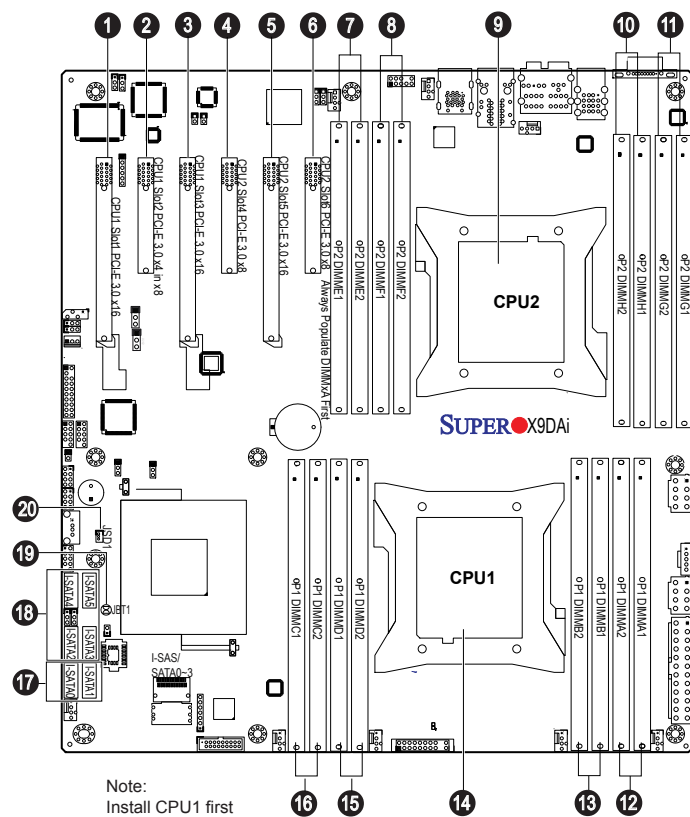


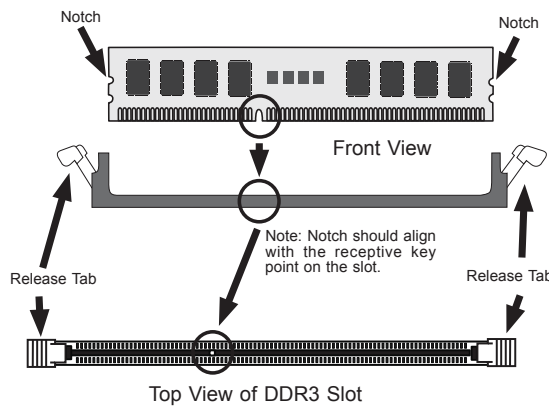
# SUPERMICR<sup>®</sup> SuperWorkstation 7047A-T Quick Reference Guide

## Board Layout



| No. | Description                   |
|-----|-------------------------------|
| 1   | CPU1 Slot1 PCI-E 3.0 x16      |
| 2   | CPU1 Slot2 PCI-E 3.0 x4 in x8 |
| 3   | CPU1 Slot3 PCI-E 3.0 x16      |
| 4   | CPU2 Slot4 PCI-E 3.0 x8       |
| 5   | CPU2 Slot5 PCI-E 3.0 x16      |
| 6   | CPU2 Slot6 PCI-E 3.0 x8       |
| 7   | P2 DIMME1/P2 DIMME2           |
| 8   | P2 DIMMF1/P2 DIMMF2           |
| 9   | CPU2                          |
| 10  | P2 DIMMH1/P2 DIMMH2           |
| 11  | P2 DIMMG1/P2 DIMMG2           |
| 12  | P1 DIMMA1/P1 DIMMA2           |
| 13  | P1 DIMMB1/P1 DIMMB2           |
| 14  | CPU1 (Install CPU1 first)     |
| 15  | P1 DIMMD1/P1 DIMMD2           |
| 16  | P1 DIMMC1/P1 DIMMC2           |
| 17  | SATA 0/1 = SATA 3.0 Ports     |
| 18  | SATA 2~5 = SATA 2.0 Ports     |
| 19  | JBT1 = CMOS Reset             |
| 20  | JSD1= SATA DOM Power          |

