

Intel® Storage Server SSR212MC2BR / SSR212MC2RBR Quick Start User's Guide

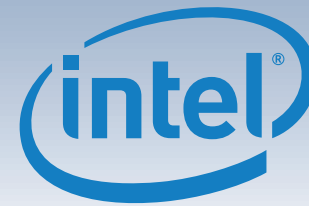


Thank you for buying an Intel® Storage Server SSR212MC2BR/SSR212MC2RBR. This document describes how to set up the Intel® Storage Server SSR212MC2BR/SSR212MC2RBR, turn on the system, and complete basic hardware and software configuration for the system.

This guide and other supporting documents are located on the web at: <http://support.intel.com/support/motherboards/server>.

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, please see the *Intel® Server Board and Server Chassis Safety Information* document at <http://support.intel.com/support/motherboards/server/sb/cs-010770.htm>.

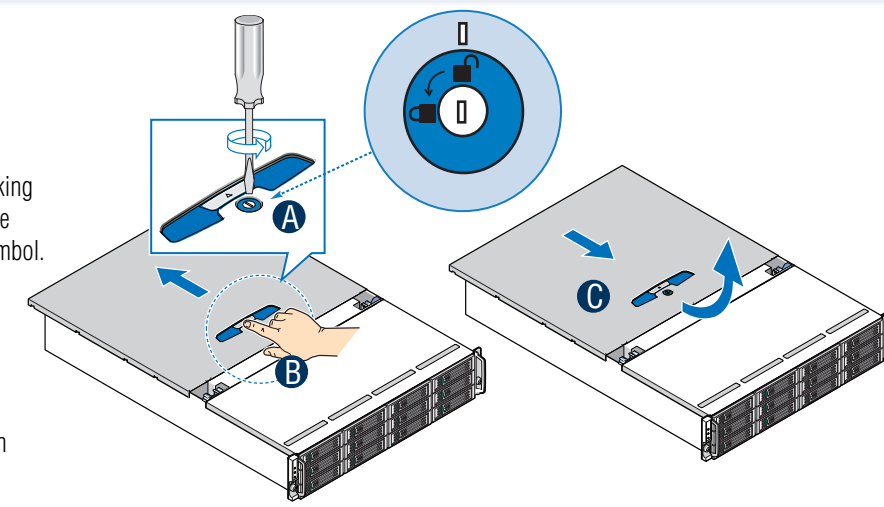
See the *Tested Hardware and Operating System List* at <http://support.intel.com/support/motherboards/server> for a list of supported hardware and operating systems.



1

Remove Enclosure Cover

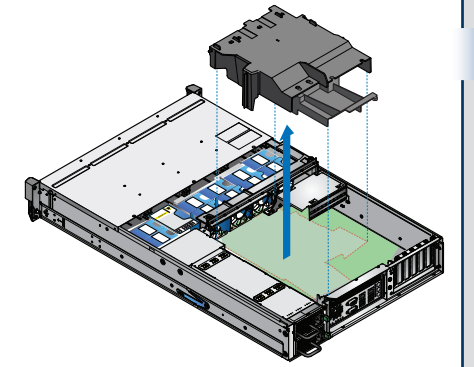
- With a flat-head screwdriver, turn locking screw to the unlock position. Align the notch in the cover with the unlock symbol.
- Press on latch and slide enclosure cover back until it stops.
- Slide enclosure cover forward while lifting to remove enclosure cover from chassis.



2

Remove Processor Air Duct

Lift the processor air duct from its location over the processor sockets.

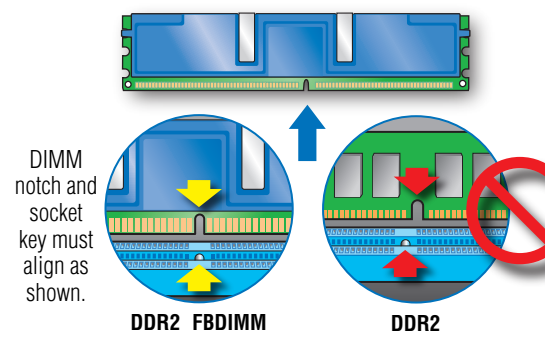


3

Install Memory FBDIMMs

DDR2 FBDIMM Memory Identification

- This server board supports up to eight DDR2-533 or DDR2-667 Fully Buffered DIMMs (FBDIMM memory). DDR2 DIMMs that are not FBDIMMs are not supported on this server board.
- FBDIMM DDR2 memory varies in height. Only FBDIMMs with a height of up to 1.2 inches are supported. **DO NOT MIX** different DIMM heights and types.

