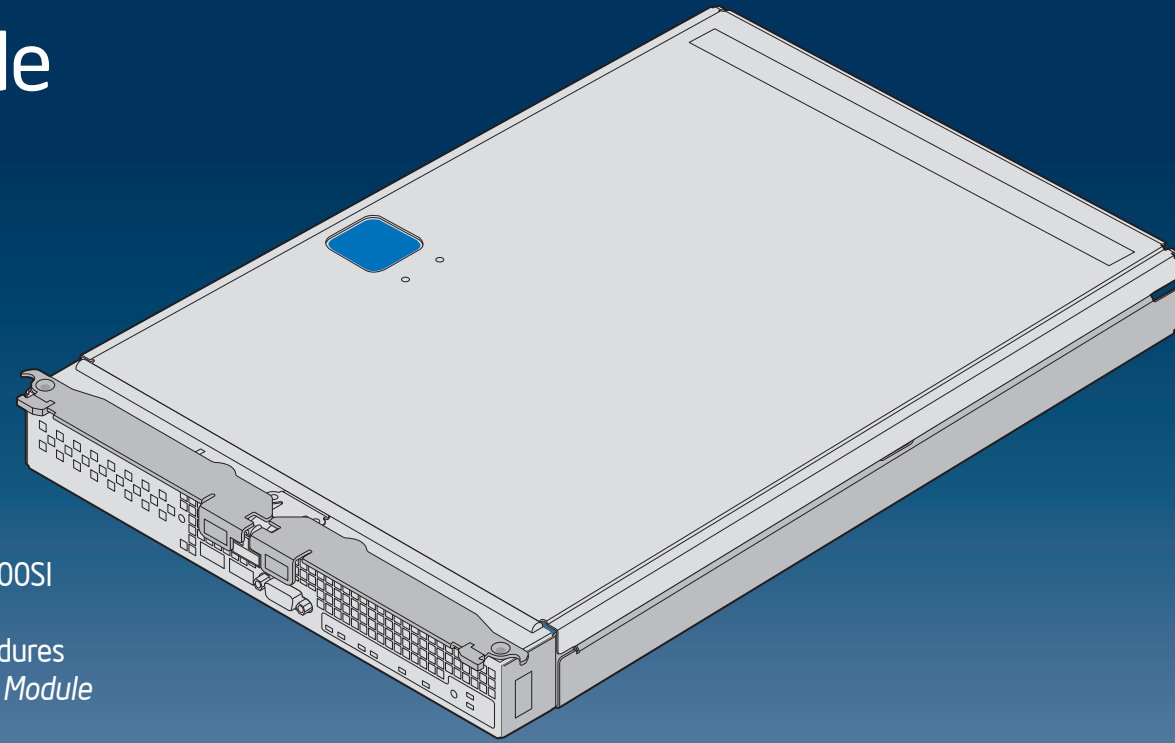# Intel® Compute Module MFS5000SI
# Quick Start User's Guide

Thank you for buying an Intel® Compute Module. The following information will help you assemble your Intel® Compute Module MFS5000SI and install components.

This guide and other supporting documents are located on the web at http://support.intel.com/support/motherboards/server/MFS5000SI

If you are not familiar with ESD (Electrostatic Discharge) procedures used during system integration, please see the *Intel® Compute Module MFS5000SI User Guide*, available at http://support.intel.com/support/motherboards/server/MFS5000SI

*Read all cautions and warnings before starting your compute module integration.*
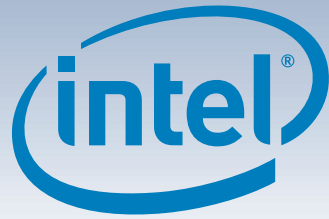
(intel)

Minimum Hardware Requirements

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

■ **Processor(s):**
 • Minimum of one Dual-Core or Quad-Core Intel® Xeon® processor 5000 sequence.

■ **Heatsink(s):**
 • Minimum of one 1U Intel® approved passive heatsink.

■ **Memory:**
 • Minimum of one 512-MB, DDR2 667-MHz compliant 240-pin FBDIMM.

