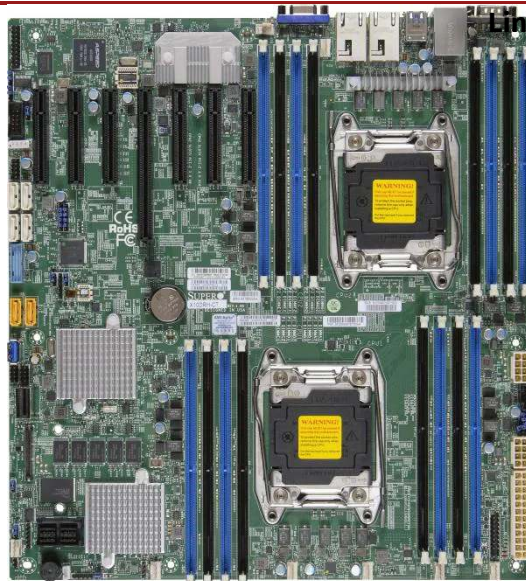


X10DRH-CT



[Links & Resources](#)

(https://www.supermicro.com/CDS_Image/uploads/imagecache/600px_wide/intel_motherboard_active/X10DRH-CT_Top_0.jpg).

16 DIMMs
12" x 13"

Key Features

Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4†/ v3 family; UPI up to 9.6GT/s
Intel® C612 chipset
Up to 2TB† ECC 3DS LRDIMM , up to
DDR4- 2400†MHz; 16 DIMM slots
1 PCI-E 3.0 x16, 6 PCI-E 3.0 x8 slots
Intel® X540 Dual port 10GBase-T
10 SATA3 (6Gbps) ports w/ Intel®
C612 controller; RAID 0, 1, 5, 10
8 SAS3 (12Gbps) ports w/ Broadcom® 3108 controller (2GB cache);
RAID 0, 1, 5, 6, 10, 50, 60
Integrated IPMI 2.0 and KVM with Dedicated LAN
5 USB 3.0 and 4 USB 2.0 ports

Specifications

Product SKUs - Discontinued SKU (EOL). Please contact sales-rep for replacement SKUs.

MBD-X10DRH-CT
X10DRH-CT

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

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

1TB Registered ECC RDIMM, DDR4-2133MHz; Up to 2TB 3DS ECC LRDIMM, in 16 DIMM slots

Memory Type

2400MHz/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit

DIMM Sizes

RDIMM: 4GB, 8GB, 16GB, 32GB, 64GB

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; RAID 0,1,5,10

SAS

Broadcom 3108 SAS3 (12Gbps) controller; 2GB cache; HW RAID 0, 1, 5, 6, 10, 50, 60

Supports up to 16 devices as default, more HDD devices support is also available as an option *

For special SKU, please contact your Supermicro Sales.

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

Expansion Slots

PCI-E

1 PCI-E 3.0 x16,

6 PCI-E 3.0 x8

System BIOS

BIOS Type

128Mb SPI Flash EEPROM with 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, SUM, SuperDoctor® 5, Watchdog

Power Configurations

ACPI Power Management

Power-on mode for AC power recovery

PC Health Monitoring

Voltage

+1.8V, +12V, +3.3V, +5V, +5V standby, 3.3V standby, 6 Phase-switching voltage regulator, Memory Voltages, Monitors for CPU Cores

FAN

8x 4-pin fan headers (up to 8 fans), 8x fans with 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)



Network Controllers

Dual LAN with 10GBase-T with Intel® X540 10GbE Controller
 Single LAN with Virtual Machine Device Queues reduce I/O overhead

Single LAN with Supports 10Base-T, 100BASE-TX, and 1000BASE-T, RJ45 output

Single LAN with 1 Realtek RTL8211E PHY (dedicated IPMI)

Graphics

Aspeed AST2400 BMC

Input / Output**SATA**

10 SATA3 (6Gbps) port

LAN

2 RJ45 10GBase-T ports
 1 RJ45 Dedicated IPMI LAN 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 port

Serial Port / Header

2 COM Ports (1 rear, 1 header)
 2 fast UART 16550 serial

TPM

1 TPM Header

Parts List

Parts List (Bulk Package)

Name	Part Number	Qty	Description
Motherboard	MBD-X10DRH-CT	1	X10DRH-CT Motherboard
Quick Reference Guide	MNL-1628-QRG		Quick Reference Guide
I/O Shield	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket
I/O Cables	CBL-0044L	2	SATA CABLE 61CM FLAT S-S PBF

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 Horizontal 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 Horizontal 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 [Details]
I/O Cables	CBL-0097L-03	--	30AWG 50CM IPASS TO 4 SATA W/50CM SB, S
SuperCap TFM module	BTR-TFM8G-LSICVM02		SuperCap TFM module


Chassis (Optimized for X10DRH-CT)

Embedded 1U 2U
Compact


3U


Mid,

 [SC826BE1C-R920LPB](/en/products/chassis/2u/826/SC826BE1C-R920LPB)
(/en/products/chassis/2u/826/SC826BE1C-R920LPB)

 [SC835TQ-R920B](/en/products/chassis/3U/835/SC835TQ-R920B)
(/en/products/chassis/3U/835/SC835TQ-R920B)


 [865](/en/products/chassis/3U/835/SC835TQ-R920B)

 [SC829HE1C4-R1K02LPB](/en/products/chassis/2U/829/SC829HE1C4-R1K02LPB)
(/en/products/chassis/2U/829/SC829HE1C4-R1K02LPB)

 [SC836BE1C-R1K03B](/en/products/chassis/3U/836/SC836BE1C-R1K03B)
(/en/products/chassis/3U/836/SC836BE1C-R1K03B)

 [903](/en/products/chassis/3U/836/SC836BE1C-R1K03B)


2U Heatsink:SNK-P0048PS

 [SC836BE2C-R1K03B](/en/products/chassis/3U/836/SC836BE2C-R1K03B)
(/en/products/chassis/3U/836/SC836BE2C-R1K03B)

[SC835TQ-R921B](/en/products/chassis/3U/835/SC835TQ-R921B)
(/en/products/chassis/3U/835/SC835TQ-R921B)

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

Server (Optimized for X10DRH-CT)

Server Name

[SYS-2028R-C1RT](/en/products/system/2U/2028/SYS-2028R-C1RT.cfm) (/en/products/system/2U/2028/SYS-2028R-C1RT.cfm)

[SYS-7048R-C1RT](/en/products/system/4U/7048/SYS-7048R-C1RT.cfm) (/en/products/system/4U/7048/SYS-7048R-C1RT.cfm)

[SSG-6028R-E1CR12T](/en/products/system/2U/6028/SSG-6028R-E1CR12T.cfm) (/en/products/system/2U/6028/SSG-6028R-E1CR12T.cfm)

[SSG-6028R-E1CR16T](/en/products/system/2U/6028/SSG-6028R-E1CR16T.cfm) (/en/products/system/2U/6028/SSG-6028R-E1CR16T.cfm)

Global SKU (/en/products/SMC_global_skus)