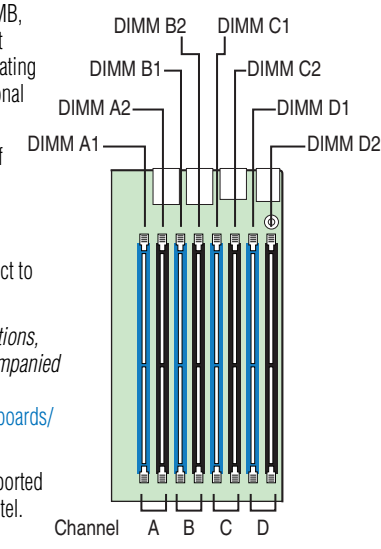


Memory Configurations and Population Order

Memory Type: Minimum of two 512-MB, DDR2 FBDIMM 533/667-MHz compliant 240-pin gold DIMMs. Refer to your operating system or third-party software for additional memory requirements.

Populate DDR2 FBDIMMs in the order of A1, B1, C1, and D1 then A2, B2, C2, and D2.

DIMM pairs must be identical with respect to size, speed, and organization.



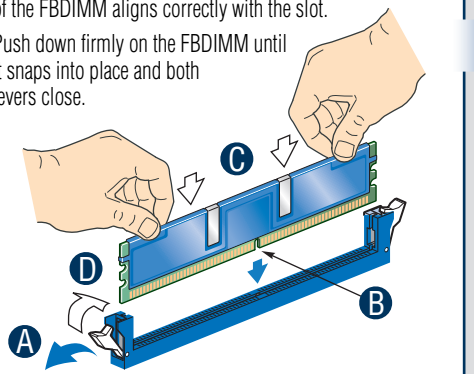
Note: For additional memory configurations, see the *User Guide on the CD that accompanied your storage server*, or go to: <http://support.intel.com/support/motherboards/server/ssr212mc2/>

Memory sizing and configuration is supported only for qualified DIMMs approved by Intel. For a list of supported memory, see the tested memory list at <http://support.intel.com/support/motherboards/server/ssr212mc2/>

To Install FBDIMMs

Warning: Avoid touching gold contacts when handling or installing DIMMs.

- Open both FBDIMM socket levers.
- Note location of alignment notch.
- Insert FBDIMM making sure the connector edge of the FBDIMM aligns correctly with the slot.
- Push down firmly on the FBDIMM until it snaps into place and both levers close.



Warning

Safety information: Read all the safety and caution statements in this document before performing any of the instructions. Also, see the *Intel® Server Board and Server Chassis Safety Information* document at: <http://support.intel.com/support/motherboards/server/sb/cs-010770.htm> for complete safety information.

Installation and service: Installation and service of this product is to be performed only by qualified service personnel to avoid risk of injury from electrical shock or energy hazard.

Enclosure cover: In order to comply with applicable safety, emission, and thermal requirements, no covers should be removed and all bays must be fitted with drive carriers.

Hazardous conditions-power supply: Hazardous voltage, current, and energy levels are present inside the power supply enclosure. There are no user-serviceable parts inside the power supply; servicing should only be done by technically qualified personnel.

Hazardous conditions-devices/cables: Hazardous electrical conditions may be present on power, telephone, and communication cables. Turn off the storage system and disconnect telecommunications systems, networks, modems, and power cord before opening it. Failure to do so can result in personal injury or equipment damage.

Power ground: A safe electrical earth connection must be provided to the power cord. Check the grounding of the enclosure before applying power.

Avoid injury: Lifting the storage system chassis and attaching it to the rack is a two-person job. If needed, use an appropriate lifting device. **NOTE:** The plastic rack mounting flange covers are not designed for lifting or carrying the unit.

