

# SCB-1942

Performance Network Appliance

## AEWIN Technologies Co., Ltd.

2U Rackmount Dual 4th Gen Intel Xeon Scalable Processor (Sapphire Rapids -SP) and Intel® C741 PCH Network System, support DDR4 RDIMM up to 1.5TB, 8x PCIe x8 slot (4x PCIe Gen5 + 4x PCIe Gen4) for Network Expansion Module, 2x 2.5" SATA HDD hot-swappable, IPMI, USB 3.0, 2x 1GbE, 1x Console, CF/mSATA/mini-PCIe, M.2, Redundant PSU



### Features

- Support Dual 4th Gen Intel Xeon Scalable Processors (Sapphire Rapids-SP), LGA4677
- 16x DDR5 RDIMM memory, up to 4800 MHz
- Support Intel QAT
- 2x 1GbE RJ45 ports, 4x PCIe Gen5 Expansion Module bays, 4x PCIe Gen4 Expansion Module bays
- 2x 2.5" SATA, 2x M.2 M Key, 1x mSATA
- IPMI v2.0, Optional Intel PFR/AEWIN TSB V2 module

### Description

The SCB-1942 is a 2U 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 60C per CPU) and 4 Ultra Path Interconnect (UPI) links up to 16 GT/s.

The SCB-1942 supports 16x channels DDR5 register ECC RDIMM (up to 4800 MHz) and maximum memory capacity is up to 1.5TB. With 80 PCI Express lanes per CPU, the SCB-1942 can support up to 8x PCIe x8 slots (4x PCIe Gen5 + 4x PCIe Gen4) 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-1942 Series also provides the flexibility to change the 2x PCIe slots to 1x PCIe x16 slot for standard PCIe form factor which can install off-the-shelf add-on card for additional function required. It can support 400G NIC card installed such as Mellanox PCIe 5.0 NIC. The maximum ethernet bandwidth capacity is up to 1,200GbE.

The strong IO elements of SCB-1942 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-1942 also supports two front hot-swappable 2.5" SATA HDDs/SSDs and onboard CompactFlash/m-SATA/mini-PCIe, M.2 slot for network storage application.

### Specifications

#### ▼ Processor System

CPU	Support Dual 4th Gen Intel Xeon Scalable Processor (Sapphire Rapids-SP), Socket E, 4677pin
Chipset	Intel® Emmitsburg C741
System Bus	UPI up to 16GT/s
BIOS	AMI® UEFI BIOS

#### ▼ Memory

Technology	Total 16 DIMMs (8 channels per CPU, 1x DIMM per channel, 8 DIMMs per CPU) -- ECC & Registered RDIMM : DDR5 4800 MHz memory, up to 96GB per DIMM
Capacity	ECC RDIMM up to 1.5TB

#### ▼ Expansion

Onboard Expansion Slots	- 8x PCIe x8 slots (4x PCIe Gen5 + 4x PCIe Gen4) for NIC modules - 2x M.2, one CF/mSATA/miniPCI-E, 6x MCIO, 4x slimSAS - 1x rear PCIe x16 slot for Standard PCIe card (Optional)
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#### ▼ I/O

USB	2x USB 2.0 ports (Front) 1x USB 3.0 port (Rear) 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 2x 2.5" SATA HDD or SSD
mSATA	1
M.2	2x M.2 2280 socket (M-Key)

#### ▼ Power Supply

Watt	850W/1300W/1600W Redundant power supply (CRPS), 12V output / RoHS
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#### ▼ Mechanical and Environment

Form Factor	2U Rackmount
LED	1x Power LED (Green) 1x HDD LED (Red) 2x Status LED (Green/Yellow via programmable GPIO)
Dimension (W x D x H)	A/B: 440mm(W) x 680 mm(D) x 88mm(H) C: 440mm(W) x 600 mm(D) x 88mm(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	21 kg
Certification	CE/FCC

#### ▼ Packing List

- 1x SCB-1942 unit
- 2x power cord
- 1x CD (Manual, Quick Installation Guide, Utilities & Drivers)

## Ordering Information

SCB-1942A	2U Rackmount, Dual Intel SPR-SP processors with C741 PCH, DDR4, 8x PCIe x8 slots for NIC, Console, USB, 2x GbE, M.2 2280, BMC, 6x M.2, 4x slimSAS, 2x2.5 SATA, mSATA
SCB-1942B	2U Rackmount Dual Intel SPR-SP processor with C741 PCH, DDR4, 4x PCIe x8 slots for NIC, 2x PCIe x16 slots for Standard PCIe Card or T4 GPU Card, Console, USB, 2x GbE, M.2 2280, BMC, 6x M.2, 4x slimSAS, 2x2.5 SATA, mSATA

SCB-1942C	2U Rackmount, Dual Intel SPR-SP processor with C741 PCH, DDR4, 4x PCIe x8 slots for NIC, 2x PCIe x16 slots for dual width FHFL GPU Cards, Console, USB, 2x GbE, M.2 2280, BMC, 6x M.2, 4x slimSAS, 2x2.5 SATA, mSATA
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## Optional

RS054A	5 pin Fan card for FAN module 180D Male connector
RS055A	RS055A, 5 pin Fan card for FAN module 180D Female connector
BP009A	CRPS Power Distribution Board for 2U system
BP013A	Backplane with HDD Active LED and HDD Fault LED support 2 2.5" SATA HDD Tray with hot-swappable
RS041A	Riser card with 2 SlimSAS x8 to 1 PCIe x16 Slot for rear standard PCIe add-on card
RS040A	Riser card with 1 x16 lanes via high-speed CONN to 1 PCIe x16 slot for 2nd Layer standard PCIe x16 add-on card

RS045A	Riser card with 1 x16 lanes via high-speed CONN to 1 x16 lanes high speed CONN for RS040A
RS046A	Riser card with 1 x16 lanes via high-speed CONN to 1 x16 lanes high speed CONN for RS044A
RS044A	Riser card with 1 x16 lanes via high-speed CONN to 1 PCIe x16 Slot for 2nd Layer Dual Width GPU card
R466A	I/O card with Console, 2xLAN, USB, LEDs
S042A	Riser card with mSATA CONN to CF socket

## I/O

