

Intel® Server System SR1560SF Quick Start User's Guide

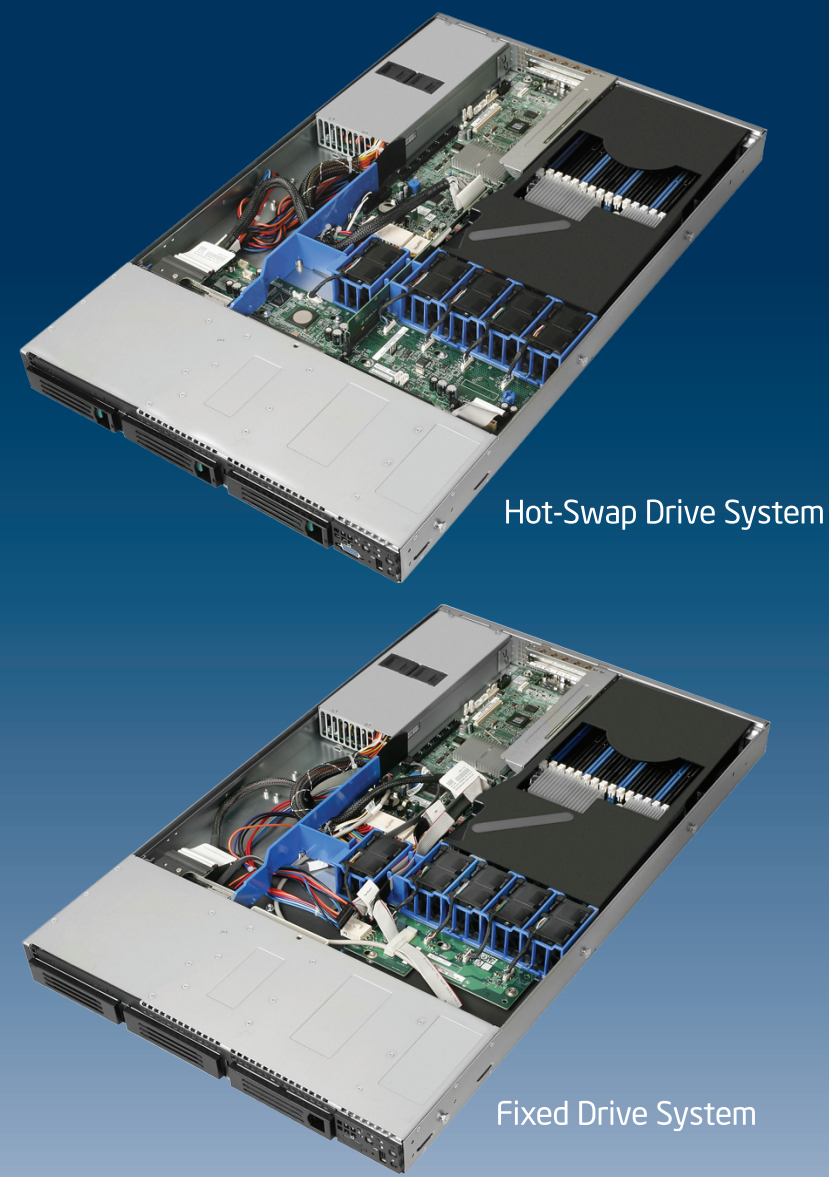
Thank you for buying an Intel® Server System. The following information will help you assemble your Intel® Server System SR1560SF and install components.

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 System SR1560SF Service Guide, available on the Intel® Server Deployment Toolkit 2.0 CD or at <http://support.intel.com/support/motherboards/server/s5400sf/index.htm>.

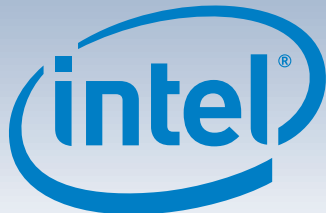
Please boot to the Intel® Server Deployment Toolkit 2.0 CD first for BIOS and firmware configuration and updates.

Read all cautions and warnings first before starting your server system integration.



Hot-Swap Drive System

Fixed Drive System



Minimum Hardware Requirements

To avoid integration difficulties and possible damage to your system, make sure you have components from each category below.

