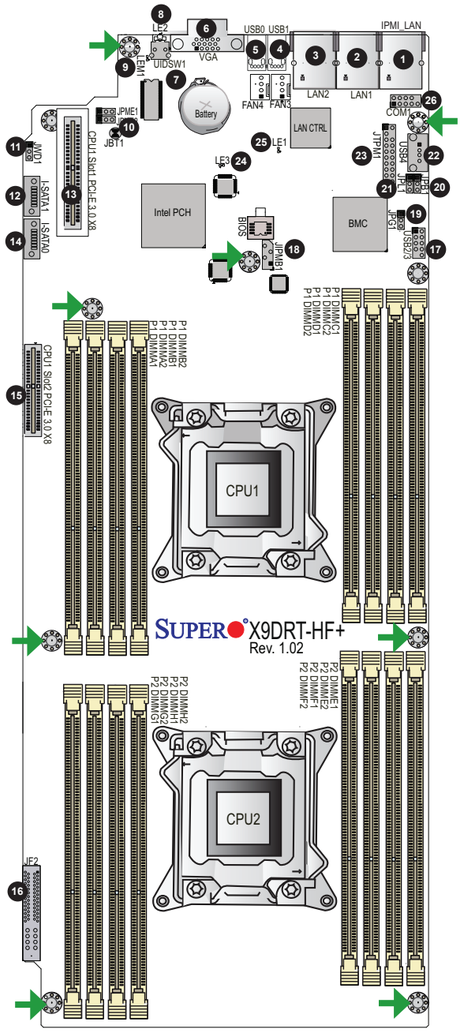
SUPERMICRO® X9DRT-HF+ *Quick Reference Guide*

(MNL#1334-QRG)

Contact Info: 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

Motherboard Layout and Features



= *mounting hole*

***Note**: Item numbers are listed in counterclockwise order.*

Jumpers, Connectors and LED Indicators

Jumpers

Jumper	Item #	Description	Default
JBT1	10	Clear CMOS	See Chpt. 2 in User Manual
JPB1	20	BMC Enabled	Pins 1-2 (Enabled)
JPG1	19	VGA Enabled	Pins 1-2 (Enabled)
JPL1	21	GLAN1/GLAN2 Enable	Pins 1-2 (Enabled)
JWD1	11	Watch Dog	Pins 1-2 (Reset)

Connectors

Connector	Item #	Description
COM1	26	Back Panel COM Port
JF2	16	SMC Proprietary Add-On Card for Power, FP Control & SATA Connections
JIPMB1	18	4-pin External BMC I²C Header (for and IPMI card)
JTPM1	23	TPM (Trusted Platform Module) Port 80 Header
LAN1	2	G-bit Ethernet Port 1
LAN2	3	G-bit Ethernet Port 2
(IPMI) LAN	1	IPMI Dedicated LAN
(I-)SATA 0	14	SATA 0 Connector
(I-)SATA 1	12	SATA 1 Connector
(CPU1) Slot1	13	PCI-E 3.0 x8 Slot for SMC-Proprietary Daughter (Add-On) Card
(CPU1) Slot2	15	PCI-E 3.0 x8 Slot for SMC-Proprietary Micro Low-Profile (LP) Card
UIDSW1	7	UID (Unit Idientifier) Switch
USB 0	5	Back Panel USB Port 0
USB 1	4	Back Panel USB Port 1
USB 2/3	17	Front Accessible USB Connections 2/3
USB 4	22	Type A USB Connection (USB 4) for Front Access
VGA	6	Back Panel VGA Port

LED Indicators

LED	Item #	Description	Color/State	Status
LED1	25	Onboard Standby PWR LED	Green: Solid on	Power On
LED2	8	UID LED	Blue: On	Unit Identified
LED3	24	HDD LED	Green: On	HDD/SATA Active
LEM1	9	BMC Heartbeat LED	Green: Blinking	BMC Normal

Memory Support

This motherboard supports up to 512 GB of 240-pin Registered (RDIMM)/Load Reduced (LRDIMM) ECC or up to 128 GB of Unbuffered (UDIMM) ECC/Non-ECC DDR3 800/1066/1333/1600 MHz 4-channel (per CPU) memory in 16 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.