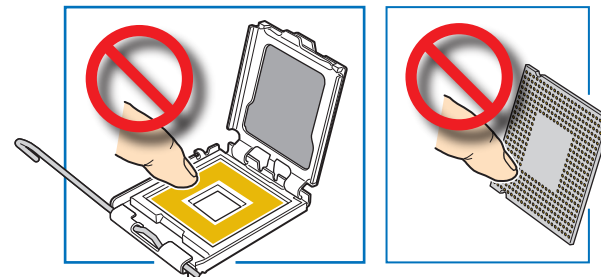
Ventilation: The equipment rack must provide sufficient airflow to the front of the storage system to maintain proper cooling. It must also include ventilation sufficient to exhaust a maximum of 3400 BTUs/hour for a fully loaded Intel® Storage Server SSR212MC2BR/SSR212MC2RBR.

4

Install the Processor(s)

Notes and Cautions:

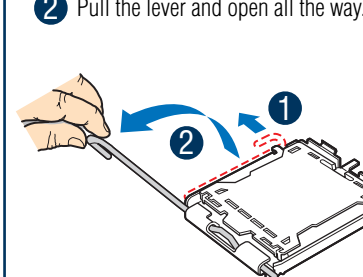
- When unpacking a processor, hold it only by the edges. Never touch the underside of the processor.
- This server board has a "zero-insertion force" socket. If processor does not drop easily into socket, make sure lever is in the full-open position.



A. Open the Socket Lever

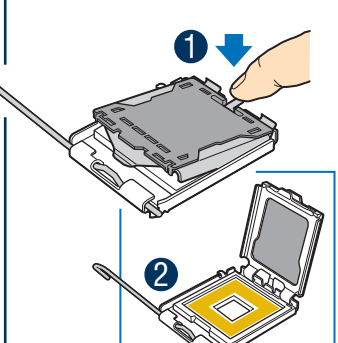
Warning: If only installing a single processor, install it in the CPU1 socket.

- Push the lever handle down and away from the socket to release it.
- Pull the lever and open all the way.



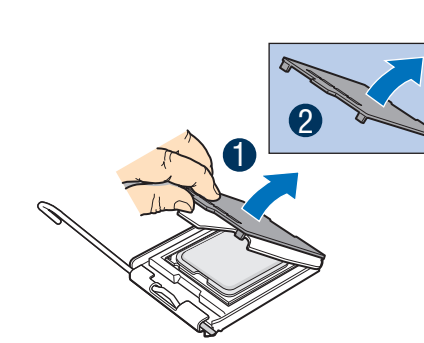
B. Open the Load Plate

- Push the rear tab with your finger tip to bring the front end of the load plate up slightly.
- Open the load plate as shown.



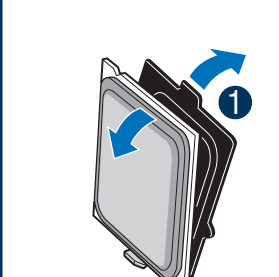
C. Remove Socket Protective Cover

- Grasp the socket protective cover tab and pull away from the load plate as shown.
- Remove the socket protective cover and store for future use.



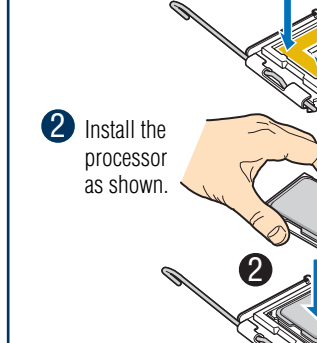
D. Remove the Processor Protective Cover

- Take the processor out of the box and remove the protective shipping cover.



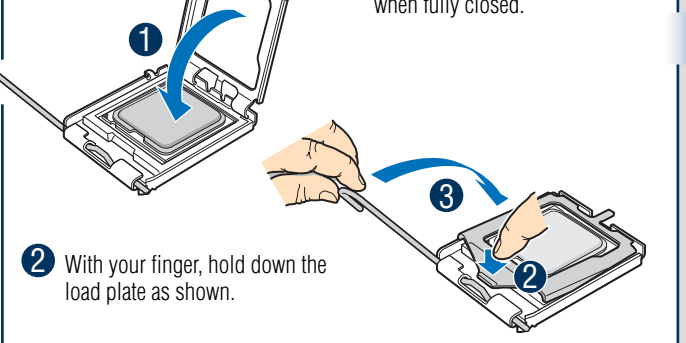
E. Install the Processor

- Orient the processor with the socket so that the processor cutouts match the socket notches.
- Install the processor as shown.



