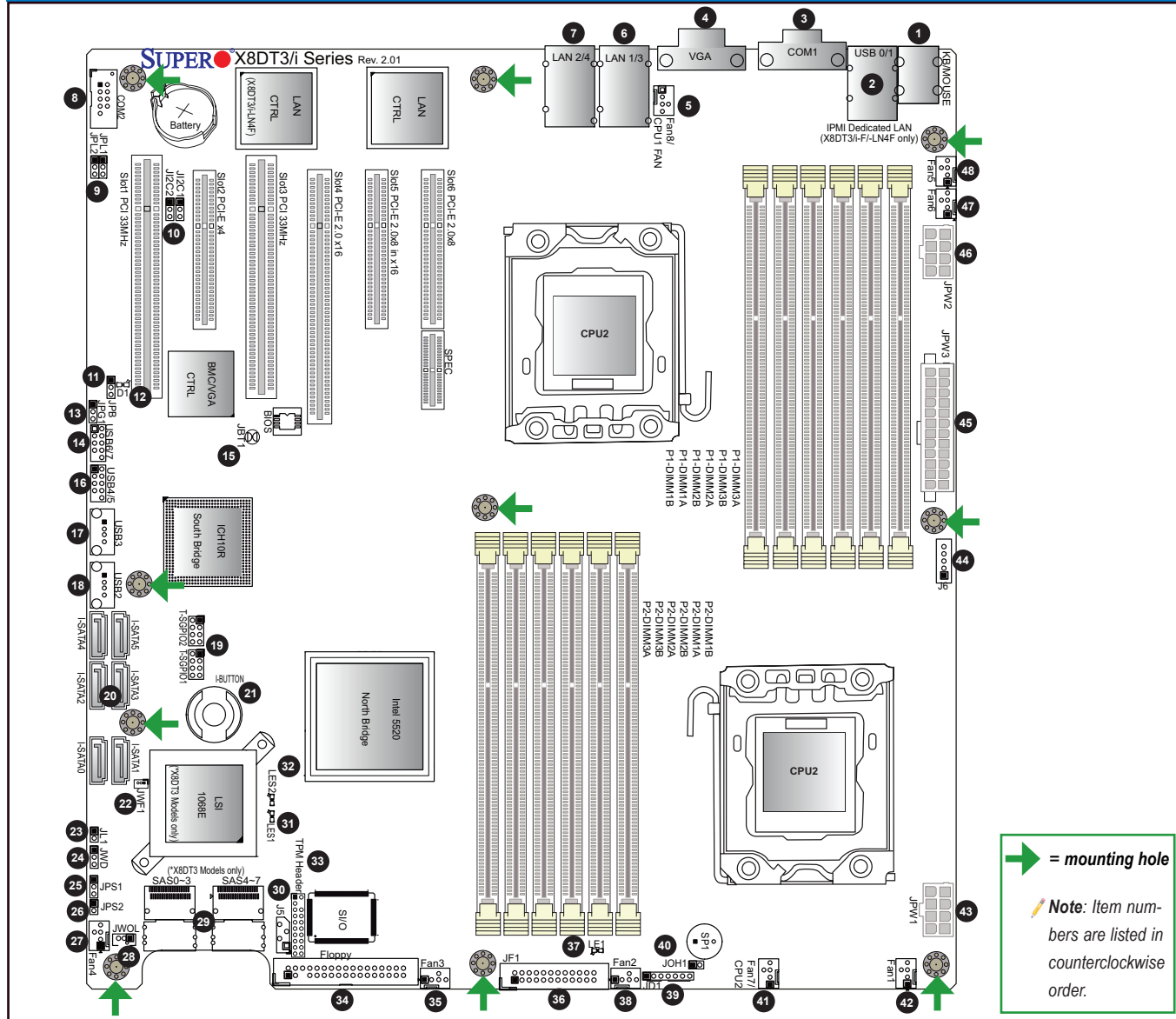
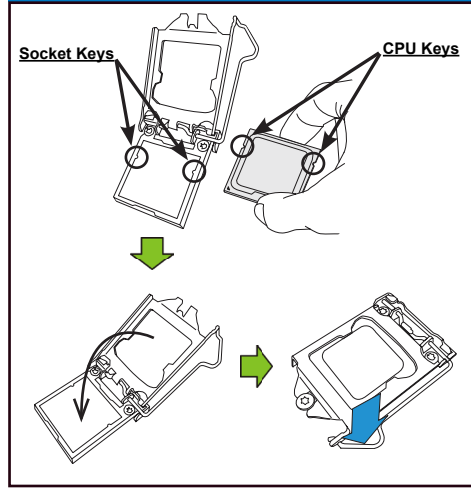


