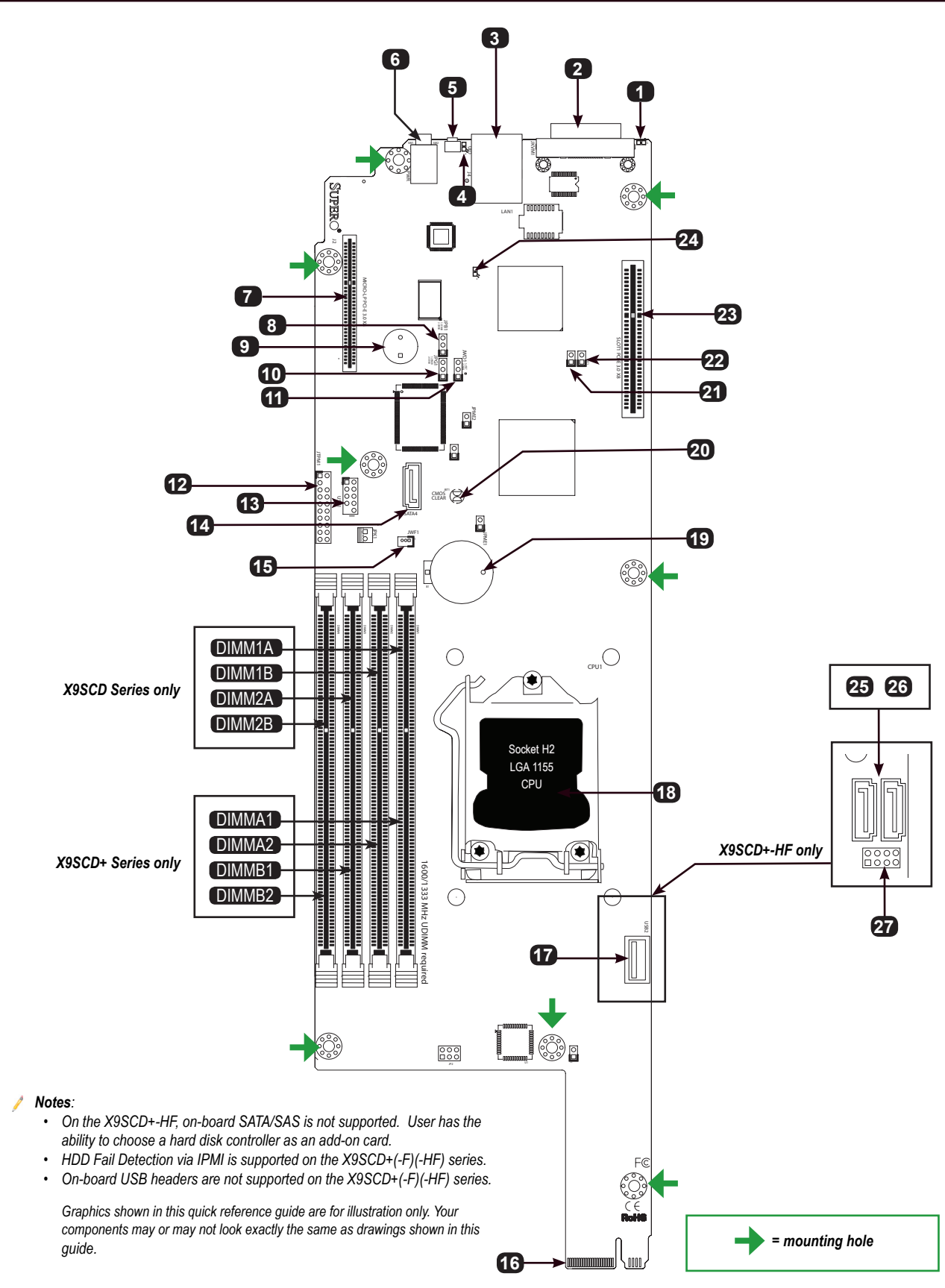


**Motherboard Layout and Features**



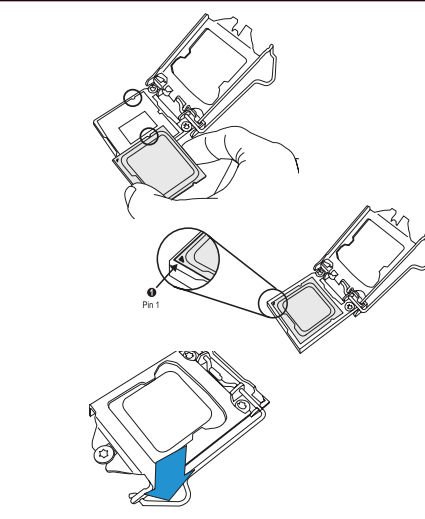
**Jumpers, Connectors and LED Indicators**

Jumpers			
8	JPB1	BMC Enable/Disable	Pins 1-2 (Enabled)
10	JPG1	Onboard VGA Enable/Disable	Pins 1-2 (Enabled)
11	JWD1	Watch Dog Timer RST/NMI Selection	Pins 1-2 (Reset)
20	JBT1	CMOS Clear	Short contact pads to reset CMOS
21	JI2C2	SMB to PCI Slots	Open (Disabled)
22	JI2C1	SMB to PCI Slots	Open (Disabled)

