

# Exatron multi-node system

## Rx280-4i16

Provides performance and versatility to address your most edge & Cloud demanding applications

The Rx280-4i16 is an advanced 2U 4-Node server solution designed to meet the demands of modern data centres. It features 12 spacious 3.5" SAS/SATA bays, providing ample storage capacity for a variety of applications. This server is equipped with four motherboards, supporting the latest dual Intel® Xeon® Scalable Processors from the Sapphire Rapids family, ensuring exceptional processing power and efficiency.

For enhanced connectivity and expansion capabilities, the Rx280-4i16 supports up to three PCIe X16 add-on cards, which can be utilised for networking, host bus adapters (HBA), or RAID configurations. Its optimised design is particularly tailored for Hyper-Converged Infrastructure (HCI) applications, making it a robust choice for organisations looking to streamline their IT operations.

Additionally, this server allows for flexible deployment, enabling a scale-out approach where you can add one node at a time. This feature also facilitates the seamless migration of legacy software into a cloud service, reinforcing the Rx280-4i16's position as a versatile solution for modern IT challenges.

### Key Features

- 2U 4-Node hybrid storage server supports 12 hot-swap 3.5" SATA/SAS drive bays
- Supports 5th Gen Intel® Xeon® Scalable Processors (Emerald Rapids)
- Supports 4th Gen. Intel® Xeon® Scalable processors (Sapphire Rapids)
- Maximising the use of the processor, memory, and add-on cards in a single system
- Onboard Baseboard Management Controller for system management and IPMI control
- 3 x PCIe X16 extensions on each node
- Front-to-back airflow and easy swap redundant fans to provide optimal thermal conditions

# Specification

## Motherboard

Intel® Emmitsburg PCH C741  
CPU Interconnection: 12.8, 14.4, and 16GT/s  
Socket Type: Socket E (LGA 4677)

## Processor Support:

- 5th Gen Intel® Xeon® Scalable Processors (Emerald Rapids)
- 4th Gen Intel® Xeon® Scalable Processors (Sapphire Rapids)
- Supports CPU TDP up to 350W.

\*Please contact EXATRON Technical Support for more info/details about optimised CPUS and specialised systems.  
CPU Interconnection: 12.8, 14.4, and 16GT/s  
Socket Type : Socket E (LGA 4677)

## System Memory (per node)

- DDR5 4800MHz (1DPC); DDR5 5600MHz (1DPC) by Emerald Rapids CPU
- Total 16 memory slots; 8 slots per CPU (1DPC)

## Drive Bays

External

- 12 x 3.5" hot-swap (3 x drives per node)

Internal

- 2 x M.2(NGFF)/ M-Key/ 2280/ Support SATA or PCIe 4.0 X4
- 2 x PCIe X16 slots (HHHL)
- 1 x OCP 3.0 bay (PCIe X16 width)

## Expansion Slots (PCIe 5.0)

BIOS Type: AMI UEFI BIOS  
BIOS Features :

- ACPI
- PXE
- WOL
- AC loss recovery
- BIOS recovery
- IPMI 2.0 KCS mode interface
- SRIOV
- SMBIOS
- TPM
- Serial console redirection
- PCIe hotplug

## System BIOS

## On-board Devices

6 SATA to front edge connectors (SATA 6Gb/s)

**BMC**

Aspeed AST2600 Advanced PCIe Graphics & Remote Management Processor

- Baseboard Management Controller
- Intelligent Platform Interface 2.0 (IPMI 2.0)
- iKVM, Media Redirection, IPMI over LAN, Serial over LAN
- HTML5
- Redfish
- SMASH Support

**Network Controllers**

- Realtek RTL8211F GbE PHY for dedicated management port
- Intel® i210 GbE NIC for shared management port

**Graphics**

Aspeed AST2600 Advanced PCIe Graphics & Remote Management Processor

- PCIe Graphic/2D Controller
- 1920x1200@60Hz 32bpp

**Rear I/O**

LAN:

1 x GbE RJ45 dedicated/shared BMC management

USB:

2 x USB 3.2 Gen1 Type A

Video Output:

