

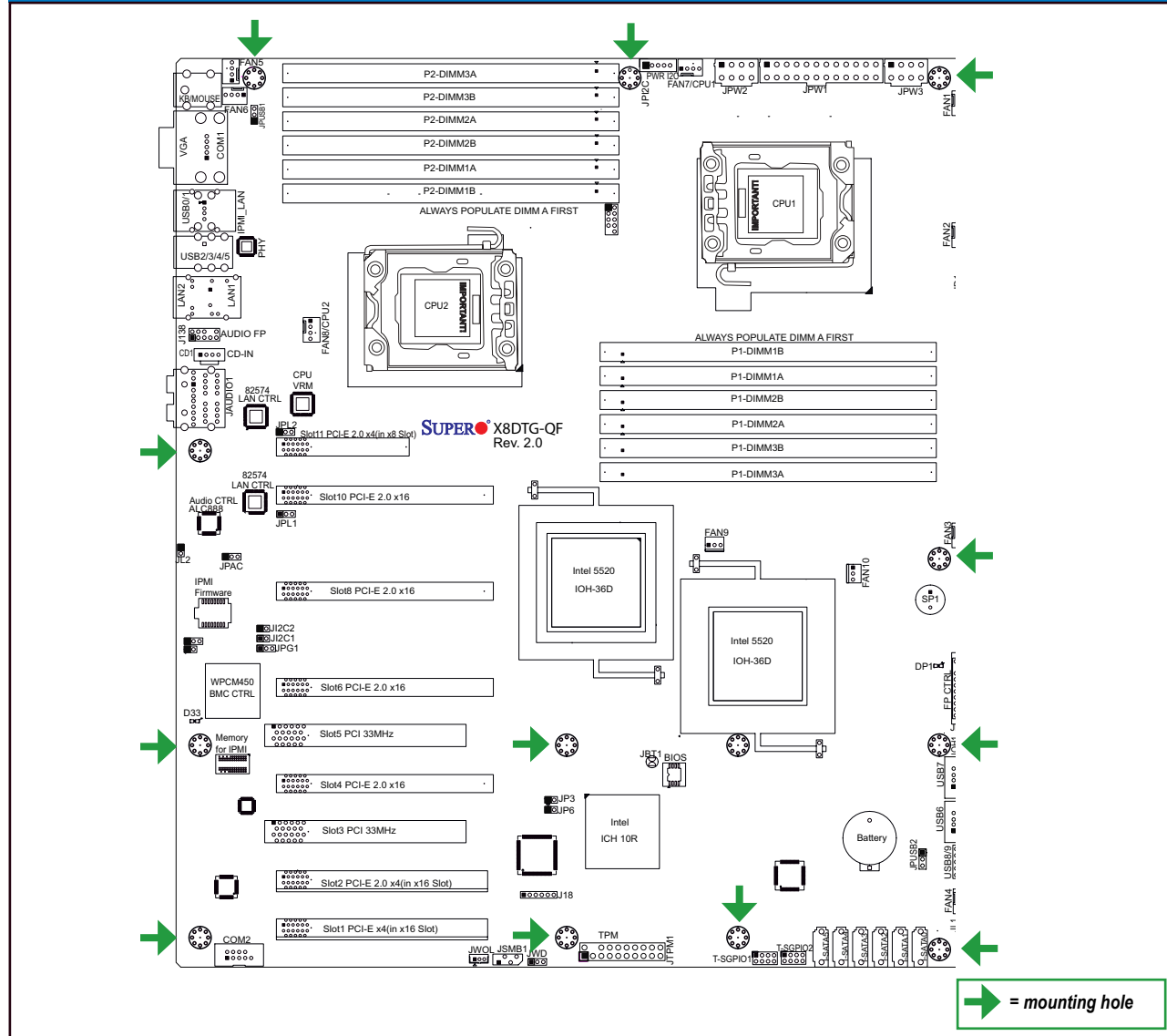
CONTACT INFORMATION

- 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

- One (1) Supermicro Motherboard
- Six (6) SATA Cables
- One (1) I/O Shield

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

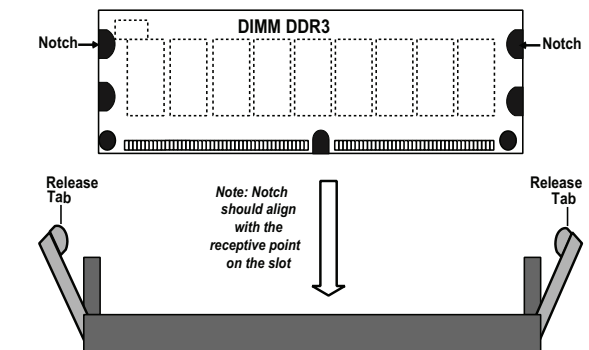
Memory Support

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

	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	

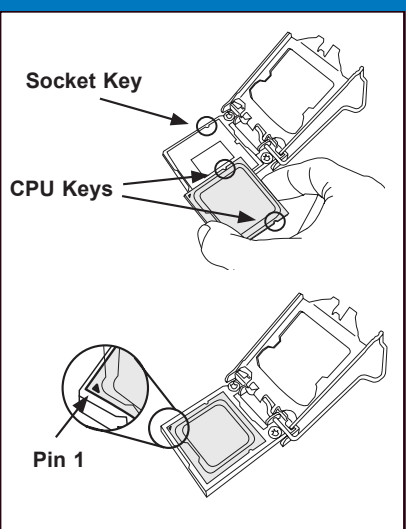
Memory Population for Optimal Performance -For a motherboard with One CPU (CPU2) installed

	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	

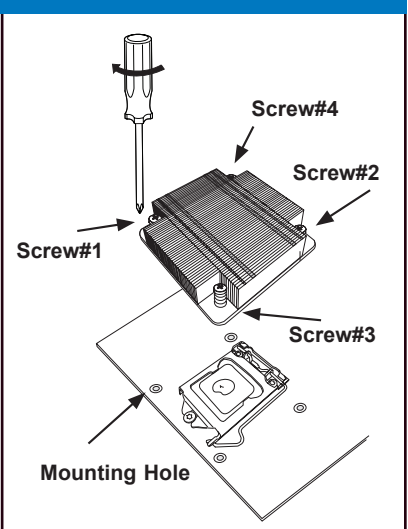
Memory Population for Optimal Performance -For a motherboard with Two CPUs installed

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

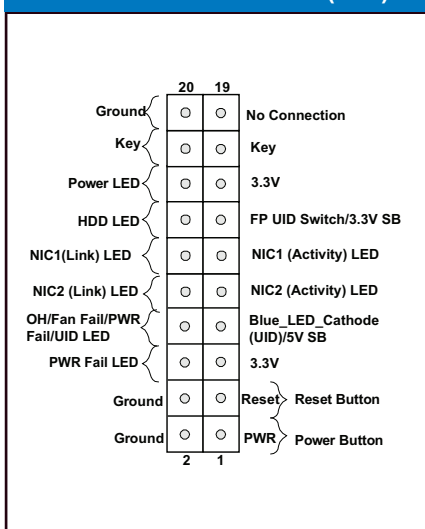
CPU Installation



Heatsink Installation



Front Panel Control (JF1)



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.