SUPERMICRO®

X9DBU-3F/X9DBU-iF

Quick Reference Guide Rev. 1.0a

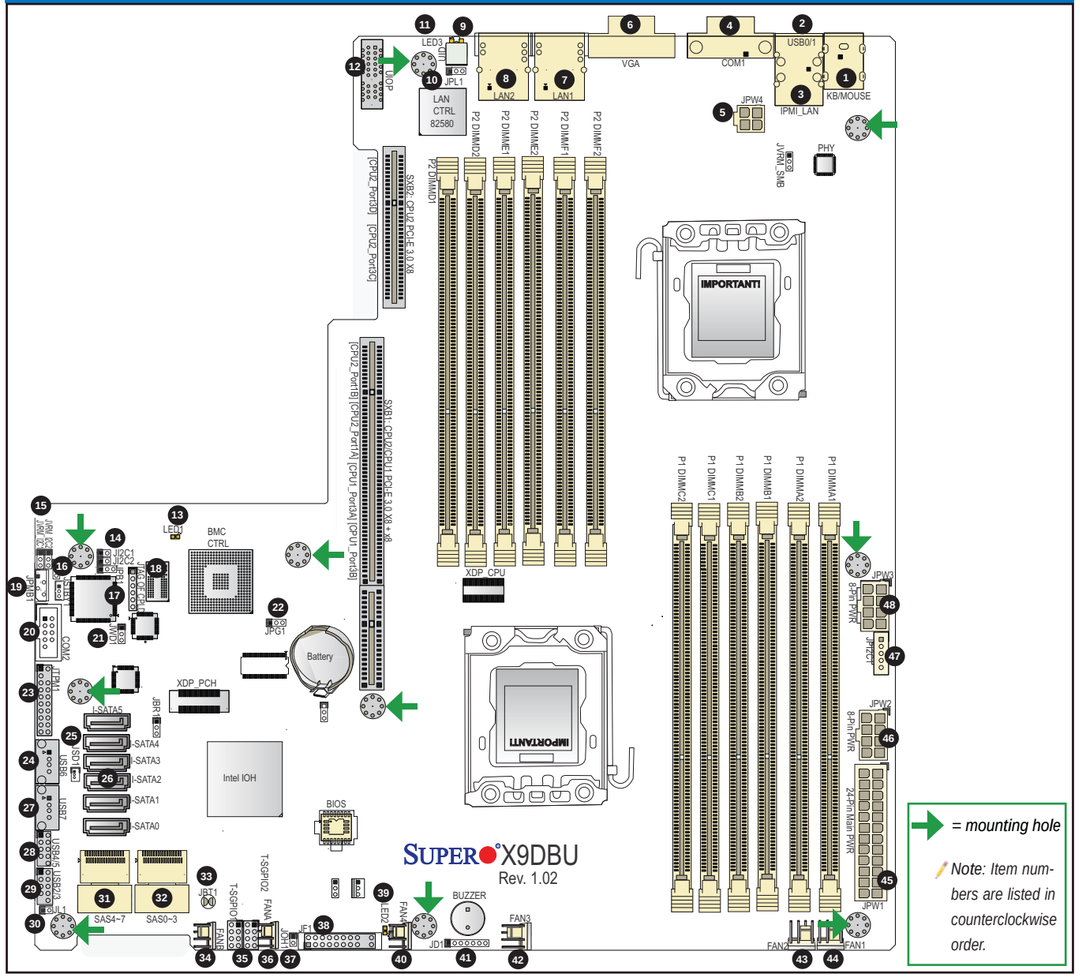
Contact Information

- 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
- Two (2) Serial ATA Cables
- One (1) I/O Shield
- Two (2) I-Pass to 4 Serial ATA (50 cm) Cables (X9DBU-3F)
- One (1) I-Pass to 4 Serial ATA (50 cm) Cable (X9DBU-iF)

Motherboard Layout and Features



Note: Item numbers are listed in counterclockwise order.

Jumpers/Connectors/LED Indicators

Jumpers

Jumper	Item#	Description	Default Setting
JBT1	33	Clear CMOS	See Chpt. 2 in User Manual
JI²C1/JI²C2	14	SMB to PCI-E Slots	Open (Normal)
JPB1	17	BMC Enable	Pins 1-2 (Enabled)
JPG1	22	VGA Enable	Pins 1-2 (Enabled)
JPL1	10	LAN1/LAN2 Enable	Pins 1-2 (Enabled)
JVRM_JI²C1/JI²C2	15	I²C Bus to CPU1/2 VRMs	Pins 1-2 (Connect to BMC)
JWD1	21	Watch Dog	Pins 1-2 (Reset)

