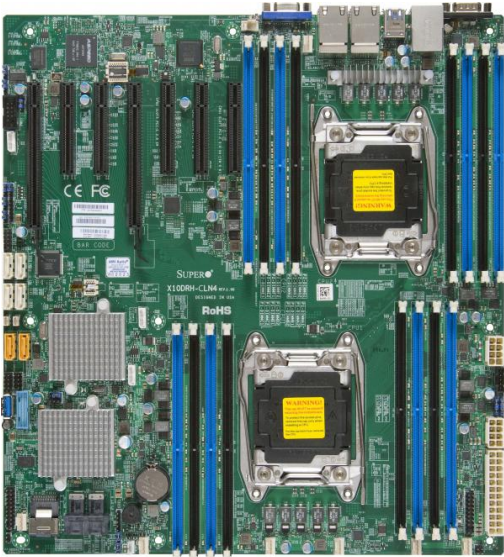


X10DRH-CLN4



**Quad 1GbE LAN
Broadcom 3008 SAS3 SW RAID**

Key Features

- 1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4†/ v3 family; UPI up to 9.6GT/s
- 2. Intel® C612 chipset
- 3. Up to 2TB† ECC 3DS LRDIMM , up to DDR4- 2400†MHz; 16 DIMM slots
- 4. 2 PCIe 3.0 x16, 4 PCIe 3.0 x8, and 1 PCIe 3.0 x4 (in x8) slot
- 5. Quad 1GbE LAN ports via Intel® i350
- 6. 10 SATA3 (6Gbps) ports w/ Intel® C612 controller
- 7. 8x SAS3 (12Gbps) ports w/ Broadcom® 3008 controller; SW RAID 0, 1, 10, JBOD support (IT Mode)
- 8. Integrated IPMI 2.0 and KVM w ith Dedicated LAN
- 9. 5 USB 3.0 and 4 USB 2.0 ports

Links & Resources

- [Tested Memory List](#)
- [Tested HDD / SSD List](#)
- [Tested AOC List](#)
- [Motherboard Manual](#)
- [Quick Reference Guide](#)
- [Update Your BIOS](#)
- [BMC/IPMI Firmware](#)
- [Download the Latest Drivers and Utilities](#)
- [Download Driver CD](#)
- [Heat Sink Compatibility](#)
- [OS Compatibility](#)
- [DP Motherboard Selection Assistant](#)
- [Optimization](#)

Specifications

Product SKUs

MBD-X10DRH-CLN4	■ X10DRH-CLN4
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Physical Stats

Form Factor	■ E-ATX
Dimensions	■ 12" x 13" (30.48cm x 33.02cm)

Processor/Cache

CPU	■ Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. ■ Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, 1 QPI up to 9.6GT/s
Cores / Cache	■ Up to 22 cores † / Up to 55MB† cache
Note	■ † BIOS version 2.0 or above is required
Note	■ ** Motherboard supports this maximum TDP. Please verify your system can thermally support.

System Memory

Memory Capacity	■ 512GB Registered ECC RDIMM, DDR4-2133MHz, in 16 DIMM slots
Memory Type	■ 2400□/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	■ RDIMM: 4GB, 8GB, 16GB, 32GB ■ LRDIMM: 32GB, 64GB ■ 3DS LRDIMM: 128GB
Memory Voltage	■ 1.2V
Error Detection	■ Corrects single-bit errors

On-Board Devices

Chipset	■ Intel® C612
SATA	■ Intel® C612 controller for 6 SATA3 (6 Gbps) ports; 4 SATA3 (6 Gbps) RAID 0,1,10, JBOD support (IT Mode) ■ Broadcom® 3008 SW controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,6,10,50,60 BBU option support, JBOD support (IT Mode)
SAS	■ Broadcom 3008 SAS3 (12Gbps) controller; SW RAID 0, 1, 10 JBOD support (IT Mode) JBOD support (IT Mode)
AHCI SATA	■ SATA3 (6Gbps); RAID 0, 1, 5, 10
SCU SATA	■ SATA3 (6Gbps); RAID 0, 1, 5, 10
IPMI	■ Support for Intelligent Platform Management Interface v.2.0 ■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support ■ ASPEED AST2400 BMC
Network Controllers	■ Quad LAN w ith Intel® i350 Gigabit Ethernet Controller Single LAN with Virtual Machine Device Queues reduce I/O overhead
Graphics	■ Aspeed AST2400 BMC

