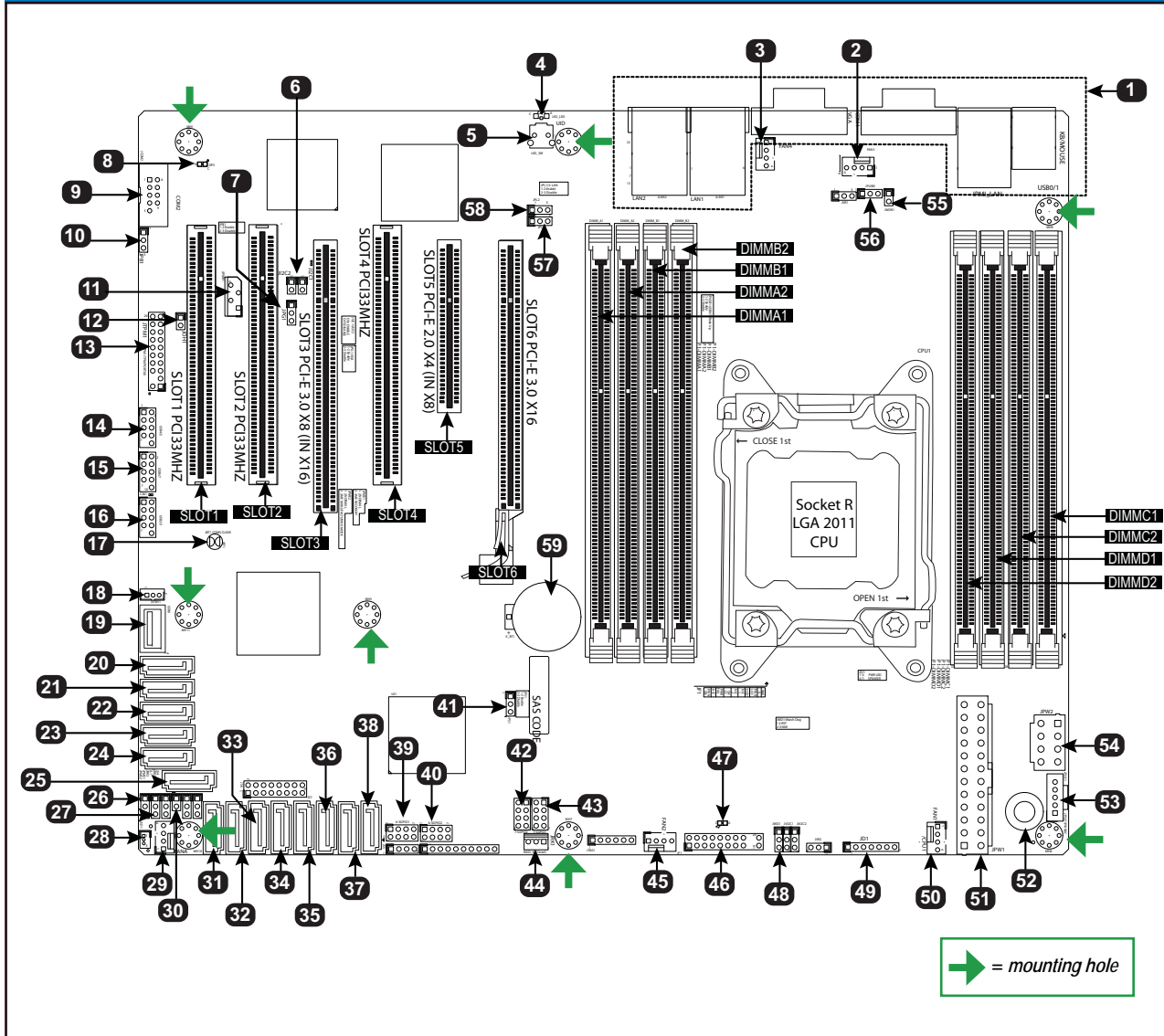


**Motherboard Layout and Features**



**Jumpers, Connectors and LED Indicators**

Jumpers			
6	J12C1,J12C2	SMB to PCI-E Slots	On (Enabled)
7	JPG1	On Board VGA Enable/Disable	Pins 1-2 (Enabled)
10	JPB1	BMC Enable/Disable	Pins 1-2 (Enabled)
17	JBT1	Reset CMOS	Short contact pads to reset CMOS
26	JPME2	Intel ME Mode Select	Pins 1-2 (Normal)
27	JPME1	ME Recovery	Pins 1-2 (Normal)
41	JPS1	SAS Controller Enable/Disable	Pins 1-2 (Enabled)
48	JWD1	Watch Dog Timer Reset	Pins 1-2 (Reset)
56	JPUSB1	USB Enable/Disable	Pins 1-2 (Enabled)
57,58	JPL1/JPL2	LAN1/LAN2 Enable/Disable	Pins 1-2 (Enabled)

Connectors		
1	I/O Backpanel	See "Back Panel I/O Connectors", below right
2,3,29,45,50	FAN 3,4,A,2,1	System Fan Headers (FAN A: I/O, FAN 1: CPU)
5	UID SW	Unit ID (UID) Switch
9	COM2	COM2 Header
11	JIPMB1	System Management Bus Header for the IPMI Slot
12	JOH1	Overheat LED/Fan Fail Header
13	JTPM1	Trusted Platform Module (TPM) Header
14,15,16	USB 4/5,6/7,2/3	Internal USB Headers
18	JSTBY1	Legacy Wake-On-LAN Header
19	JUSB	Internal "Type A" USB Port
20-25	I-SATA0-5	Internal SATA Ports (SATA 0/1: SATA 3.0)
28	JSD1	Disk-On-Module (DOM) Power Header
