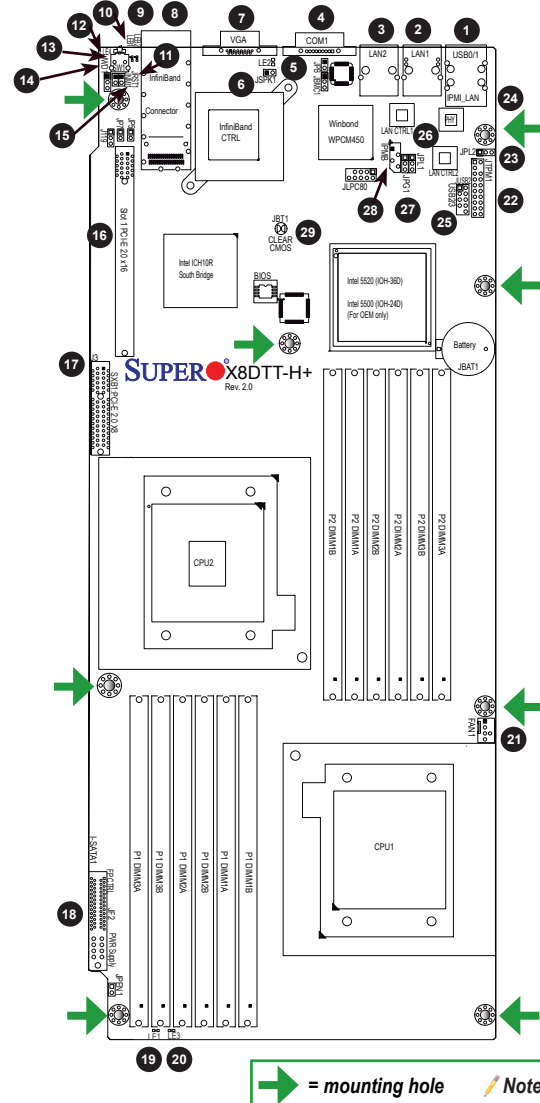


Motherboard Layout and Features



Jumpers, Connectors and LED Indicators

Jumpers			
Jumper	Item #	Description	Default
JBT1	29	CMOS Clear	Short: Clear CMOS Open: Normal Operation (Default)
JPG1	27	VGA Enabled	Pins 1-2 (Enabled)
JPL1/JPL2	26, 23	LAN1/2 Enable	Pins 1-2 (Enabled)
JWD1	14	Watch Dog	Pins 1-2 (Reset)

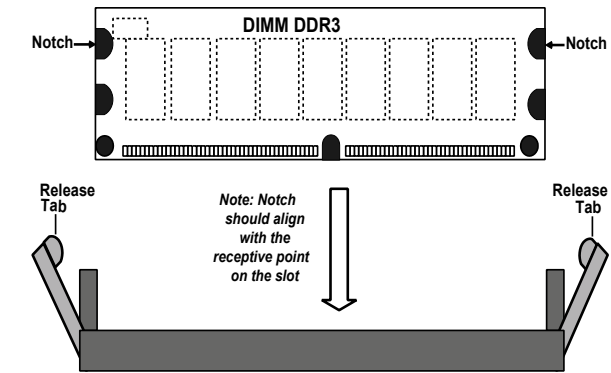
Connectors		
Connectors	Item#	Description
COM1	4	COM1 Serial Port
FAN 1	21	Cooling Fan Header
InfiniBand	8	InfiniBand Connector (X8DTT-HIBXF+/-HIBQF+)
IPMB	28	IPMB Header (X8DTT-HF+/-HEF+/-HIBXF+/-HIBQF+)
J3	17	(SXB1) PCI-E 2.0 x8 Slot for use with an SMC Proprietary Daughter (Add-On) Card (Available on the X8DTT-HEF+/-HIBXF+/-HIBQF+ only)
JF2	18	SMC Proprietary Slot for Power, FP Control & I-SATA Connections
JNMI1	15	NMI (Non-Maskable Interrupt) Header
JRST1	11	Alarm Reset Header
JSPK1	6	Internal Speaker/Buzzer Header
JTPM1	22	TPM/Port 80 Header
LAN1/2	3, 2	Gigabit Ethernet (RJ45) Ports
(IPMI Dedicated) LAN	24	LAN (RJ45) Port for IPMI 2.0 (X8DTT-HF+/-HEF+/-HIBXF+/-HIBQF+)
Slot1	16	PCI-E 2.0 x16 slot
SW1	13	Unit Identifier Switch
USB 0/1	1	Universal Serial Bus (USB) Ports 0/1
USB 2/3 (JUSB2)	25	Front Accessible USB connections
VGA	7	Video Port

Memory Support

The X8DTT-H+ Series motherboard supports up to 192 GB of Registered ECC or 48 GB of Unbuffered ECC/Non-ECC DDR3 1333 MHz/1066 MHz/800 MHz in 12 DIMMs.

