

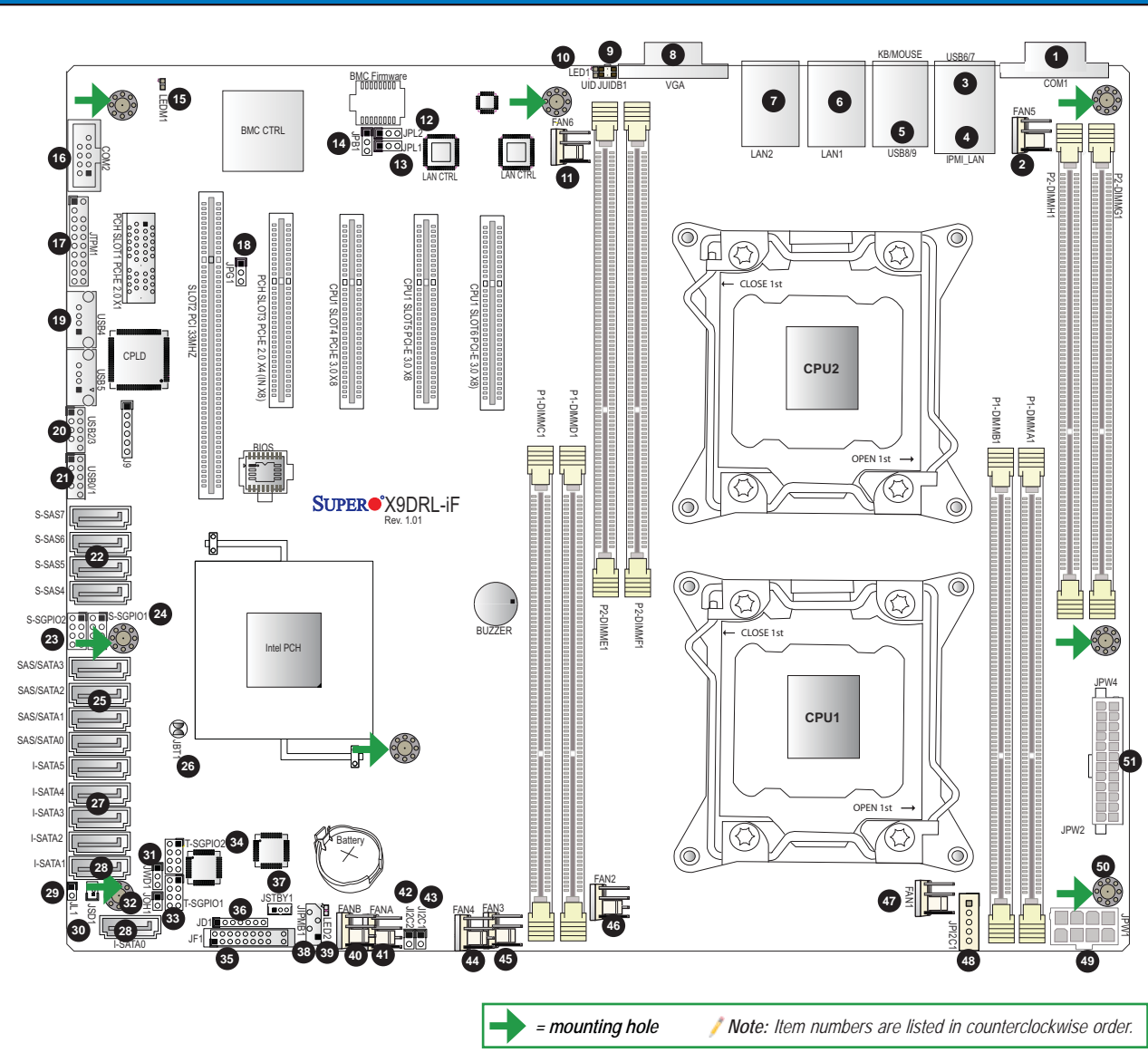
**CONTACT INFORMATION**

- www.supermicro.com (Email: support@supermicro.com)
- Manuals: <http://www.supermicro.com/support/manuals>
- Drivers & Utilities: <ftp://ftp.supermicro.com>
- Safety: [http://www.supermicro.com/about/policies/safety\\_information.cfm](http://www.supermicro.com/about/policies/safety_information.cfm)

