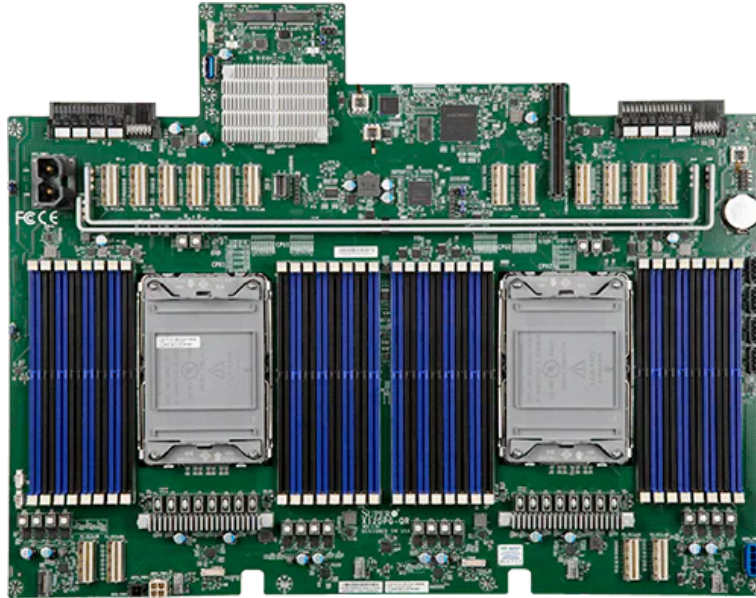


X12DPG-QR (For SuperServer Only)



GPU Serverboard

Key Features

3rd Gen Intel® Xeon® Scalable processors

Dual Socket LGA-4189 (Socket P+) supported, CPU TDP supports Up to 270W TDP, 3 UPI up to 11.2 GT/s
Intel® C621A

Up to 8TB 3DS ECC RDIMM, DDR4-3200MHz; Up to 8TB 3DS ECC LRDIMM, DDR4-3200MHz

Up to 8GB Unbuffered ECC Intel® Optane™ Persistent Memory 200 Series, DDR4-3200MHz, in 32 DIMM slots

8 PCIe 4.0 x8 SlimSAS ports supporting 4 Nvidia Redstone GPUs

8 PCIe 4.0 x8 SlimSAS ports supporting 4 AOC

M.2 Interface: 2 Hybrid PCIe 4.0 x4 / SATA3

M.2 Form Factor: 2280/22110

Flexible networking options

Optimized Servers

[SYS-220GQ-TNAR+](#)

Specifications

Product SKUs**MBD-X12DPG-QR****Physical Stats****Form Factor**

Proprietary

Dimension

17.3" x 13.7" (43.94cm x 34.8cm)

Processor**CPU**

3rd Gen Intel® Xeon® Scalable processors

Dual Socket LGA-4189 (Socket P+) supported, CPU TDP supports Up to 270W TDP, 3 UPI up to 11.2 GT/s

Core

Up to 40 cores

System Memory**Memory Capacity**

32 DIMM slots

Up to 8GB Intel® Optane™ Persistent Memory 200 Series, DDR4-3200MHz

Up to 4TB 3DS ECC LRDIMM, DDR4-3200MHz; Up to 4TB 3DS ECC RDIMM, DDR4-3200MHz

Memory Type

3200/2933/2666 MT/s ECC DDR4 LRDIMM (3DS), RDIMM (3DS)

DIMM Sizes

16GB, 32GB, 64GB, 128GB, 256GB

LRDIMM: 16GB, 32GB, 64GB, 128GB, 256GB

RDIMM: 16GB, 32GB, 64GB, 128GB, 256GB

Memory Voltage

1.2V

Error Detection

Detects double-bit errors (using ECC memory)

On-Board Devices**Chipset**

Intel® C621A

SATA

Intel® C621A controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10

IPMI

ASPEED AST2600 BMC

Network Controllers

N/A

Input / Output**USB**

1 USB 3.2 Gen2 port(s) (1 rear Through riser card)

Video Output

1 VGA port(s) Through riser card

Serial Port

1 COM Port(s) (1 rear Through riser card)

TPM

1 TPM Header

Expansion Slots**PCIe**

8 PCIe 4.0 x8 SlimSAS

M.2

M.2 Interface: 2 PCIe 3.0 x4

Form Factor: 2280/22110

Key: M-Key

System BIOS**BIOS Type**

AMI UEFI

Management**Software**[Redfish API](#), [Supermicro Server Manager \(SSM\)](#), [Supermicro Power Manager \(SPM\)](#), [Supermicro Update Manager \(SUM\)](#), [SuperDoctor® 5](#), [Super Diagnostics Offline](#), [KVM with dedicated LAN](#), [IPMI 2.0](#)**System Management Software**

IPMI (Intelligent Platform Management Interface) v1.5 / 2.0 with KVM support

Power Configurations

ACPI / ACPM Power Management

Security**Hardware**

Trusted Platform Module (TPM) 2.0

PC Health Monitoring**Voltage**

System temperature, PCH temperature, Memory temperature, CPU temperature, Chipset Voltage, 3.3V standby, 1.2V (VDIMM), 1.05 (PCH), +5V standby, +5V, +3.3V, +12V, VRM temperature, LAN temperature, CPU thermal trip support, +1.8V PCH

LED

UID/Remote UID

Power LED

BMC/IPMI Heartbeat LED

Temperature

Monitoring for CPU and chassis environment

CPU thermal trip support

FAN

4x 4-pin fan headers (up to 4 fans)

Fan speed control

6 fans with tachometer status monitoring

Other Features

UID

CPU thermal trip support for processor protection

Chassis intrusion header

Chassis intrusion detection

ACPI power management

Operating Environment**Operating Temperature Range**

10°C - 35°C (50°F - 95°F)

Non-Operating Temperature Range

-40°C - 70°C (-40°F - 158°F)

Operating Relative Humidity Range

8% - 90% (non-condensing)

Non Operating Relative Humidity Range

5% - 95% (non-condensing)

Parts List