DIMM Memory Installation

Insert the desired number of DIMMs into the memory slots, starting with P1-DIMM 1A.

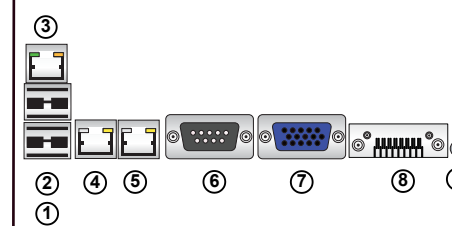


Memory Population for Optimal Performance -For a motherboard with One CPU (CPU1) installed						
O	Branch 0	Branch 1	Branch 2	Branch 3	Branch 4	Branch 5
3 DIMMs	P1 DIMM1A	P1 DIMM2A	P1 DIMM3A			
6 DIMMs	P1 DIMM1A	P1 DIMM1B	P1 DIMM2A	P1 DIMM2B	P1 DIMM3A	P1 DIMM3B

Memory Population for Optimal Performance -For a motherboard with One CPU (CPU2) installed						
O	Branch 0	Branch 1	Branch 2	Branch 3	Branch 4	Branch 5
3 DIMMs	P2 DIMM1A	P2 DIMM2A	P2 DIMM3A			
6 DIMMs	P2 DIMM1A	P2 DIMM1B	P2 DIMM2A	P2 DIMM2B	P2 DIMM3A	P2 DIMM3B

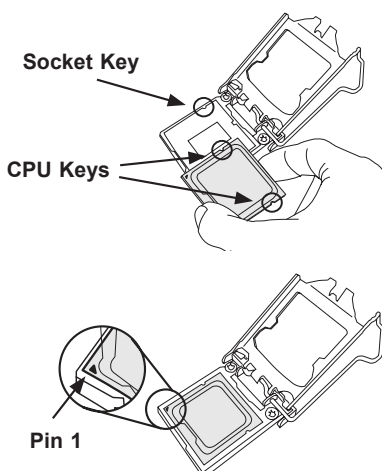
Memory Population for Optimal Performance -For a motherboard with Two CPUs installed								
O	CPU1				CPU2			
	Branch 0	Branch 1	Branch 3	Branch 0	Branch 1	Branch 3	Branch 4	Branch 5
6 DIMMs	1A	2A	3A	1A	2A	3A		
12 DIMMs	1A	1B	2A	2B	3A	3B	1A	1B

Back Panel I/O Connectors

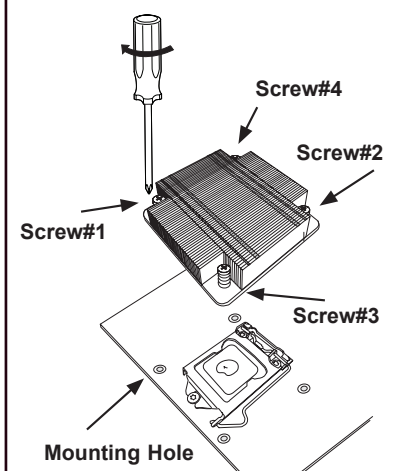


1. USB 0
2. USB 1
3. IPMI_Dedicated LAN (X8DTT-HF+/-HEF+/-HIBXF+/-HIBQF+ models)
4. LAN 1
5. LAN 2
6. COM Port 1
7. VGA (Blue)
8. InfiniBand (X8DTT-HIBXF+/-HIBQF+ models)
9. UID Switch

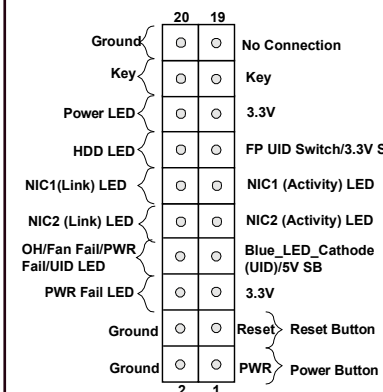
CPU Installation



Heatsink Installation



Front Panel Control (JF1)



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

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

Note: Refer to Chapter 2 of the User Manual for detailed information on memory support and CPU/motherboard installation instructions.