

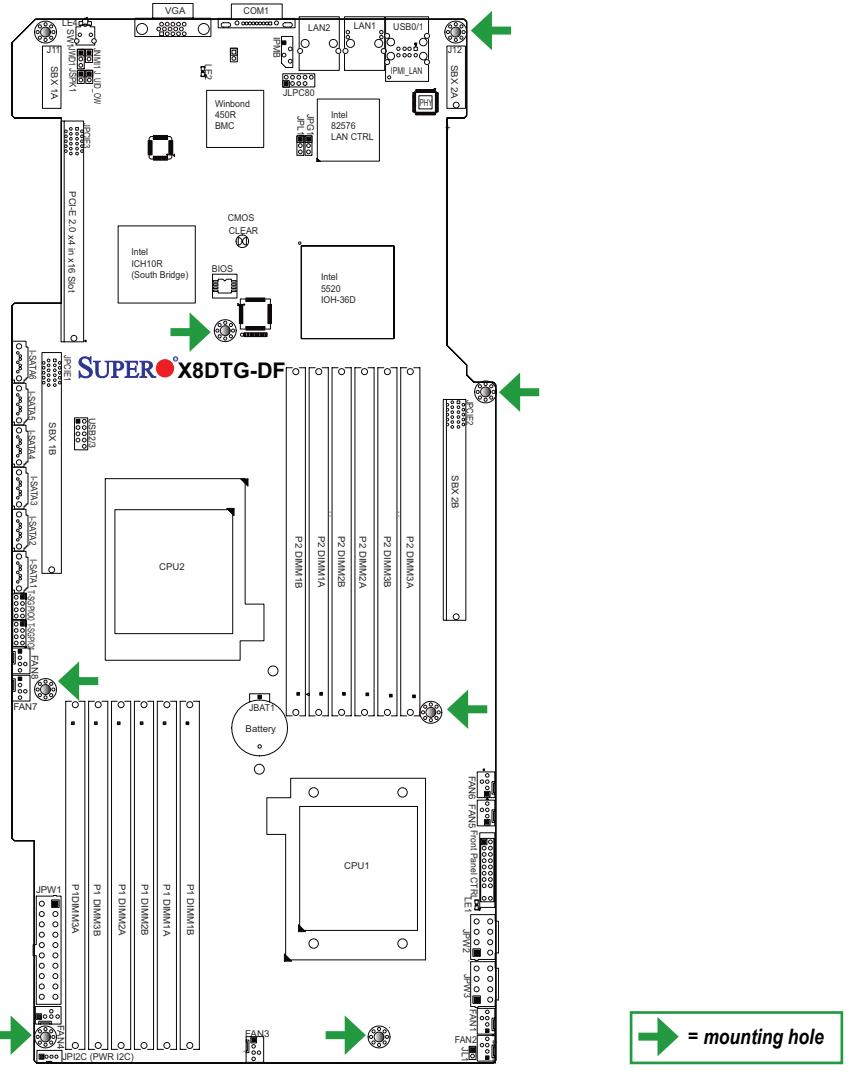
**CONTACT INFORMATION**

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

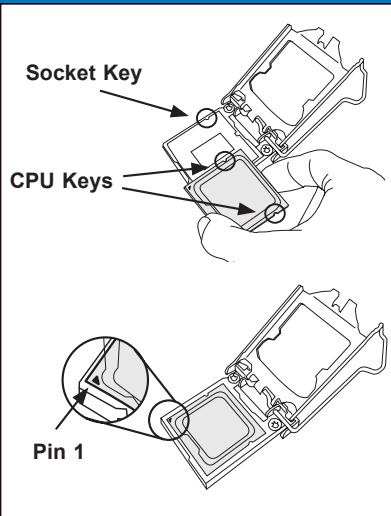
**PACKAGE CONTENTS**

- One (1) Supermicro Motherboard

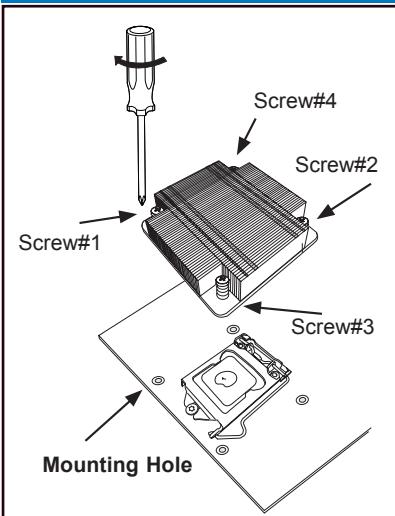
**Motherboard Layout and Features**



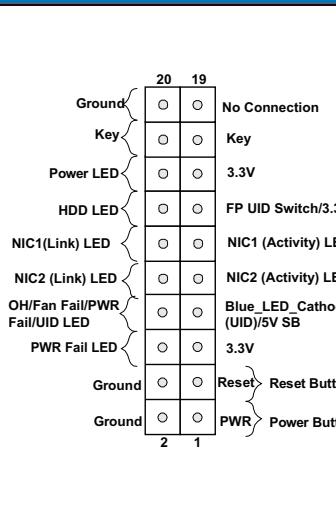
**CPU Installation**



**Heatsink Installation**



**Front Panel Control (JF1)**



**Jumpers, Connectors and LED Indicators**

Jumpers		
Jumper	Description	Default Setting
JBT1	CMOS Clear	Pins 1-2 (Reset)
JPG1	VGA Enable	Pins 1-2 (Enabled)
JPL1	LAN1/2 Enable	Pins 1-2 (Enabled)
J_UID_OW	Red LED OW (Pins 7-8 of JF1)	Off (Overwrites)
JWD1	Watch Dog	Pins 1-2 (Reset)

Connectors		
Connector	Description	
COM1	COM1 Serial Port	
FAN 1-8	System/CPU Fan Headers	
IPMB	IPMB (SMB I2C) Header (for IPMI)	
JF1	Front Panel Connector	
JL1	Chassis Intrusion	
JLPC80	JLPC80 Connector	
JNMI1	NMI (Non-Maskable Interrupt) Header	
JPSK1	Internal Speaker/Buzzer Header	
JPW1	12V 20-pin Power Connector	
JPW2/JPW3	12V 8-pin PCI-Exp. Power Connectors	
LAN1/2	Gigabit Ethernet (RJ45) Ports	
(IPMI dedicated) LAN	LAN (RJ45) Port for IPMI 2.0	
PCI-E Slot	PCI-Express 2.0 x4 in x 16 slot (JPCIE3)	
PWR I2C (JPI2C)	Power SMB (System Management Bus) I2C Header	
SATA1 ~ SATA6	(Intel South Bridge) SATA Ports	
SBX 1A/2A Slots	PCI-E slots GPU for (Graphics Processing Unit) support (J11/J12)	
