# 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<br>Processor (Sapphire Rapids-SP), Socket E,<br>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<br>Slots | <ul> <li>- 8x PCIe x8 slots (4x PCIe Gen5 + 4x PCIe Gen4) for NIC modules</li> <li>- 2x M.2, one CF/mSATA/miniPCI-E, 6x MCIO, 4x slimSAS</li> <li>- 1x rear PCIe x16 slot for Standard PCIe card (Optional)</li> </ul> |
|----------------------------|--|
|                            |  |

#### **▼** 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

## Storage

| SATA  | Support 2x 2.5" SATA HDD or SSD |
|-------|---------------------------------|
| mSATA | 1                               |
| M.2   | 2x M.2 2280 socket (M-Key)      |

#### ▼ Power Supply

| Watt | 350W/1300W/1600W Redundant power |  |
|------|----------------------------------|--|
|      | supply (CRPS), 12V output / RoHS |  |

#### Mechanical and Environment

| Form Factor              | 2U Rackmount   |
|--------------------------|--|
| LED                      | 1x Power LED (Green)<br>1x HDD LED (Red)<br>2x Status LED (Green/Yellow via programmable GPI |
| Dimension (W x D x H)    | A/B: 440mm(W) x 680 mm(D) x 88mm(H)<br>C: 440mm(W) x 600 mm(D) x 88mm(H)                     |
| Operating<br>Temperature | Operating: 0 ~ 40°C ( 32 ~ 104°F )   |
| Storage<br>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)

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## **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 MCIO, 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 MCIO, 4x slimSAS, 2x2.5

SATA, mSATA

2U Rackmount, Dual Intel SPR-SP processor with C741 PCH, DDR4, 4x PCIe x8 slots for NIC, 2x PCIex16 slots for dual width FHFL GPU Cards, Console, USB, 2x GbE, M.2 2280, BMC, 6x MCIO, 4x slimSAS, 2x2.5 SATA,

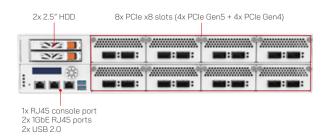
## **Optional**

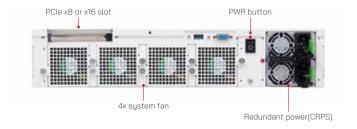
| RS054A | 5 pin Fan card for FAN module 180D Male connector   | RS045A | Riser card with 1 x16 lanes via high-speed CONN to 1 x16 lanes high speed CONN for RS040A               |
|--------|---|--------|---|
| RS055A | RS055A, 5 pin Fan card for FAN module 180D Female connector                                     | RS046A | Riser card with 1 x16 lanes via high-speed CONN to 1 x16 lanes high speed CONN for RSO44A               |
| BP009A | CRPS Power Distribution Board for 2U system   | RS044A | Riser card with 1 x16 lanes via high-speed CONN to 1<br>PCIe x16 Slot for 2nd Layer Dual Width GPU card |
| BP013A | Backplane with HDD Active LED and HDD Fault LED support 2 2.5" SATA HDD Tray with hot-swappable | R466A  | I/O card with Console, 2xLAN, USB, LEDs   |
| RS041A | Riser card with 2 SlimSAS x8 to 1 PCle x16 Slot for rear standard PCle add-on card              | S042A  | Riser card with mSATA CONN to CF socket   |
| RS040A | Riser card with 1 x16 lanes via high-speed CONN to 1  |        |   |

Riser card with 1 x16 lanes via high-speed CONN to 1 PClex16 slot for 2nd Layer standard PCle x16 add-on

## 1/0

card





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