

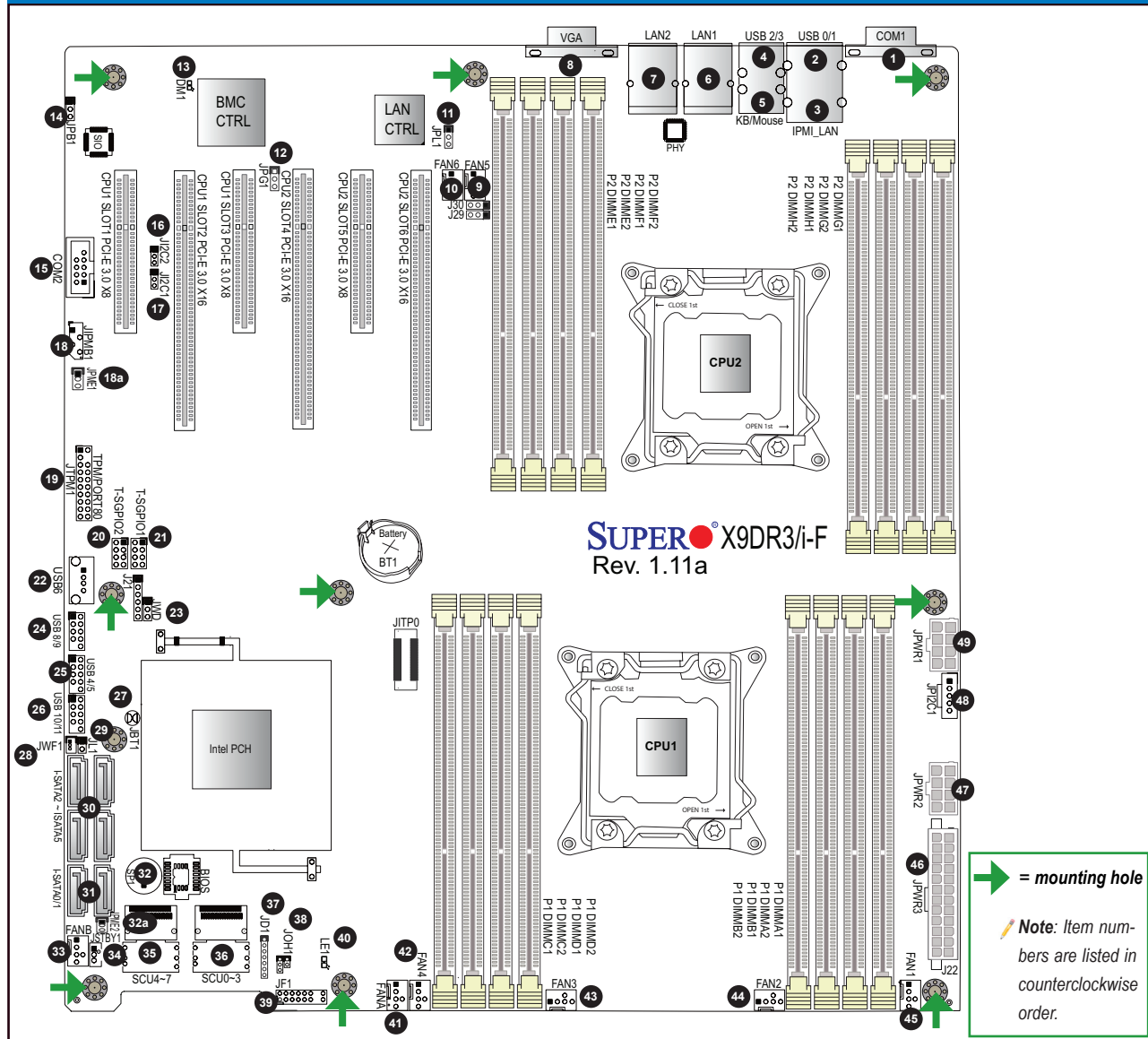
**CONTACT INFORMATION**

- 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

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

- One (1) Supermicro Motherboard
- Two (2) Serial ATA Cables
- One (1) I/O Shield
- Two (2) I-Pass to Serial ATA Cables (X9DR3-F)
- One (1) I-Pass to Serial ATA Cable (X9DRi-F)

