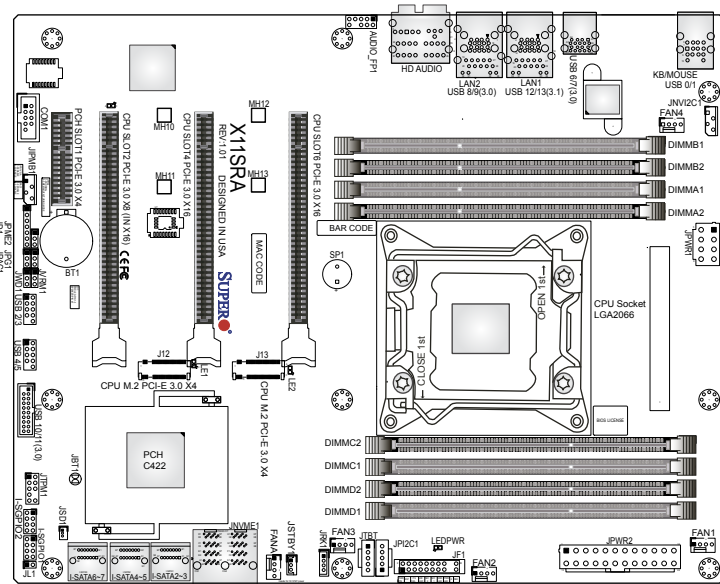


# SUPERMICR<sup>®</sup> SuperWorkstation 5039A-I Quick Reference Guide

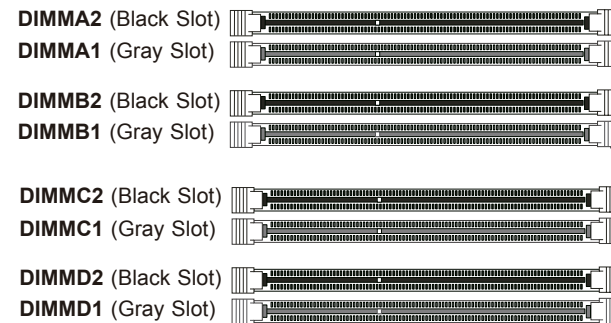
## Board Layout



Jumper	Description	Default Setting
JBT1	CMOS Clear	Open: Normal, Closed: Clear CMOS
JPAC1	Audio Enable	Pins 1-2 (Enabled)
JPME2	Manufacturing Mode Select	Pins 1-2 (Normal)

Connector	Description
AUDIO_FP1	Front Panel Audio Header
BT1	Onboard Battery
COM1	COM Header
FAN1 ~ FAN4, FANA	System/CPU Fan Headers
HD AUDIO	High Definition Audio Header
I-SATA2/3, I-SATA4/5, I-SATA6/7	SATA 3.0 Connectors
I-SGPIO 1/2	Serial Link General Purpose I/O Headers
J12	M.2 PCI-E 3.0 X4 Slot
J13	M.2 PCI-E 3.0 X4 Slot
JD1	Speaker/Power LED Indicator (Pins 1-3: Power LED, Pins 4-7: Speaker)
JF1	Front Control Panel Header
JL1	Chassis Intrusion Header
JNVME1	NVMe (supports two connections for U.2 SSDs)
JNV2C1	NVMe I2C Header
JPWR1	+12V 8-pin CPU Power Connector (Required)
JPWR2	24-pin ATX Main Power Connector (Required)
JRK1	Intel RAID Key Header
JSD1	SATA Disk On Module (DOM) Power Connector
JSTBY1	Standby Power Header
JTBT	Thunderbolt Header
JTPM1	Trusted Platform Module (TPM)/Port 80 Connector
LAN1/LAN2	5/1 Gigabit (RJ45) LAN Ports
MH10 ~ MH13	M.2 Holding Screws
SLOT1	PCI-E 3.0 x4 PCH Slot
SLOT2	PCI-E 3.0 x8 (IN x16) CPU Slot
SLOT4	PCI-E 3.0 x16 CPU Slot
SLOT6	PCI-E 3.0 x16 CPU Slot
SP1	Internal Speaker/Buzzer
USB0/1	Back Panel USB 2.0 Ports
USB2/3, USB4/5	Front Accessible USB 2.0 Headers
USB6/7, USB8/9	Back Panel USB 3.0 Ports

## Memory



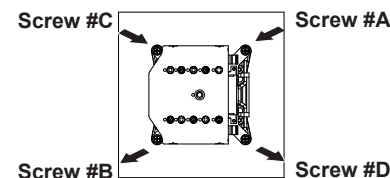
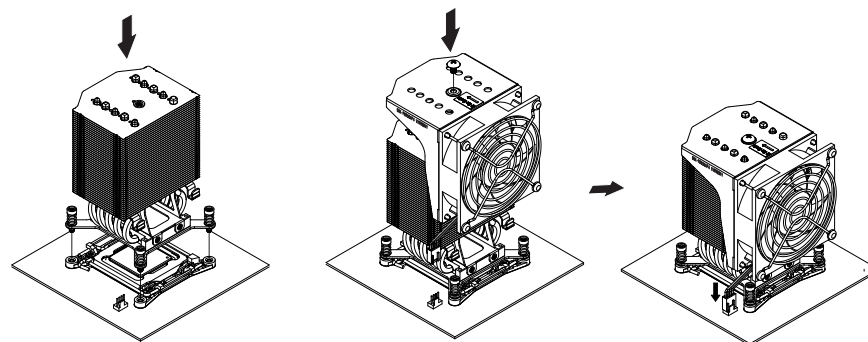
### Memory Population Guidelines

When installing memory modules, the DIMM slots should be populated in the following order: DIMMA1, DIMMB1, DIMMC1, DIMMD1, then DIMMA2, DIMMB2, DIMMC2, DIMMD2.