**PACKAGE CONTENTS** (Applies to single-pack only)

- One (1) Supermicro Motherboard
- Six (6) Serial ATA Cables (X9DRL-iF)
- Eight (8) Serial ATA Cables (X9DRL-3F)
- One (1) I/O Shield

**Motherboard Layout and Features**



**Jumpers, Connectors and LED Indicators**

**Jumpers**

Jumper	Item #	Description	Default
JBT1	26	Clear CMOS	See Chpt. 2 in User Manual
JPC1/JPC2	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 <sup>2</sup> C Header (for an IPMI Card)
JL1	29	Chassis Intrusion
JOH1	32	Overheat LED Indicator
JPC1	48	Power Supply SMBbus I <sup>2</sup> 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.

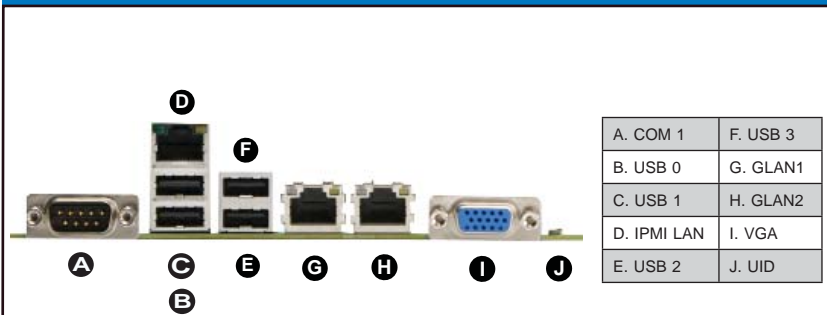
**Processors and their Corresponding Memory Modules**

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

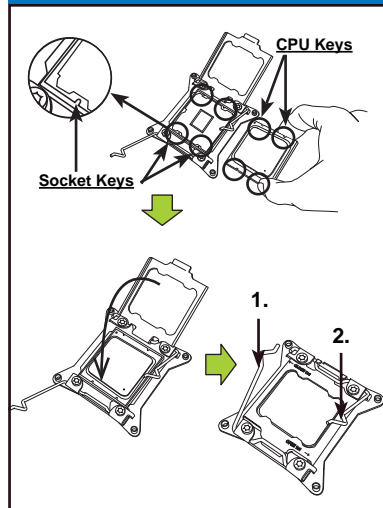
**Processor and Memory Module Population**

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

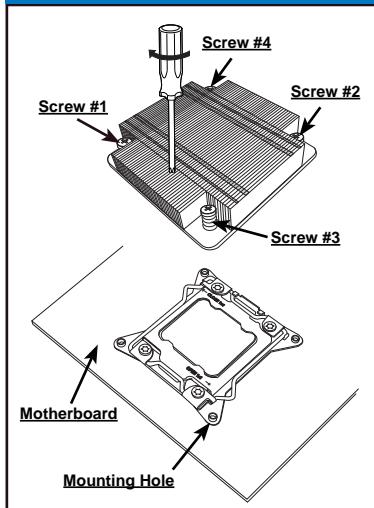
**Back Panel IO Connectors**



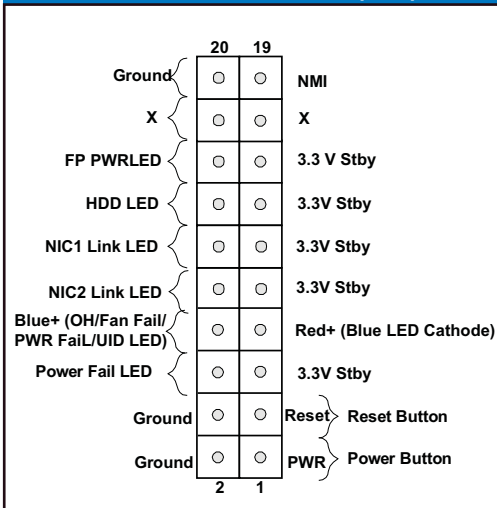
**CPU Installation**



**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.