**Motherboard Layout and Features**



**Jumpers, Connectors and LED Indicators**

**Jumpers**

Jumper	Item #	Description	Default
JBT1	27	Clear CMOS	None
JPB1	14	BMC Enabled	Pins 1-2 (Enabled)
JPG1	12	VGA Enabled	Pins 1-2 (Enabled)
JPL1	11	GLAN1/GLAN2 Enable	Pins 1-2 (Enabled)
JPME1	18a	Management Engine (ME) Recovery Mode	Pins 1-2 (Normal)
JPME2	32a	Management Engine (ME) Manufacture Mode	Pins 1-2 (Normal)
JWD	23	Watch Dog	Pins 1-2 (Reset)

**Connectors**

Connector	Item #	Description
COM1, COM2	1, 15	Back Panel Com Port1 / Front Accessible COM2 Header
Fan 1-3	45, 44, 43	CPU/System Fan Headers
Fan 4-6	42, 9, 10	CPU/System Fan Headers
FanA, FanB	41, 33	CPU/System Fan Headers
I-SATA 0/1	31	Intel SB SATA 3.0 Connectors 0/1
I-SATA 2-5	30	Intel SB SATA 2.0 Connectors 2-5
J22 (JPWR3)	46	ATX 24-Pin Power Connector
JD1	37	Speaker/Power LED Indicator
JF1	39	Front Control Panel Header
JI <sup>2</sup> C1/JI <sup>2</sup> C2	17, 16	SMBus I <sup>2</sup> C Header
JIPMB1	18	4-Pin External BMC I <sup>2</sup> C Header (for IPMI card)
JL1	29	Chassis Intrusion
JOH1	38	Overheat LED Indicator
JPI <sup>2</sup> C1	48	Power Supply SMBus I <sup>2</sup> C Header
JPWR1/2	49, 47	12V 8-Pin Power Connectors
JSTBY1	34	Standby Header
JTPM1	19	TPM (Trusted Platform Module) Port 80
JWF1	28	SATA DOM (Disk on Module) Power Connector
LAN1, LAN2	6, 7	G-bit Ethernet Ports 1/2
(IPMI) LAN	3	IPMI Dedicated LAN
SCU 0-3	36	SCU Connectors 0-3
SCU 4-7	35	SCU Connectors 4-7 (for X9DR3-F only)
SP1	32	Onboard Buzzer (Internal Speaker)
T-SGPIO 1, 2	21, 20	Serial Link General Purpose I/O Headers
BP USB 0/1, USB 2/3	2, 4	Back Panel USB 0/1, 2/3
USB 4/5, USB 6,	25, 22	Front Panel Accessible USB Connections
USB 8/9, USB 10/11	24, 26	Front Panel Accessible USB Connections
VGA	8	Back Panel VGA Port

**LED Indicators**

LED	Item #	Description	Color/State	Status
DM1	13	BMC Heartbeat LED	Green: Blinking	BMC Normal
LE1	40	Standby PWR LED	Green: On	SB Power On

**Memory Support**

This motherboard supports up to 1 TB of Load Reduced (LRDIMM), 512 GB of Registered (RDIMM) or 128 GB of Unbuffered (UDIMM) ECC/Non-ECC DDR3 800/1066/1333/1600/1866 MHz 240-pin 4-channel memory modules in 16 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.

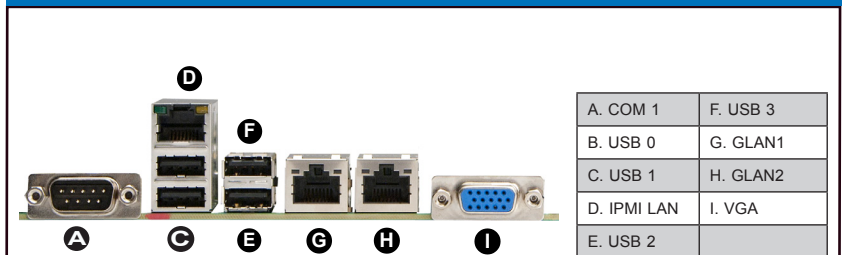
**Processors and their Corresponding Memory Modules**