- Always use DDR4 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)								
DIMMA1	DIMMB1	DIMMC1	DIMMD1	DIMMA2	DIMMB2	DIMMC2	DIMMD2	Total System Memory
4GB	4GB							8GB
4GB	4GB	4GB	4GB					16GB
4GB	4GB	4GB	4GB	4GB	4GB	4GB	4GB	32GB
8GB	8GB	8GB	8GB	8GB	8GB	8GB	8GB	64GB
32GB	32GB	32GB	32GB					128GB
32GB	32GB	32GB	32GB	32GB	32GB	32GB	32GB	256GB
64GB	64GB	64GB	64GB	64GB	64GB	64GB	64GB	384GB
64GB	64GB	64GB	64GB	64GB	64GB	64GB	64GB	512GB

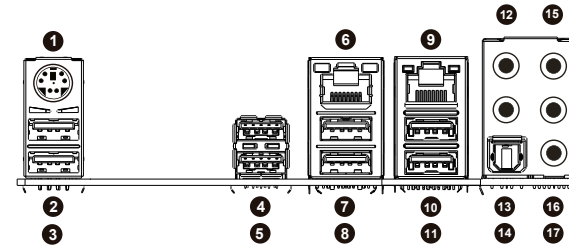
## Heatsink Installation



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, B, C, D)
4. NOTE: Only use 6-8 lb/f of torque; otherwise, hand-tighten each screw, to avoid damaging the system

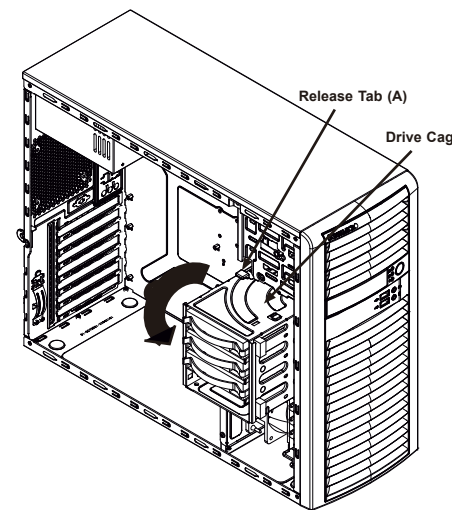
## Back Panel I/O Connectors

The rear of system offers these input/output ports.



Rear I/O Ports					
#	Description	#	Description	#	Description
1.	PS2 KB/Mouse	6.	LAN1	10.	USB9 (3.0)
2.	USB1 (2.0)	7.	USB13 (3.1)	11.	USB8 (3.0)
3.	USB0 (2.0)	8.	USB12 (3.1)	12.	CEN/LFE Out
4.	USB7 (3.0)	9.	LAN2	13.	Surround Out
5.	USB6 (3.0)			14.	S/PDIF Out
				15.	Line In
				16.	Line Out
				17.	Mic In

## Hard Drives Installation



### Storage Drives

Primary data storage capability is provided by up to four 3.5" drives that can be installed in the chassis. To replace or install them, the drive cage must be rotated.

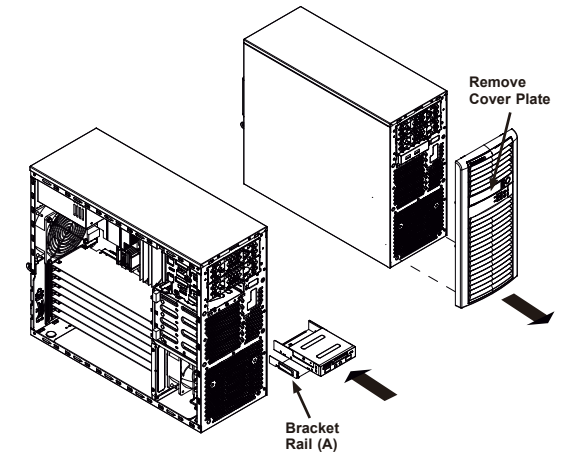
### Rotating the Drive Cage

1. Remove power from the system and remove the chassis cover.
2. Lift the release tab (A) as shown below.
3. Rotate the drive cage outward.

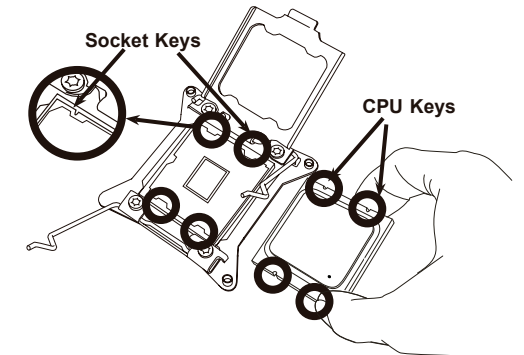
## Installing an Optical Device

### Installing an Optical Device

1. Remove power from the system.
2. Remove the front bezel from the chassis by lifting it upwards from the bottom, and pulling off the front of the chassis.
3. Remove the cover plate from the bezel.
4. Install the bracket rail (A) onto one side of the device, by inserting the pins of the bracket into the mounting holes on the sides of the optical device.
5. Slide the device into the chassis.



## 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](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>