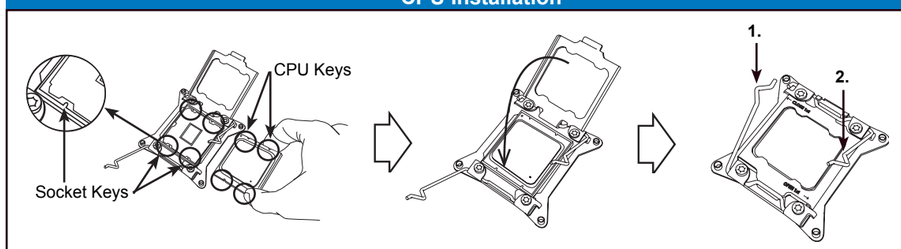
Processors and their Corresponding Memory Modules

CPU#	Corresponding DIMM Modules							
CPU 1	P1-DIMMA1	P1-DIMMB1	P1-DIMMC1	P1-DIMMD1	P1-DIMMA2	P1-DIMMB2	P1-DIMMC2	P1-DIMMD2
CPU2	P2-DIMME1	P2-DIMMF1	P2-DIMMG1	P2-DIMMH1	P2-DIMME2	P2-DIMMF2	P2-DIMMG2	P2-DIMMH2

Processor and Memory Module Population for Optimal Performance

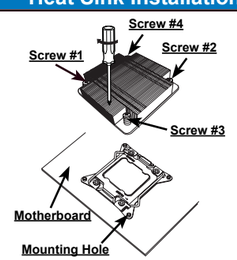
Number of CPUs+DIMMs	CPU and Memory Population Configuration Table (For memory to work properly, please follow the instructions below.)
1 CPU & 2 DIMMs	CPU1 P1-DIMMA1/P1-DIMMB1
1 CPU & 4 DIMMs	CPU1 P1-DIMMA1/P1-DIMMB1, P1-DIMMC1/P1-DIMMD1
1 CPU & 5-8 DIMMs	CPU1 P1-DIMMA1/P1-DIMMB1, P1-DIMMC1/P1-DIMMD1 + Any memory pairs in P1-DIMMA2/P1-DIMMB2/P1-DIMMC2/P1-DIMMD2 slots
2 CPUs & 4 DIMMs	CPU1 + CPU2 P1-DIMMA1/P1-DIMMB1, P2-DIMME1/P2-DIMMF1
2 CPUs & 6 DIMMs	CPU1 + CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1
2 CPUs & 8 DIMMs	CPU1 + CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1
2 CPUs & 10-16 DIMMs	CPU1/CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1 + Any memory pairs in P1, P2 DIMM slots
2 CPUs & 16 DIMMs	CPU1/CPU2 P1-DIMMA1/P1-DIMMB1/P1-DIMMC1/P1-DIMMD1, P2-DIMME1/P2-DIMMF1/P2-DIMMG1/P2-DIMMH1,P1-DIMMA2/P1-DIMMB2/P1-DIMMC2/P1-DIMMD2, P2-DIMME2/P2-DIMMF2/P2-DIMMG2/P2-DIMMH2

CPU Installation



***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.*

Heat Sink Installation



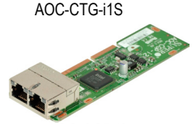
***Note**: Refer to Chapter 2 of the User Manual for detailed information on jumpers, connectors, and LED indicators.*

MicroLP Add-on Cards

This board features a MicroLP slot (see #13 on layout) for use with MicroLP add-on cards, including the following:

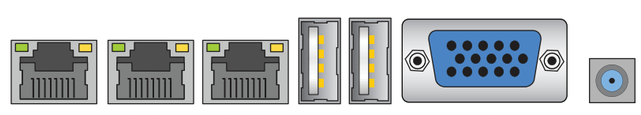
AOC-CTG-i1S

AOC-CIBF-m1



AOC-CGP-i2

Back Panel IO Connectors



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