Connectors

Connectors	Item#	Description
COM1/COM2	4, 20	Backplane COM Port1/Front Accessible COM2 Header
FAN1~4	44, 43,42 ,40	CPU/System Fan Headers
FANA, FANB	36 ,34	CPU/System Fan Headers
JD1	41	Power LED/Speaker (PWR LED Pins 1~3, Speaker: Pins 4~7)
JF1	38	Front Panel Control Header
JIPMB1	19	4-pin External BMC I²C Header (for an IPMI Card)
JL1	30	Chassis Intrusion
JOH1	37	Overheat/Fan Fail LED
JPI²C1	47	Power Supply SMBbus I²C Header
JPW1	45	ATX 24-Pin Power Connector
JPW2, JPW3	46, 48	12V 8-Pin Power Connectors
JPW4	5	4-Pin Power Connector
JSTBY1	16	Standby
JTAG of CPLD	18	JTAG of CPLD (Complex Programming Logical Device)
JTPM1	23	TPM (Trusted Platform Module)/Port 80
JSD1	25	SATA DOM (Device On Module) Power Connector
KB/Mouse	1	Keyboard/Mouse
LAN1, LAN2	7, 8	G-bit Ethernet Ports 1/2
(IPMI) LAN	3	IPMI Dedicated LAN
SATA 0~3, SATA/SAS 0~3, 4~7	32 32, 31	SATA 0~3 (for X9DBU-iF) SATA/SAS 0~3, 4~7 (for X9DBU-3F)
(I)-SATA 0~5	26	Intel PCH SATA Connectors 0~5 (SATA 3.0 Ports 0/1, SATA 2.0 Ports 2~5)
T-SGPIO 1/2	35	Serial link General Purpose I/O Connections 1/2
UIOP	12	SMC-Proprietary Universal I/O Slot
USB 0/1, 2/3, 4/5	2, 29,28	Back Panel USB 0/1; Front Panel Accessible USB 2/3, 4/5
USB 6, USB7	24, 27	Front Panel Type A USB 6 Port
UID Switch	9	UID (Unit Identifier) Switch
VGA	6	Backpanel VGA Port 1/Front Panel VGA Port2

LED Indicators

LED	Item#	Description	State	Status
LED1	13	BMC Heatbeat	Green: Blinking	BMC: Normal
LED2	39	Standby PWR LED	Green: On	SB Power On
LED3	11	UID LED	Blue: On (Windows OS), Blinking (Linux)	Unit Identified

Note: Refer to Chapter 2 of the User Manual on detailed information on jumpers, connectors, and LED indicators.

Memory Support

This motherboard supports up to 384 GB of 240-pin Registered (RDIMM)/ Load Reduced (LRDIMM) ECC or up to 96 GB of Unbuffered (UDIMM) ECC/ Non-ECC DDR3 800/1066/1333/1600 MHz 3-channel (per CPU) memory in 6 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-DIMMA1. 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.

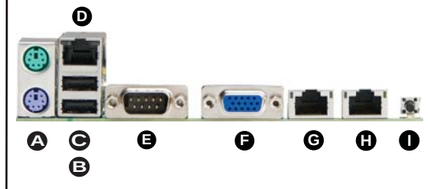
Processors and their Corresponding Memory Modules

CPU#	Corresponding DIMM Modules					
CPU 1	P1-DIMMA1	P1-DIMMA2	P1-DIMMB1	P1-DIMMB2	P1-DIMMC1	P1-DIMMC2
CPU2	P2-DIMMD1	P2-DIMMD2	P2-DIMME1	P2-DIMME2	P2-DIMMF1	P2-DIMMF2

Processor and Memory Module Population for Optimal Performance

Number of CPUs+DIMMs	CPU and Memory Population Configuration Table (For memory to work properly, please follow the instructions below.)
1 CPU & 2 DIMMs	CPU1 P1-DIMMA1/P1-DIMMB1
1 CPU & 4 DIMMs	CPU1 P1-DIMMA1/P1-DIMMB1, P1-DIMMA2/P1-DIMMB2
1 CPU & 6 DIMMs	CPU1 P1-DIMMA1/P1-DIMMB1, P1-DIMMA2/P1-DIMMB2, P1-DIMMC1/P1-DIMMC2
2 CPUs & 4 DIMMs	CPU1 + CPU2 P1-DIMMA1/P1-DIMMB1, P2-DIMMD1/P2-DIMME1
2 CPUs & 6 DIMMs	CPU1 + CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1, P2-DIMMD1/P2-DIMME1/ P2-DIMMF1
2 CPUs & 8 DIMMs	CPU1 + CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMA2, P2-DIMMD1/P2-DIMME1/ P2-DIMMF1/P2-DIMMD2
2 CPUs & 10 DIMMs	CPU1 + CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMA2/P1-DIMMB2, P2-DIMMD1/ P2-DIMME1/P2-DIMMF1/P2-DIMMD2/P2-DIMME2
2 CPUs & 12 DIMMs	CPU1 + CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMA2/P1-DIMMB2/P1-DIMMC2, P2-DIMMD1/P2-DIMME1/P2-DIMMF1/P2-DIMMD2/P2-DIMME2/P2-DIMMF2

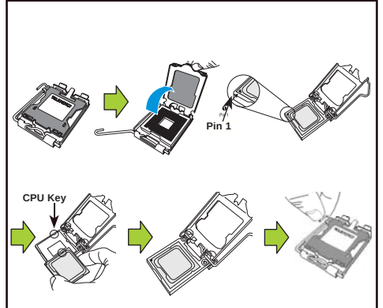
Back Panel IO Connectors



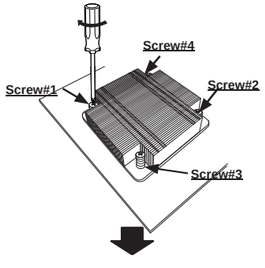
A. KB/Mouse	F. VGA
B. USB 0	G. GLAN1
C. USB 1	H. GLAN2
D. IPMI LAN	I. UID
E. COM 1	

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

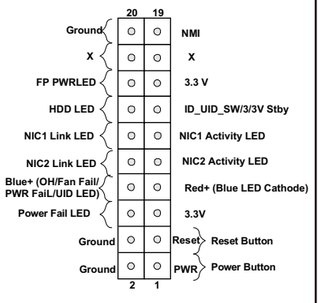
CPU Installation



Heatsink Installation



Front Panel Control (JF1)



Note: Graphics shown in this quick guide are for illustration only. Your components may or may not look exactly the same as drawings shown in this guide.

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