SUPERMICRO®

X8DTU / X8DTU-F

QUICK REFERENCE GUIDE Rev. 1.00

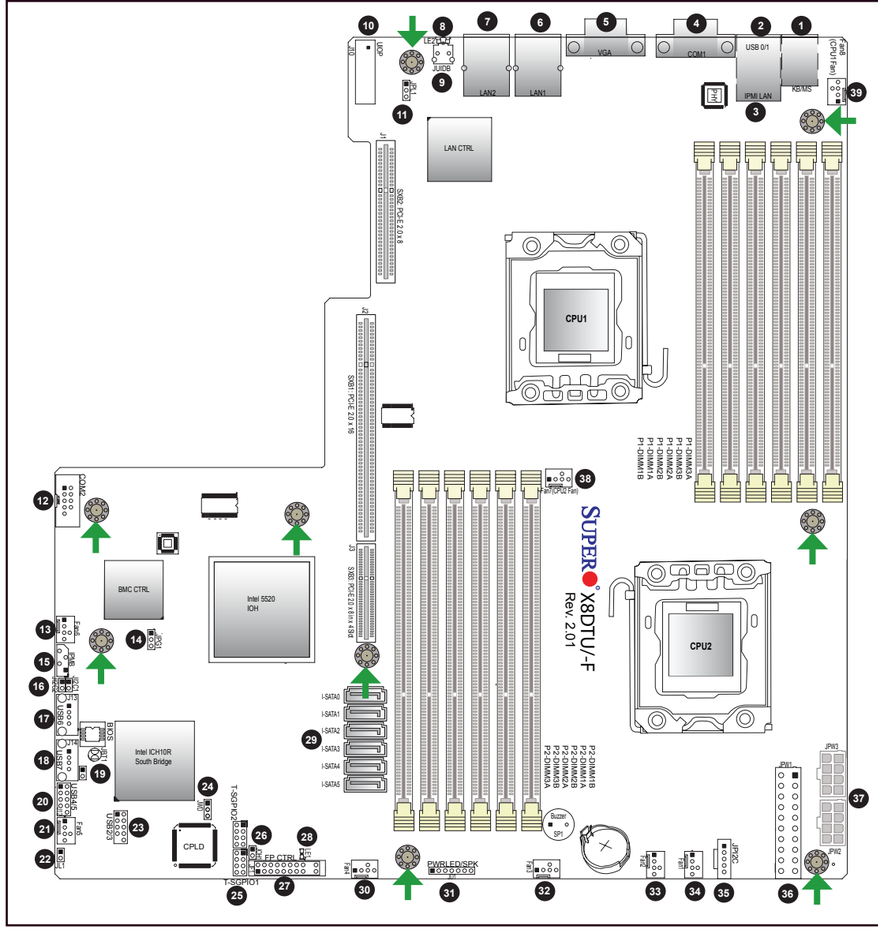
CONTACT INFORMATION

- 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
- One (1) I/O Back Panel Shield

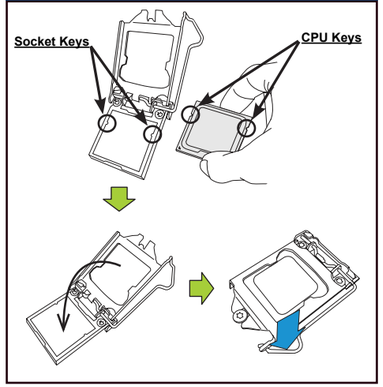
Motherboard Layout and Features



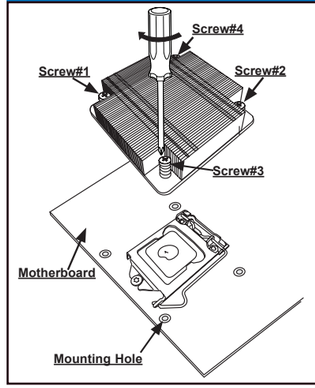
= *mounting hole*

***Note**: Item numbers are listed in counterclockwise order.*

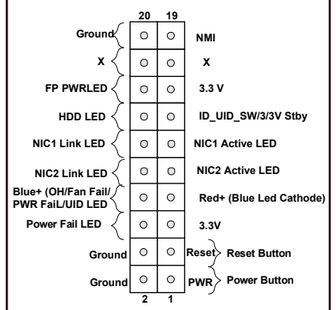
CPU Installation



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, and LED Indicators

Jumpers

Jumper	Item #	Description	Default
JBT1	19	CMOS Clear	See Chapter 2 in User Manual
JI²C1/JI²C2	16	SMB to PCI-Exp. Slots	Off (Disabled)
JPG1	14	VGA Enable	Pins 1-2 (Enabled)
JPL1	11	LAN1/2 Enable	Pins 1-2 (Enabled)
JWD	24	Watch Dog	Pins 1-2 (Reset)

