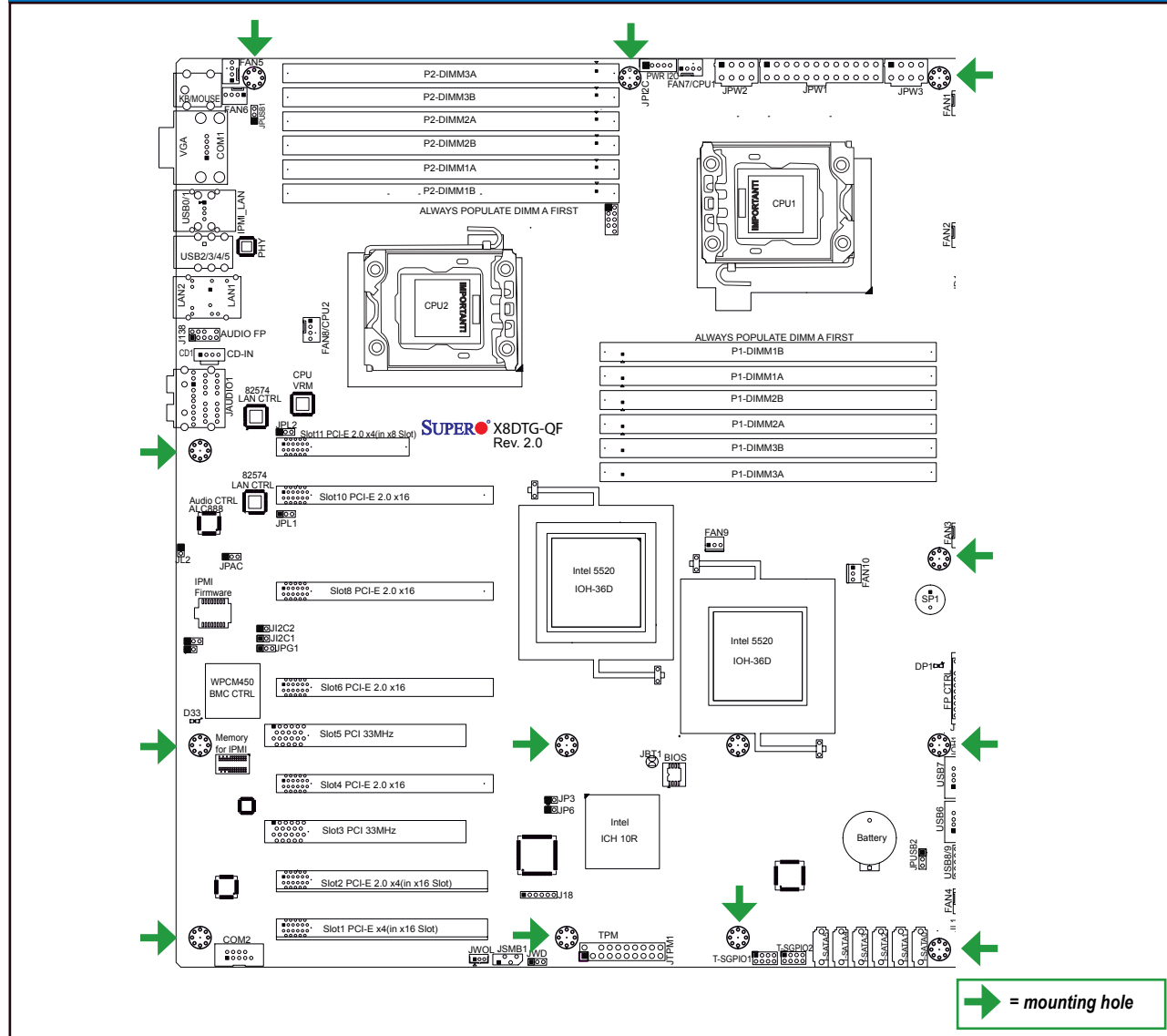


Motherboard Layout and Features



Jumpers, Connectors and LED Indicators

Jumpers		
Jumper	Description	Default Setting
JBT1	CMOS Clear	Pins 1-2 (Reset)
JI ² C1/JI ² C2	SMB to PCI/PCI-E Slots	Open (Disabled)
JL2	Audio Mode Select	Open (HD Mode)
JPAC	Audio Enable	Pins 1-2 (Enable)
JPG1	VGA Enable	Pins 1-2 (Enabled)
JPL1/JPL2	LAN1/2 Enable	Pins 1-2 (Normal)
JPUSB1/2	Back/FP USB Wake-up Enable	Pins 1-2 (Enabled)
JWD	Watch Dog	Pins 1-2 (Reset)

Connectors	
Connector	Description
(HD) Audio/CD-In/FP Audio	7.1 Channel High Definition Audio (JAUDIO1)/CD-In (CD-1)/Front Panel Audio
COM1/COM2	COM1/COM2 Serial Connections
FAN#1~10	System/CPU Fan Headers (Fans 7~8: CPU Fans)
I-SATA0 ~ 5	(Intel South Bridge) SATA Ports 0~5
JD1	PWR LED (Pins 1~3)/Speaker (Pins 4~7)
JF1	Front Panel Connector
JL1	Chassis Intrusion
JOH1	Overheat LED Indicator
JPW1,JPW2,JPW3	12V 24-pin Main PWR, 8-pin PWR Connectors
