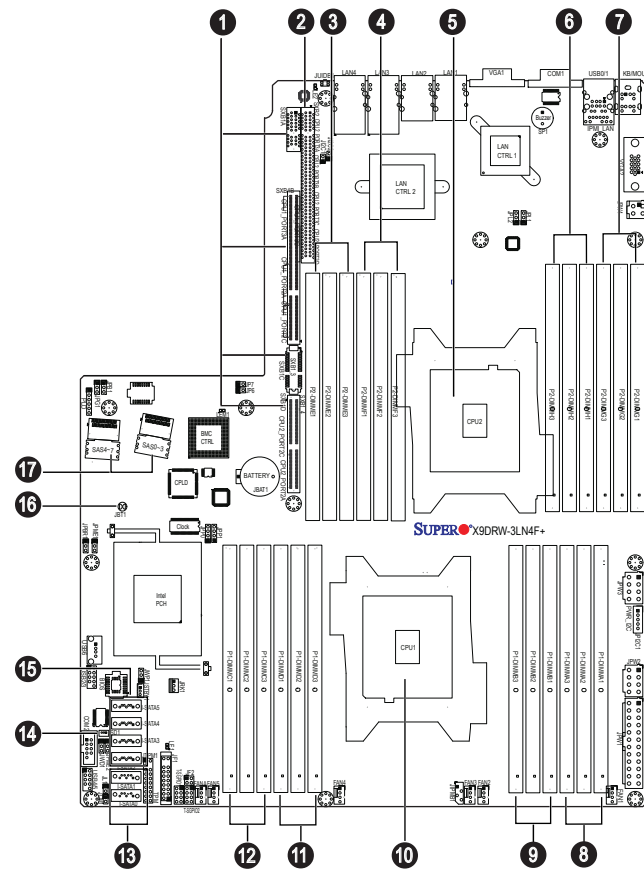


## Board Layout



No.	Description
1	SXB1A/SXB1B/SXB1C/SXB1D: SMC-Proprietary WIO_L (Left) Add-On Card Slot
2	SXB2: SMC-Proprietary WIO_R (Right) Add-On Card Slot
3	P2-DIMME1(Blue)/P2-DIMME2/P2-DIMME3 slot
4	P2-DIMMF1(Blue)/P2-DIMMF2/P2-DIMMF3 slot
5	CPU2
6	P2-DIMMH1(Blue)/P2-DIMMH2/P2-DIMMH3 slot
7	P2-DIMMG1(Blue)/P2-DIMMG2/P2-DIMMG3 slot
8	P1-DIMMA1(Blue)/P2-DIMMA2/P2-DIMMA3 slot
9	P1-DIMMB1(Blue)/P2-DIMMB2/P2-DIMMB3 slot
10	CPU1 (Install CPU1 first)
11	P1-DIMMD1(Blue)/P2-DIMMD2/P2-DIMMD3 slot
12	P1-DIMMC1(Blue)/P2-DIMMC2/P2-DIMMC3 slot
13	SATA 3 Ports 0~1 (from Intel SB)
14	JSD1 = SATA DOM Power
15	SATA 2 Ports 2~5 (from Intel SB)
16	JBT1 = CMOS Reset
17	SAS ports 0~3, 4~7 (from Intel SB)

## MEMORY

Processors and their Corresponding Memory Modules												
CPU#	Corresponding DIMM Modules											
CPU 1	P1-A1	P1-A2	P1-A3	P1-B1	P1-B2	P1-B3	P1-C1	P1-C2	P1-C3	P1-D1	P1-D2	P1-D3
CPU2	P2-E1	P2-E2	P2-E3	P2-F1	P2-F2	P2-F3	P2-G1	P2-G2	P2-G3	P2-H1	P2-H2	P2-H3