- Processor:**
 - Minimum of one Multi-Core Intel® Xeon® processor.
- Heat Sink:**
 - 1U passive heat sink for each processor installed.
- Memory:**
 - Minimum of one 512MB, DDR2 FBDIMM 667/800 MHz compliant 240-pin DIMM.
- Hard Disk Drives:**
 - SATA/SAS (hot-swap drive system)
 - SATA (fixed drive system)

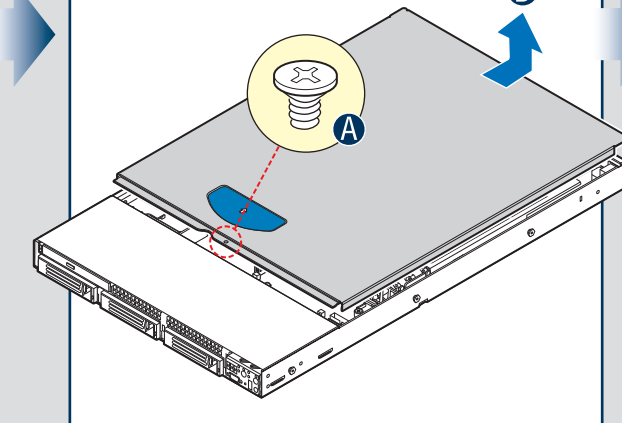
1 Preparing the Chassis

Observe normal ESD (Electrostatic Discharge) procedures.

Place your Intel® Server System on a flat anti-static surface to perform the following integration procedures. Always touch the chassis frame first, before reaching inside to make server board connections or to install components.

2 Remove Top Cover

- Remove the top cover screw.
- Slide cover back and lift upward.

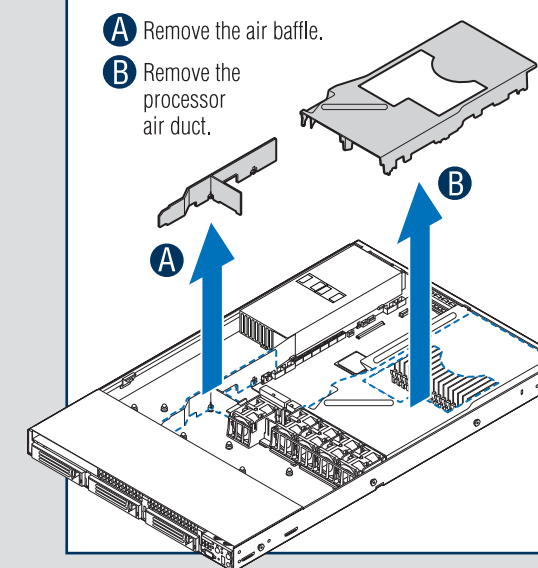


IMPORTANT! Before proceeding further, do the following:

Check your Intel® Server System for disconnected or loose cables and components that may have occurred during shipping.

3 Remove Air Baffle and Processor Air Duct

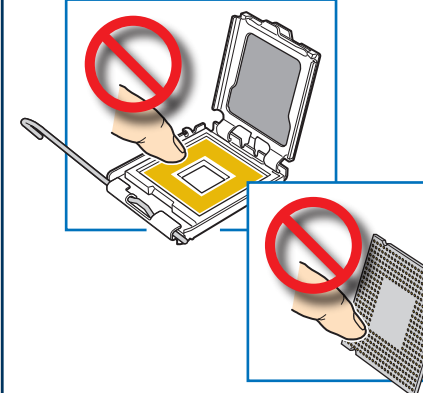
- Remove the air baffle.
- Remove the processor air duct.



4a Installing the Processor(s)

Note: If you are only using one processor on your server board, use the socket labeled "CPU1" in the Reference Diagram.

Caution: When unpacking a processor, hold by the edges only to avoid touching the contacts.



Open the Socket Lever

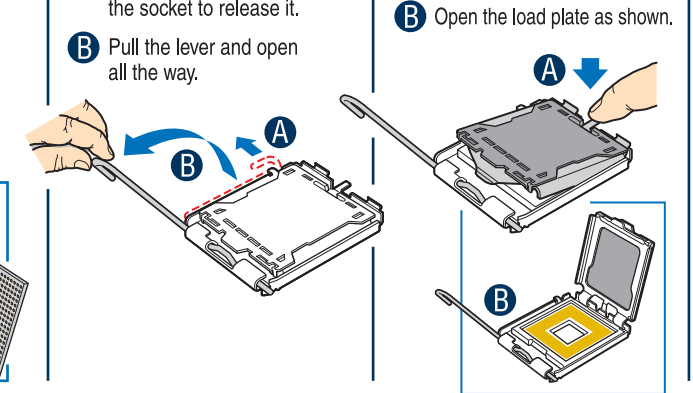
- Push the lever handle down and away from the socket to release it.
- Pull the lever and open all the way.

