X9DRH-7TF

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 1TB ECC DDR3, up to 1866MHz; 16x DIMM slots
4. Expansion slots: 1 PCI-E 3.0 x16 and 6 PCI-E 3.0 x8
5. Intel® X540 Dual port 10GBase-T
6. 8x SATA2 and 2x SATA3 ports
7. 8x SAS2 ports from LSI 2208
8. Integrated IPMI 2.0 and KVM with Dedicated LAN
9. 7x USB 2.0 ports (4 rear, 2 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-X9DRH-7TF-O	X9DRH-7TF (Standard Retail Pack)
MBD-X9DRH-7TF-B	X9DRH-7TF (Bulk Pack)

Physical Stats	
Form Factor	Extended ATX
Dimensions	12.1" x 13" (30.7cm x 33.2cm)

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	16x 240-pin DDR3 DIMM slots Up to 1TB DDR3 ECC LRDIMM Up to 512GB DDR3 ECC RDIMM Up to 128GB 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 3Gb/s with RAID 0, 1, 5, 10 SATA 3.0 6Gb/s with RAID 0, 1
SCU SATA	SATA 2.0 3Gb/s with RAID 0, 1, 10
SAS	SAS2 from LSI 2208 (1GB cache) HW RAID 0, 1, 5, 6, 10, 50, 60 support 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.
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® X540 Dual Port 10GBase-T Virtual Machine Device Queues reduce I/O overhead Supports 10GBase-T, 100BASE-TX, and 1000BASE-T, RJ45 output 1x Realtek RTL8201N PHY (dedicated IPMI)
Video	Matrox G200eW

Input / Output	
AHCI SATA	2 SATA 3.0 ports (6Gb/s) 4 SATA 2.0 ports (3Gb/s)
SCU SATA	4 SATA 2.0 ports (3Gb/s)
SAS	8 SAS2 ports (6Gb/s)
LAN	2 RJ45 10GBase-T ports 1 RJ45 Dedicated IPMI LAN port
USB	7 USB 2.0 ports total (4 rear + 2 via header + 1 Type A)
Video	1 VGA port
Serial Port / Header	2 Fast UART 16550 serial COM port (1 rear & 1 header)
DOM	1 DOM (Disk on Module) power connector
TPM	1 TPM 1.2 20-pin Header

Chassis (Optimized for X9DRH-7TF)	
2U Chassis	CSE-825TQ-R740LPB CSE-826BA-R1K28LPB CSE-826BA-R920LPB CSE-826BE16-R1K28LPB CSE-826BE16-R920LPB CSE-826BE26-R1K28LPB CSE-826BE26-R920LPB
3U Chassis	CSE-835TQ-R920B CSE-836BA-R1K28B CSE-836BE16-R1K28B CSE-836BE26-R1K28B
Tower / 4U Rackmount	CSE-743TQ-1200B CSE-743TQ-865B CSE-743TQ-903B CSE-745TQ-R1200B CSE-745TQ-R800B CSE-745TQ-R920B CSE-846BA-R1K28B CSE-846BE16-R1K28B CSE-846BE26-R1K28B CSE-847A-R1400B CSE-847A-R1K28LPB CSE-847E16-R1400B CSE-847E16-R1K28LPB CSE-847E26-R1400B CSE-847E26-R1K28LPB
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.

SuperServer(s) with X9DRH-7TF	
Model(s)	SSG-2027R-AR24 SSG-6027R-E1R12T SYS-6027R-72RFT SYS-6037R-72RFT SYS-7047R-72RFT

Expansion Slots	
PCI-Express	1x PCI-E 3.0 x16 6x PCI-E 3.0 x8 (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 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	SuperDoctor® III Watch Dog NMI IPMI 1.5 / 2.0
Power Configurations	ACPI / APM Power Management 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, Memory Voltages. 5+1 Phase-switching voltage regulator
FAN	8x 4-pin fan headers (up to 8 fans) 8x fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors
Temperature	Monitoring for CPU and chassis environment CPU thermal trip support Thermal Control for 8x Fan Connectors Thermal Monitor 2 (TM2) support PECI
LED	CPU / System Overheat LED
Other Features	Chassis intrusion detection Chassis intrusion header RoHS, Halogen Free Dual Cooling Zones

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
X9DRH-7TF	MBD-X9DRH-7TF	1	X9DRH-7TF Motherboard
I/O Cables	CBL-0044L	2	SATA CABLE 61CM FLAT S-S PBF
I/O Cables	CBL-0097L-03	2	30AWG 50CM Ipass to 4 SATA, W/50cm SB, S
Quick Reference Guide	MNL-1306-QRG	1	X9DRH-7TF Quick Reference Guide

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]

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