Input / Output

SATA	■ 10 SATA3 (6Gbps) port
LAN	■ 4 RJ45 Gigabit Ethernet LAN ports ■ 1 RJ45 Dedicated IPMI LAN port
USB	■ 4 USB 2.0 ports (4 headers, Type A)) ■ 5 USB 3.0 ports (2 rear + 2 headers + 1 Type A)
Video Output	■ 1 VGA port
Serial Port / Header	■ 2 COM Ports (1 rear, 1 header) 1 fast UART 16550 serial
TPM	■ 1 TPM Header
Others	■ 2.0

Expansion Slots

PCI-E	■ 2 PCI-E 3.0 x16, ■ 4 PCI-E 3.0 x8, ■ 1 PCI-E 3.0 x4 (in x8 slot)
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System BIOS

BIOS Type	■ 128Mb SPI Flash EEPROM w ith AMI BIOS
BIOS Features	■ Plug and Play (PnP) ■ PCI 2.3 ■ 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, NMI, SPM, SSM, SUM, SuperDoctor® 5, SuperDoctor® III, Watchdog
Power Configurations	■ ACPI Pow er Management ■ Pow er-on mode for AC pow er recovery

PC Health Monitoring

Voltage	■ +1.8V, +12V, +3.3V, +5V, +5V standby, 3.3V standby, 6 Phase-sw itching voltage regulator, Memory Voltages, VBAT
FAN	■ 8x 4-pin fan headers (up to 8 fans), 8x fans w ith tachometer monitoring, Pulse Width Modulated (PWM) fan connectors, Status monitoring for speed control
Temperature	■ Monitoring for CPU and chassis environment, CPU thermal trip support, Thermal Control for 8 Fan Connectors, Thermal Monitor 2 (TM2) support, PECI
LED	■ CPU / System Overheat LED, Suspend static indicator LED, UID/Remote UID
Other Features	■ Chassis intrusion detection, Chassis intrusion header, RoHS, SDDC

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-X10DRH-CLN4	1	X10DRH-CLN4 Motherboard
I/O Cable 1	CBL-0044L	2	SATA CABLE 61CM FLAT S-S PBF
I/O Shield	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket

Parts List (Retail Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X10DRH-CLN4	1	X10DRH-CLN4 Motherboard
X10DRH-CLN4	MBD-X10DRH-CLN4	1	X10DRH-CLN4 Motherboard
I/O Cable 1	CBL-0044L	2	SATA CABLE 61CM FLAT S-S PBF
I/O Cable 1	CBL-SAST-0532	2	Internal Mini-SAS HD to Mini-SAS HD 50cm,30AWG,12Gb/s,HF
I/O Shield	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket

Optional Parts List			
Name	Part Number	Qty	Description
Heat Sink (optional, not included)	-	--	CPU Heat Sink reference
TPM security module (optional, not included)	AOM-TPM-9655V AOM-TPM-9655H	--	TPM 1.2 module with Infineon 9655, RoHS/REACH, PBF; Vertical or Horiztonal depends on the server
TPM security module (optional, not included)	AOM-TPM-9655V-S AOM-TPM-9655H-S	--	TPM 1.2 module with Infineon 9655, RoHS/REACH, PBF; Vertical or Horiztonal depends on the server, provision for TXT
TPM security module (optional, not included)	AOM-TPM-9665V AOM-TPM-9665H	--	TPM 2.0 module with Infineon 9665, RoHS/REACH, PBF; Vertical or Horizontal depends on the server
TPM security module (optional, not included)	AOM-TPM-9665V-S AOM-TPM-9665H-S	--	TPM 2.0 module with Infineon 9665, RoHS/REACH, PBF; Vertical or Horizontal depends on the server, provisioned for TXT
SuperDOM	-	--	Supermicro SATA DOM Solutions

Chassis (Optimized for X10DRH-CLN4)

Embedded Compact	1U	2U	3U	Mid / Mini-Tower	4U / Tower
		● 826BE1C-R920LPB ● 826BE2C-R920LPB ● 826BAC4-R920LPB ● 216BE1C-R920LPB ● 216BE2C-R920LPB 2U Heatsink:SNK-P0048PS	● SC836BE1C-R1K03B ● SC836BE2C-R1K03B ● SC835TQ-R920B 2U Heatsink:SNK-P0048PS	● SC732i-865B ● SC732D4F-903B 2U Heatsink:SNK-P0048AP4	● SC743TQ-1200B ● SC847BE1C-R1K28LPB ● SC847BE2C-R1K28LPB ● SC417BE1C-R1K28LPB ● SC417BE2C-R1K28LPB 2U Heatsink:SNK-P0048PS

● = Most optimized Chassis for SuperServer Configuration
Blue color = Compatible
Green color = Global SKU & Compatible
Red dot & green color = Optimized + Global SKU