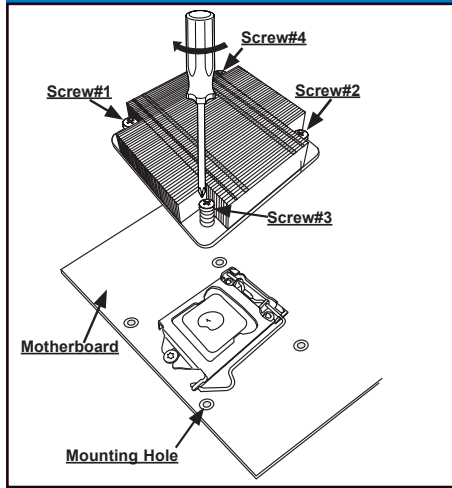
**Motherboard Layout and Features**



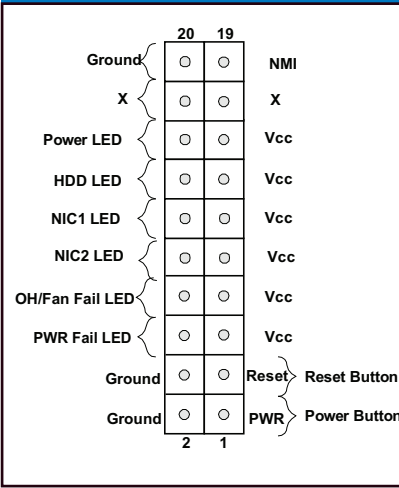
**CPU Installation**



**Heatsink Installation**



**Front Panel Control (JF1)**



**Jumpers, Connectors, and LED Indicators**

**Jumpers**

| Jumper                                | Item # | Description            | Default                                    |
|---------------------------------------|--------|------------------------|--------------------------------------------|
| JBT1                                  | 15     | CMOS Clear             | (See Chapter 2 in User Manual)             |
| Ji <sup>2</sup> C1/Ji <sup>2</sup> C2 | 10     | SMB to PCI Slots       | 2-3 (Disabled)                             |
| JPB                                   | 11     | BMC Enable (-F models) | Pins 1-2 (Enabled) (Rev 2.0 board & later) |
| JPG1                                  | 13     | VGA Enable             | Pins 1-2 (Enabled)                         |
| JPL1, JPL2                            | 9      | LAN1/2, LAN 3/4 Enable | Pins 1-2 (Enabled) (JP2: for LN4F models)  |
| JPS1                                  | 25     | SAS Enable             | Pins 1-2 (Enabled)                         |
| JPS2                                  | 26     | SAS RAID Enable        | Closed (SR RAID Enabled)                   |
| JWD                                   | 24     | Watch Dog              | Pins 1-2 (Reset)                           |

