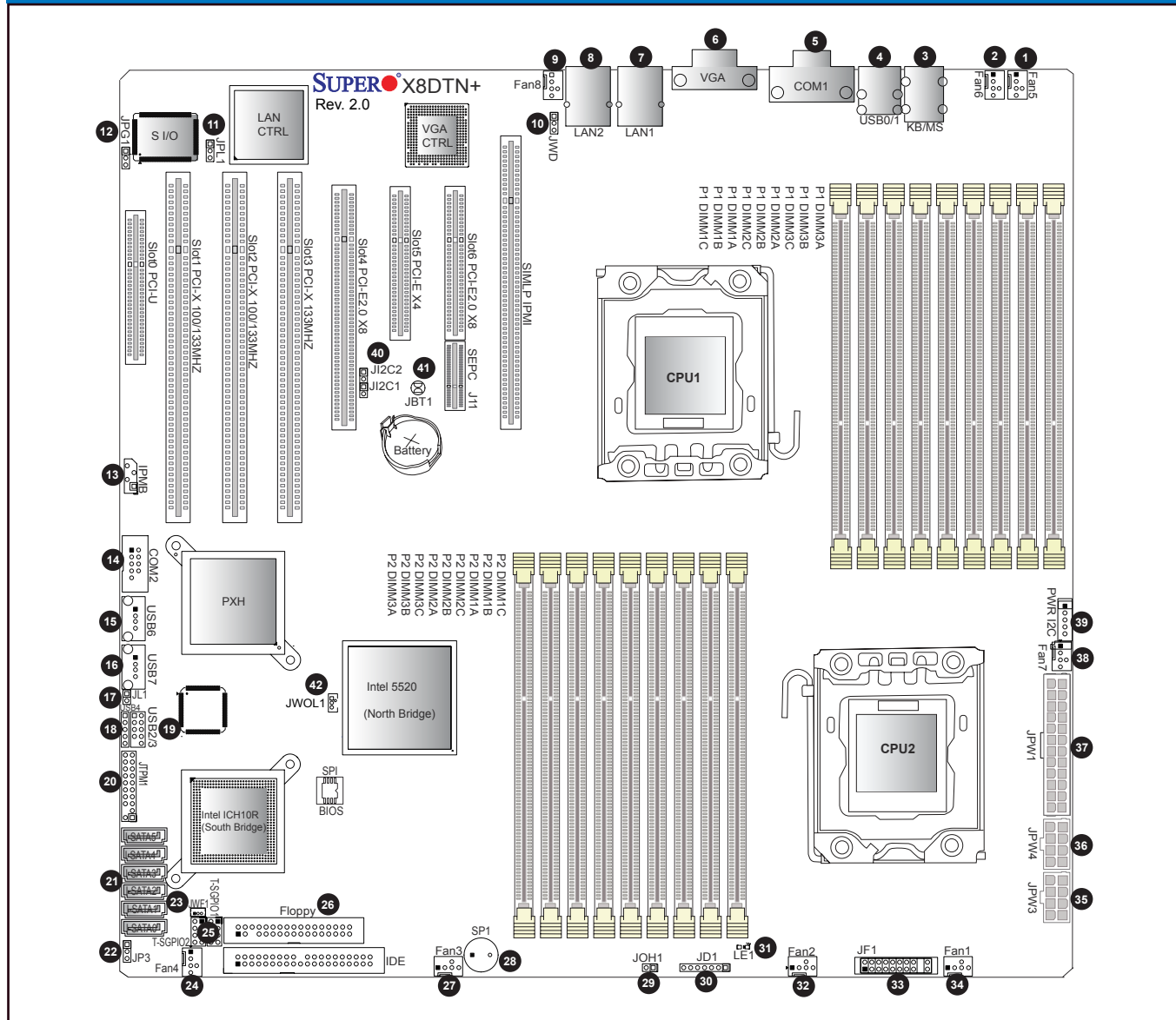


**Motherboard Layout and Features**



**Jumpers, Connectors, and LED Indicators**

**Jumpers**

Jumper	Item #	Description	Default
JBT1	41	CMOS Clear	See Chpt. 2 in User Manual
J <sup>2</sup> C1, J <sup>2</sup> C2	40	SMB to PCI-Exp./ SMB to PCI-X Slots	Open (Disabled)
JP3	22	IDE Master/Slave Select	1-2 (Master)
JPG1	12	VGA Enable	1-2 (Enable)
JPL1	11	LAN1/2 Enable	Pins 1-2 (Enabled)
JWD	10	Watch Dog Enable	Pins 1-2 (Reset)

