -- ECC & Registered RDIMM : DDR5 4800 MHz memory, up to 64GB per DIMM
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Capacity ECC RDIMM up to 512GB

▼ Expansion

Onboard Expansion Slots	4x PCIe Gen 5 x8 slots for NIC modules, 1 mSATA/miniPCI-E, 1 internal SlimSAS 4i connector, 1 miniSAS HD connector, 1 MCIO 8i for PCIe 5 slot
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▼ I/O

USB	2x USB 2.0 ports (Front) 2x Internal USB3.0 pin header
Serial	1x RJ45 Console port (COM1) 2x internal pin header (COM2 & COM3)

▼ Ethernet

GbE Ethernet	2x RJ45 1GbE ports in system front
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▼ Storage

SATA	Support 1x 2.5" SATA HDD or SSD
NVMe	External 2x2.5" NVME SSD Hot-Swappable Module (through BPO20 kit on Expansion Slot)
mSATA	1
mSATA	2x M.2 2280 (PCIex4/SATA) with VROC RAID support

▼ Power Supply

Watt	550W Redundant power supply (CRPS), 12V output / RoHS
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▼ Mechanical and Environment

Form Factor	1U Rackmount
LED	1x Power LED (Green) 1x HDD LED (Red) 2x Status LED (Green/Yellow via programmable GPIO)
Dimension (W x D x H)	440mm(W) x 548 mm(D) x 44mm(H)
Operating Temperature	Operating: 0 ~ 40°C (32 ~ 104°F)
Storage Temperature	-20 ~ 75°C (-4 ~ 167°F)
Humidity	10 ~ 85% relative humidity, non-operating, non-condensing
Weight	10 kg
Certification	CE/FCC

▼ Packing List

- 1x SCB-1941 unit
- 2x power cord
- 1x CD (Manual, Quick Installation Guide, Utilities & Drivers)

Ordering Information

SCB-1941A	1U Rack-Mount, Single Intel SPR/EMR processor with C741 PCH, 8 DDR5, 4 PCIe 5 x8 slot for NIC, Console, 2 RJ45 GbE (MGMT/IPMI), 2 USB 2.0, 2 USB 3.0, M.2 2280, BMC, 1x2.5" SATA HDD, Internal PCIe 5 x8 slot for standard PCIe Card
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Optional

R594A	TPM 2.0 module via SPI pin header, Temp -20~85°C	R386A	Expansion module with 4 SFP+ 10 GbE ports, Intel XL710-BM1 w/o re-driver
OT006B	AEWIN TSB module (ROT/COT Module)	R387A	Expansion module with 2 QSFP+ 40 GbE ports, Intel XL710-BM2 w/o re-driver
BPO20A	HDD Backplane with 1 MCIO 8i to 2 NVME 4.0 CONN (SFF-8639)	R405A	Expansion module with 4 SFP GbE ports, Intel I350-AM4
R671A	Expansion module with 2 QSFP28 100GbE ports, Intel E810-CAM2	R406A	Expansion module with 4 RJ45 GbE ports, two pairs Gen3 Bypass, Intel I350-AM4
NFT801A	Expansion module with 8x SFP+ GbE ports, Intel E810-CAM2	R445B	Expansion module with 2 SFP+ 10GbE ports, Intel® X710-BM2 w/o Re-driver
R384B	Expansion module with 8 SFP GbE ports, Intel i350-AM4	R471D	Expansion module with 8 RJ45 GbE ports with two pairs Gen.3 Bypass, Intel® I350-AM4
R385B	Expansion module with 8 RJ45 GbE ports, two pairs Gen 3 Bypass, Intel I350-AM4	NMG801AL	Expansion module with 4 SFP GbE and 4 RJ45 GbE ports, 2 pair Bypass, Intel i350-AM4 with PCIe G2 Switch ASMedia ASM1812, L2R
R385C	Expansion module with 8 RJ45 GbE ports, Intel I350-AM4		

I/O