Connectors

Connectors	Item#	Description
COM1, COM2	4, 12	COM1, COM2 Serial Port/Header
FAN 1~4	34, 33, 32, 30	System Fan Headers
FAN 5~8	21, 13, 38, 39	System/CPU Fan Headers (Fans 7~8: CPU Fans)
IPMB	15	IPMB I²C Header (for an IPMI Card) (X8DTU-F)
IPMI LAN	3	IPMI 2.0 Dedicated LAN (X8DTU-F)
JD1	31	Speaker/Power LED Header (Pins 4~7: Speaker)
JF1	27	Front Panel Control Connector
JL1	22	Chassis Intrusion Header
JOH1	26	Overheat LED Header
JPI²C	35	Power Supply SMBbus I²C Header
JPW1	36	20-pin ATX Main Power Connector
JPW2/JPW3	37	8-pin Secondary PWR Connector
JUIDB	9	Rear Unit Identifier Switch
KB/MS	1	Keyboard and Mouse
LAN1, LAN2	6, 7	Gigabit Ethernet (RJ45) Ports
I-SATA0 ~ I-SATA5	29	(Intel South Bridge) SATA Ports
T-SGPIO-1 T-SGPIO-2	25	Serial General Purpose Input/Output Headers
UIOP	10	Universal IO Riser Card Power Connector (Required for Add-on cards)
(B/P) USB0/1	2	(Back Panel) Universal Serial Bus (USB) Ports
USB 2/3 4/5, 6, 7	23, 20, 17, 18	Front Panel Accessible USB Headers
VGA	5	Video Port

LED Indicators

LED	Item#	Description	State	Status
LE1	28	Onboard Standby PWR	On	System Power On
LE2	8	UID LED	Blue: On (Windows OS), Blinking (Linux)	Unit Identified

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

Memory Support

This motherboard supports up to 192 GB of Registered (RDIMM) ECC or up to 48 GB of Unbuffered (UDIMM) ECC/Non-ECC DDR3 800/1066/1333 MHz 3-channel (per CPU) memory in 12 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-DIMM1A. 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.

Memory Support for the Motherboard with the 5500 Processor(s) Installed

RDIMM Population for the Motherboard w/5500 Processors Installed

DIMM Slots per Channel	DIMMs Populated per Channel	DIMM Type (Reg.= Registered)	Speeds (in MHz)	Ranks per DIMM (any combination; SR=Single Rank, DR=Dual Rank, QR=Quad Rank)
3	1	Reg. DDR3 ECC	800,1066,1333	SR or DR
3	1	Reg. DDR3 ECC	800,1066	QR
3	2	Reg. DDR3 ECC	800,1066	Mixing SR, DR
3	2	Reg. DDR3 ECC	800 **(Note)**	Mixing SR, DR, QR

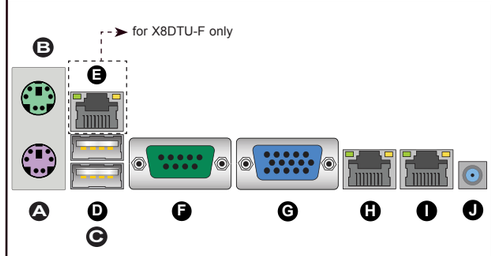
Note: 1066 RDIMMs will run at 800 MHz (-BIOS automatic downgrading)

UDIMM Population for the Motherboard w/5500 Processors Installed

DIMM Slots per Channel	DIMMs Populated per Channel	DIMM Type (Unb.= Unbuffered)	Speeds (in MHz)	Ranks per DIMM (any combination; SR=Single Rank, DR=Dual Rank, QR=Quad Rank)
3	1	Unb. DDR3 ECC/Non-ECC	800,1066,1333	SR or DR
3	2	Unb. DDR3 ECC/Non-ECC	800,1066	Mixing SR, DR

***Note:** Refer to Chapter 2 of the User Manual for additional memory support.*

Back Panel IO Connectors



A. Keyboard
B. PS/2Mouse
C. USB Port 0
D. USB Port 1
E. IPMI LAN
F. COM Port 1
G. VGA
H. Gigabit LAN 1
I. Gigabit LAN 2
J. UID Switch

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

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