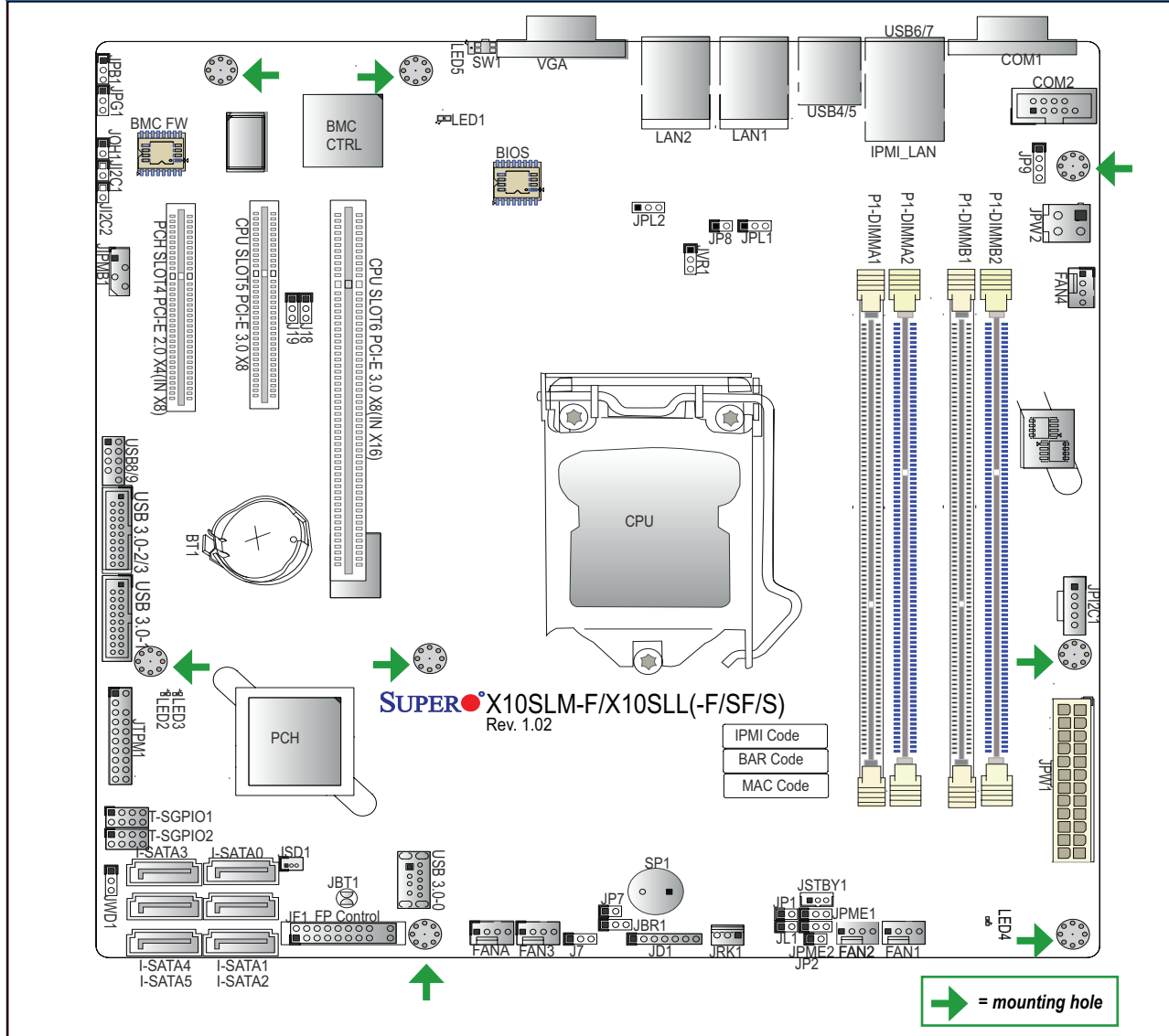


**Motherboard Layout and Features**



**Jumpers, Connectors and LED Indicators**

Jumpers		
Jumper	Description	Default
JIP2C1/JIP2C2	SMB to PCI Slots	On (Enabled)
JPB1 (-F Models only)	BMC Enable	Pins 1-2 (Enabled)
JBR1	BIOS Recovery	Pins 1-2 (Normal)
JPG1	VGA Enable	Pins 1-2 (Enabled)
JPL1/JPL2	LAN1/LAN2 Enable	Pins 1-2 (Enabled)
JPME1	ME Recovery	Pins 1-2 (Normal)
JPME2	Manufacturing Mode Select	Pins 1-2 (Normal)
JWD1	Watch Dog Enable	Pins 1-2 (Reset)

