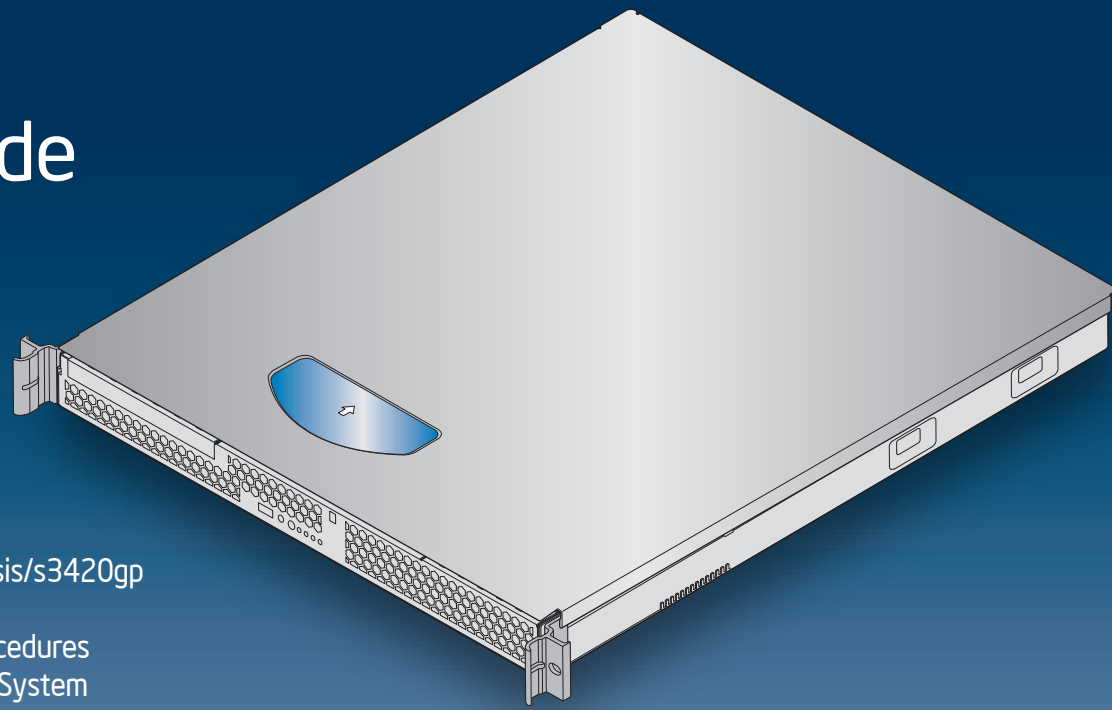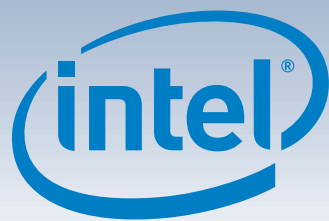# Intel® Server System SR1630GP
Quick Start User's Guide

Thank you for buying an Intel® Server System. The following information will help you assemble your Intel® Server System SR1630GP and install components.

This guide and other supporting documents are located on the web at http://support.intel.com/support/motherboards/server/chassis/s3420gp

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, please see the Intel® Server System SR1630GP Service Guide, available on the Intel® Server Deployment Toolkit CD or at http://support.intel.com/support/motherboards/server/s3420gp/howto.htm

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

(intel) Xeon inside™

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Minimum Hardware Requirements

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

- **Heat Sink:**
  - 1U passive heat sink.
- **Memory:**
  - Memory Type: Minimum of one 1GB DDR3 800/1066/1333MHz ECC RDIMM or 1066/1333MHz ECC UDIMM.
- **Hard Disk Drives:**
  - SATA
- **Power:**
  - Minimum of 350W with 3A of standby current, which meets the SSI EPS 12V specification.

1 Preparing the Chassis

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.

