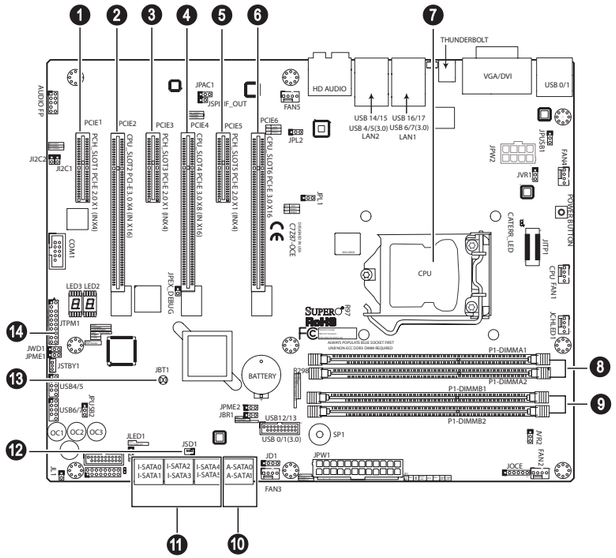
SUPERMICRO® SuperWorkstation 5038AD-T Quick Reference Guide

Board Layout



No.	Description
1	PCH_Slot1 PCI-E 2.0 x1 (in x4)
2	CPU_ Slot2 PCI-E 3.0 x4 (in x16)
3	PCH_Slot3 PCI-E 2.0 x1 (in x4)
4	CPU_Slot4 PCI-E 3.0 x8 (in x16)
5	PCH_Slot5 PCI-E 2.0 x1 (in x4)
6	CPU_Slot6 PCI-E 3.0 x16
7	CPU1
8	DIMMA1/DIMMA2 (Blue slot)
9	DIMMB1/DIMMB2 (Blue slot)
10	A-SATA0 ~ A-SATA1 (SATA 3.0 ports 6Gb/s)
11	I-SATA0 ~ I-SATA5 (SATA 3.0 ports 6Gb/s)
12	JSD1 = SATA DOM Power
13	JBT1 = CMOS Reset
14	JTPM1 = Trusted Platform Module/Port 80 connector

MEMORY

Memory Population Guidelines

DDR3 Unbuffered Non-ECC (UDIMM) Memory				
DIMM Slots per Channel	**DIMMs Populated per Channel**	**DIMM Type**	**POR Speeds**	**Ranks per DIMM (any combination)**
2	1	Unbuffered DDR3	1066, 1333, 1600	Single Rank, Dual Rank
2	2	Unbuffered DDR3	1066, 1333, 1600	Single Rank, Dual Rank

Possible System Memory Allocation & Availability		
System Device	**Size**	**Physical Memory Remaining (-Available) (4 GB Total System Memory)**
Firmware Hub flash memory (System BIOS)	1 MB	3.99
Local APIC	4 KB	3.99
Area Reserved for the chipset	2 MB	3.99
I/O APIC (4 Kbytes)	4 KB	3.99
PCI Enumeration Area 1	256 MB	3.76
PCI Express (256 MB)	256 MB	3.51
PCI Enumeration Area 2 (if needed) -Aligned on 256-MB boundary-	512 MB	3.01
VGA Memory	16 MB	2.85
TSEG	1 MB	2.84
Memory available to OS and other applications		2.84

Memory Population Guidelines

When installing memory modules, the DIMM slots should be populated in the following order: P1-DIMMA2, P1-DIMMB2, then P1-DIMMA1, P1-DIMMB1.

- Always use DDR3 DIMM modules of the same size, type and speed.
- Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.

Recommended Population (Balanced)				
DIMMA2	**DIMMB2**	**DIMMA1**	**DIMMB1**	**Total System Memory**
2GB	2GB			4GB
2GB	2GB	2GB	2GB	8GB
4GB	4GB			8GB
4GB	4GB	4GB	4GB	16GB
8GB	8GB			16GB
8GB	8GB	8GB	8GB	32GB

