SUPERMICRO®

X10DRi/X10DRi-T
QUICK REFERENCE GUIDE Rev. 1.0a

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FOR YOUR SYSTEM TO WORK PROPERLY, PLEASE DOWNLOAD APPROPRIATE DRIVERS/IMAGES/USER'S MANUAL FROM THE LINKS BELOW:
- Manuals: http://www.supermicro.com/support/manuals/
- Drivers & Utilities: ftp://ftp.supermicro.com/
- Safety: http://www.supermicro.com/about/policies/safety_information.cfm

PACKAGE CONTENTS
- One (1) Supermicro Motherboard
- Six (6) SATA Cables (CBL-0044L)
- One (1) I/O Shield (MCP-260-00042-0N)
- One (1) Quick Reference Guide (MNL-1491-QRG)

Motherboard Layout and Features

= mounting hole

CPU Installation

Socket Keys
CPU Keys

Heatsink Installation

Screw #4
Screw #2
Screw #1
Screw #3
Mounting Holes

Front Panel Control (JF1)

	20	19	
Ground	○	○	NMI
X	○	○	X
FP PWRLED	○	○	3.3 V
HDD LED	○	○	UID Switch
NIC1 Link LED	○	○	NIC1 Activity LED
NIC2 Link LED	○	○	NIC2 Activity LED
OH/Fan Fail/ PWR Fail LED)	○	○	UID LED
Power Fail LED	○	○	3.3V
Ground	○	○	Reset / Reset Button
Ground	○	○	PWR / Power Button
	2	1	

Note: Graphics shown in this quick reference guide are for illustration only. Your components may or may not look exactly the same as the drawings shown in this guide.

Jumpers and Connectors

Jumpers

Jumper	Description	Default Setting
JBT1	Clear CMOS	See Chapter 3
JI²C1/JI²C2	SMB to PCI-E Slots	Pins 2-3 (Disabled)
JPB1	BMC Enable	Pins 1-2 (Enabled)
JPG1	VGA Enable	Pins 1-2 (Enabled)
JPL1	GLAN1/GLAN2 Enable (X10DRi) (10G) TLAN1/TLAN2 Enable (X10DRi-T)	Pins 1-2 (Enabled)
JPME2	Manufacture (ME) Mode Select	Pins 1-2 (Normal)

Connectors

Connectors	Description
Battery	Onboard CMOS Battery (See Chpt. 3 for Used Battery Disposal)
COM1/COM2	Backplane COM Port1/Front Accessible COM2 Header
Fan1-6, FanA-B	CPU/System Fan Headers
J24	24-pin ATX Main Power Connector (See Warning on Pg. 1-6.)
JD1	Speaker/Power LED
JF1	Front Panel Control Header
JIPMB1	4-pin External BMC I²C Header (for an IPMI Card)
JL1	Chassis Intrusion
JOH1	Overheat LED Indicator
JPI²C1	Power Supply SMBbus I²C Header
JPWR1/2	12V 8-Pin Power Connectors (See Warning on Pg. 1-6.)
JSD1/JSD2	SATA DOM (Device on Module) Power Connectors
JSTBY1	Standby Power Connector
JTPM1	TPM (Trusted Platform Module)/Port 80 Header
JUIDB1	UID (Unit Identification) Button
LAN1/LAN2	G-bit Ethernet (GLAN) Ports 1/2 (X10DRi) 10G-bit Ethernet (TLAN) Ports 1/2 (X10DRi-T)
(IPMI) LAN	IPMI_Dedicated LAN support by the Aspeed controller
(I-)SATA 0-5	SATA 3.0 Connectors supported by Intel PCH (I-SATA 0-5), (I-SATA4/I-SATA5: can be used as Supermicro SuperDOM (Disk-on-Module) devices with built-in power connectors)
(S-)SATA 0-3	SATA 3.0 Connectors supported by Intel PCH (S-SATA 0-3)
(CPU1) Slot1	PCI-Express 3.0 x8 Slot from CPU1
(CPU1) Slot2	PCI-Express 3.0 x16 Slot from CPU1
(CPU1) Slot3	PCI-Express 3.0 x8 Slot from CPU1
(CPU2) Slot4	PCI-Express 3.0 x16 Slot from CPU2
(CPU2)Slot5	PCI-Express 3.0 x8 Slot from CPU2
(CPU1)Slot6	PCI-Express 3.0 x16 Slot from CPU2
(T-)SGPIO1/2/3	Seria_Link General Purpose I/O Headers 1/2/3 (for SATA ports), (T-SGPIO1 for I-SATA0-3, T-SGPIO2 for I-SATA4/5, T-SGPIO3 for S-SATA0-3)
SP1	Internal Speaker/Buzzer
(BP) USB 0/1	Backpanel USB 2.0 Ports 0/1
(BP) USB 6/7	Backpanel USB 3.0 Ports 6/7
(FP) USB 2/3, 4/5	Front Accessible USB 2.0 Connection Headers 2/3 (J25), 4/5 (J27)
(FP) USB 10	Front Panel Accessible Type A 3.0 Connector USB10 (J26)
(FP) USB 8/9	Front Panel Accessible Vertical USB 3.0 Connector for USB 8/9 (J-USB3-1AA)
VGA	Backpanel VGA Port