*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.
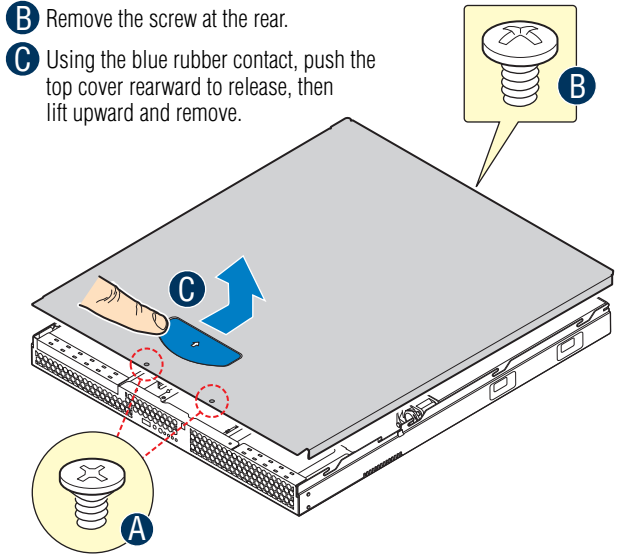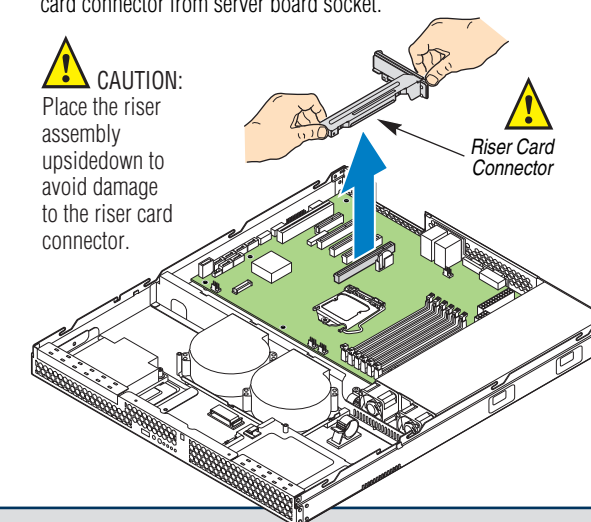
3 Remove Air Duct
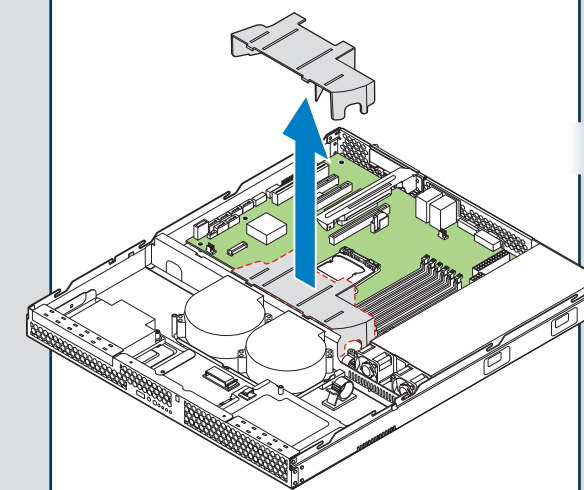
4 Remove Add-in Card Riser Assembly

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.

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

Phillips* screwdriver

Anti-static wrist strap

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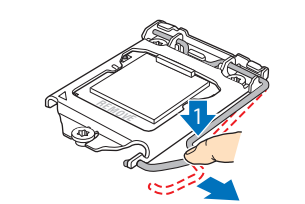
5 Install the Processor

Cautions:

A When removing the protective cover, DO NOT TOUCH the gold socket wires.
B To avoid damage, DO NOT DROP the cover onto the socket wires or components.
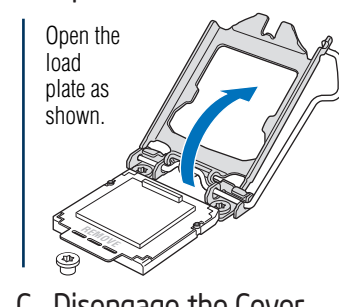C When unpacking a processor, hold by the edges only to avoid touching the gold contact wires.
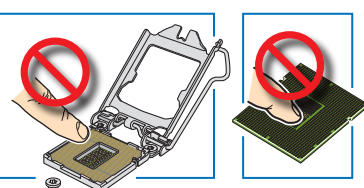
A. Open the Socket Lever
A Push the lever handle down and away from the socket to release it.
B Rotate the lever open all the way.

