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Motherboard Layout and Features

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JPS1 O MUBT1

I SI 3008 SAS CTRL

CPU Installation

Socket Keys

CONTACT INFORMATION

LAN CTRL

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SUPER 10DRH-CLN4/iLN4

- 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: http://www.supermicro.com/wftp

JPWR1/JPWR2

• Safety: http://www.supermicro.com/about/policies/safety_information.cfm

PACKAGE CONTENTS

- One (1) Supermicro Motherboard
- Six (6) SATA Cables for -iLN4 only
- Two (2) SATA Cables for -CLN4 only
- Two (2) SAS Cables for -CLN4 only One (1) I/O Shield



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/s one direction per QPI)

Memory Support

The X10DRH-CLN4/iLN4 motherboard supports up to 2048 GB of Load Reduced (LRDIMM) or 512 GB of Registered (RDIMM) DDR4 (288-pin) ECC of up to 2400 MHz modules in 16 slots. Memory speed support depends on 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 E5-2600v3based Motherboard

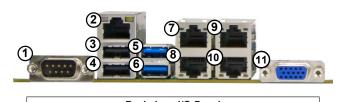
	Ranks Per	DIMM Capacity (GB)		Speed (MT/s); Voltage (V); Siot Per Channel (SPC) and DIMM Per Channel (DPC)		
Туре	DIMM and Data Width			1 Slot Per Channel	2 Slots Pe	r Channel
				1DPC	1DPC	2DPC
		4Gb 8Gb		1.2V	1.2V	1.2V
RDIMM	SRx4	8GB	16GB	2133	2133	1866
RDIMM	SRx8	4GB	8GB	2133	2133	1866
RDIMM	DRx8	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 E5-2600v4based Motherboard

	Ranks Per DIMM and Data Width	DIMM Capacity (GB)		Speed (MT/s); Voltage (V); Slot Per Channel (SPC) and DIMM Per Channel (DPC)		
Туре				1 Slot Per Channel	2 Slots Pe	r 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	8R×4	64GB	128GB	2400	2400	2400

DIMM Memory Installation Notches Release Tabs

Back Panel I/O Connectors



Backplane I/O Panel			
1. COM1	7. Gigabit LAN3		
2. IPMI LAN	8. Gigabit LAN1		
3. Backpanel USB 2.0 Port 1	9. Gigabit LAN4		
4. Backpanel USB 2.0 Port 0	10. Gigabit LAN2		
5. Backpanel USB 3.0 Port 5	11. Backpanel VGA		
6. Backpanel USB 3.0 Port 4			

Jumpers and Connectors

	Julipers	
Jumper	Description	Default Setting
JBT1	Clear CMOS/Reset BIOS Configuration	See Chapter 2
JPB1	BMC Enable	Pins 1-2 (Enabled)
JPG1	VGA Enable	Pins 1-2 (Enabled)
JPL1	GLAN1/3/GLAN2/4 Enable	Pins 1-2 (Enabled)
JPME2	Manufacture (ME) Mode Select	Pins 1-2 (Normal)
JPS1	SAS Enable (X10DRH-CLN4 only)	Pins 1-2 (Enabled)
JWD1	Watch Dog Timer Enable	Pins 1-2 (Reset)
	Connectors	

Description
Onboard CMOS battery (See Chpt. 3 for Used Battery Disposal)
Backplane COM Port1/Front accessible COM2 header
CPU/system fan headers (Fan 1-Fan 6, Fan A, Fan B)
24-pin ATX main power connector (See Warning on Pg. 1-6.)
Speaker/Power LED header
Front panel control header
Onboard LAN3 and LAN4 LED indicators (Pin 1-3: LAN3 activity/link LED, Pin 2-4: LAN4 activity/link LED)
4-pin external BMC I ² C header (for an IPMI card)
Chassis intrusion header
System management bus (SMBbus) (I ² C) for NVME
Power supply SMBbus I ² C header

12V 8-pin power connectors (See Warning on Pg. 1-6.)

- 1	J3D 1/J3D2	SATA DOW (Device on woodie) power connectors 1/2
	JSTBY1	Standby power connector
	JTPM1	TPM (Trusted Platform Module)/Port 80 header
	IPMI_LAN	IPMI_dedicated LAN support by the ASpeed controller
	LAN1/3 & LAN2/4	G-bit Ethernet (GLAN) ports 1/3 & 2/4
	I-SGPIO 1/2	Seria_Link General Purpose I/O headers 1/2 for SATA ports (I-SGPIO 1 for I-SATA0-3, I-SGPIO 2 for I-SATA4/5)
	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) with built-in power connectors)
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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) with built-in power connectors)
S-SATA 0-3	SATA vertical connector w/4 SATA 3.0 connections (S-SATA 0-3)
SAS(0-3,4-7 (-for -CLN4 only)	SAS 3.0 connections (0-3,4-7) supported by the LSI 3008 (For X10DRH-CLN4 only)
(CPU1) Slot1	PCI-Express 3.0 x16 slot from CPU1
(CPU2) Slot2	PCI-Express 3.0 x8 slot from CPU2
(CPU2) Slot3	PCI-Express 3.0 x8 slot from CPU2

	(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 x8 slot from CPU1
	(CPU1) Slot7	PCI-Express 3.0 x4 in x8 slot from CPU1
	SP1	Internal speaker/buzzer
	UID (JUIDB1)	UID (Unit Identification) switch
	(BP) USB 0/1 (2.0)	Backpanel USB 2.0 ports 0/1
	(FP) USB 2/3 (2.0)	Front accessible USB 2.0 connections (USB 2/3) header
	(BP) USB 4/5 (3.0)	Backpanel USB 3.0 ports 4/5
- 1	(ED) LISP 7/8 (3.0)	Front accessible LISB 3.0 connections (LISB 7/8) header

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(BP) USB 0/1 (2.0)	Backpanel USB 2.0 ports 0/1		
(FP) USB 2/3 (2.0)	Front accessible USB 2.0 connections	(USB 2/3) header	
(BP) USB 4/5 (3.0)	Backpanel USB 3.0 ports 4/5		
(FP) USB 7/8 (3.0)	Front accessible USB 3.0 connections	(USB 7/8) header	
(FP) USB 6 (3.0)	Front accessible Type A 3.0 connector	(USB 6)	
VGA	Backpanel VGA port		
	LED Indicator	S	
LED	Description	State	Sta
154	Deer LUD LED	Diver On	Llmit

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

Mounting Holes CPU Pin1 **CPU Keys**

Motherboard

Screw#1

Front Panel Control (JF1)

0

NIC1/3 Activity LED O NIC1/3 Link LED

0

UID Switch O

NIC2/4 Activity LED 0 0

= mounting hole

OH/Fan Fail/ PWR Fail LED)

NIC2/4 Link LED

HDD LED FP PWRLED

Heatsink Installation

Screw#4