**Connectors**

Connectors	Item#	Description
COM1, COM2	5, 14	COM Port 1, COM2 Header
FAN 1-4	34, 32, 27, 24	System/CPU Fan Headers
Fan 5-8	1, 2, 38, 9	System/CPU Fan Headers (Fans 7 and 8: CPU Fans)
Floppy	26	Floppy Disk Drive Connector
IPMB (J14)	13	IPMB I <sup>2</sup> C Header (for an IPMI card)
I-SATA 0-5	21	(Intel South Bridge) SATA Ports
JD1	30	PWR LED/Speaker Header (Pins1-3: PWR LED, 4-7: SPKR)
JF1	32	Front Panel Connector
JL1	17	Chassis Intrusion Header
JOH1	29	Overheat LED Header
JPW1	37	24-pin ATX Main Power Connector (Required)
JPW3, JPW4	35, 36	8-pin 12-V Power Connectors
JTPM1	20	TPM (Trusted Platform Module) Header
JWF1	23	Compact Flash Power Connector
JWOL1	42	Wake-On-LAN Header
KB/MS	3	PS/2 Keyboard and Mouse
LAN1, LAN2	7, 8	Gigabit Ethernet (RJ45) Ports
PWR I <sup>2</sup> C (J15)	39	Power SMB (I <sup>2</sup> C) Header
SP1	28	Internal Buzzer
T-SGPIO-1 T-SGPIO-2	25	Serial General Purpose Input/Output Headers
USB 0/1	4	(Back Panel) Universal Serial Bus (USB) Ports
USB 2/3, 4, 6, 7	19, 18, 15, 16	Front Panel Accessible USB Headers
VGA	6	VGA Connector

**LED Indicators**

LED	Item#	Description	State	Status
LE1	31	Onboard Standby PWR	On	System Power On

**Memory Support**

This motherboard supports up to 288 GB of Registered (RDIMM)/Load Reduced (LRDIMM) ECC or up to 48 GB of Unbuffered (UDIMM) ECC/Non-ECC DDR3 800/1066/1333 MHz 3-channel (per CPU) memory in 18 DIMM slots.

**Note:** For memory optimization, use only DIMM modules that have been validated by Supermicro. For the latest memory updates, please refer to our website at <http://www.supermicro.com/products/motherboard>.

**DIMM Installation**

Insert the desired number of DIMMs into the memory slots, starting with P1-DIMM1A. For memory to work properly, follow the tables below for memory population order. Refer to the motherboard layout (at left) for the location of the DIMM slots.

**Memory Support for the Motherboard with the 5000 Processor(s) Installed**

**Memory Population for Optimal Performance -For a Motherboard with One CPU (CPU1) Installed**

P1-DIMMs	To Populate P1-DIMMs								
	Branch 0		Branch 1		Branch 2				
3 DIMMs	P1-1A		P1-2A		P1-3A				
6 DIMMs	P1-1A	P1-1B	P1-2A	P1-2B	P1-3A	P1-3B			
9 DIMMs (RDIMMs only) (Note)	P1-1A	P1-1B	P1-1C	P1-2A	P1-2B	P1-2C	P1-3A	P1-3B	P1-3C