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.

Remove the Processor Protective Cover

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



Warning

Read all caution and safety 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.

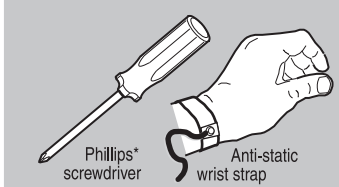
Warning

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

Caution

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

Tools Required



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4b Installing the Processor(s) continued...

- Orient the processor so that its cutouts match the socket's notches.
- Gently place the processor on the socket as shown.
- 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.
- Close Load Plate and Socket Lever
 - Close the load plate all the way as shown.
 - With your finger, push down on the load plate as shown.
 - Close the socket lever and ensure that the load plate tab engages under the socket lever when fully closed.

5 Install Heat Sink(s)

Note: Only passive heat sinks are supported in this system.

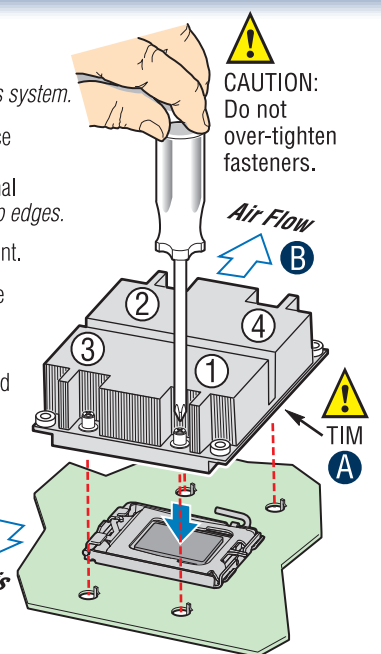
CAUTION: The heat sink has thermal interface material (TIM) on the underside of it. Use caution so that you do not damage the thermal interface material. Use gloves to avoid sharp edges.

- Remove the protective film on the TIM if present.
- Align heat sink fins to the front and back of the chassis for correct airflow. Airflow goes from front-to-back of chassis.

Each heat sink has four captive fasteners and should be tightened using the following procedure:

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

Note: Heat sink styles may vary.

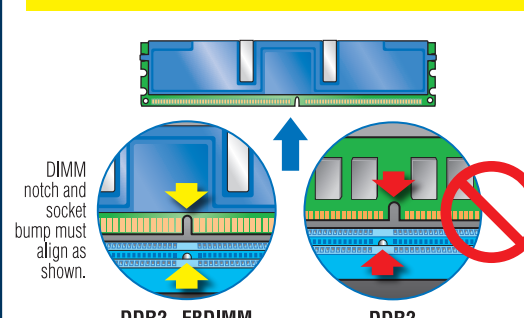


6a Install Memory DIMMs

DDR2 FBDIMM Memory Identification:

This server board supports up to sixteen DDR2-667 or DDR2-800 Fully Buffered DIMMs (FBD memory). DDR2 DIMMs that are not FBD memory are not supported on this server board.

FBDIMM DDR2 memory varies in height. Only use DIMMs approved for use in a 1U chassis.



Memory Configurations and Population Order:

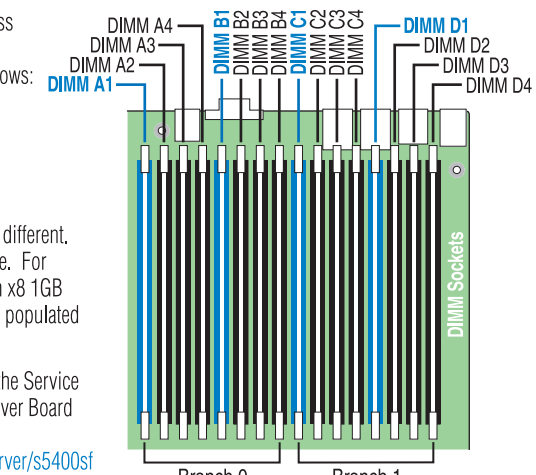
Memory Type: Minimum of one 512MB, DDR2 FBDIMM 667/800 MHz-compliant 240-pin DIMM.

DIMMs must be populated in matching pairs across channels within a given branch. When populating DIMM pairs, the population order would be as follows: A1 & B1, C1 & D1, A2 & B2, C2 & D2, A3 & B3, C3 & D3, A4 & B4, C4 & D4.

