



## GPU Serverboard 3 UPI 4 GPUs

### Key Features

1. 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors, , Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s
2. Intel® C621
3. Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz  
Or 2TB DCPMM, DDR4-2666MHz, in 16 DIMM slots;  
Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).
4. 6 PCI-E 3.0 x16,  
1 PCI-E 3.0 x4 (in x8 slot)  
**M.2 Interface:** PCI-E 3.0 x4  
**M.2 Form Factor:** 2280, 22110  
**M.2 Key:** M-Key
5. Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
6. Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
7. Dual LAN with Intel® X550 10GBase-T Ethernet Controller
8. Integrated IPMI 2.0 and KVM with Dedicated LAN
9. 5 USB 3.0 ports, 4 USB 2.0 ports
10. HD Audio with optical S/PDIF

### Links & Resources

[Tested Memory List](#)

[Tested HDD / SSD List](#)

[Tested M.2 List](#)

[Tested AOC List](#)

[Motherboard Manual](#)

[Update Your BIOS](#)

[BMC/IPMI Firmware](#)

[Download the Latest Drivers and Utilities](#)

[Download Drivers CD](#)

[OS Compatibility](#)

[Optimization](#)

# Specifications

## Product SKUs

- MBD-X11DPG-QT
- X11DPG-QT

## Physical Stats

- **Form Factor** Proprietary

- **Dimensions** 15.12" x 13.2" (38.4cm x 33.53cm)

## Processor/Cache

- **CPU** 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors,
  - Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s

- **Cores / Cache** Up to 28 cores

- **Note** BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)

## System Memory

- **Memory Capacity** Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots;
  - Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).

- **Memory Type** 2933/2666/2400/2133MHz ECC DDR4 RDIMM, LRDIMM

- **DIMM Sizes**
  - RDIMM: 64GB, 128GB
  - LRDIMM: 128GB, 256GB
  - 3DS LRDIMM: 128GB, 256GB

- **Memory Voltage** 1.2V

## On-Board Devices

- **Chipset** Intel® C621

- **SATA** Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10

- **IPMI** ASPEED AST2500

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

- **Audio** 7.1 HD Audio Header

- **Graphics** Aspeed AST2500 BMC

## Input / Output

- **SATA** 10 SATA3 (6Gbps) port

- **USB**
  - 4 USB 2.0 ports (2 rear + 2 headers)
  - 5 USB 3.0 ports (2 rear + 2 headers + 1 Type A)

- **Video Output** 1 VGA D-Sub Connector port

- **Serial Port / Header** 2 COM Ports (1 rear, 1 header)

- **TPM** 1 TPM Header

## Expansion Slots

- **PCI-E**
  - 6 PCI-E 3.0 x16,
  - 1 PCI-E 3.0 x4 (in x8 slot)

- **M.2**
  - M.2 Interface: PCI-E 3.0 x4
  - Form Factor: 2280, 22110
  - Key: M-Key

## System BIOS

- **BIOS Type**

- **BIOS Features**
  - Plug and Play (PhP)
  - ACPI 1.0 / 2.0 / 3.0 / 4.0
  - USB Keyboard support
  - SMBIOS 2.7.1
  - UEFI 2.3.1

## Management

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

- **Power Configurations** ACPI Power Management

## PC Health Monitoring

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

- **FAN** 10x 4-pin fan headers (up to 10 fans), Pulse Width Modulated (PWM) fan connectors, Status monitoring for speed control

- **Temperature** N/A

- **LED** CPU / System Overheat LED, Suspend static indicator LED, UID/Remote UID

- **Other Features** Chassis intrusion detection, CPU thermal trip support for processor protection, Node Manager Support, RoHS

## 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

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11DPG-QT	1	X11DPG-QT Motherboard
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## Chassis (Optimized for X11DPG-QT)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
					● SC747BTS-R2K20BP 4U Heatsink:SNK-P0070APS4

● = Most optimized Chassis for SuperServer Configuration

Blue color = Compatible

Green color = Global SKU & Compatible

Red dot & green color = Optimized + Global SKU

## Server (Optimized for X11DPG-QT)

Server Name
<u>SYS-7049GP-TRT</u>