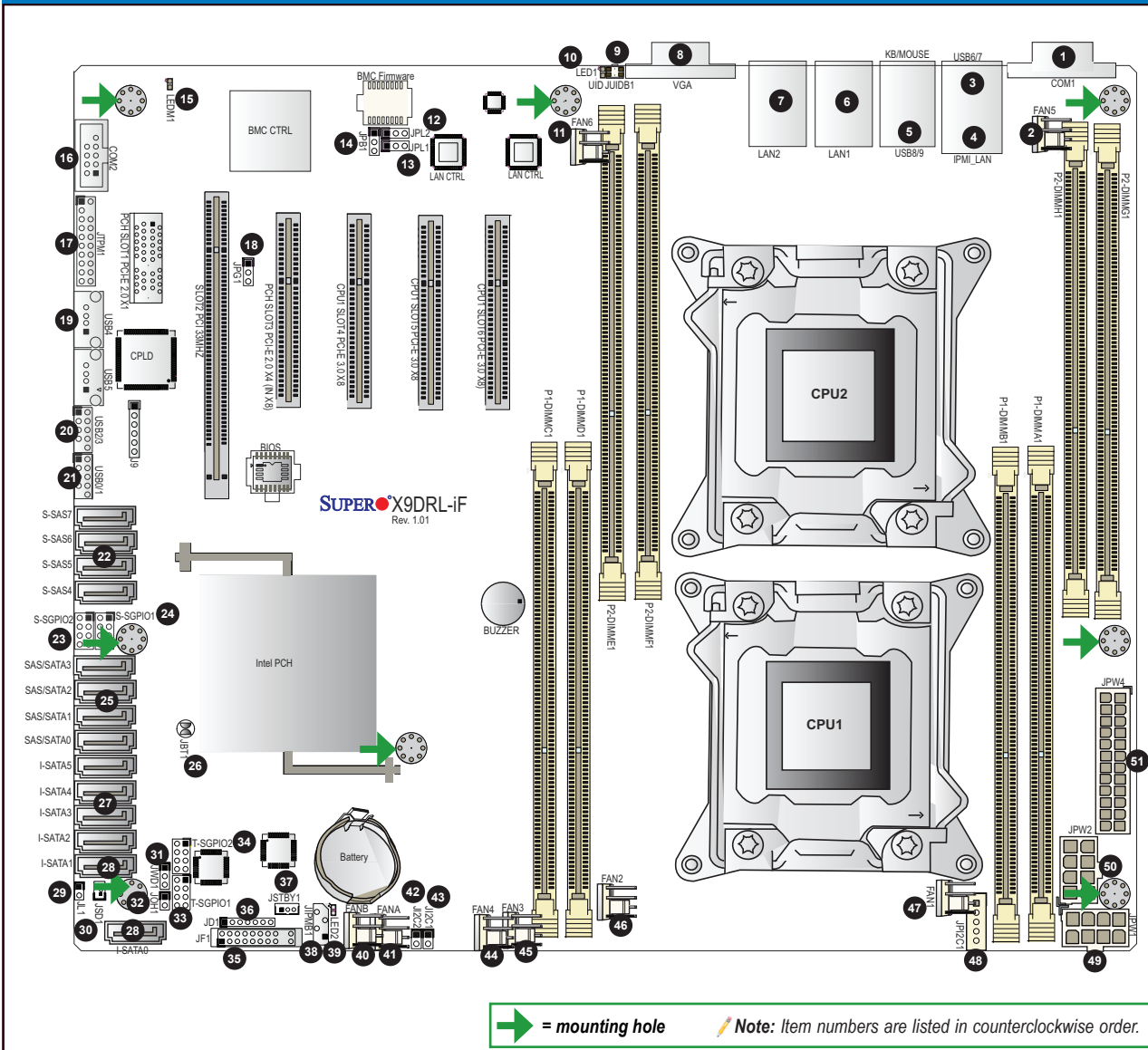


Motherboard Layout and Features



Jumpers, Connectors and LED Indicators

Jumpers

Jumper	Item #	Description	Default
JBT1	26	Clear CMOS	See Chpt. 2 in User Manual
J1°C1/J1°C2	43, 42	SMB to PCI-E Slots	Off (Disabled)
JPB1	14	BMC Enabled	Pins 1-2 (Enabled)
JPG1	18	VGA Enabled	Pins 1-2 (Enabled)
JPL1/JPL2	13, 12	GLAN1/GLAN2 Enable	Pins 1-2 (Enabled)
JWD1	31	Watch Dog Timer Enable	Pins 1-2 (Reset)

Connectors

Connector	Item #	Description
COM1/COM2	1, 16	Back Panel COM Port1 / Front Accessible COM2 Header
Fan 1~3	47, 46, 45	CPU/System Fan Headers
Fan 4-6	44, 2, 11	CPU/System Fan Headers
FanA, FanB	41, 40	CPU/System Fan Headers
JD1	36	Speaker/Power LED Indicator
JF1	35	Front Panel Control Header
JIPMB1	38	4-pin External BMC I°C Header (for an IPMI Card)
JL1	29	Chassis Intrusion
JOH1	32	Overheat LED Indicator
J1°C1	48	Power Supply SMBbus I°C Header
JPW1/2	49, 50	12V 8-Pin Power Connectors
JPW4	51	24-Pin ATX Main Power Connector
JSD1	30	SATA DOM (Device on Module) Power Connector
JSTBY1	37	+5V Standby Power Header
JTPM1	17	TPM (Trusted Platform Module)/Port 80
JUIDB1	9	UID (Unit Identification) Switch
LAN1/LAN2	6, 7	G-bit Ethernet Ports 1/2
(IPMI) LAN	4	IPMI Dedicated LAN