1 x DB15 connector

**Power Supply**

3000W 1+1 CRPS 80+ Platinum

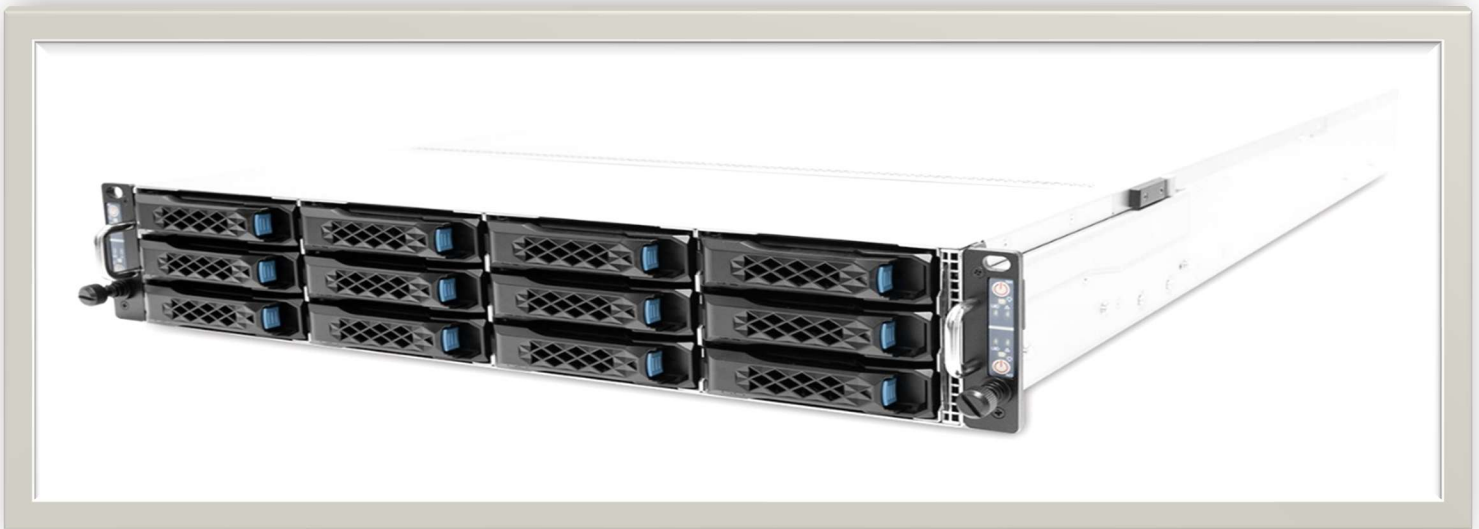
**System Cooling**

4 x 80x80mm easy swap fans

**Environmental Specifications**

- Storage temperature : -10°C(14°F) ~ 60°C(140°F)
- Operating temperature : 0°C(32°F) ~ 35°C(95°F)
- Storage operating humidity : 5%~95% non-condensing

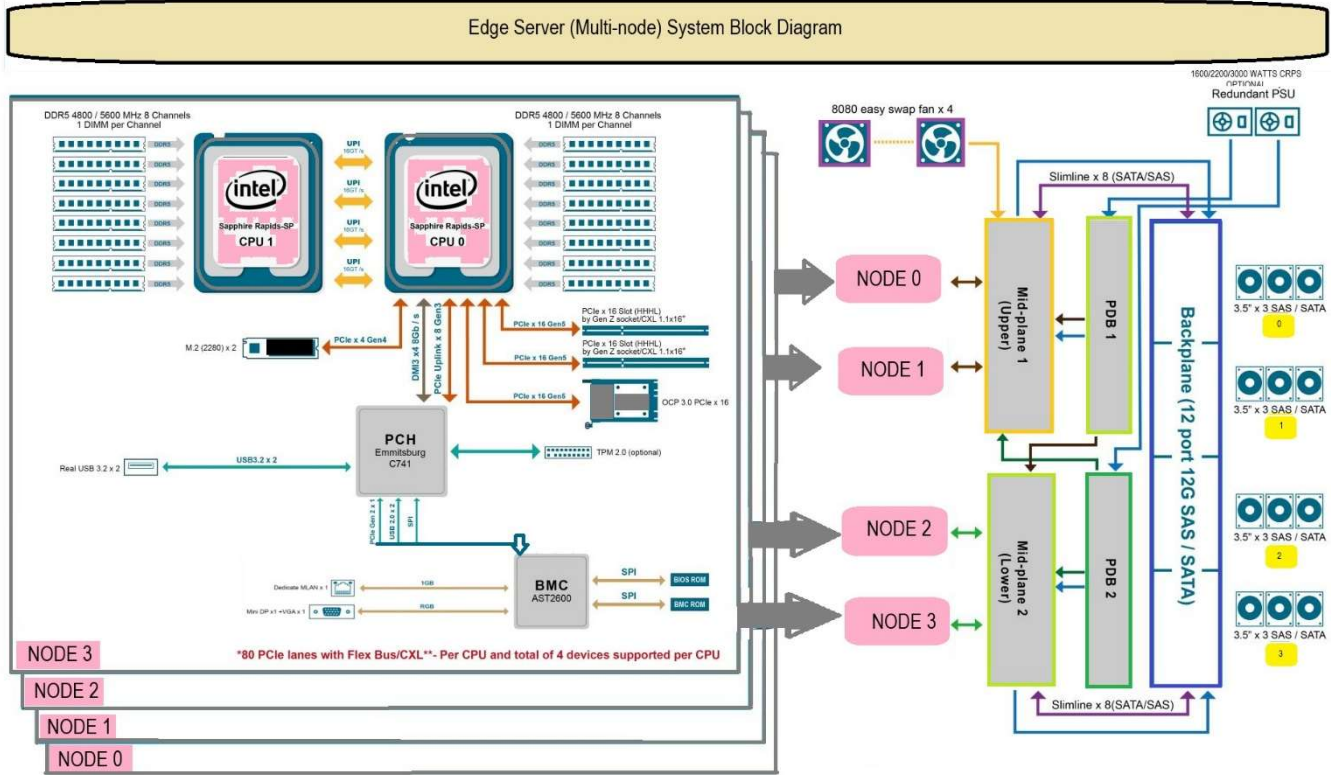
Front View





Rare View

# Block Diagram of Rx280-4i16



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V 0.1; 26th Nov 2024



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