## MEMORY

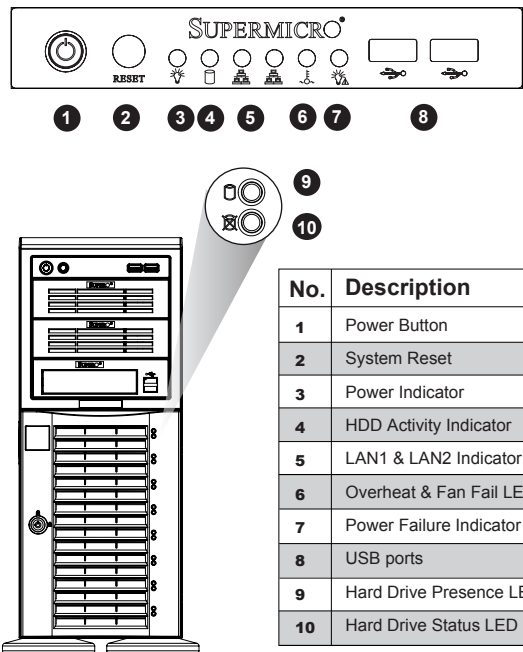


| Processors and their Corresponding DIMM Slots |                            |       |       |       |       |       |       |       |
|-----------------------------------------------|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| CPU#                                          | Corresponding DIMM Modules |       |       |       |       |       |       |       |
| CPU 1                                         | P1-A1                      | P1-B1 | P1-C1 | P1-D1 | P1-A2 | P1-B2 | P1-C2 | P1-D2 |
| CPU 2                                         | P2-E1                      | P2-F1 | P2-G1 | P4-H1 | P2-E2 | P2-F2 | P2-G2 | P2-H2 |

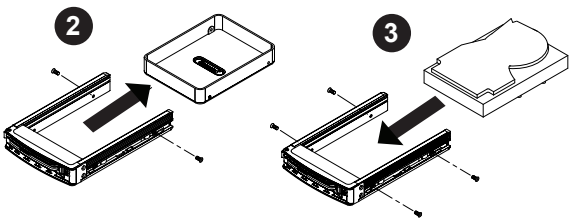
| Processor and Memory Module Population                                                                       |                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| CPU and Memory Population Configuration Table<br>(For memory to work proper, please install DIMMs in pairs.) |                                                                                                                   |
| 1 CPU & 2 DIMMs                                                                                              | CPU1<br>P1-A1/P1-B1                                                                                               |
| 1 CPU & 4 DIMMs                                                                                              | CPU1<br>P1-A1/P1-B1, P1-C1/P1-D1                                                                                  |
| 1 CPU & 5~8 DIMMs                                                                                            | CPU1<br>P1-A1/P1-B1, P1-C1/P1-D1 + Any memory pairs in P1-A2/B2/C2/D2 DIMM slots                                  |
| 2 CPUs & 4 DIMMs                                                                                             | CPU1 + CPU2<br>P1-A1/P1-B1, P2-E1/P2-F1                                                                           |
| 2 CPUs & 6 DIMMs                                                                                             | CPU1 + CPU2<br>P1-A1/P1-B1/ P1-C1, P2-E1/P2-F1/P2-G1                                                              |
| 2 CPUs & 8 DIMMs                                                                                             | CPU1 + CPU2<br>P1-A1/P1-B1/ P1-C1/P1-D1, P2-E1/P2-F1/P2-G1/P2-H1                                                  |
| 2 CPUs & 10~16 DIMMs                                                                                         | CPU1/CPU2<br>P1-A1/P1-B1/ P1-C1/P1-D1/P1-A2, P2-E1/P2-F1/P2-G1/P2-H1+P2-E2, Any memory pairs in P1, P2 DIMM slots |

| UDIMM Memory Support        |                                   |     |     |                                                                                                         |            |       |            |
|-----------------------------|-----------------------------------|-----|-----|---------------------------------------------------------------------------------------------------------|------------|-------|------------|
| Ranks Per DIMM & Data Width | Memory Capacity Per DIMM (Note 1) |     |     | Speed (MT/s) and Voltage Validated by Slot Per Channel (SPC) and DIMM Per Channel (DPC) (Notes 2, 3, 4) |            |       |            |
|                             |                                   |     |     | 2 Slots Per Channel                                                                                     |            |       |            |
|                             |                                   |     |     | 1DPC                                                                                                    |            | 2DPC  |            |
|                             |                                   |     |     | 1.35V                                                                                                   | 1.5V       | 1.35V | 1.5V       |
| SRx8 Non-ECC                | 1GB                               | 2GB | 4GB | n/a                                                                                                     | 1066, 1333 | n/a   | 1066, 1333 |
| DRx8 Non-ECC                | 2GB                               | 4GB | 8GB | n/a                                                                                                     | 1066, 1333 | n/a   | 1066, 1333 |
| SRx16 Non-ECC               | 512MB                             | 1GB | 2GB | n/a                                                                                                     | 1066, 1333 | n/a   | 1066, 1333 |
| SRx8 ECC                    | 1GB                               | 2GB | 4GB | 1066, 1333                                                                                              | 1066, 1333 | n/a   | 1066, 1333 |
| DRx8 ECC                    | 2GB                               | 4GB | 8GB | 1066, 1333                                                                                              | 1066, 1333 | n/a   | 1066, 1333 |