(I-)SATA0~1	28	Intel PCH SATA Connectors 0/1
(I-)SATA2~5	27	Intel PCH SATA Connectors 2~5
(S-)SATA0~3	25	SATA Connectors 0~3 (X9DRL-iF)
(S-)SAS0~7	22	SAS Connections 0~7 (for X9DRL-3F only)
(S-)SGPIO1/2	24, 23	Serial (SAS) General Purpose I/O Headers 1/2
(T-)SGPIO1/2	33, 34	Serial (SATA) General Purpose I/O Headers 1/2
USB 0/1, 2/3	21, 20	Front Panel USB Connections 0/1, 2/3
USB 4	19	FP-Accessible Type A USB Connections 4
USB 6/7, 8/9	3, 5	Backpanel USB Connections 6/7, 8/9
VGA	8	Backpanel VGA Port

LED Indicators

LED	Item #	Description	Color/State	Status
LED1	10	Rear UID LED	Blue: On	Unit Identified
LED2	39	Onboard PWR LED	Green: On	Power On
LEDM1	15	BMC Heartbeat LED	Green	BMC Normal

Memory Support

This motherboard supports up to 256 GB of Registered (RDIMM)/Load Reduced (LRDIMM) ECC or up to 64 GB of Unbuffered (UDIMM) ECC/Non-ECC DDR3 800/1066/1333/1600 MHz 4-channel memory in 8 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

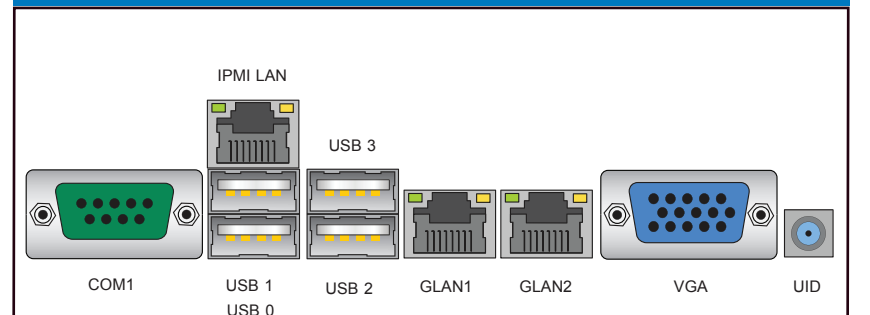
Insert the desired number of DIMMs into the memory slots, starting with P1-DIMMA1. For memory to work properly, follow the tables below for memory population order. Refer to the motherboard layout (at left) for the location of the DIMM slots.

