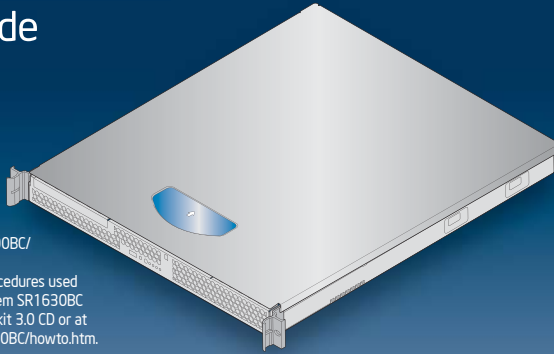# Intel® Server System SR1630BC
Quick Start User's Guide

Thank you for buying an Intel® Server System. The following information will help you assemble your Intel® Server System SR1630BC and install components.

This guide and other supporting documents are located on the web at:
http://support.intel.com/support/motherboards/server/S5500BC/

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, please see the Intel® Server System SR1630BC User's Guide, available on the Intel® Server Deployment Toolkit 3.0 CD or at http://support.intel.com/support/motherboards/server/S5500BC/howto.htm.

Please boot to the Intel® Server Deployment Toolkit 3.0 CD first for BIOS and firmware configuration and updates.

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

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 Intel® Xeon® processor 5500 series (except TDP 135 W)
- **Heat Sink:**
  - 1U passive heat sink for each processor installed.
- **Memory:**
  - Minimum of one 1GB, DDR3 800/1066/1333 MHz compliant 240-pin DIMM.
- **Hard Disk Drives:**
  - SATA
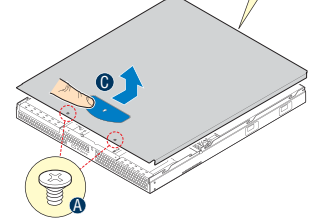- **Power:**
  - Minimum of 400W.

---

1 Preparing the Chassis

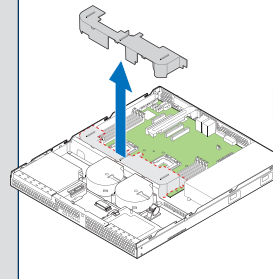*Observe normal ESD (Electrostatic Discharge) procedures.*

Place your Intel® Server Chassis 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

A. Remove the two screws at the front.
B. Remove the screw at the rear.
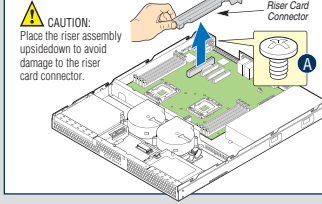C. Using the blue rubber contact, push the top cover rearward to release, then lift upward and remove.

3 Remove Air Baffle

4 Remove Add-in Card Riser Assembly

A. Remove the screw at rear of the chassis.
B. Grasp riser with both hands and pull straight up to release riser card connector from server board socket.

⚠ CAUTION: Place the riser assembly upsidedown to avoid damage to the riser card connector.

Riser Card Connector

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.

Tools Required
Philips* screwdriver
Anti-static wrist strap

E51999-004

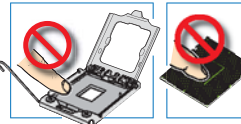
5 Install the Processor(s)

Cautions:

⚠ 1. When opening a socket, DO NOT TOUCH the gold socket wires.

⚠ 2. When unpacking a processor, hold by the edges only to avoid touching the gold contact wires.

A. Open the Socket Lever
A. Push the lever handle down and away from the socket to release it.
B. Rotate the lever open all the way.

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

E. Remove Socket Protective Cover
A. Grasp the socket protective cover by the two tabs and carefully lift straight up as shown.

⚠ 1. To avoid damage, DO NOT DROP the cover onto the socket wires or components.

Save the protective cover.

C. Remove the Processor Protective Cover
A. Take the processor out of the box and remove the protective shipping cover.

D. Install the Processor

⚠ CAUTION: The underside of the processor has components that may damage the socket wires if installed improperly.

Processor must align correctly with the socket opening before installation.

DO NOT DROP processor into socket!

A. Orient the processor with the socket so that the processor cutouts match the two socket pins.

Install the processor as shown.

Components

F. Close Load Plate and Socket Lever
A. Close the load plate all the way as shown.
B. With your finger, push down on the load plate as shown.
C. Close the socket lever and ensure that the load plate tab engages under the socket lever when fully closed.
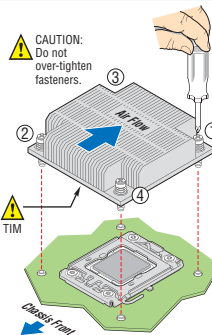
---

6 Install Heat Sink(s)

IMPORTANT NOTE:
Intel® Server Chassis require passive heatsinks. For a non-Intel server chassis, see the documentation that came with your chassis for heat sink requirements.

⚠ 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.*

⚠ CAUTION: Do not over-tighten fasteners.

Air Flow

A. 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:

B. Using a #2 Phillips* screwdriver, finger-tighten each fastener diagonally, according to the numbers shown.

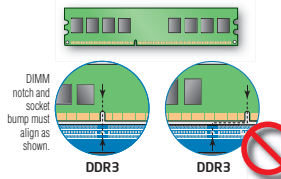C. Securely re-tighten each fastener again in the same order as performed in step B.

Note: Heatsink styles may vary.

TIM

Chassis Front

---

7 Install Memory DIMMs

DDR3 Memory Identification:

⚠ This server board supports up to eight DDR3-800/1066/1333 ECC RDIMM and ECC or Non-ECC UDIMM. DDR3 DIMMs that are only single-rank and dual-rank are supported on this server board.
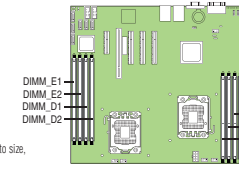
DIMM notch and socket bump must align as shown.

DDR3

DDR3

Memory Configurations and Population Order:

Memory Type: Minimum of one 1GB 800/1066/1333 MHz compliant 240-pin DDR3 DIMM.

Populate DDR3 DIMMs in the order of A1, D1, B1, E1, A2, D2, B2, E2. Populate the farthest DIMM from the processor for per DIMM per channel.

DIMMs must be identical with respect to size, speed, and organization.
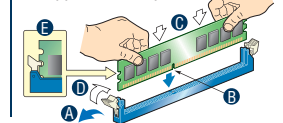
Note: For additional memory configurations, see the User Guide on the Intel® Server Deployment Toolkit 3.0 CD that accompanied your Intel® Server System SR1630BC, or go to:
http://support.intel.com/support/motherboards/server/S5500BC

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/S5500BC/compat.htm

DIMM_E1
DIMM_E2
DIMM_D1
DIMM_D2
DIMM_B1
DIMM_B2
DIMM_A1
DIMM_A2

To Install DIMMs:

⚠ CAUTION: Avoid touching contacts when handling or installing DIMMs.

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