LED Indicators

LED	Description	State	Status
LE1	Rear UID LED	Blue: On	Unit Identified
LE2	Onboard PWR LED	On	System Power On
LEDM1	BMC Heartbeat LED	Green: Blinking	BMC Normal

Note: Refer to Chapter 1 of the user manual for detailed information on jumpers, connectors, and LED indicators.

CPU Support

Dual Intel® E5-2600v3/v4 Series Processors (Socket R3-LGA 2011); each processor supports dual full-width Intel QuickPath Interconnect (QPI) links (of up to 9.6 GT/sone direction per QPI)

Memory Support

The X10DRi/X10DRi-T Motherboard supports up to 2048 GB of Load Reduced (LRDIMM) or 512 GB of Registered (RDIMM) DDR4 (288-pin) ECC 2400 MHz (max.) modules in 16 slots. Memory speed support depends upon the CPUs installed in the motherboard. For the latest memory updates, please refer to our website at http://www.supermicro.com/products/motherboard.

Populating RDIMM/LRDIMM DDR4 Memory Modules for the E5-2600v3-based Motherboard

Type	Ranks Per DIMM and Data Width	DIMM Capacity (GB)		Speed (MT/s); Voltage (V); Slot Per Channel (SPC) and DIMM Per Channel (DPC)		
				1 Slot Per Channel	2 Slots Per Channel	
				1DPC	1DPC	2DPC
		4Gb	8Gb	1.2V	1.2V	1.2V
RDIMM	SRx4	8GB	16GB	2133	2133	1866
RDIMM	SRx8	4GB	8GB	2133	2133	1866
RDIMM	DRx8	8GB	16GB	2133	2133	1866
RDIMM	DRx4	16GB	32GB	2133	2133	1866
LRDIMM	QRx4	32GB	64GB	2133	2133	2133
LRDIMM 3DS	8Rx4	64GB	128GB	2133	2133	2133

Populating RDIMM/LRDIMM DDR4 Memory Modules for the E5-2600v4-based Motherboard

Type	Ranks Per DIMM and Data Width	DIMM Capacity (GB)		Speed (MT/s); Voltage (V); Slot Per Channel (SPC) and DIMM Per Channel (DPC)		
				1 Slot Per Channel	2 Slots Per Channel	
				1DPC	1DPC	2DPC
		4Gb	8Gb	1.2V	1.2V	1.2V
RDIMM	SRx4	8GB	16GB	2400	2400	2133
RDIMM	SRx8	4GB	8GB	2400	2400	2133
RDIMM	DRx8	8GB	16GB	2400	2400	2133
RDIMM	DRx4	16GB	32GB	2400	2400	2133
LRDIMM	QRx4	32GB	64GB	2400	2400	2400
LRDIMM 3DS	8Rx4	64GB	128GB	2400	2400	2400

DIMM Memory Installation

Notches
Release Tabs

Back Panel I/O Connectors

Backplane I/O Panel	
1. COM Port 1	6. Back Panel USB 3.0 Port 7
2. Back Panel USB 2.0 Port 0	7. Gigabit LAN 1 (X10DRi), (10G) TLAN 1 (X10DRi-T)
3. Back Panel USB 2.0 Port 1	8. Gigabit LAN 2 (109DRi), (10G) TLAN 2 (X10DRi-T)
4. IPMI_Dedicated LAN	9. Back Panel VGA
5. Back Panel USB 3.0 Port 6	

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