Processors and their Corresponding Memory Modules				
CPU#	Corresponding DIMM Modules			
CPU1	P1-DIMMA1	P1-DIMMB1	P1-DIMMC1	P1-DIMMD1
CPU2	P2-DIMME1	P2-DIMMF1	P2-DIMMG1	P2-DIMMH1

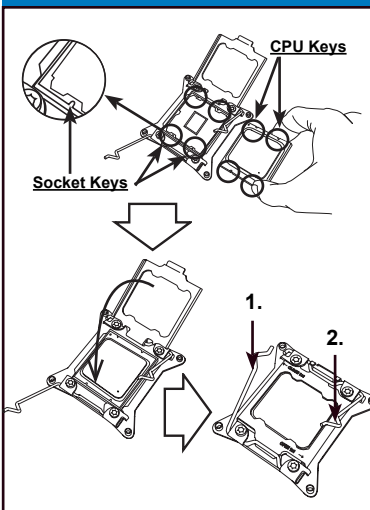
Processor and Memory Module Population

Number of CPUs+DIMMs	CPU and Memory Population Configuration Table (*For memory to work properly, please install DIMMs in pairs)
1 CPU & 2 DIMMs	CPU1 P1-DIMMA1/P1-DIMMB1
1 CPU & 4 DIMMs	CPU1 P1-DIMMA1/P1-DIMMB1, P1-DIMMC1/P1-DIMMD1
2 CPUs & 2 DIMMs	CPU1 + CPU2 P1-DIMMA1, P2-DIMME1
2 CPUs & 4 DIMMs	CPU1 + CPU2 P1-DIMMA1/P1-DIMMB1, P2-DIMME1/P2-DIMMF1
2 CPUs & 6 DIMMs	CPU1 + CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1
2 CPUs & 8 DIMMs	CPU1 + CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1

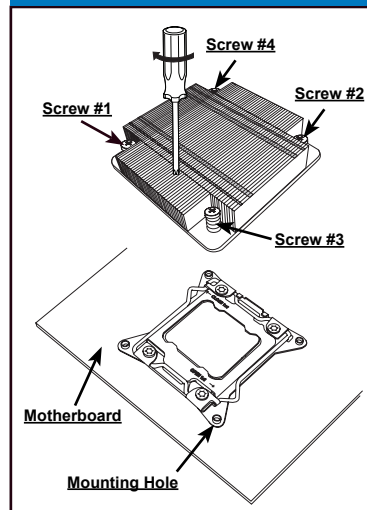
Back Panel IO Connectors



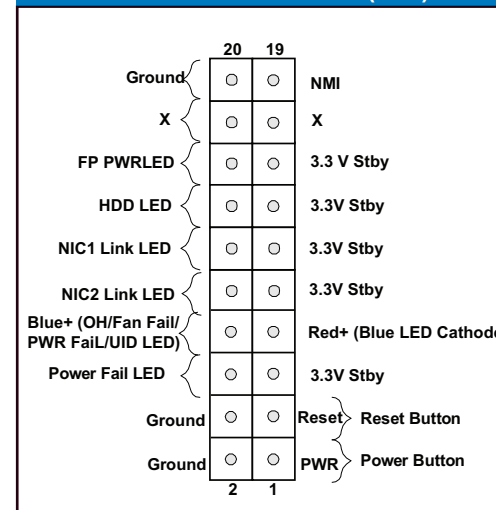
CPU Installation



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 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.