Connectors	
Connector	Description
BT1	Onboard Battery
COM1/COM2	COM1/COM2 Port Headers
Fan1-Fan4, FanA	System/CPU Fan Headers
JD1	Speaker/Power LED Indicator
JF1	Front Panel Control Header
JL1	Chassis Intrusion Header
JIPMB1	4-pin External BMC I <sup>2</sup> C Header (for an IPMI Card)
JIP2C1	Power System Management Bus (Power SMB)
JPW1	24-pin ATX Main Power Connector (Required)
JPW2	+12V 4-pin CPU power Connector (Required)
JSD1	SATA DOM (Device_On_Module) Power Connector
JSTBY1	Wake-On-LAN Enable Header
JTPM1	Trusted Platform Module/Port 80 Connector
LAN1/LAN2	Gigabit (RJ45) Ports (LAN1/2)
(IPMI)_LAN (for -F Models)	IPMI_Dedicated Gigabit (RJ45) Port
SP1	Internal Speaker/Buzzer
I-SATA0-I-SATA5	(Intel PCH) Serial ATA (SATA 3.0/2.0) Ports 0-5 (Ref. Model Table on P. 1-4)
(CPU) Slot 6	PCI-Express 3.0 x8 in x16 Slot
(CPU) Slot 5	PCI-Express 3.0 x8 Slot
(PCH) Slot 4	PCI-Express 2.0 x4 in x8 Slot (X10SLM-F/x10SLL-F Only),
T-SGPIO 1/2	Serial_Link General Purpose I/O Connection Headers 1/2
USB 3.0-0 (USB0)	Front Accessible Vertical USB 3.0 Type A Header
USB 3.0-2/3 (USB2/3)	Front Accessible USB 3.0 Header 2/3 (for X10SLM-F Only)
USB 4/5, 6/7 (2.0)	Backpanel USB 2.0 Ports 4/5, 6/7 (USB 6/7: for X10SLM-F & X10SLL-F Only)
USB 8/9	Front Panel Accessible USB 2.0 Headers 8/9
VGA	Backpanel VGA Port

LED Indicators			
LED	Description	Color/State	Status
LED1	BMC Heartbeat LED	Green: Blinking	BMC Normal
LED4	System Standby Power LED	Orange: Solid on	Power On

**Memory Support**

The X10SLM-F\_X10SLL(-F/SF/S) supports up to 32GB of Unbuffered ECC (UDIMM) DDR3 1600/1333 MHz in 4 memory slots.  
**Note:** The X10SLL-S/-SF supports up to 16 GB of DDR3 memory in 2 DIMM modules.

