

CONTACT INFORMATION

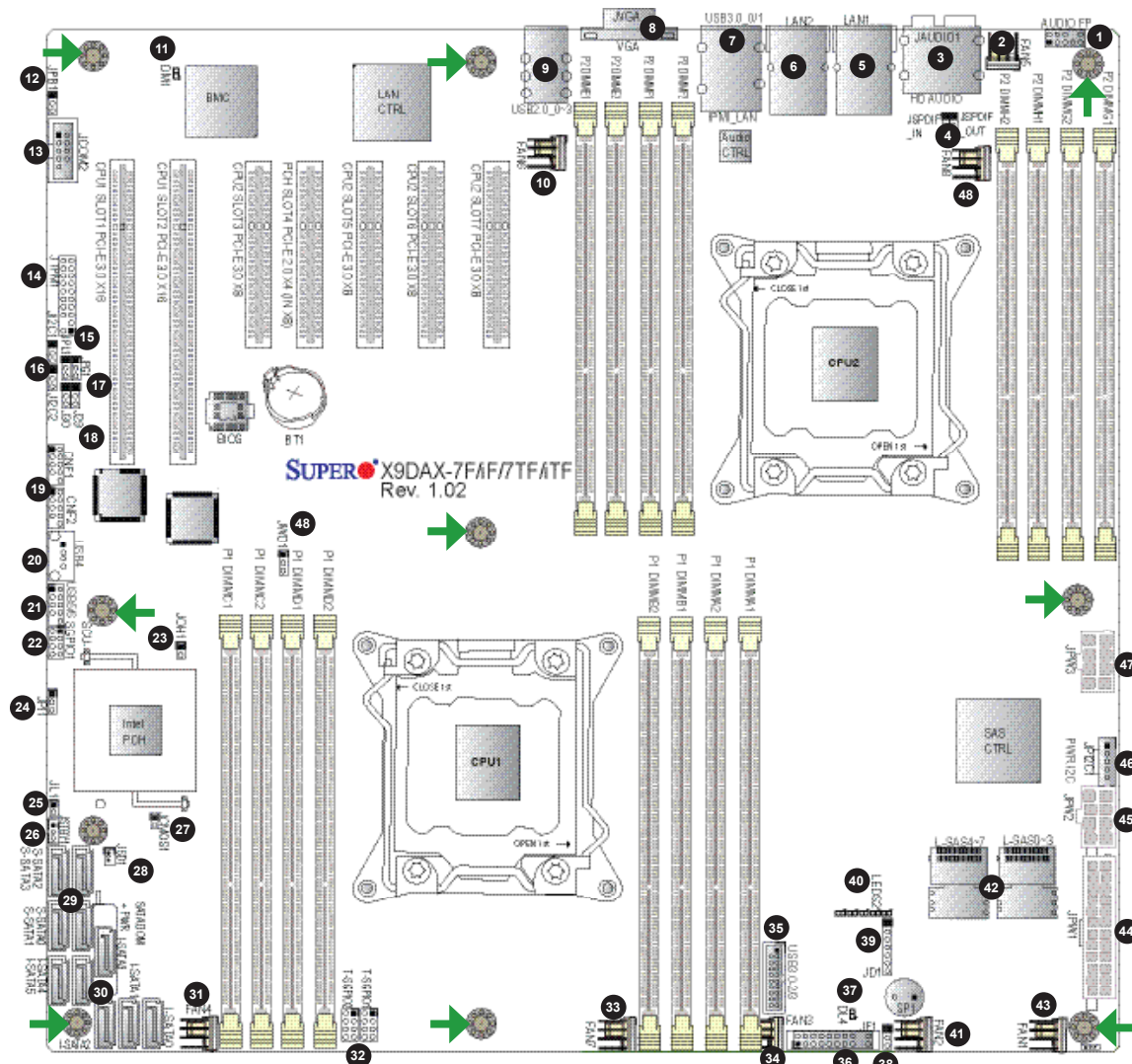
- www.supermicro.com (Email: support@supermicro.com)
- Manuals: <http://www.supermicro.com/support/manuals>
- Drivers & Utilities: <ftp://ftp.supermicro.com>
- Safety: http://www.supermicro.com/about/policies/safety_information.cfm