B. Open the Load Plate
Open the load plate as shown.

C. Disengage the Cover
Place thumb and finger as shown and tilt it up slightly at front.

D. Remove the Cover
Carefully lift the cover straight up as shown.
Save the protective cover.

E. Unpack the Processor
Carefully remove protective cover as shown.
Save the protective cover.
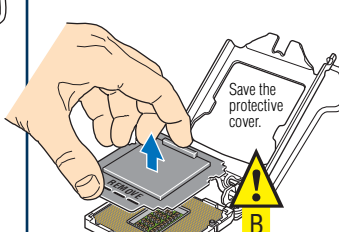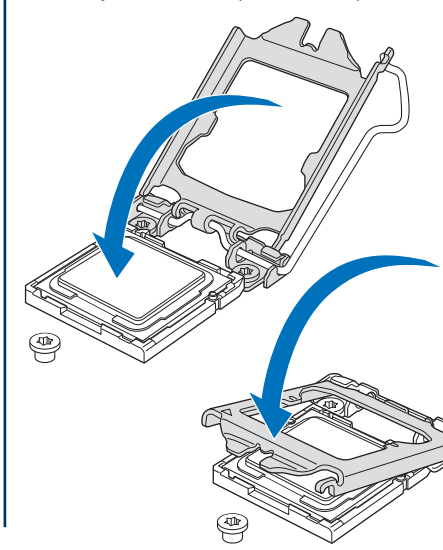
F. Install the Processor
CAUTION: The underside of the processor has components that may damage the socket wires if installed improperly.
Components
Processor must align correctly with the socket opening before installation. DO NOT DROP processor into socket!
DO NOT DROP processor into socket!
A Orient the processor with the socket so that the processor cutouts match the two socket pins.
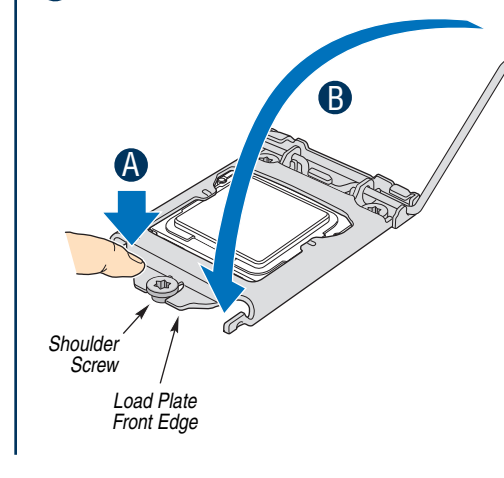B Note location of gold key at corner of processor.
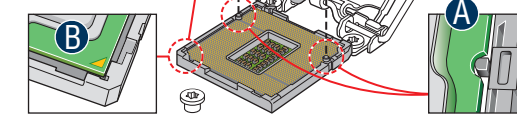
G. Close the Load Plate
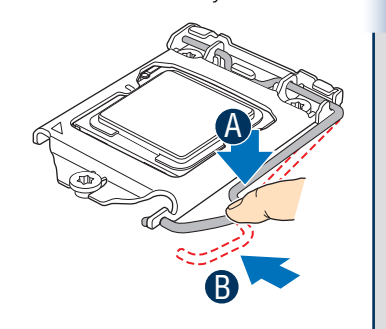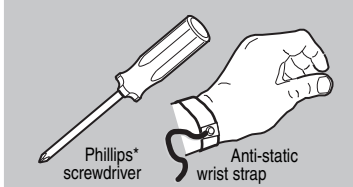Carefully lower the load plate over the processor.

H. Engage the Load Plate
A Make sure the front edge of the load plate slides under the shoulder screw as the lever is lowered.
B Close the load plate locking lever.
Shoulder Screw
Load Plate Front Edge

I. Latch the Locking Lever
A Push down on the locking lever.
CAUTION: DO NOT damage the server board with the tip of the locking lever.
B Slide the tip of the lever under the notch in the load plate. *Make sure the lever is securely latched.*