F. Close Load Plate and Socket Lever

- Close the load plate all the way as shown.
- While holding down the load plate, close the socket lever. Ensure that the load plate tab engages under the socket lever when fully closed.



Caution

Electrostatic discharge: Observe normal Electrostatic Discharge (ESD) procedures during system integration to avoid possible damage to the server board and/or other components of the storage system.

Storage system power: The power connection must always be removed before disconnecting the power supply module from the storage enclosure.

Temperature: The operating temperature of the storage system, when installed in an equipment rack, must not go below 10°C (30°F) or rise above 35°C (95°F). Extreme fluctuations in temperature can cause a variety of problems in the storage system.

Installation Requirements

- Minimum of one Dual-Core Intel® Xeon® Processor 5000 Sequence
- Minimum of one 2U passive heatsink
- Minimum of two 512-MB, 240-pin, DDR2 533/677-MHz FBDIMMs
- One external USB CD-ROM drive and one external USB floppy drive (for installing operating system)
- One serial ATA hard drive or SAS hard drive
- Two Phillips® screwdrivers (#1 and #2)
- One flat-head screwdriver

Package Contents

- Intel® Storage Server SSR212MC2BR/SSR212MC2RBR
- One mini-USB adapter
- Rail kit
- One T10 TORX® screwdriver
- Resource CD
- Bag of 50 Phillips® head screws for hard drives
- Eight pan-head screws for installing boot drive
- Drive labels
- Attention Document

Intel is a registered trademark of Intel Corporation or its subsidiaries in the United States and other countries.

*Other names and brands may be claimed as the property of others.

Copyright © 2007-2008, Intel Corporation. All rights reserved.

5

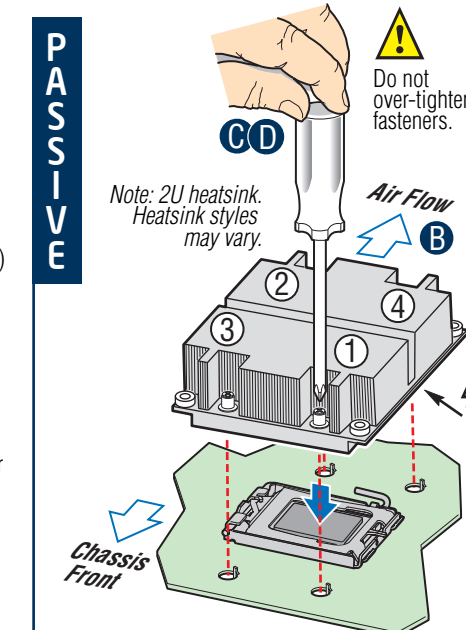
Install Heatsink(s)

CAUTION: The heatsink has thermal interface material (TIM) on the underside of it. Use caution so that you do not damage the thermal interface material. Use gloves to avoid sharp edges.

- If a protective film covers the thermal interface material (TIM) on the underside of the heatsink, remove the protective film.
- Align heatsink fins to the front and back of the chassis for correct airflow. Airflow goes from front-to-back of chassis.

Each heatsink has four captive fasteners and should be tightened as follows:

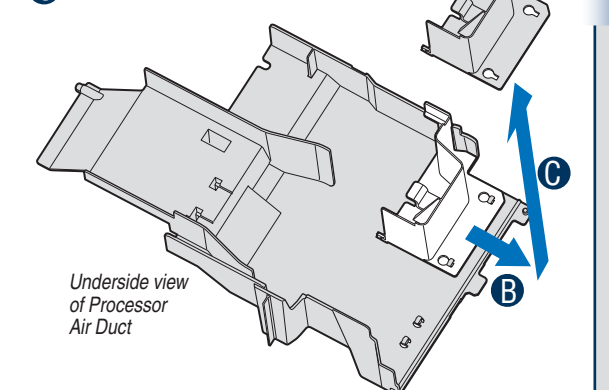
- Using a #2 Phillips® screwdriver, finger-tighten each fastener diagonally, according to the white-circled numbers shown in the figure.
- Securely re-tighten each fastener again in the same order as performed in Step C.



6

Remove Processor 2 Air Dam (only if two processors are present)

- Turn processor air duct over to reveal underside.
- Slide air dam from duct pins.
- Lift air dam to remove.



D91284-003