30	JL1	Chassis Intrusion Header
31-38	LSAS 7-0	Internal SAS Ports via LSI 2308 chipset (6Gb/sec)
39,40	6-SGPIO1,6-SGPIO2	Serial Link General Purpose I/O Headers for SAS
42,43	T-SGPIO2,T-SGPIO1	Serial Link General Purpose I/O Headers for SATA
44	JRK1	RAIDkey Header
46	JF1	Header for Front Panel Controls/LEDs
49	JD1	Power LED/Speaker Header (Pins 4-7:Attach Ext Speaker)
51	JPW1	24-pin ATX Power Connector
52	SP1	Internal Buzzer / Speaker
53	JPI2C1	Power Supply SMBus I2C Header
54	JPW2	8-pin Secondary Power Connector
55	JWOR1	Wake-On-Ring Header
59	BATT	Internal Battery

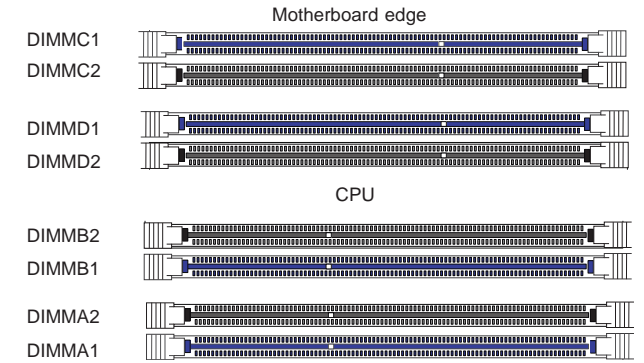
LED Indicators			
4	UID	Unit ID (UID) LED	Blue: Solid On UID: On
8	DP3	IPMI Heartbeat	Green/Blinking BMC/IPMI Normal
47	DP2	Power On LED	Green: Solid On System is On

**Memory Support**

The X9SRH motherboard series supports up to 256GB of 1600/1066/1333 MHz ECC/Non-ECC DDR3 DIMMs in eight (8) memory slots (UDIMM/RDIMM).

*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 Memory Installation**



**Memory Population Guidelines**

When installing memory modules, the DIMM slots should be populated in the following order: DIMMA1, DIMMB1, DIMMC1, DIMMD1 then DIMMA2, DIMMB2, DIMMC2, DIMMD2.

