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) Ribbon Cable for IDE Devices • One (1) Floppy Ribbon Cable

Memory Support

One (1) COM Port Cable
One (1) 2-port USB 2.0 cable
One (1) I/O Back Panel Shield

Motherboard Layout and Features SUPER°X8DTN+ 40 JI2C2 CPU1 13 (North Bridge) CPU2

CPU Installation	Heatsink Installation	Front Pane	I C
Socket Keys CPU Keys	Screw#4 Screw#2	Ground	20 O
		Power LED HDD LED	0
	Screw#3	NIC1 LED	0
-		NIC2 LED	0
		OH/Fan Fail LED	0
	Motherboard	PWR Fail LED	0
		Ground	0
		Ground	0
	Mounting Hole		2

	JPW
	JPW:
	JTPN
	JWF
	JWO
	KB/N
	LAN1
	PWR
	SP1
- 1)	T-SG T-SG
	USB
	USB
	VGA
	LED
	LE1
set Button	
B	ı

I Control (J

Vcc

Vcc

Jumpers, Connectors, and LED indicators						
Jumpers						
Jumper	Item #	Description	Default			
JBT1	41	CMOS Clear	See Chpt. 2 in User Manual			
JI ² C1, JI ² C2	40	SMB to PCI-Exp./ SMB to PCI-X Slots	Open (Disabled)			
JP3	22	IDE Master/Slave Select	1-2 (Master)			
JPG1	12	VGA Enable	1-2 (Enable)			
JPL1	11	LAN1/2 Enable	Pins 1-2 (Enabled)			
JWD	10	Watch Dog Enable	Pins 1-2 (Reset)			

ConnectorsItem#DescriptionCOM1, COM25, 14COM Port 1, COM2 HeaderFAN 1~434, 32, 27, 24System/CPU Fan HeadersFan 5~81, 2, 38, 9System/CPU Fan Headers (Fans 7 and 8: CPU Fans)Floppy26Floppy Disk Drive ConnectorIPMB (J14)13IPMB I²C Header (for an IPMI card)I-SATA 0~521(Intel South Bridge) SATA PortsJD130PWR LED/Speaker Header (Pins1~3: PWR LED, 4~7: SPKR)JF132Front Panel ConnectorJL117Chassis Intrusion HeaderJOH129Overheat LED HeaderJPW13724-pin ATX Main Power Connector (Required)JPW3, JPW435, 368-pin 12-V Power ConnectorsJTPM120TPM (Trusted Platform Module) HeaderJWF123Compact Flash Power ConnectorJWCL142Wake-On-LAN HeaderKB/MS3PS/2 Keyboard and MouseLAN1, LAN27, 8Gigabit Ethernet (RJ45) PortsPWR I²C (J15)39Power SMB (I²C) HeaderSP110ternal Ruzzer	Connectors						
FAN 1~4 34, 32, 27, 24 System/CPU Fan Headers Fan 5~8 1, 2, 38, 9 System/CPU Fan Headers (Fans 7 and 8: CPU Fans) Floppy 26 Floppy Disk Drive Connector IPMB (J14) 13 IPMB I²C Header (for an IPMI card) I-SATA 0~5 21 (Intel South Bridge) SATA Ports JD1 30 PWR LED/Speaker Header (Pins1~3: PWR LED, 4~7: SPKR) JF1 32 Front Panel Connector JL1 17 Chassis Intrusion Header JOH1 29 Overheat LED Header JPW1 37 24-pin ATX Main Power Connector (Required) JPW3, JPW4 35, 36 8-pin 12-V Power Connectors JTPM1 20 TPM (Trusted Platform Module) Header JWF1 23 Compact Flash Power Connector JWOL1 42 Wake-On-LAN Header KB/MS 3 PS/2 Keyboard and Mouse LAN1, LAN2 7, 8 Gigabit Ethernet (RJ45) Ports PWR I²C (J15) 39 Power SMB (I²C) Header	Connectors	Item#	Description				
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Floppy 26 Floppy Disk Drive Connector IPMB (J14) 13 IPMB I²C Header (for an IPMI card) I-SATA 0~5 21 (Intel South Bridge) SATA Ports JD1 30 PWR LED/Speaker Header (Pins1~3: PWR LED, 4~7: SPKR) JF1 32 Front Panel Connector JL1 17 Chassis Intrusion Header JOH1 29 Overheat LED Header JPW1 37 24-pin ATX Main Power Connector (Required) JPW3, JPW4 35, 36 8-pin 12-V Power Connectors JTPM1 20 TPM (Trusted Platform Module) Header JWF1 23 Compact Flash Power Connector JWOL1 42 Wake-On-LAN Header KB/MS 3 PS/2 Keyboard and Mouse LAN1, LAN2 7, 8 Gigabit Ethernet (RJ45) Ports PWR I²C (J15) 39 Power SMB (I²C) Header	FAN 1~4	34, 32, 27, 24	System/CPU Fan Headers				
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JL1 17 Chassis Intrusion Header JOH1 29 Overheat LED Header JPW1 37 24-pin ATX Main Power Connector (Required) JPW3, JPW4 35, 36 8-pin 12-V Power Connectors JTPM1 20 TPM (Trusted Platform Module) Header JWF1 23 Compact Flash Power Connector JWOL1 42 Wake-On-LAN Header KB/MS 3 PS/2 Keyboard and Mouse LAN1, LAN2 7, 8 Gigabit Ethernet (RJ45) Ports PWR I²C (J15) 39 Power SMB (I²C) Header	JD1	30	PWR LED/Speaker Header (Pins1~3: PWR LED, 4~7: SPKR)				
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JPW1 37 24-pin ATX Main Power Connector (Required) JPW3, JPW4 35, 36 8-pin 12-V Power Connectors JTPM1 20 TPM (Trusted Platform Module) Header JWF1 23 Compact Flash Power Connector JWOL1 42 Wake-On-LAN Header KB/MS 3 PS/2 Keyboard and Mouse LAN1, LAN2 7, 8 Gigabit Ethernet (RJ45) Ports PWR I²C (J15) 39 Power SMB (I²C) Header	JL1	17	Chassis Intrusion Header				
JPW3, JPW4 35, 36 8-pin 12-V Power Connectors JTPM1 20 TPM (Trusted Platform Module) Header JWF1 23 Compact Flash Power Connector JWOL1 42 Wake-On-LAN Header KB/MS 3 PS/2 Keyboard and Mouse LAN1, LAN2 7, 8 Gigabit Ethernet (RJ45) Ports PWR I²C (J15) 39 Power SMB (I²C) Header	JOH1	29	Overheat LED Header				
JTPM1 20 TPM (Trusted Platform Module) Header JWF1 23 Compact Flash Power Connector JWOL1 42 Wake-On-LAN Header KB/MS 3 PS/2 Keyboard and Mouse LAN1, LAN2 7, 8 Gigabit Ethernet (RJ45) Ports PWR I ² C (J15) 39 Power SMB (I ² C) Header	JPW1	37	24-pin ATX Main Power Connector (Required)				
JWF1 23 Compact Flash Power Connector JWOL1 42 Wake-On-LAN Header KB/MS 3 PS/2 Keyboard and Mouse LAN1, LAN2 7, 8 Gigabit Ethernet (RJ45) Ports PWR I ² C (J15) 39 Power SMB (I ² C) Header	JPW3, JPW4	35, 36	8-pin 12-V Power Connectors				
JWOL1 42 Wake-On-LAN Header KB/MS 3 PS/2 Keyboard and Mouse LAN1, LAN2 7, 8 Gigabit Ethernet (RJ45) Ports PWR I ² C (J15) 39 Power SMB (I ² C) Header	JTPM1	20	TPM (Trusted Platform Module) Header				
KB/MS 3 PS/2 Keyboard and Mouse LAN1, LAN2 7, 8 Gigabit Ethernet (RJ45) Ports PWR I ² C (J15) 39 Power SMB (I ² C) Header	JWF1	23	Compact Flash Power Connector				
LAN1, LAN2 7, 8 Gigabit Ethernet (RJ45) Ports PWR I ² C (J15) 39 Power SMB (I ² C) Header	JWOL1	42	Wake-On-LAN Header				
PWR I ² C (J15) 39 Power SMB (I ² C) Header	KB/MS	3	PS/2 Keyboard and Mouse				
	LAN1, LAN2	7, 8	Gigabit Ethernet (RJ45) Ports				
SP1 28 Internal Buzzer	PWR I ² C (J15)	39	Power SMB (I ² C) Header				
Ci i Lo	SP1	28	Internal Buzzer				
T-SGPIO-1 25 Serial General Purpose Input/Output Headers T-SGPIO-2		25	Serial General Purpose Input/Output Headers				
USB 0/1 4 (Back Panel) Universal Serial Bus (USB) Ports	USB 0/1	4	(Back Panel) Universal Serial Bus (USB) Ports				
USB 2/3, 4, 6, 7 19, 18, 15, 16 Front Panel Accessible USB Headers	USB 2/3, 4, 6, 7	19, 18, 15, 16	Front Panel Accessible USB Headers				
VGA 6 VGA Connector	VGA	6	VGA Connector				

