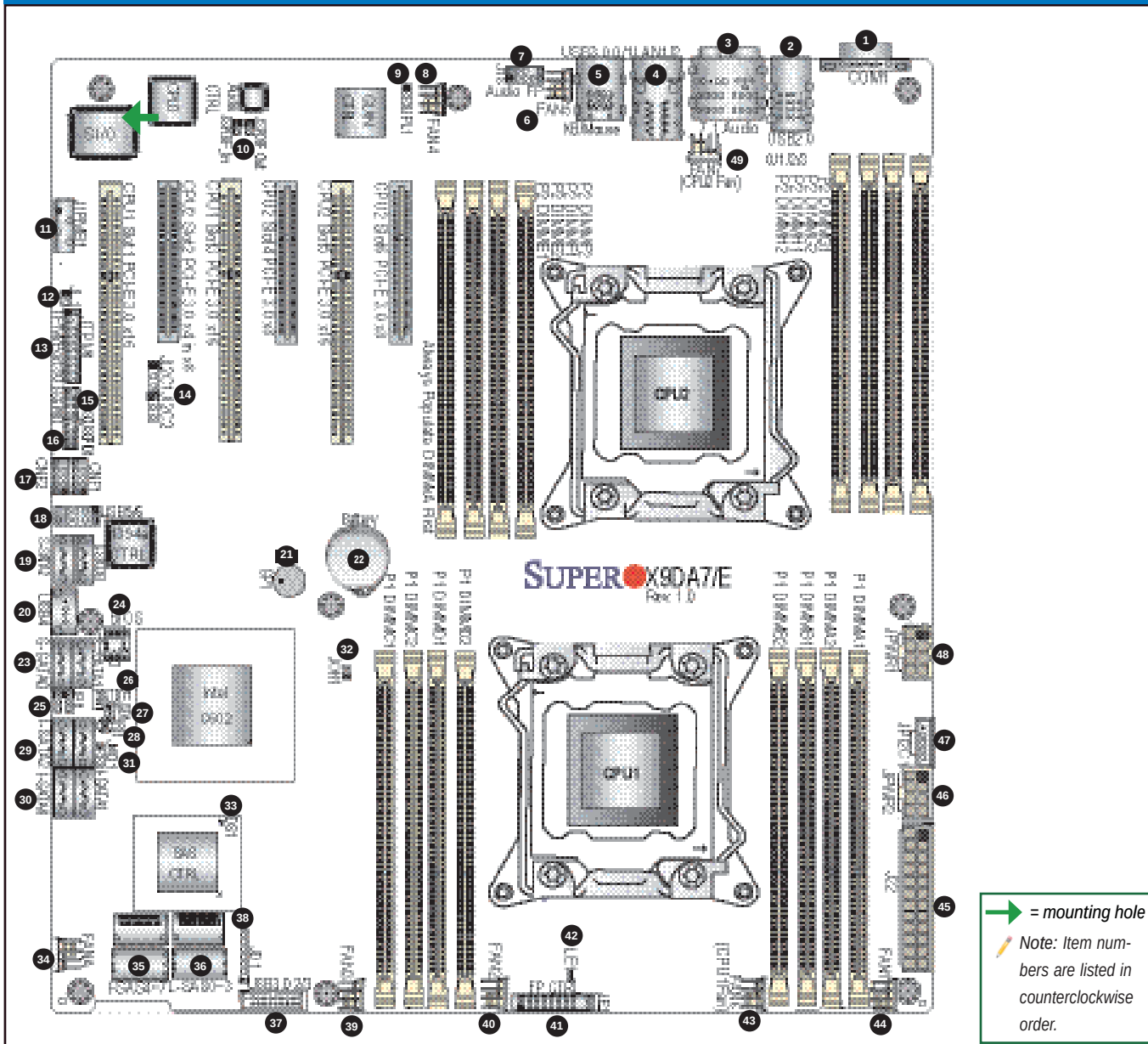


SUPERMICR[®] X9DA7/X9DAE QUICK REFERENCE GUIDE

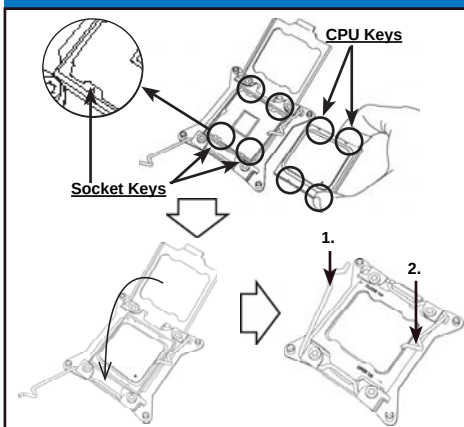
(MNL#1338-QRG)

CONTACT INFO: 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

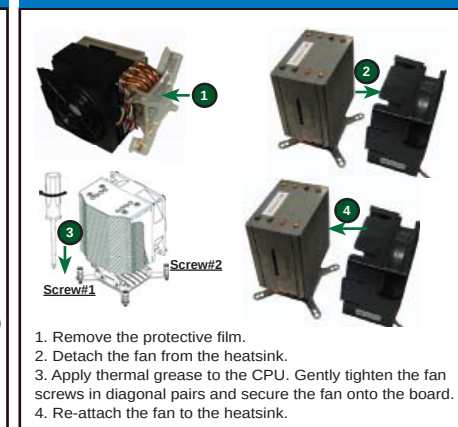
Motherboard Layout and Features



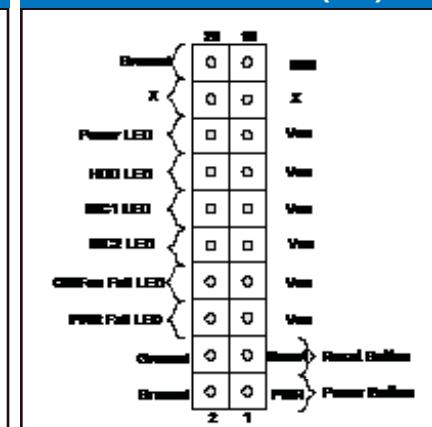
CPU Installation



Heatsink Installation



Front Panel Control (JF1)



Note: Graphics shown in this quick guide are for illustration only. Your components may or may not look exactly the same as drawings shown in this guide.

