

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 with RAID 0, 1, 5, 10 - SATA 3.0 6Gbps with RAID 0, 1, 5, 10
SCU SATA	SATA 2.0 3Gbps with 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 - 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 X9DR-I3F)	
1U Chassis	▪ CSE-8131T-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-TDAF

- Expansion Slots
 - 1 (x16) PCI-E 3.0 slot
 - 4 (x8) PCI-E 3.0 slots

PCI-Express (Both CPUs need to be installed for full access to PCI-E 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	▪ <u>SuperDoctor® III</u> ▪ 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-sw itching 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 μC 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-9655V AOM-TPM-9655H	-	TPM module with Infineon 9655, RoHS/REACH,PBF; Vertical or Horizontal depends on the server
SuperDOM	-	-	Supermicro SATA DOM Solutions [Details]