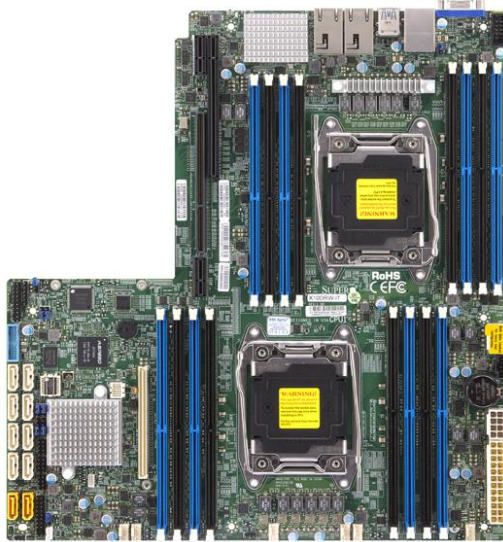




16 DIMMs
2400MHz DDR4
WIO
Dual 10GbE

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 ; 16x DIMM slots
4. Riser card support:
Left side - 1 PCI-E 3.0 x32
Right side - 1 PCI-E 3.0 x16
5. Intel® X540 Dual port 10GBase-T
6. 10 SATA3 (6Gbps); RAID 0, 1, 5, 10
7. Integrated IPMI 2.0 and KVM with Dedicated LAN
8. 6 USB 3.0 (4 rear, 2 via header)

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-x10drw -it
 - x10drw -it

Physical Stats

- Form Factor
 - Proprietary WIO
- Dimensions
 - 12.3" x 13" (31.24cm 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
 - 1TB Registered ECC RDIMM, DDR4-2400MHz; Up to 2TB 3DS ECC LRDIMM, in 4 DIMM slots
- Memory Type
 - 2400□/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 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
- 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
 - Dual LAN with Intel® X540 10GBase-T Ethernet 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
 - 6 USB 3.0 ports (4 rear + 2 headers)
- Video Output
 - 1 VGA port
- Serial Port / Header
 - 1 COM Port (1 header)
- TPM
 - 1 TPM Header

Expansion Slots

- PCI-E
 - 1x PCI-E 3.0 x16 for Add-on Module (AOM)
 - Riser card support:
 - Left side - 1 PCI-E 3.0 x32
 - Right side - 1 PCI-E 3.0 x16

System BIOS

- BIOS Type
 - 128Mb SPI Flash EEPROM with AMI BIOS
- BIOS Features
 - Plug and Play (PhP)
 - 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, SuperDoctor® 5, Watchdog
- System Mangement Software
 - IPMI (Intelligent Platform Management Interface) v1.5 / 2.0 with KVM support
 - 1.5 / 2.0
- Power Configurations
 - ACPI Pow er Management
 - Pow er-on mode for AC pow er recovery

PC Health Monitoring

- Voltage
 - +12V, +3.3V, +5V, +5V standby, 3.3V standby, 6 Phase-sw itching voltage regulator, Memory Voltages, Monitors for CPU Cores, VBAT
- FAN
 - 6x 4-pin fan headers (up to 6 fans), 6 fans with tachometer status 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 6 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-X10DRW-iT	1	X10DRW-iT Motherboard
I/O Cables	CBL-0044L	2	SATA CABLE 61CM FLAT S-S PBF

Parts List (Retail Package)			
Name	Part Number	Qty	Description
X10DRW-iT	MBD-X10DRW-iT	1	X10DRW-iT Motherboard
I/O Cables	CBL-0044L	6	SATA CABLE 61CM FLAT S-S PBF
Quick Reference Guide	MNL-1557-QRG	1	Quick Reference Guide

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 [Details]
Add-on Module	AOM-S3108M-H8		

Chassis (Optimized for x10drw-it)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
1U Heatsink:SNK-P0047PSC (Front) 1U Heatsink:SNK-P0057PS (Front) 2U Heatsink:SNK-P0048PS (Front) 2U Heatsink:SNK-P0048PSC (Front) 1U Heatsink:SNK-P0047PSC (Rear) 1U Heatsink:SNK-P0057PS (Rear) 2U Heatsink:SNK-P0048PS (Rear) 2U Heatsink:SNK-P0048PSC (Rear)	● SC116TQ-R706WB ● SC116AC2-R706WB ● SC113TQ-R700WB ● SC113TQ-600WB ● SC815TQ-600WB ● SC815TQ-R706WB 1U Heatsink:SNK-P0047PSC (Front) 1U Heatsink:SNK-P0057PS (Front) 2U Heatsink:SNK-P0048PS (Front) 2U Heatsink:SNK-P0048PSC (Front) 1U Heatsink:SNK-P0047PSC (Rear) 1U Heatsink:SNK-P0057PS (Rear) 2U Heatsink:SNK-P0048PS (Rear) 2U Heatsink:SNK-P0048PSC (Rear)	● 825TQ-R740WB ● 826BA-R920WB ● 213AC-R920WB ● 826BAC4-R920WB ● 216BA-R920WB 1U Heatsink:SNK-P0047PSC (Front) 1U Heatsink:SNK-P0057PS (Front) 2U Heatsink:SNK-P0048PS (Front) 2U Heatsink:SNK-P0048PSC (Front) 1U Heatsink:SNK-P0047PSC (Rear) 1U Heatsink:SNK-P0057PS (Rear) 2U Heatsink:SNK-P0048PS (Rear) 2U Heatsink:SNK-P0048PSC (Rear)			

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

Server (Optimized for x10drw-it)

Server Name
<u>SYS-1028R-WTRT</u>
<u>SYS-1028R-WC1RT</u>
<u>SYS-6018R-WTRT</u>
<u>SYS-6028R-WTRT</u>