Jumpers/Connectors/LED Indicators

Jumpers

Jumper	Item#	Description	Default Setting
JBT1	28	Clear CMOS	See Chpt. 2 in User Manual
JPC1/JPC2	14	SMBus to PCI-E Slots	Pins 2-3 (Disabled)
JPI1	25	IEEE1394a Enable	Pins 1-2 (Enabled)
JPL1	9	GLAN1/GLAN2 Enable	Pins 1-2 (Enabled)
JWD1	31	Watch Dog Timer Enable	Pins 1-2 (Reset)

Connectors

Connector	Item#	Description
7.1 Audio	3	8 Channel (7.1) HD Back Panel Audio Connector
Battery	22	Onboard Battery
CNF1/CNF2	17	IEEE 1394a 1/2 Connectors
COM1	1	Backplane COM Port1
FAN1~7, FANA	44, 40, 39, 8, 6, 43, 49, 34	CPU/System Fan Headers (Fan6/Fan7: CPU 1/2 Fans)
J18	7	Front Panel Audio Header
J22	45	ATX 24-Pin Power Connector
JD1	38	Speaker/Power LED Indicator
JF1	41	Front Panel Control Header
JL1	12	Chassis Intrusion
JIPMB1	11	4-pin External BMC I ² C Header to PCH
JOH1	32	Overheat/Fan Fail LED Indicator
JPIC1	47	Power Supply SMBus I ² C Header
JPWR1/JPWR2	48, 46	12V 8-Pin Power Connectors
JSD1	27	SATA DOM (Device On Module) Power Connector
JSPDIF_In/Out	10	SPDIF (Sony/Philips Digital Interface) In/Out Headers
JTPM1	13	TPM (Trusted Platform Module)/Port 80 Header
KB/Mouse	5	(PS2) Keyboard/Mouse Connector
LAN1/2	4	Gigabit Ethernet LAN Ports 1/2
(L-)SAS 0~3, 4~7	36, 35	SAS 2.0 Connections 0~3, 4~7 from LSI (X9DA7 Only)
(I-)SATA0~3	30, 29	Intel SATA Connectors 0~3 (SATA 3: #0/1, SATA 2: #2/3)
(S-)SATA0~3	23, 19	SATA 2.0 Connectors 0~3 from Intel SCU
SP1	21	Onboard Buzzer (Internal Speaker)
STBY1	26	Standby Power Header
S-SGPIO 1	16	Serial-Link General Purpose IO Header for S-SATA Connections 0~3
T-SGPIO 1	15	Serial-Link General Purpose IO Header for I-SATA Connections 0~3
USB 2.0 0~3	2	Back Panel USB 2.0 Ports 0/1/2/3
USB 2.0 4	20	Front-Panel Accessible Type A USB 2.0 Header
USB 2.0 5/6	18	Front-Panel Accessible USB 2.0 Connections 5/6
USB 3.0 0/1	5	Back Panel USB 3.0 Ports 0/1
USB 3.0 2/3	37	Front-Panel Accessible USB 3.0 Connections 2/3

LED Indicators

LED	Item#	Description	State	Status
DS1	33	SAS LED	(Reserved for Internal Use)	
LE1	42	Standby PWR LED	Green: On	SB Power On

Note: Refer to Chapter 2 of the User Manual for detailed information on jumpers, connectors, and LED indicators.

Memory Support

This motherboard supports up to 512 GB of 240-pin Registered (RDIMM)/Load Reduced (LRDIMM) ECC or 128 GB of Unbuffered (UDIMM) ECC/Non-ECC DDR3 800/1066/1333/1600 MHz 4-channel (per CPU) memory 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

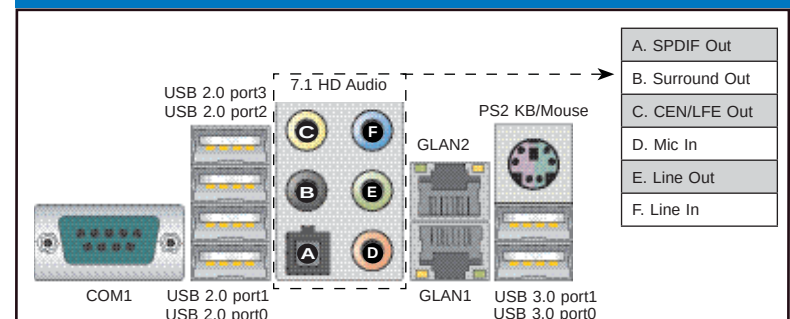
Insert the desired number of DIMMs into the memory slots, starting with P1-DIMMA1. For memory to work properly, follow the tables below for memory population order. Refer to the motherboard layout (at left) for the location of the DIMM slots.

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
CPU 2	P2-DIMME1	P2-DIMMF1	P2-DIMMG1	P2-DIMMH1	P2-DIMME2	P2-DIMMF2	P2-DIMMG2

Processor and Memory Module Population for Optimal Performance

Number of CPUs+DIMMs	CPU and Memory Population Configuration Table (*For memory to work properly, 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



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