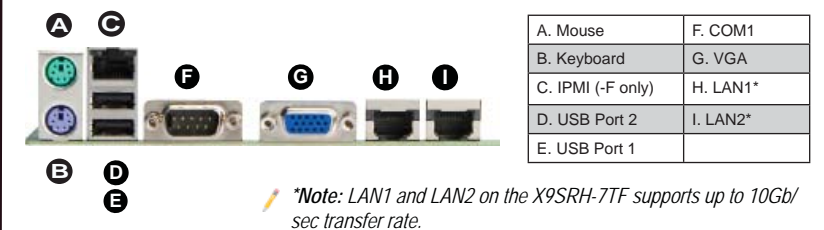
- Always use DDR3 DIMM modules of the same size, type and speed.
- Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.
- The motherboard will support odd-numbered modules installed (1, 3, 5, or 7 modules). However, for best memory performance, install DIMM modules in pairs.

**Recommended Population (Balanced)**

DIMMA1	DIMMA2	DIMMB1	DIMMB2	DIMMC1	DIMMC2	DIMMD1	DIMMD2	Total System Memory
								4GB
2GB		2GB						8GB
2GB	2GB	2GB	2GB	2GB	2GB	2GB	2GB	16GB
4GB		4GB						8GB
4GB	4GB	4GB	4GB	4GB	4GB	4GB	4GB	16GB
4GB	4GB	4GB	4GB	4GB	4GB	4GB	4GB	32GB

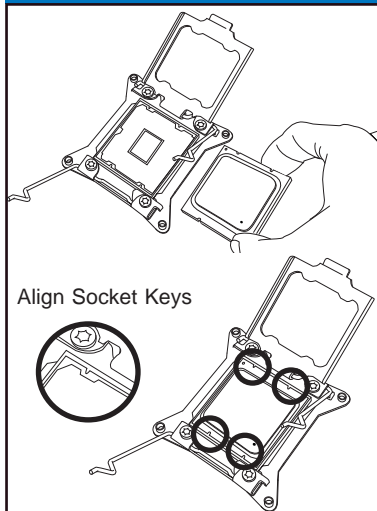
*Note: Up to 256GB of memory are supported. See chapter 2 of the User Manual for complete memory population information.*

**Back Panel IO Connectors**

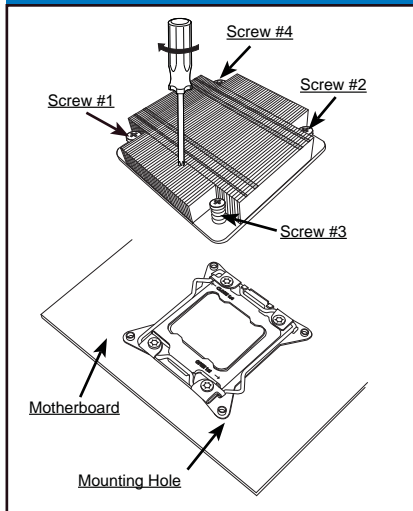


*\*Note: LAN1 and LAN2 on the X9SRH-7TF supports up to 10Gb/sec transfer rate.*

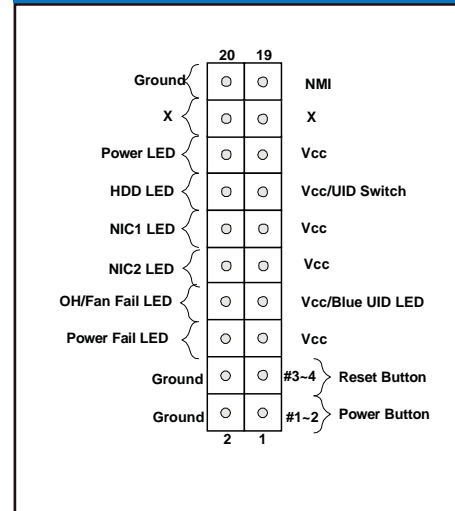
**CPU Installation**



**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 2 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.*