Heatsink Installation

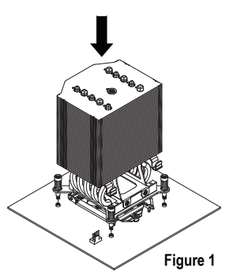


Figure 1

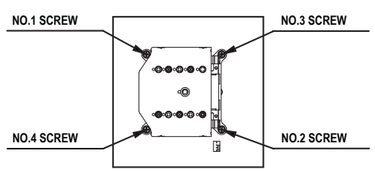


Figure 2

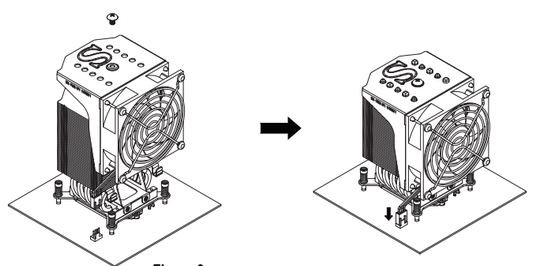
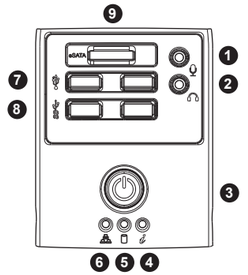
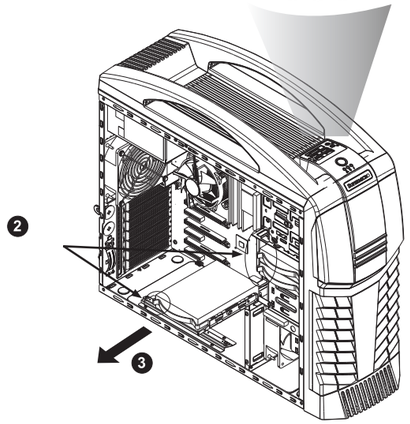


Figure 3

Installing 3.5” HDD/Front Panel

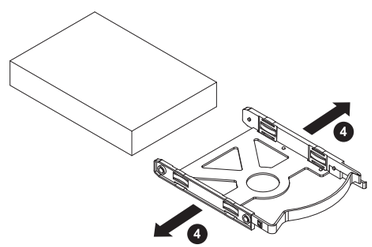
No.	Description
1	Microphone
2	Audio
3	Power Button
4	System Information
5	HDD Activity Indicator
6	LAN Indicator
7	USB 2.0 ports
8	USB 3.0 ports
9	eSATA port





Removing and Installing 3.5” Hard Drives

1. Remove the cover without powering down the system.
2. Press the release tab on the side of the hard drive carrier that is to be removed from the hard drive cage.
3. Pull the hard drive carrier out of the hard drive cage by the drive carrier handle.
4. If a hard drive is already present, remove it by carefully pulling the sides of the hard drive carrier outward.
5. Remove the hard drive from the hard drive carrier.

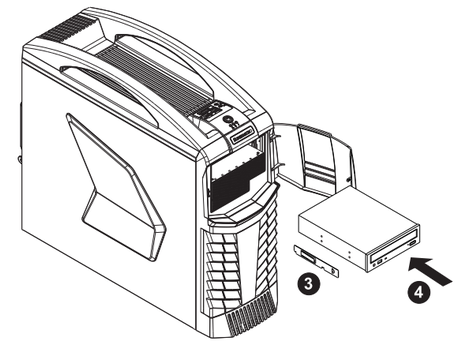


6. Insert the new hard drive into the hard drive carrier.
7. Insert the hard drive carrier into the hard drive cage by sliding it towards the back of the hard drive cage until it clicks into a locked position.
8. If desired, each hard drive carrier may be secured to the exterior of the hard drive cage using one optional screw.
9. Replace the chassis cover.

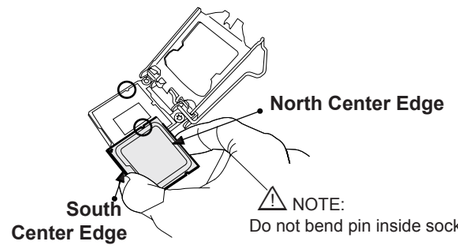
Installing an Optical Device

Installing an Optical Device

1. Disconnect the power cord from the rear of the power supply and remove the cover.
2. Open the upper front compartment.
3. Secure the peripheral drive bracket to the left side of the peripheral drive.
4. Slide the whole peripheral drive module (with drive bracket) into the corresponding slot in the chassis and push the drive in until it clicks into the locked position.
5. Connect the cables to the rear of the peripheral drive.
6. Replace the chassis cover, reconnect the power cord and power up the system.



CPU Installation



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

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