JSMB1	System Management Bus I ² C Header
JTPM1	TPM (Trusted Platform Module) Header
JWOL	Wake-On_LAN
KB/Mouse	PS2 Keyboard/Mouse
LAN1/2, IPMI_LAN	Gigabit Ethernet Ports 1~2, IPMI LAN
SP1	Internal Speaker/Buzzer Header
T-SGPIO-0/1	Serial General Purpose IO Headers
USB 0/1, 2/3/4/5	Backplane USB Ports 0/1, 2/3/4/5
USB 6, 7, 8/9	Front Panel USB 6, 7, 8/9
VGA	Video Port

LED Indicators	
LED	Description
DP1	Onboard Standby PWR warning LED Indicator
D33	BMC LED Indicator

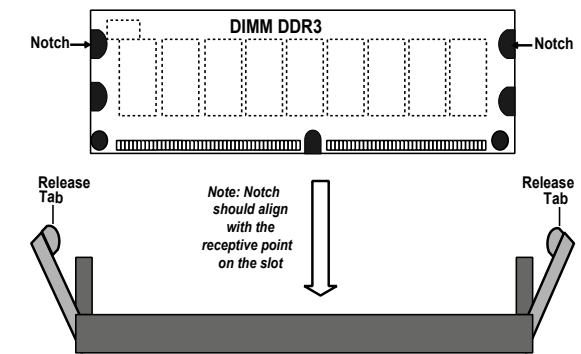
Memory Support

The X8DTG-QF supports up to 192 GB of Registered ECC or up to 48 GB of Unbuffered ECC/Non-ECC DDR3 1333/1066/800 MHz Memory in 12 DIMMs. (*Refer to our memory recommendation list posted on our website at www.supermicro.com.)

Note: For Unbuffered ECC/Non-ECC memory, maximum of 4 GB per DIMM is supported.

DIMM Memory Installation

Insert the desired number of DIMMs into the memory slots, starting with P1-DIMM 1A.

