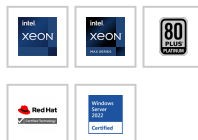


R283-S90 (rev. AAE2) | (rev.AAE1) | (rev.AAE3) | (rev.AAJ1) | (rev.AAJ2) | (rev.AAJ3)

4th Gen Intel® Xeon® Scalable Server System - 2U DP 12+2-Bay SATA/SAS | Application: [Networking](#)

- 4th Gen Intel® Xeon® Scalable Processors
- Intel® Xeon® CPU Max Series
- Dual processor, LGA 4677
- 8-Channel RDIMM DDR5 per processor, 32 x DIMMs
- Dual ROM Architecture supported
- 2 x 1Gb/s LAN ports (Intel® I350-AM2)
- 1 x Dedicated management port
- 12 x 3.5"/2.5" SATA hot-swappable bays
- 2 x 2.5" SATA hot-swappable bays on rear side
- 6 x FHHL PCIe Gen5 x16 slots
- 2 x LP PCIe Gen5 x8 slots
- 2 x OCP 3.0 Gen5 x16 mezzanine slots
- Dual 2000W (240V) 80 PLUS Platinum redundant power supply



[OVERVIEW](#) [SPECIFICATIONS](#) [SUPPORT](#) [RESOURCES](#) [BUY](#)

Dimensions (WxHxD, mm)

2U
438 x 87.5 x 815

Motherboard

MS93-F50

CPU

4th Generation Intel® Xeon® Scalable Processors
Intel® Xeon® CPU Max Series
Intel® Xeon® Platinum Processor, Intel® Xeon® Gold Processor, Intel® Xeon® Silver Processor
Dual processor, CPU TDP up to 350W

NOTE: If only 1 CPU is installed, some PCIe or memory functions might be unavailable

Socket

2 x LGA 4677
Socket E

Chipset

Intel® C741 Chipset

Memory

32 x DIMM slots
DDR5 memory supported only
8-Channel memory architecture
RDIMM modules up to 128GB supported
3DS RDIMM modules up to 256GB supported
Memory speed: Up to 4800 MHz (1DPC), 4400 MHz (2DPC)

LAN

Rear side:

2 x 1Gb/s LAN ports (1 x Intel® I350-AM2)
Support NCSI function

1 x 10/100/1000 management LAN

Video

Integrated in Aspeed® AST2600
2D Video Graphic Adapter with PCIe bus interface
1920x1200@60Hz 32bpp, DDR4 SDRAM

Storage

Front side:

12 x 3.5"/2.5" SATA/SAS hot-swappable bays

Rear side:

2 x 2.5" SATA/SAS hot-swappable bays

SAS card is required for SAS devices support

SAS

Depends on SAS Add-on card

RAID

Intel® SATA RAID 0/1/10/5

Expansion Slots

Riser Card CRS101J:

- 1 x PCIe x16 (Gen5 x16) FHHL slot, from CPU_0

Riser Card CRS101K:

- 1 x PCIe x16 (Gen5 x16) FHHL slot, from CPU_1

Riser Card CRS202E:

- 2 x PCIe x16 (Gen5 x16) FHHL slots, from CPU_0*

***NOTE: Slot_10 would be downgraded to Gen4 if using XCC CPU with 4 x UPI**

Riser Card CRS202G:

- 2 x PCIe x16 (Gen5 x16) FHHL slots, from CPU_0

Riser Card CRS202H:

- 2 x PCIe x16 (Gen5 x16) FHHL slots, from CPU_1

1 x OCP 3.0 slot with PCIe Gen5 x16 bandwidth, from CPU_0
Supports NCSI function

1 x OCP 3.0 slot with PCIe Gen5 x16 bandwidth, from CPU_1
Supports NCSI function

Internal I/O

1 x TPM header
1 x VROC connector
2 x OCP 3.0 mezzanine slots

Front I/O

2 x USB 3.2 Gen1
1 x Power button with LED
1 x ID button with LED
1 x NMI button
1 x Reset button
2 x LAN activity LEDs
1 x HDD activity LED
1 x System status LED

Rear I/O

2 x USB 3.2 Gen1
1 x Mini-DP
2 x RJ45
1 x MLAN
1 x ID LED

Backplane I/O

Front side Backplane P/N: 9CBP20C5NR-00
Rear side Backplane P/N: 9CBP2022NR-00

Speed and bandwidth:
SATA 6Gb/s or SAS 12Gb/s on front side
SATA 6Gb/s or SAS 12Gb/s on rear side

TPM

1 x TPM header with SPI interface
Optional TPM2.0 kit: [CTM010](#)

Power Supply

Dual 2000W (240V) 80 PLUS Platinum redundant power supply

AC Input:
- 100-120V~/ 12A, 50-60Hz
- 180-240V~/ 10A, 50-60Hz

DC Input:
- 240Vdc/ 10A

DC Output:
- Max 1000W/ 100-120V~
+ 12.2V/ 81.5A
+ 12Vsb/ 2.5A
- Max 1600W/ 180-199V~
+ 12.2V/ 131A
+ 12Vsb/ 2.5A
- Max 1800W/ 200-220V~
+ 12.2V/ 147.5A
+ 12Vsb/ 2.5A
- Max 2000W/ 221-240V~
+ 12.2V/ 163.5A
+ 12Vsb/ 2.5A

System Management

Aspeed® AST2600 management controller
GIGABYTE Management Console (AMI MegaRAC SP-X) web interface

Dashboard
HTML5 KVM
Sensor Monitor (Voltage, RPM, Temperature, CPU Status ...etc.)
Sensor Reading History Data
FRU Information
SEL Log in Linear Storage / Circular Storage Policy
Hardware Inventory
Fan Profile
System Firewall
Power Consumption
Power Control
LDAP / AD / RADIUS Support
Backup & Restore Configuration
Remote BIOS/BMC/CPLD Update
Event Log Filter
User Management
Media Redirection Settings
PAM Order Settings
SSL Settings
SMTP Settings

OS Compatibility

Please refer to OS compatibility table in support page

Additional certifications:
[Windows Server 2022 \(x64\)](#)
[Red Hat Enterprise Linux 9.0 \(x86_64\) or later](#)

System Fans

4 x 80x80x38mm (18,300rpm)

Operating Properties

Operating temperature: 10°C to 35°C
Operating humidity: 8%-80% (non-condensing)
Non-operating temperature: -40°C to 60°C
Non-operating humidity: 20%-95% (non-condensing)

Packaging Dimensions

1077 x 679 x 300 mm