DIMMs that makeup a given pair must match with respect to size, speed, and organization. DIMM size from one DIMM pair to another can be different. However, speed and organization must be the same. For example: DIMM pair A1 and B1 are populated with x8 1GB DDR2-667 DIMMs. DIMM pair C1 and D1 can be populated with x8 2GB DDR2-667 DIMMs.

Note: For additional memory configurations, see the Service Guide on the CD that accompanied your Intel® Server Board S5400SF, or go to: <http://support.intel.com/support/motherboards/server/s5400sf>

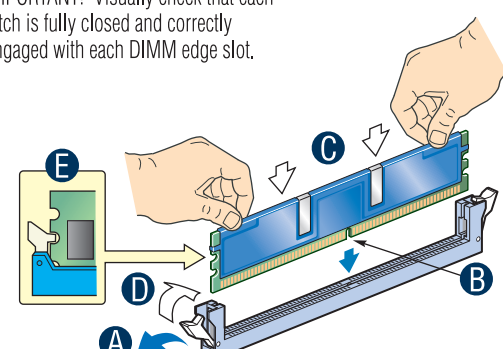
Memory sizing and configuration is supported only for qualified DIMMs approved by Intel®. For a list of supported memory, see the tested memory list at <http://support.intel.com/support/motherboards/server/s5400sf/compat.htm>



6b To Install DIMMs:

- Open both DIMM socket levers.
- Note location of alignment notch.
- Insert DIMM making sure the connector edge of the DIMM aligns correctly with the slot.
- Push down firmly on the DIMM until it snaps into place and both levers close.
- IMPORTANT!** Visually check that each latch is fully closed and correctly engaged with each DIMM edge slot.

CAUTION: Avoid touching contacts when handling or installing DIMMs.

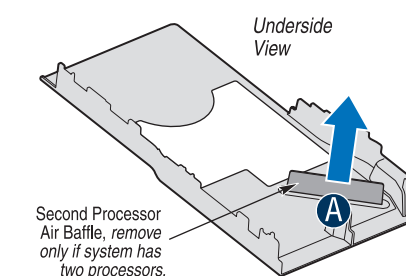


7 Processor Air Duct Modification

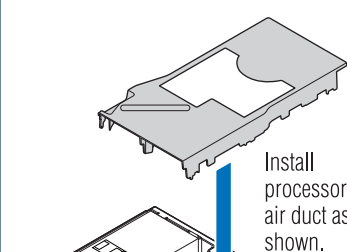
IMPORTANT NOTE: If you are installing a single processor, disregard this step and continue to step 8.

CAUTION: For a single processor configuration, the air baffle must be left in place to ensure proper cooling.

- Remove air baffle by rocking back and forth until tabs break away from the duct.



8 Install Processor Air Duct

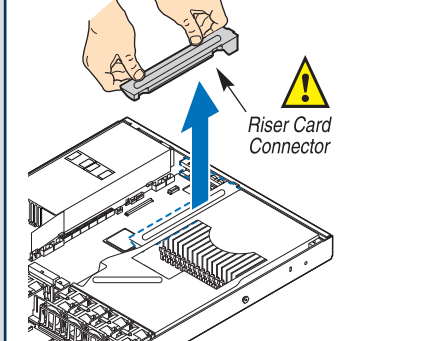


Use care to avoid pinching system cables.

9 Remove Add-in Card Riser Assembly

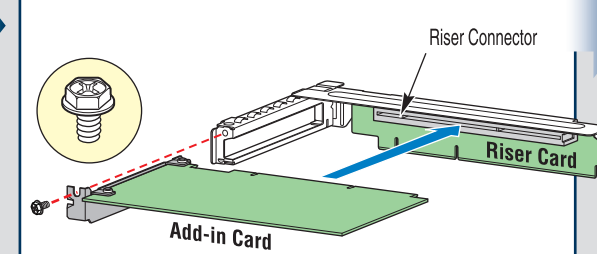
To remove the riser: Grasp the riser with both hands as shown and pull up to release riser assembly. Lift straight up.

CAUTION: Place the riser assembly upside-down to avoid damage to the riser card connector.



10 Install Add-in Card (optional)

- Remove filler panel from the selected add-in card slot.
- Insert add-in card until it seats in riser connector.
- Secure add-in card with screw as shown.



CAUTION: Observe normal ESD precautions when installing add-in cards.

11 Install PCI Add-in Card Riser Assembly

- Position riser card edge connector over the server board riser socket and align up the two hooks in the riser with the slots at the back of the chassis.
- Press down uniformly until the two hooks on the rear of the PCI riser assembly engage the chassis back panel slots. The riser card will seat into the matching socket on the server board.

