

X9DRD-iF

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Key Features

1. Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and E5-2600 v2 family†
2. Intel® C602 chipset; QPI up to 8.0GT/s
3. Up to 512GB ECC DDR3, up to 1866MHz; 8x DIMM slots
4. Expansion slots: 1 (x16) PCI-E 3.0 and 4 (x8) PCI-E 3.0 slots
5. Intel® i350 Dual port GbE LAN
6. 8x SATA2 and 2x SATA3 ports
7. Integrated IPMI 2.0 and KVM w/ Dedicated LAN
8. 9x USB 2.0 ports
(4 rear, 4 via header + 1 Type A)

Links & Resources

- ▶ [Tested Memory List](#)
- ▶ [Tested HDD / SSD List](#)
- ▶ [Motherboard Manual](#)
- ▶ [Update Your BIOS](#)
- ▶ [IPMI Firmware](#)
- ▶ [Download the Latest Drivers and Utilities](#)
- ▶ [Download Driver CD](#)
- ▶ [Heat Sink Compatibility](#)
- ▶ [OS Compatibility](#)



Specifications

Product SKUs	
MBD-X9DRD-IF -O	▪ X9DRD-IF (Standard Retail Pack)
MBD-X9DRD-IF -B	▪ X9DRD-IF (Bulk Pack)
Physical Stats	
Form Factor	▪ E-ATX
Dimensions	▪ 10.3" x 13" (26.2cm x 33.0cm)
Processor/Cache	
CPU	▪ Dual Socket R (LGA 2011) ▪ Intel® Xeon® processor E5-2600 and E5-2600 v2 family [†] (up to 135W TDP ^{**})
Note	[†] BIOS version 3.0 or above is required
Note	^{**} Motherboard supports this maximum TDP. Please verify your system can thermally support.
Cache	▪ Up to 30MB
System Bus	▪ QPI up to 8 GT/s
System Memory	
Memory Capacity	▪ 8x 240-pin DDR3 DIMM slots ▪ Up to 512GB DDR3 ECC LRDIMM ▪ Up to 256GB DDR3 ECC RDIMM ▪ Up to 64GB DDR3 ECC/non-ECC UDIMM
Memory Type	▪ 1866/1600/1333/1066/800MHz* ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs ▪ Support ECC and non-ECC UDIMMs * Maximum memory speed may be capped by CPU. Please verify that the chosen CPU can support desired memory speed.
DIMM Sizes	▪ 32GB, 16GB, 8GB, 4GB, 2GB, 1GB, 64GB LRDIMM
Memory Voltage	▪ 1.5 V, 1.35 V
Error Detection	▪ Corrects single-bit errors ▪ Detects double-bit errors (using ECC memory)
On-Board Devices	
Chipset	▪ Intel® C602 chipset
AHCI SATA	▪ SATA 2.0 3Gbps w/ RAID 0, 1, 5, 10 ▪ SATA 3.0 6Gbps w/ RAID 0, 1, 5, 10
SCU SATA	▪ SATA 2.0 3Gbps w/ RAID 0, 1, 5, 10
IPMI	▪ Support for Intelligent Platform Management Interface v.2.0 ▪ IPMI 2.0 w/ virtual media over LAN and KVM-over-LAN support ▪ Nuvoton WPCM450 BMC
Network Controllers	▪ Intel® i350 Dual Port Gigabit Ethernet ▪ Virtual Machine Device Queues reduce I/O overhead ▪ Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output ▪ 1x Realtek RTL8201F PHY (dedicated IPMI)
Video	▪ Matrox G200eW
Input / Output	
AHCI SATA	▪ 2x SATA 3.0 ports (6Gbps) ▪ 4x SATA 2.0 ports (3Gbps)
SCU SATA	▪ 4x SATA 2.0 ports (3Gbps)
LAN	▪ 2 RJ45 Gigabit Ethernet LAN ports ▪ 1 RJ45 Dedicated IPMI LAN port
USB	▪ 9 USB 2.0 ports total (4 rear + 4 via header + 1 Type A)
Video	▪ 1 VGA port
Serial Port / Header	▪ 2 Fast UART 16550 ports (rear/header)
DOM	▪ 1 DOM (Disk on Module) power connector
TPM	▪ 1 TPM 1.2 20-pin Header

Chassis (Optimized for X9DRD-iF)	
1U Chassis	▪ CSE-813LT-R500CB ▪ CSE-813T-441CB
2U Chassis	▪ CSE-823TQ-653LPB ▪ CSE-825TQ-600LPB ▪ CSE-825TQ-R740LPB
Important Chassis Notes	▪ To support the new generation Intel® Xeon® processor-based motherboards, Revision M chassis is recommended. Please talk to your sales representative for details. ▪ Please use optional I/O shield MCP-260-00041-0N in Supermicro 1U chassis
SuperServer(s) with X9DRD-iF	
Model(s)	▪ SYS-6017R-TDAF ▪ SYS-6017R-TDF ▪ SYS-6027R-TDARE
Expansion Slots	
	▪ 1 (x16) PCIe 3.0 slot ▪ 4 (x8) PCIe 3.0 slots
PCI-Express	(Both CPUs need to be installed for full access to PCIe slots and onboard controllers. See manual block diagram for details.)
System BIOS	
BIOS Type	▪ 128Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	▪ Plug and Play (PnP) ▪ APM 1.2 ▪ DMI 2.3 ▪ PCI 2.3 ▪ ACPI 1.0 / 2.0 / 3.0 / 4.0 ▪ BIOS rescue hot keys ▪ USB Keyboard support ▪ SMBIOS 2.7.1 ▪ UEFI 2.3.1
Management	
Software	▪ SuperDoctor® III ▪ Watch Dog ▪ NMI ▪ IPMI 1.5 / 2.0
Power Configurations	▪ ACPI / APM Power Management ▪ CPU Fan auto-off in sleep mode ▪ Power-on mode for AC power recovery
PC Health Monitoring	
Voltage	▪ Monitors for CPU Cores, +1.1V, +1.5V, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, 4 Memory Voltages. ▪ 5+1 Phase-switching voltage regulator
FAN	▪ 8x 4-pin fan headers ▪ 8x fans with tachometer monitoring ▪ Status monitor for speed control ▪ Status monitor for on/off control ▪ Low noise fan speed control ▪ Pulse Width Modulated (PWM) fan connectors
Temperature	▪ Monitoring for CPU and chassis environment ▪ CPU thermal trip support ▪ T²C temperature sensing logic ▪ 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 ▪ SDDC 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)

Note: For optimized or compatible chassis, additional parts may be required, please check with Supermicro sales rep.

Parts List

Parts List (retail)			
	Part Number	Qty	Description
X9DRD-iF	MBD-X9DRD-iF	1	X9DRD-iF Motherboard
I/O Cables	CBL-0044L	4	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.

Optional Parts List			
	Part Number	Qty	Description
Heat Sink (optional, not included)	-	-	CPU Heat Sink reference
TPM security module (optional, not included)	AOM-TPM-9665V AOM-TPM-9665H	-	TPM module with Infineon 9665, RoHS/REACH,PBF; Vertical or Horizontal depends on the server
SuperDOM	-	-	Supermicro SATA DOM Solutions [Details]