**Note:** Max. of 6 UDIMM modules are supported by a CPU.

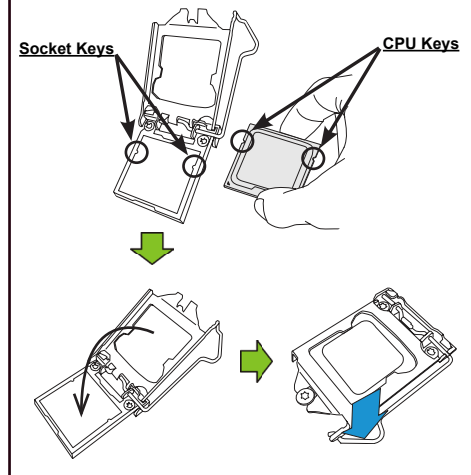
**Memory Population for Optimal Performance -For a Motherboard with Two CPUs Installed**

	CPU 1 (To Populate P1-DIMMs)			CPU 2 (To Populate P2-DIMMs)		
	Branch 0	Branch 1	Branch 2	Branch 0	Branch 1	Branch 2
6 DIMMs	P1-1A	P1-2A	P1-3A	P2-1A	P2-2A	P2-3A
12 DIMMs	P1-1A/1B	P1-2A/2B	P1-3A/3B	P2-1A/1B	P2-2A/2B	P2-3A/3B
18 DIMMs (For RDIMMs only) (Note)	P1-1A/1B/1C	P1-2A/2B/2C	P1-3A/3B/3C	P2-1A/1B/1C	P2-2A/2B/2C	P2-3A/3B/3C

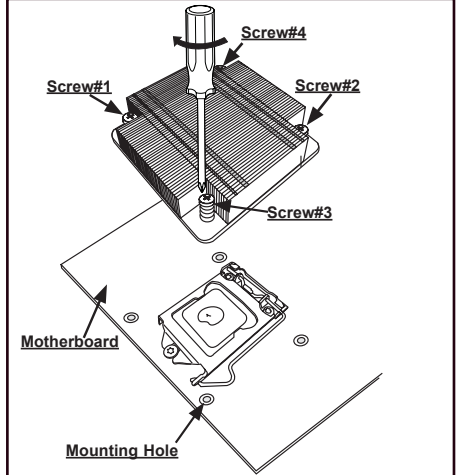
**Note:** Max. of 6 UDIMM modules are supported by a CPU.

**Note:** Refer to Chapter 2 of the User Manual for additional memory support.

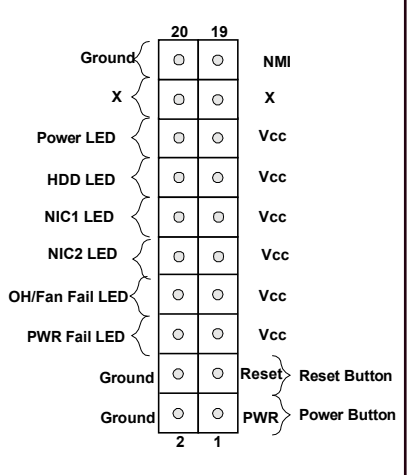
**CPU Installation**



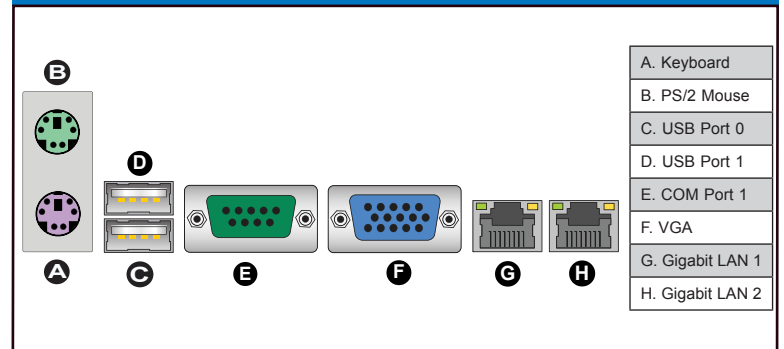
**Heatsink Installation**



**Front Panel Control (JF1)**



**Back Panel IO Connectors**



**Note:** Graphics shown in this quick 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 2 of the User Manual on 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.