CPU#	Corresponding DIMM Modules							
CPU 1	P1-DIMMA1	P1-DIMMB1	P1-DIMMC1	P1-DIMMD1	P1-DIMMA2	P1-DIMMB2	P1-DIMMC2	P1-DIMMD2
CPU 2	P2-DIMME1	P2-DIMMF1	P2-DIMMG1	P2-DIMMH1	P2-DIMME2	P2-DIMMF2	P2-DIMMG2	P2-DIMMH2

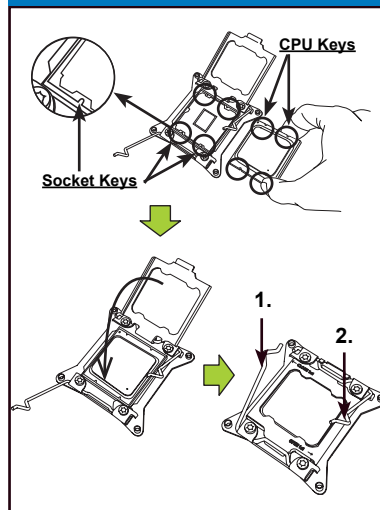
**Processor and Memory Module Population for Optimal Performance**

Number of CPUs+DIMMs	CPU and Memory Population Configuration Table (For memory to work properly, please follow the instructions below.)
1 CPU & 2 DIMMs	CPU1 P1-DIMMA1/P1-DIMMB1
1 CPU & 4 DIMMs	CPU1 P1-DIMMA1/P1-DIMMB1, P1-DIMMC1/P1-DIMMD1
1 CPU & 5-8 DIMMs	CPU1 P1-DIMMA1/P1-DIMMB1, P1-DIMMC1/P1-DIMMD1 + Any memory pairs in P1-DIMMA2/P1-DIMMB2/P1-DIMMC2/P1-DIMMD2 slots
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/P1-DIMMD1, P2-DIMME1/P2-DIMMF1
2 CPUs & 8 DIMMs	CPU1 + CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1
2 CPUs & 10-16 DIMMs	CPU1/CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1 + Any memory pairs in P1, P2 DIMM slots
2 CPUs & 16 DIMMs	CPU1/CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1, P1-DIMMA2/P1-DIMMB2/P1-DIMMC2/P1-DIMMD2, P2-DIMME2/P2-DIMMF2/P2-DIMMG2/P2-DIMMH2

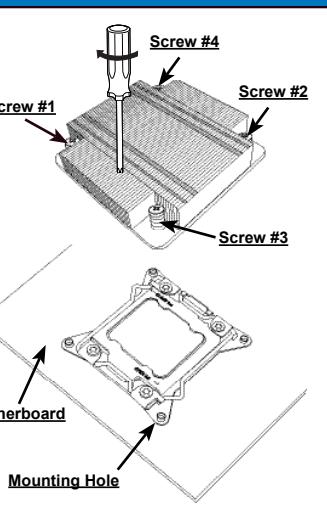
**Back Panel IO Connectors**



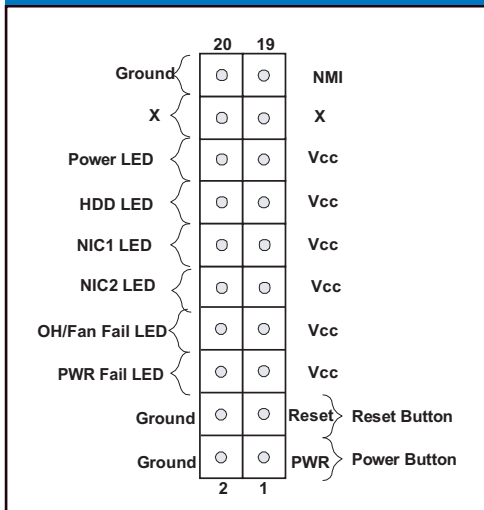
**CPU Installation**



**Heatsink Installation**



**JF1 Header Pins**



**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.