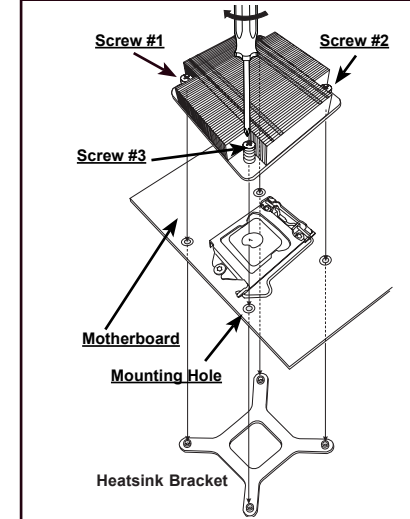
Connectors & LED Indicators		
1	LED5	Fail LED
2	JKVM1	USB / VGA / UART Interface
3	IPMI	RJ45 IPMI Port (with HDD Fail detection on the X9SCD+ series)
4	UID LED	Unit ID LED
5	UID BUTTON	Unit ID Button
6	PWR BTN/LED	Power Button and LED
7	MICRO LP SLOT	For Supermicro Micro LP Cards
9	SPKR1	Internal Speaker / Buzzer
12	JTPM1	Trusted Platform Module (TPM) Header
13	JUSB2	USB Header on the X9SCD-F or USB Type A on the X9SCD+ series
14	I-SATA4	Internal SATA Port
15	JWF1	SATA Disk On Module (DOM) Power Connector
16	IF + PWR	Back Panel Edge Connector (SATA*/Power)
17	JUSB1	Internal (Type A) USB Port (Supported on the X9SCD-F only)
18	CPU	Intel H2 (LGA-1155) CPU Socket
19	BATT	Onboard Battery
23	SLOT1	PCI-E 3.0 or PCI-E 2.0 x 8 Expansion Slot
24	LED4	IPMI Heartbeat (Green: Blinking = Normal)
25,26	S-SATA/SAS 1,0*	Bypass connector from optional internal SATA/SAS add-on card to hard disk drives (X9SCD+HF only)
27	S-SGPIO1	Serial General Purpose I/O Header for SATA

\*Note: On the X9SCD+HF, on-board SATA/SAS is not supported. User has the ability to choose a hard disk controller as an add-on card and use the bypass connector to attach external SATA/SAS drives..

**CPU Installation**



**Heatsink Installation**



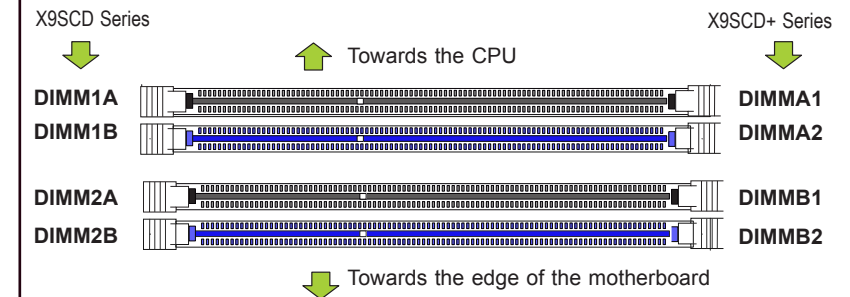
Note: Refer to Chapter 1 of the User Manual for detailed information on jumpers, connectors, and LED indicators.

**Memory Support**

The X9SCD-F Motherboard Series supports up to 32GB of Unbuffered (UDIMM) DDR3 ECC 1600/1333 MHz DIMMs in 4 memory 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 a at http://www.supermicro.com/products/motherboard.

**DIMM Memory Installation**



**Memory Population Guidelines**

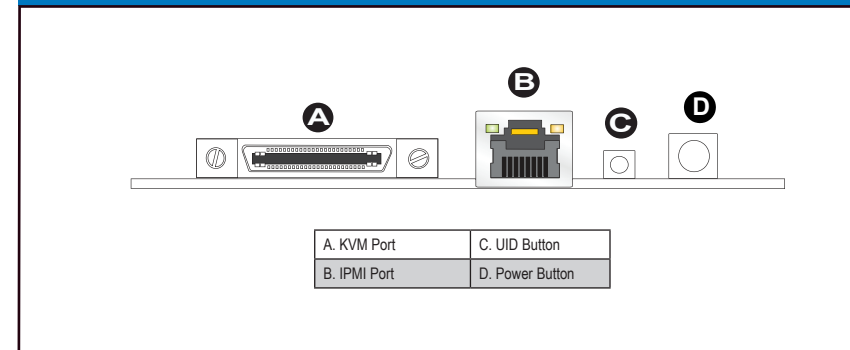
When installing memory modules, the DIMM slots should be populated in the following order: (for the X9SCD series) DIMM1B, DIMM2B, DIMM1A and DIMM2A, (for the X9SCD+ series) DIMMA2, DIMMB2, DIMMA1, and DIMMB1.

- 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 one DIMM module or three DIMM modules installed. For best memory performance, install DIMM modules in pairs.

Recommended Population (Balanced)				
DIMM1B/A2	DIMM2B/B2	DIMM1A/A1	DIMM2A/B1	Total System Memory
2GB	2GB			4GB
2GB	2GB	2GB	2GB	8GB
4GB	4GB			8GB
4GB	4GB	4GB	4GB	16GB
8GB	8GB			16GB
8GB	8GB	8GB	8GB	32GB

Note: Due to memory allocation to system devices, the amount of memory that remains available for operational use will be reduced when 4 GB of RAM is used.

**Back Panel I/O Connectors**



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