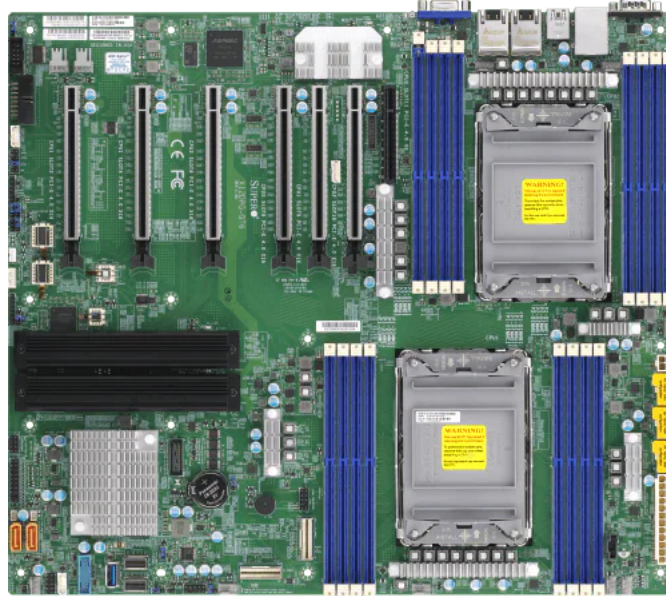


X12DPG-QT6



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

Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog

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

Up to 6TB Intel® Optane™ Persistent Memory 200 Series, in 16 DIMM slots;

Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode.

6 PCIe 4.0 x16,

1 PCIe 4.0 x8

M.2 Interface: 2 PCIe 4.0 x4, RAID 0 & 1

M.2 Form Factor: 2242/2260/2280/22110

M.2 Key: M-Key

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

Dual LAN with Intel® X550 10GBase-T Ethernet Controller

Integrated IPMI 2.0 and KVM with Dedicated LAN

5 USB 3.0 ports, 4 USB 2.0 ports

HD Audio with optical S/PDIF

Optimized Servers

[SYS-740GP-TNRT](#)

Specifications

Product SKUs**MBD-X12DPG-QT6****Physical Stats****Form Factor**

Proprietary

Dimension

15.12" x 13.2" (38.43cm x 33.53cm)

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

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

Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode.

Memory Type

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

DIMM Sizes

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

LRDIMM: 128GB, 256GB

RDIMM: 64GB, 128GB

Memory Voltage

1.2V

Error Detection

Corrects single-bit errors

Detects double-bit errors (using ECC memory)

On-Board Devices**Chipset**

Intel® C621A

SATA

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

IPMI

ASPEED AST2600 BMC

Audio

7.1 HD Audio Header

Graphics

1 ASPEED AST2600 BMC port(s)

Network Controllers

Dual LAN with Intel® X550 10GBase-T Ethernet Controller

Input / Output**SATA**

10 SATA3 (6Gbps) port(s)

USB

10 USB 3.1 Gen1 port(s) (1 via header; 1 type A; 3 rear type A; 1 rear type C; 4 rear)

2 USB 2.0 port(s) (2 via header)

Video Output

1 VGA D-Sub Connector port(s)

Serial Port

2 COM Port(s) (1 header; 1 rear)

DOM2 Super**DOM** (Disk on Module) port with build power**Expansion Slots****PCIe**

1 PCIe 4.0 x8,

6 PCIe 4.0 x16

M.2

M.2 Interface: 2 PCIe 4.0 x4, RAID 0 & 1

Form Factor: 2242/2260/2280/22110

Key: M-Key

System BIOS**BIOS Type**

AMI UEFI

BIOS Features

Plug and Play (PnP)

ACPI 1.0 / 2.0 / 3.0 / 4.0

USB Keyboard support

SMBIOS 2.7.1

UEFI 2.3.1

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](#)**Power Configurations**

ACPI Power Management

Security**Hardware**

Trusted Platform Module (TPM) 2.0

PC Health Monitoring**Voltage**

VBAT, Supports system management utility, HT, Chassis intrusion header, +5V standby, +5V, +3.3V, +12V, +1.8V, 5+1 Phase-switching voltage regulator, 10 -fan status

LED

UID/Remote UID

Suspend static indicator LED

CPU / System Overheat LED

FAN

10x 4-pin fan headers (up to 10 fans)

Status monitoring for speed control

Pulse Width Modulated (PWM) fan connectors

Other Features

RoHS

Node Manager Support

CPU thermal trip support for processor protection

Chassis intrusion detection

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)

TPM1 TPM Header

Parts List

Standard Parts (Bulk Package)

CPU carrier

Part Number SKT-1205L-P4IC-FXC
Qty 2
Description CPU carrier for 3rd Gen
Intel Xeon Scalable
Processors

I/O Shield

Part Number MCP-260-00150-0N
Qty 1
Description X12DPG-QT6 I/O SHIELD

SATA Cables

Part Number CBL-0044L • [eStore](#)
Qty 2
Description 57.5 cm SATA FLAT S-S
PBF