ption State	Status
ard Standby PWR On	System Power On

This motherboard supports up to 288 GB of Registered (RDIMM)/Load
Reduced (LRDIMM) ECC or up to 48 GB of Unbuffered (UDIMM) ECC/
Non-ECC DDR3 800/1066/1333 MHz 3-channel (per CPU) memory in 18
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

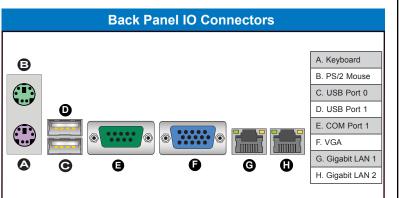
Insert the desired number of DIMMs into the memory slots, starting with P1-DIMM1A. For memory to work properly, follow the tables below for memory population order. Refer to the motherboard layout (at left) for the location of the DIMM slots.

Memory Support for the Motherboard with the 5000 Processor(s) Installed

Memory Population for Optimal Performance -For a Motherboard with One CPU (CPU1) Installed									
P1-DIMMs To Populate P1-DIMMs									
	Branch 0 Branch 1 Branch 2								
3 DIMMs	P1-1A			P1-2A			P1-3A		
6 DIMMs	P1-1A	P1-1B		P1-2A	P1-2B		P1-3A	P1-3B	
9 DIMMs (RDIMMs only) (Note)	P1-1A	P1-1B	P1-1C	P1-2A	P1-2B	P1-2C	P1-3A	P1-3B	P1-3C
Note: Max. of 6 UDIMM modules are supported by a CPU.									

Memory Population for Optimal Performance -For a Motherboard with Two CPUs Installed CPU 1 (To Populate P1-DIMMs) CPU 2 (To Populate P2-DIMMs) Branch 0 Branch 1 Branch 0 Branch 1 Branch 2 6 DIMMs P1-1A P1-2A P2-1A P2-2A P2-3A P1-1A/1B P2-2A/2B P2-3A/3B 12 DIMMs P1-2A/2B P1-3A/3B P2-1A/1B 18 DIMMs 1A/1B/1C 2A/2B/2C 3A/3B/3C 1A/1B/1C 2A/2B/2C Note: Max. of 6 UDIMM modules are supported by a CPU.

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



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