**Motherboard Layout and Features** 

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

## **Jumpers, Connectors and LED Indicators**

	Jumpers								
Jumper	Item#	Description	Default Setting						
JMBC1	8	BMC Enable (X8DTT-F/-IBXF/-IBQF)	Pins 1-2 (Enabled)						
JBT1	22	CMOS Clear	Short: Clear CMOS Open: Normal Operation (Default)						
JPEN1	34	Normal Power Enable	Pins 1-2 (Enabled)						
JPG1	4	VGA Enabled	Pins 1-2 (Enabled)						
JPL1	7	LAN 1/2 Enable	Pins 1-2 (Enabled)						
J_UID_OW	20	Red LED OW (Pins 7-8 of JF1)	Off (Overwrites)						
JWD1	17	Watch Dog	Pins 1-2 (Reset)						

2 1	14 #	Connectors
Connectors	Item#	Description
COM1	5	COM1 Serial Port
FAN 1-4	38, 36, 35, 33	System/CPU Fan Headers
InfiniBand	11	InfiniBand Connector (X8DTT-/IBXF/IBQ/IBQF
IPMB	6	IPMB Header (for an IPMI Card) (X8DTT-F/-IBXF/-IBQF)
J119	19	InfiniBand I <sup>2</sup> C Debug Header (-/IBX/IBXF/IBQF)
JF1	40	Front Panel Connector
JNMI1	16	NMI (Non-Maskable Interrupt) Header
JP10	31	Onboard 4-pin Power Connector
JPSK1	18	Internal Speaker/Buzzer Header
JTPM1	42	Trusted Platform Module Header
JWR1/JWR2	39, 32,	12V 20-pin Power Connector
JWOL1	21	Wake-On-LAN Header
LAN1/2	2, 3	Gigabit Ethernet (RJ45) Ports
(IPMI Dedicated) LAN	44	LAN (RJ45) Port for IPMI 2.0 (X8DTT-F/-IBXF/-IBQF
SATA0 ~ SATA 5	24, 25, 26, 28, 29, 30	(Intel South Bridge) SATA Ports
SMBus	37	System Management Bus (SMBus) I <sup>2</sup> C Header (J18)
SW1	15	Unit Identifier Switch
T-SGPIO-0/T- SGPIO-1	23, 27	Serial General Purpose Input/Output Headers
USB0/1, USB 2/3	1, 43	Universal Serial Bus (USB) Ports 0/1, 2/3
VGA	10	Video Port

	LED Indicators						
LED	Item#	Description					
LE1	41	Onboard Standby PWR warning LED Indicator					
LE2	9	BMC Heartbeat LED (Green/Blinking: Normal) (X8DTT-F/-IBXF/-IBQF)					
LE4	14	(Rear) Unit Identifier (UID) LED Indicator					
LEB1	13	InfiniBand Link LED (X8DTT-F/-IBXF/-IBQF)					
LEB2	12	InfiniBand Activity LED (X8DTT-F/-IBXF/-IBQF)					

Jumper	Item#	Jumpers Description	Default Setting
JMBC1	8	BMC Enable (X8DTT-F/-IBXF/-IBQF)	Pins 1-2 (Enabled)
JBT1	22	CMOS Clear	Short: Clear CMOS Open: Normal Operation (Default)
JPEN1	34	Normal Power Enable	Pins 1-2 (Enabled)
JPG1	4	VGA Enabled	Pins 1-2 (Enabled)
JPL1	7	LAN 1/2 Enable	Pins 1-2 (Enabled)
J_UID_OW	20	Red LED OW (Pins 7-8 of JF1)	Off (Overwrites)
JWD1	17	Watch Dog	Pins 1-2 (Reset)
JWD1	17	Watch Dog	Pins 1-2 (Reset)

	6 DIMMs	1A		2A		3A	
	12 DIMMs	1A	1B	2A	2B	ЗА	3B
В	ack Pa	anel	I/C	Co	nne	cto	rs
В	ack Pa	anel	I/C	Co	nne	cto	rs
В	ack Pa	anel	I/C	Co	nne	cto	rs

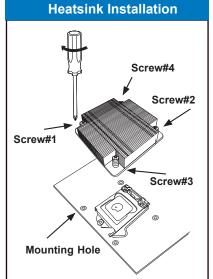
2

#### 1. USB 0 2. USB 1 3. IPMI\_Dedicated LAN (X8DTT-F/-IBXF/-IBQF models) 4. LAN 1 5. LAN 2 6. COM Port 1 (Black) 7. VGA (Blue) 4 (5) 8. InfiniBand (X8DTT-IBX/-IBXF/-IBQ/-IBQF

9. UID Switch

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

# **CPU Installation** Socket Key CPU Keys

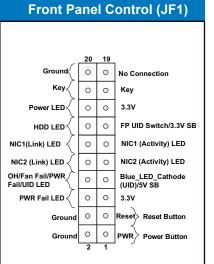


SUPER®X8DTT Series

25 27

29

31



## / 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.

## PACKAGE CONTENTS

# **Memory Support**

This motherboard supports up to 192 GB of Registered ECC or 48 GB of Unbuffered ECC/Non-ECC DDR3 1333/1066/800 MHz Memory in 12 DIMMs.

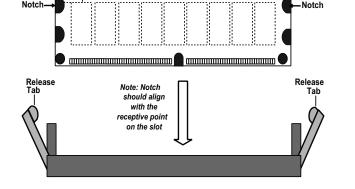
/ Note: Check the Supermicro web site for recommended memory modules.

### **DIMM Memory Installation**

MNL-1127-QRG

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

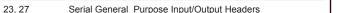
DIMM DDR3



Memory Population for Optimal Performance -For a motherboard with One CPU (CPU1) installed								
0	Bran	ch 0	Bra	nch 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							
	Bran	ch 0	Bra	nch 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								СР	U2		
	Bran	ch 0	Brai	nch 1	Bran	ich 3	Bran	Branch 0 Branch 1		Bran	ch 3	
6 DIMMs	1A		2A		ЗА		1A		2A		3A	
12 DIMMs	1A	1B	2A	2B	3A	3B	1A	1B	2A	2B	ЗА	3B



	6 DIMMs	1A		2A		3A	
	12 DIMMs	1A	1B	2A	2B	ЗА	3B
· ·							