**DIMM Memory Installation**

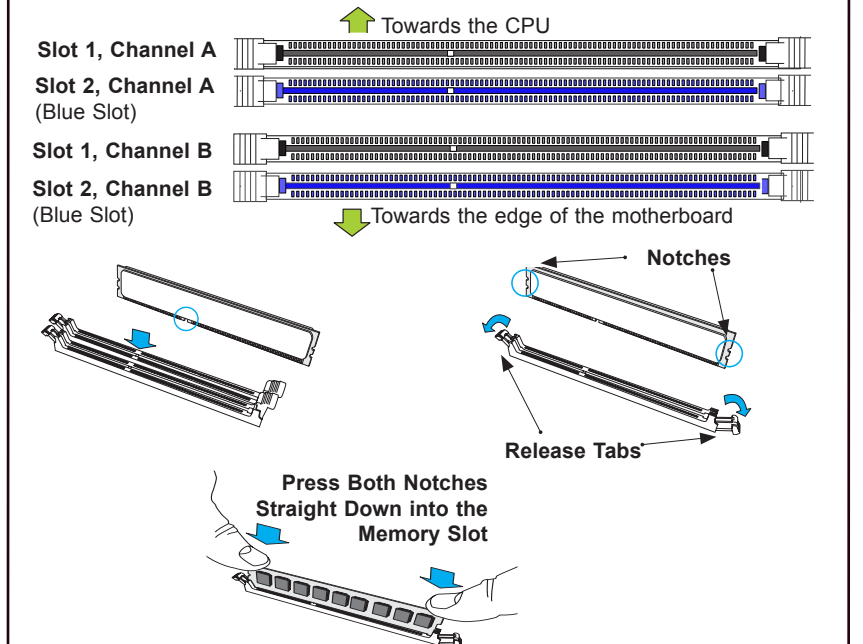
**Memory Population Guidelines**

Please follow the table below when populating the X10SLM-F\_X10SLL(-F/SF/S).

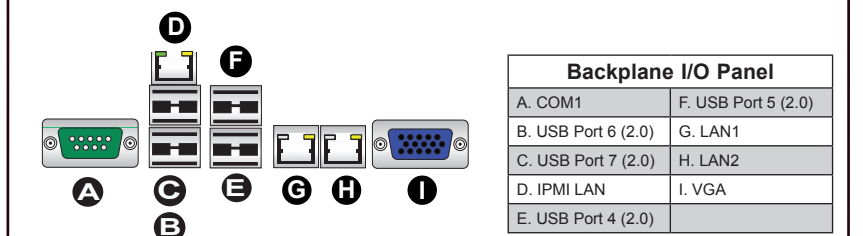
DDR3 Unbuffered ECC (UDIMM) Memory				
DIMM Slots per Channel	DIMMs Populated per Channel	DIMM Type	POR Speeds	Ranks per DIMM (any combination)
2	1	Unbuffered DDR3	1333, 1600	Single Rank, Dual Rank
2	2	Unbuffered DDR3	1333, 1600	Single Rank, Dual Rank

Populating these DIMM modules with a pair of memory modules of the same type and same size will result in interleaved memory, which will improve memory performance.

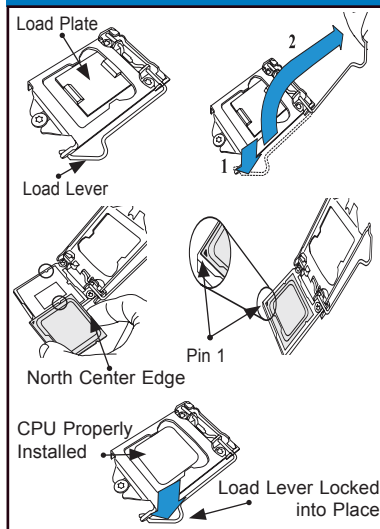
**Note:** Insert the desired number of DIMMs into the memory slots, starting with the blue slots first, i.e., DIMMB2, DIMMA2, then DIMMB1 and DIMMA1. See the illustration below for DIMM slot locations. For the system to work properly, please use the memory modules of the same type and speed in the same motherboard.



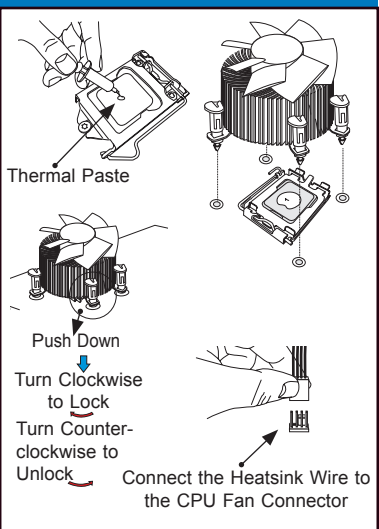
**Back Panel I/O Connectors**



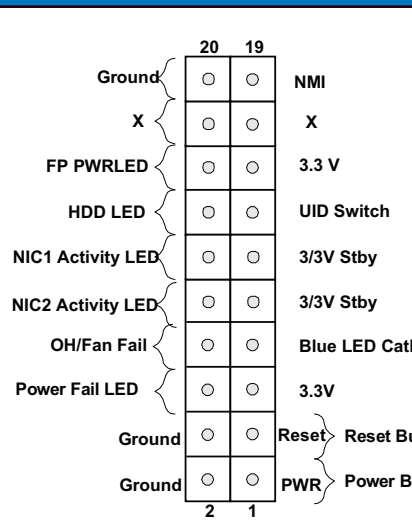
**CPU Installation**



**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.