Processor and Memory Module Population	
Number of CPUs+DIMMs	CPU and Memory Population Configuration Table (For memory to work properly, please follow the tables below.)
1 CPU & 2 DIMMs	CPU1 P1-A1/P1-B1
1 CPU & 4 DIMMs	CPU1 P1-A1/P1-B1, P1-C1/P1-D1
1 CPU & 5~8 DIMMs	CPU1 P1-A1/P1-B1, P1-C1/P1-D1, P1-A2/P1-B2, P1-C2/P1-D2
2 CPUs & 4 DIMMs	CPU1 + CPU2 P1-A1/P1-B1, P2-E1/P2-F1
2 CPUs & 6 DIMMs	CPU1 + CPU2 P1-A1/P1-B1, P2-E1/P2-F1, P1-C1/P1-D1
2 CPUs & 8 DIMMs	CPU1 + CPU2 P1-A1/P1-B1, P2-E1/P2-F1, P1-C1/P1-D1, P2-G1/P2-H1
2 CPUs & 9~12 DIMMs	CPU1/CPU2 P1-A1/P1-B1, P2-E1/P2-F1, P1-C1/P1-D1, P2-G1/P2-H1, P1-A2/P1-B2, P2-E2/P2-F2
2 CPUs & 13 DIMMs~24 DIMMs	CPU1/CPU2 P1-A1/P1-B1, P2-E1/P2-F1, P1-C1/P1-D1, P2-G1/P2-H1, P1-A2/P1-B2, P2-E2/P2-F2, P1-C2/P1-D2, P2-G2/P2-H2, P1-A3/P1-B3, P2-E3/P2-F3, P1-C3/P1-D3, P2-G3/P2-H3

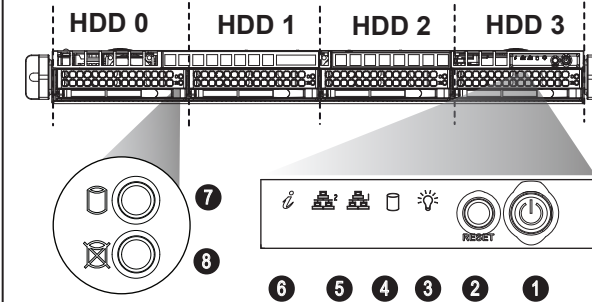
UDIMM Support			
DIMMs Populated per DDR Channel	UDIMM Type (Unb. DIMM)	POR Speeds (in MHz)	Ranks per DIMM (Any Combination)
1	ECC/Non-ECC DDR3	1066, 1333	SR, DR
2	ECC/Non-ECC DDR3	1066, 1333	SR, DR

RDIMM Support			
DIMMs Populated per DDR Channel	RDIMM Type (Reg. DIMM)	POR Speeds (in MHz)	Ranks per DIMM (Any Combination)
1	Reg. ECC DDR3	1066, 1333, 1600	SR, DR
2	Reg. ECC DDR3	1066, 1333, 1600	SR, DR
3	Reg. ECC DDR3	800, 1066	SR, DR
1	Reg. ECC DDR3	1066	QR
2	Reg. ECC DDR3	800	QR

LRDIMM Support			
DIMMs Populated per DDR Channel	LRDIMM Type (Load Reduced DIMM)	POR Speeds (in MHz)	Ranks per DIMM (Any Combination)
1	LR ECC DDR3	1066, 1333	QR
2	LR ECC DDR3	1066, 1333	QR
3	LR ECC DDR3	1066	QR

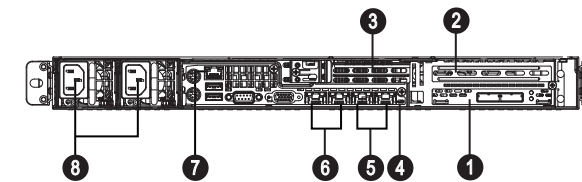
**Note:** All channels in a system will run at the fastest common frequency.