PACKAGE CONTENTS (Applies to single-pack only)

- One (1) Supermicro Motherboard
- Six (6) Serial ATA Cables (X9DAX iF/iTF)
- Four (4) Serial ATA Cables (X9DAX 7F/7TF)
- One (1) I/O Shield

- Two (2) I-Pass to Serial ATA Cables (X9DAX 7F/7TF)
- One (1) IEEE 1394a Internal to External Cable

Motherboard Layout and Features



→ = mounting hole Note: Item numbers are listed in counterclockwise order.

Jumpers, Connectors and LED Indicators

Jumpers

Jumper	Item #	Description	Default
J29/J30	18	SMB Enable	Pins 1-2 (Enabled)
JCMOS1	27	Clear CMOS	Open (Normal)
J1 ² C1/J1 ² C2	16	SMBus to PCI-E Slots	Pins 2-3 (Normal)
JPB1 / JPG1	12, 17	BMC Enable / VGA Enable	Pins 1-2 (Enabled)
JPI1	24	IEEE1394a Enable	Pins 1-2 (Enabled)
JPL1 (X9DAX-iF/7F)	15	Gigabit Ethernet LAN Enable	Pins 1-2 (Enabled)
JPL1 (X9DAX-iTF/7TF)	15	10G Ethernet LAN Enable	Pins 1-2 (Enabled)
JPS1 (X9DAX-7F/-7TF)	38	SAS Enable	Pins 1-2 (Enabled)
JWD1	48	Watch Dog	Pins 1-2 (Reset)

Connectors

Connector	Item #	Description
(J) Audio	3	8 Channel (7.1) High-Definition Backplane Audio Connector
(FP) Audio	1	Front Panel Audio Header
CNF1/CNF2	19	IEEE 1394a 1/2 Connectors
(J) COM2	13	Front Panel Accessible COM Port Header
FAN1~4	43, 41, 34, 31	CPU/System Fan Headers
FAN5~8	2, 10, 33, 48	CPU/System Fan Headers (Fan7/Fan8: CPU 1/2 Fans)
JD1	39	Speaker/Power LED Indicator
JF1	36	Front Panel Control Header
JL1	25	Chassis Intrusion
JOH1	23	Overheat/Fan Fail LED Indicator
JPI ² C1	46	Power Supply SMBus I ² C Header
JPW1	44	24-Pin Power Connectors
JPW2/JPW3	45, 47	12V 8-Pin Power Connectors
JSD1	28	SATA DOM (Device On Module) Power Connector
JSPDIF_In / Out	4	SPDIF (Sony Philips Digital Interface) In / Out Header
JSTBY1	26	Standby Power Header
JTPM1	14	TPM (Trusted Platform Module)/Port 80 Header
JVGA	8	VGA Port
LAN1/2	5, 6	GbE LAN Ports 1/2 (-iF/7F Only), 10G LAN Ports 1/2 (-iTF/7TF Only)
(L-)SAS 0~3, 4~7	42	SAS 2.0 Connections from LSI SAS 2208 Controller (-7F/-7TF Only)
(I-)SATA0~5	30	Intel SB SATA Connectors (0/1: SATA 3.0 Ports, 2~5: SATA 2.0 ports)
(S-)SATA0~3	29	SATA 2.0 Connectors 0~3 from SCU (Storage Control Unit)
SCU-SGPIO 1	22	Serial-Link General Purpose IO -Hdr for S-SATA Connections 0~3
T-SGPIO 1/2	32	Serial-Link General Purpose IO Hdrs for I-SATA Connections 0~3, 4/5
USB 2.0 #0~3	9	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	21	Front-Panel Accessible USB 2.0 Connections 5/6
USB 3.0 #0/1	7	Back Panel USB 3.0 Ports 0/1
USB 3.0 #2/3	35	Front-Panel Accessible USB 3.0 Connections 2/3

LED Indicators

LED	Item #	Description	Color/State	Status
DL4	37	Standby PWR LED	Green: On	Standby Power On
DM1	11	BMC LED	Green	BMC Active
LEDS2	40	SAS LED	On	BMC Active

Memory Support

This motherboard supports up to 1024 GB of 240-pin Registered (RDIMM)/Load Reduced (LRDIMM) ECC or up to 128 GB of Unbuffered (UDIMM) ECC/Non-ECC DDR3 800/1066/1333/1600/1866 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.

