# X12DPG-AR (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 4TB 3DS ECC RDIMM, DDR4-3200MHz; Up to 8TB 3DS ECC LRDIMM, DDR4-3200MHz

Up to 8GB Unbufferred ECC Intel® Optane™ Persistent Memory 200 Series, DDR4-3200MHz, in 16 DIMM slots

6 PCIe 4.0 x16

2 PCIe 4.0 x8

**M.2 Interface:** 2 PCle 4.0 x4

**M.2 Form Factor:** 2280/22110

Flexible networking options

1 VGA port

# **Optimized Servers**

SYS-220GP-TNR

# **Specifications**

### **Product SKUs** MBD-X12DPG-AR

# **Physical Stats**

**Form Factor** 

### Proprietary **Dimension**

9.15" x 19.8" (23.24cm x 50.29cm)

#### **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**

16 DIMM slots

Up to 6TB 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**

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 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10

#### **IPMI**

ASPEED AST2600 BMC

#### **Network Controllers**

N/A

#### Input / Output

**USB** 

2 USB 3.2 Gen2 port(s) (2 rear)

# **Video Output**

1 VGA port(s)

#### **Serial Port**

1 COM Port(s) (1 rear)

#### **TPM**

1 TPM Header

#### **Expansion Slots**

#### **PCIe**

1 PCIe 4.0 x8 AIOM,

2 PCIe 4.0 x8,

6 PCIe 4.0 x16

#### 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**

VBAT, PCH temperature, Memory temperature, Memory, CPU temperature, CPU, Chipset Voltage, Chassis intrusion header, 1.2V (VDIMM), +5V standby, +5V, +3.3V, +12V, VRM temperature, Memory Voltages, CPU thermal trip support, +1.0V PCH, 8x fans with tachometer monitoring

#### **LED**

UID/Remote UID

Power LED

**BMC/IPMI Heartbeat LED** 

#### **Temperature**

Monitoring for CPU and chassis environment

CPU thermal trip support

# **FAN**

Fan speed control

8x fans with tachometer 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**