## Front view & Interface



## Hard Drives Installation



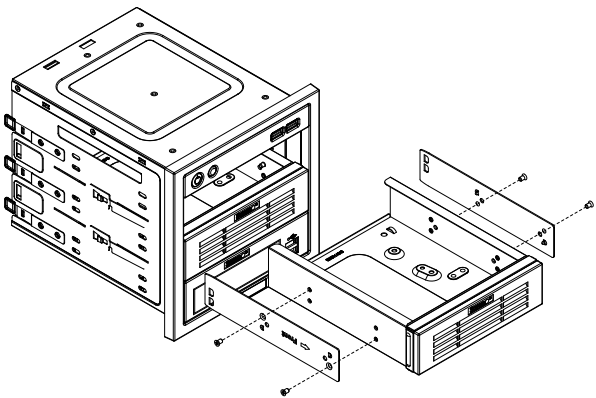
### Installing Hard Drives

1. Remove the screws from the hard drive tray and set them aside for later use.
2. Remove the dummy drive from the hard drive tray.
3. Mount a hard drive into the hard drive tray
4. Replace the screws which were set aside earlier.
5. Install the hard drive into the chassis.
6. Push down the release tab over the newly installed hard drive.
7. Close the hard drive tray door.

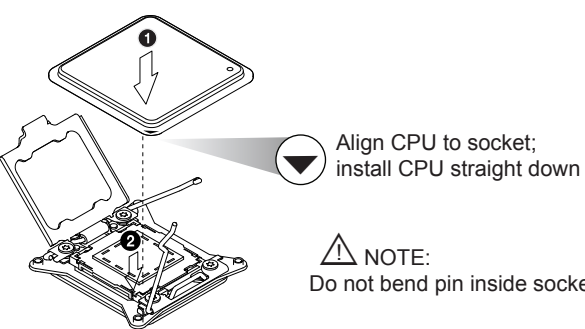
## Storage Module

### Configuring the Storage Module for 5.25" Devices

1. Remove the 5.25" drive trays from the storage module.
2. Remove the screws and drive tray brackets from the drive trays.
3. Install the 5.25" devices into storage module.
4. Replace the module back into the chassis.
5. Ensure that the storage module is securely locked into position.



## CPU Installation



## Caution

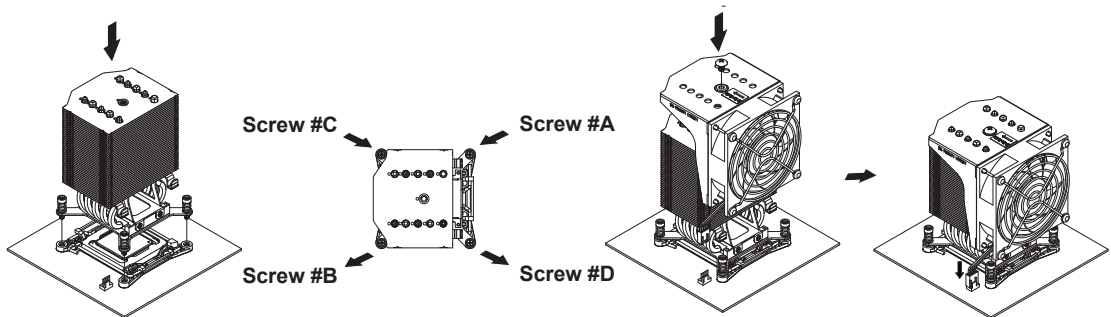
**SAFETY INFORMATION**  
IMPORTANT: See installation instructions and safety warning before connecting system to power supply.  
[http://www.supermicro.com/about/policies/safety\\_information.cfm](http://www.supermicro.com/about/policies/safety_information.cfm)

**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>

## 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