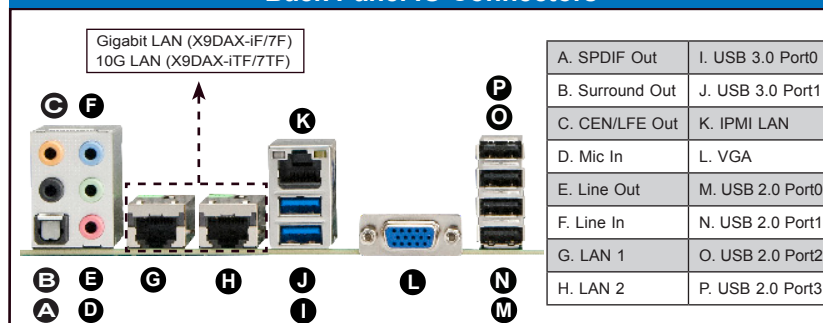
Processors and their Corresponding Memory Modules

CPU#	Corresponding DIMM Modules							
CPU 1	P1-DIMMA1	P1-DIMMB1	P1-DIMMC1	P1-DIMMD1	P1-DIMMA2	P1-DIMMB2	P1-DIMMC2	P1-DIMMD2
CPU2	P2-DIMME1	P2-DIMMF1	P2-DIMMG1	P2-DIMMH1	P2-DIMME2	P2-DIMMF2	P2-DIMMG2	P2-DIMMH2

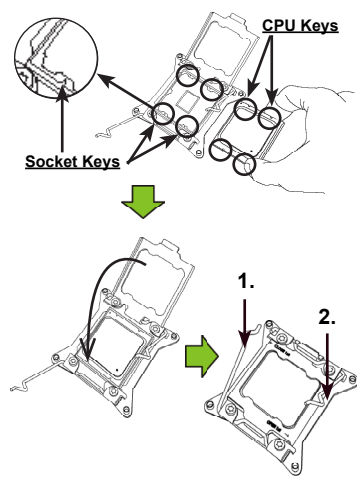
Processor and Memory Module Population for Optimal Performance

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

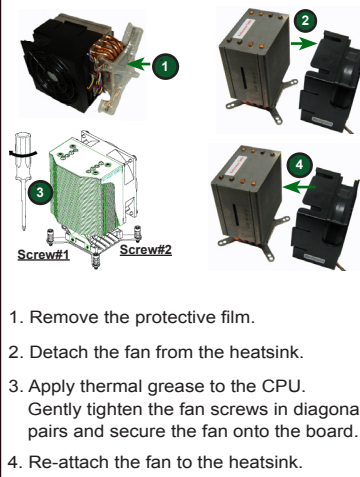
Back Panel IO Connectors



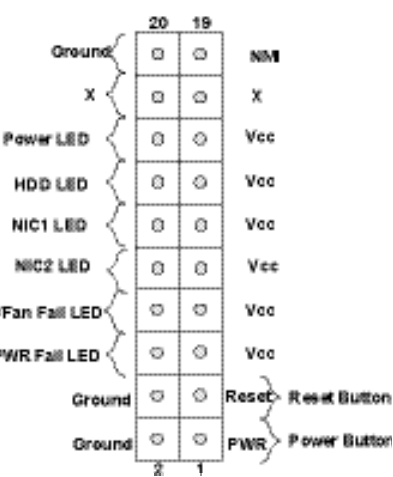
CPU Installation



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.