**Connectors**

| Connectors           | Item#          | Description                                                |
|----------------------|----------------|------------------------------------------------------------|
| COM1, COM2           | 3, 8           | COM1/COM2 Serial Port/Header                               |
| FAN 1-4              | 42, 38, 35, 27 | System Fan Headers                                         |
| FAN 5-8              | 48, 47, 41, 5  | System/CPU Fan Headers (Fans 7-8: CPU Fans)                |
| Floppy               | 34             | Floppy Disk Drive Connector                                |
| I-Button             | 21             | I-Button for RAID 5 key (optional for X8DT3/-F/-LN4F only) |
| IPMI Dedicated LAN   | 2              | Dedicated LAN (for X8DT3/i-F & X8DT3/i-LN4F)               |
| J5                   | 30             | IPMB I <sup>2</sup> C Header (for an IPMI card)            |
| J6                   | 44             | Power Supply SMBbus I <sup>2</sup> C Header                |
| JD1                  | 39             | PWR LED/Speaker Header (Pins 4-7: Speaker)                 |
| JF1                  | 36             | Front Panel Connector                                      |
| JL1                  | 23             | Chassis Intrusion Header                                   |
| JOH1                 | 40             | Overheat LED Header                                        |
| JWF1                 | 22             | DOM (Disk-On-Module) Power Header (for Rev 2.0 & later)    |
| JPW1, JPW2           | 43, 46         | 8-pin Secondary PWR, 24-pin ATX PWR                        |
| JPW3                 | 45             | 24-pin ATX PWR                                             |
| JWOL                 | 28             | Wake-On-LAN Header                                         |
| Keyboard/Mouse       | 1              | PS2 Keyboard and Mouse                                     |
| LAN1/3, LAN 2/4,     | 6, 7           | Gigabit Ethernet (RJ45) Ports                              |
| I-SATA0 ~ I-SATA5    | 20             | (Intel South Bridge) SATA Ports                            |
| SAS 0-3, 4-7         | 29             | SAS Ports 0-3, 4-7 (X8DT3/-F/-LN4F only)                   |
| T-SGPIO-1, T-SGPIO-2 | 19             | Serial General Purpose Input/Output Headers                |
| TPM Header           | 33             | Trusted Platform Module (TPM) Header (for Rev 2.0 & later) |
| USB 0/1, 2, 3        | 2, 18, 17      | Universal Serial Bus (USB) Ports                           |
| USB 4/5, 6/7         | 16, 14         | Universal Serial Bus (USB) Ports                           |
| VGA                  | 4              | VGA Connector                                              |

**LED Indicators**

| LED  | Item# | Description         | State    | Status          |
|------|-------|---------------------|----------|-----------------|
| D1   | 12    | BMC Heartbeat LED   | Blinking | BMC Normal      |
| LE1  | 37    | Onboard Standby LED | Green    | System Power On |
| LES1 | 31    | SAS Heartbeat LED   | Blinking | SAS Normal      |
| LES2 | 32    | SAS Activity LED    | Blinking | SAS Active      |

**Memory Support**

This motherboard supports up to 192 GB of Registered (RDIMM) ECC or up to 48 GB of Unbuffered (UDIMM) ECC/Non-ECC DDR3 800/1066/1333 MHz 3-channel (per CPU) memory in 12 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 Population for Optimal Performance -For a motherboard with One CPU (CPU1) installed**

| O       | Branch 0  | Branch 1  | Branch 2  |
|---------|-----------|-----------|-----------|
| 3 DIMMs | P1 DIMM1A | P1 DIMM2A | P1 DIMM3A |
| 6 DIMMs | P1 DIMM1A | P1 DIMM1B | P1 DIMM2B |
|         | P1 DIMM3A | P1 DIMM3B |           |

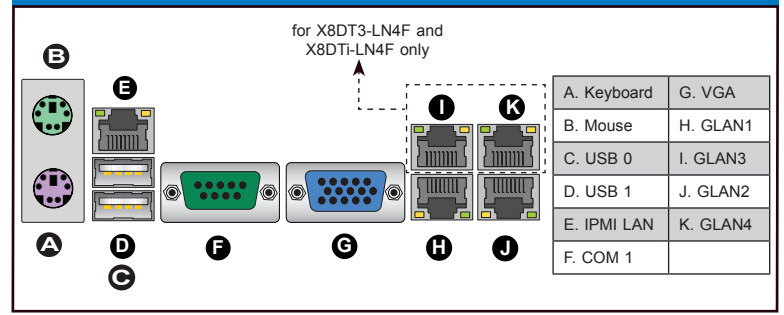
**Memory Population for Optimal Performance -For a motherboard with One CPU (CPU2) installed**

|         | Branch 0  | Branch 1  | Branch 2  |
|---------|-----------|-----------|-----------|
| 3 DIMMs | P2 DIMM1A | P2 DIMM2A | P2 DIMM3A |
| 6 DIMMs | P2 DIMM1A | P2 DIMM1B | P2 DIMM2B |
|         | P2 DIMM3A | P2 DIMM3B |           |

**Memory Population for Optimal Performance -For a motherboard with Two CPUs installed**

|          | CPU1     |          |          | CPU2     |          |          |
|----------|----------|----------|----------|----------|----------|----------|
|          | Branch 0 | Branch 1 | Branch 3 | Branch 0 | Branch 1 | Branch 3 |
| 6 DIMMs  | 1A       | 2A       | 3A       | 1A       | 2A       | 3A       |
| 12 DIMMs | 1A       | 1B       | 2A       | 2B       | 3A       | 3B       |

**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.