## Front View & Interface



No.	Description
1	Power Button
2	Reset Button
3	Power LED
4	Device Activity LED
5	LAN1 LED & LAN2 LED
6	Information LED
7	Hard Drive Signal
8	Hard Drive Fail

## Rear View

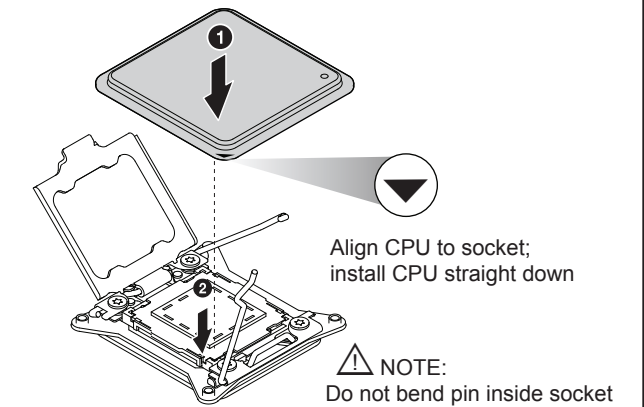


No.	Description
1	PCI-E 3.0 x16 Expansion Slot (FH, 6.6"L)
2	PCI-E 3.0 x16 Expansion Slot (FH, 10"L)
3	PCI-E 3.0 x8 Expansion Slot (LP, 4.1"L)
4	UID Button (Unit Identifier Button)
5	LAN3 & LAN4 (1GbE for N3RF4+ SKU, 10GbE-T for N3RFT+ SKU)
6	LAN1 & LAN2 (1GbE)
7	Dedicated LAN for IPMI
8	Redundant Power Supply Modules

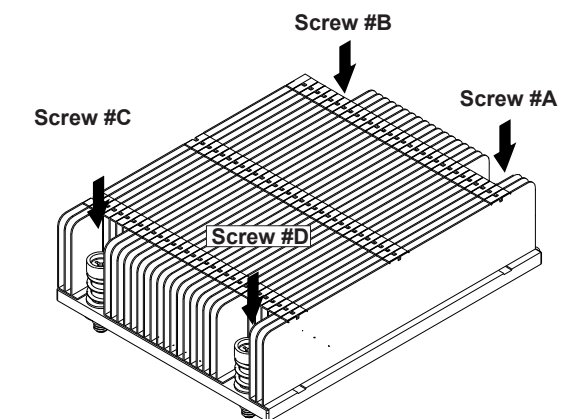
## Beep Codes

Beep Code	Error Message	Description
1 beep	Refresh	Circuits have been reset (Ready to power up)
5 short beeps and 1 long beep	Memory error	No memory detected in the system
5 beeps	No Con-In or Con-Out devices	Con-In includes USB or PS/2 keyboard, PCI or serial console redirection, IPMI KVM or SOL. Con-Out includes video controller, PCI or serial console redirection, IPMI SOL.

## CPU Installation



## Heatsink Installation



1. Place heatsink on top of installed CPU
2. Line up the four screws to socket
3. Push down heatsink and screw down as shown (cross pattern, in order: A, C, B, D)
4. **NOTE:** Only use 6-8 lb/ft of torque; otherwise, hand-tighten each screw, to avoid damaging the system

## Caution

**SAFETY INFORMATION**  
**IMPORTANT:** See installation instructions and safety warning before connecting system to power supply.  
[http://www.supermicro.com/about/policies/safety\\_information.cfm](http://www.supermicro.com/about/policies/safety_information.cfm)

**WARNING:**  
 To reduce risk of electric shock/damage to equipment, disconnect power from server by disconnecting all power cords from electrical outlets.  
 If any CPU socket empty, install protective plastic CPU cap

**CAUTION:**  
 Always be sure all power supplies for this system have the same power output. If mixed power supplies are installed, the system will not operate.

For more information go to :  
<http://www.supermicro.com/support>