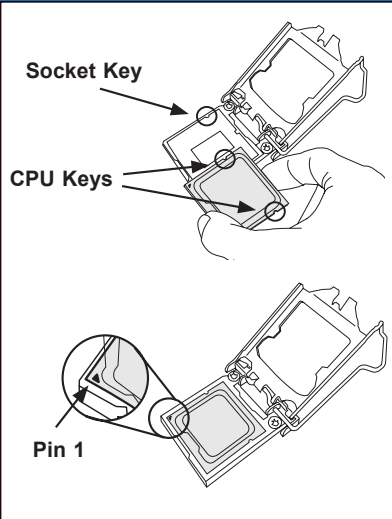


Memory Population for Optimal Performance -For a motherboard with One CPU (CPU1) installed						
0	Branch 0		Branch 1		Branch 2	
3 DIMMs	P1 DIMM1A		P1 DIMM2A		P1 DIMM3A	
6 DIMMs	P1 DIMM1A	P1 DIMM1B	P1 DIMM2A	P1 DIMM2B	P1 DIMM3A	P1 DIMM3B

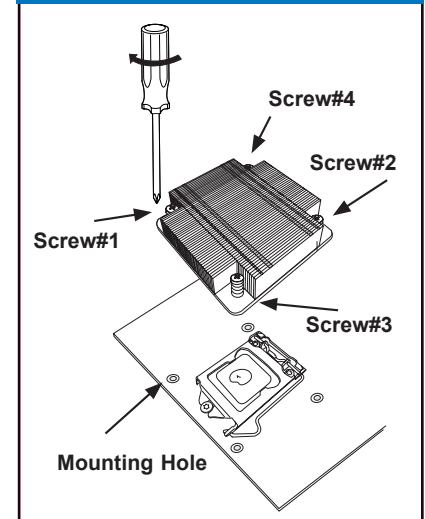
Memory Population for Optimal Performance -For a motherboard with One CPU (CPU2) installed						
	Branch 0		Branch 1		Branch 2	
3 DIMMs	P2 DIMM1A		P2 DIMM2A		P2 DIMM3A	
6 DIMMs	P2 DIMM1A	P2 DIMM1B	P2 DIMM2A	P2 DIMM2B	P2 DIMM3A	P2 DIMM3B

Memory Population for Optimal Performance -For a motherboard with Two CPUs installed								
	CPU1						CPU2	
	Branch 0		Branch 1		Branch 3		Branch 0	
6 DIMMs	1A	2A	3A		1A	2A	3A	
12 DIMMs	1A	1B	2A	2B	3A	3B	1A	1B
							2A	2B
							3A	3B

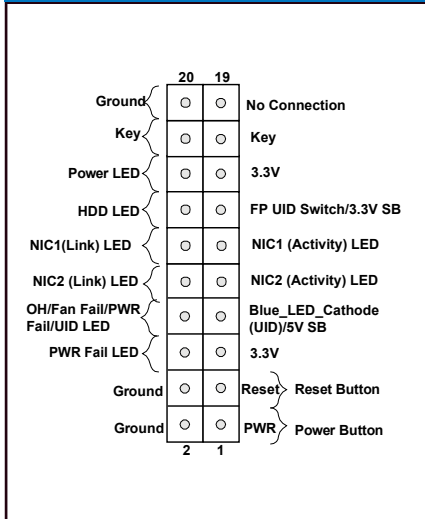
CPU Installation



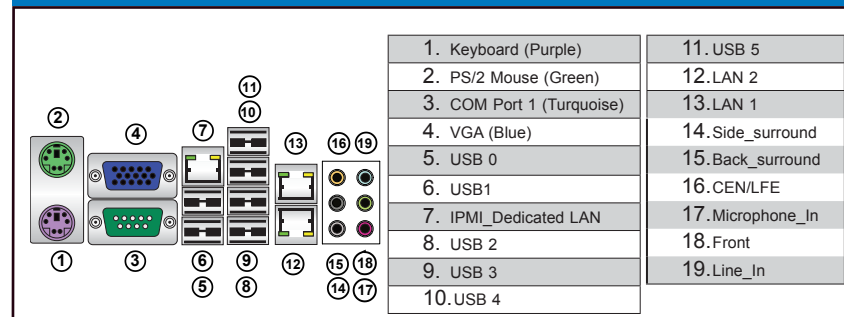
Heatsink Installation



Front Panel Control (JF1)



Back Panel I/O Connectors



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 1 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.