6 Install Heat Sink

A Remove the screw securing the heat sink retention plate. *Retain this screw for installing the hard drive carrier at this location later in this document.*
B Slide the plate toward the center of the chassis to disengage it from the chassis sidewall and remove.
C Loosen the four captive fasteners and remove the heat sink from the retention plate. *This plate will not be used again and can be discarded.*
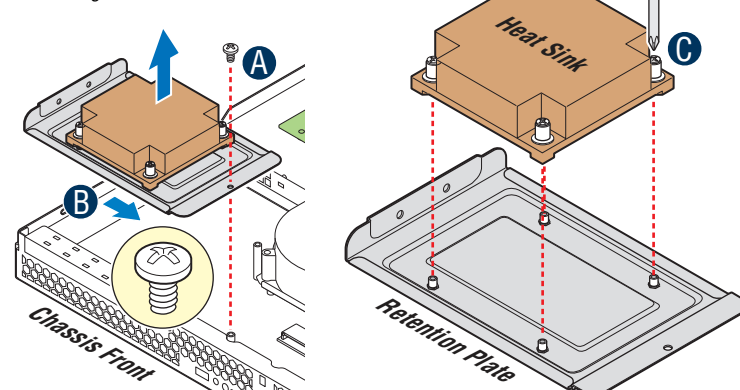
CAUTION: The heat sink has thermal interface material (TIM) on the underside of it. Use caution so that you do not damage the thermal interface material. *Use gloves to avoid sharp edges.*

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

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

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

AIRFLOW

TIM

CAUTION: Do not over-tighten fasteners.

Heat Sink

Chassis Front

Retention Plate
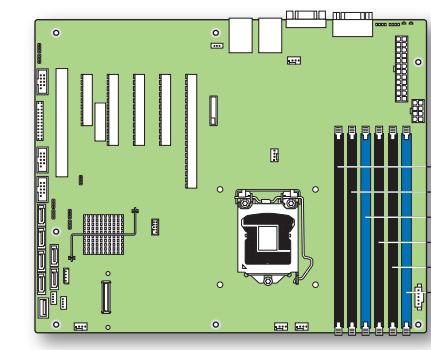
Chassis Front

Processor Socket
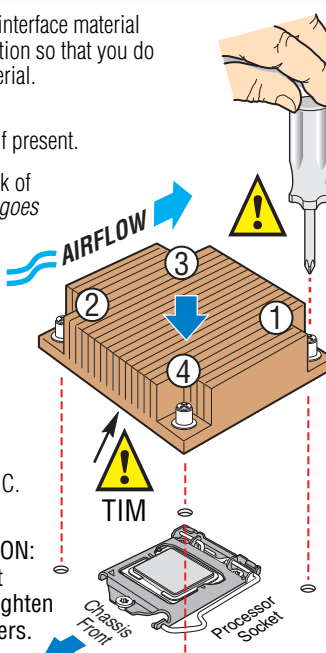
7 Install DIMM Memory Modules

DDR3 DIMM Memory Identification:

CAUTION: Observe normal ESD (ElectroStatic Discharge) procedures to avoid possible damage to system components.

This server board supports up to 6 DDR3-800/1066/1333 MHz ECC RDIMM and 1066/1033 MHz ECC UDIMM.

DIMM notch and socket bump must align as shown.
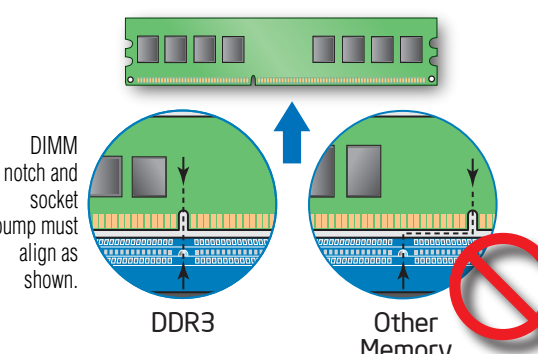
DDR3

Other Memory

Memory Configurations and Population Order:

DIMM A3
DIMM A2
DIMM A1
DIMM B3
DIMM B2
DIMM B1

Memory Type: Minimum of one 1 GB, DDR3 800/1066/1333 MHz ECC RDIMM or 1066/1033 MHz ECC UDIMM compliant 240-pin DIMM.

Note: For additional memory configurations, see the User Guide on the Intel® Server Deployment Toolkit CD that accompanied your Intel® Server Board S3420GP, or go to: http://support.intel.com/support/motherboards/server/chassis/s3420gp

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/chassis/s3420gp/compat.htm

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.