SBX 1B/2B Slots	PCI-E slots for GPU support (JPCIE1/JPCIE2)	
SW1	Unit Identifier Switch	
T-SGPIO-0/T-SGPIO-1	Serial General Purpose Input/Output Headers	
USB0/1, USB 2/3	Universal Serial Bus (USB) Ports 0/1, 2/3	
VGA	Video Port	

LED Indicators		
LED	Description	
LE1	Onboard Standby PWR warning LED Indicator	
LE2	BMC LED Indicator	
LE4	(Rear) Unit Identifier (UID) LED Indicator	

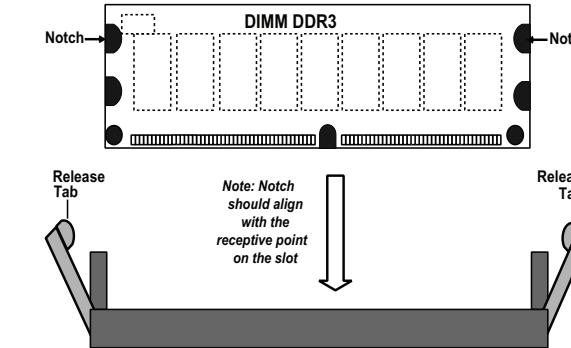
**Memory Support**

The X8DTG-DF supports up to 96 GB of Registered ECC or up to 24 GB of Unbuffered ECC/Non-ECC DDR3 1333/1066/800 MHz Memory in 12 DIMMs.

**Note:** With Unbuffered ECC/Non-ECC Memory, a maximum of 2 GB of memory is supported per DIMM slot.

**DIMM Memory Installation**

Insert the desired number of DIMMs into the memory slots, starting with P1 DIMM1A.



**Memory Population for Optimal Performance**  
-For a motherboard with One CPU (CPU1) installed

	Branch 0	Branch 1	Branch 2
3 DIMMs	P1 DIMM1A	P1 DIMM2A	P1 DIMM3A
6 DIMMs	P1 DIMM1A	P1 DIMM1B	P1 DIMM2A

**Memory Population for Optimal Performance**  
-For a motherboard with One CPU (CPU2) installed

	Branch 0	Branch 1	Branch 2
3 DIMMs	P2 DIMM1A	P2 DIMM2A	P2 DIMM3A
6 DIMMs	P2 DIMM1A	P2 DIMM1B	P2 DIMM2A

**Memory Population for Optimal Performance**  
-For a motherboard with Two CPUs installed

	CPU1			CPU2		
	Branch 0	Branch 1	Branch 3	Branch 0	Branch 1	Branch 3
6 DIMMs	1A	2A	3A	1A	2A	3A
12 DIMMs	1A	1B	2A	2B	3A	3B

**Back Panel I/O Connectors**