Tools Required

Phillips* screwdriver

Anti-static wrist strap

1/4-inch nut driver
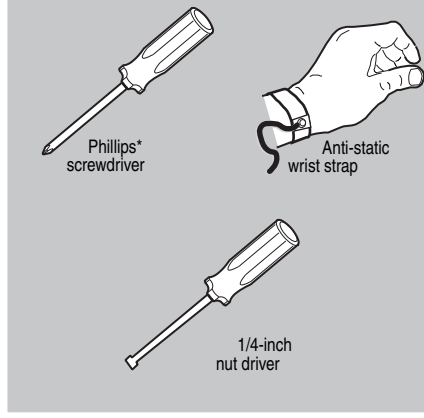
1 Preparing the Module

Observe normal ESD (Electrostatic Discharge) procedures.

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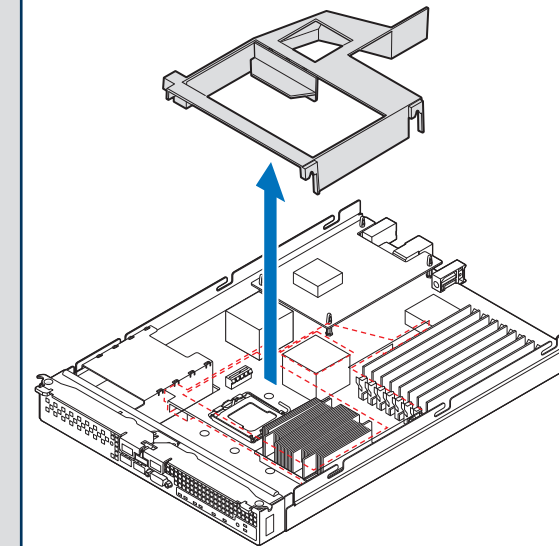
Always touch the module chassis frame first, before reaching inside to make connections or to install components.

2 Remove Top Cover

Ⓐ Depress cover release button.

Ⓑ Slide top cover toward rear and lift upward.
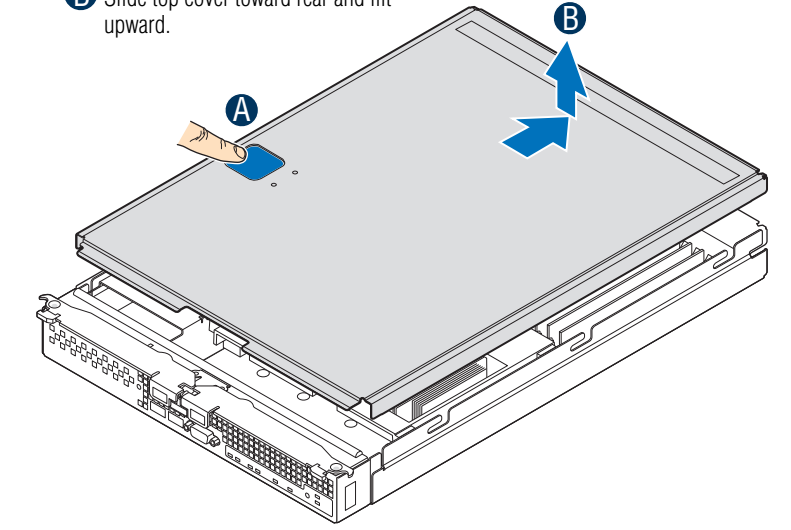
3 Remove Air Duct

IMPORTANT!

Before proceeding further, do the following:

Check your Intel® Compute Module to ensure no components have loosened during shipping.

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4 Install Processor(s)

Notes and 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 contacts.
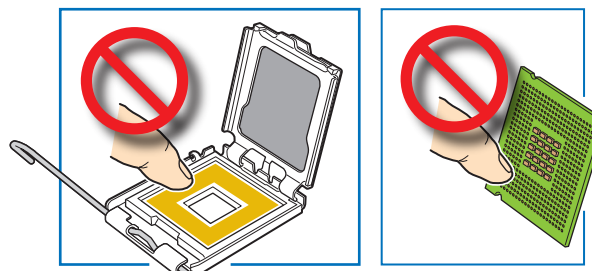
A. Open Socket Lever
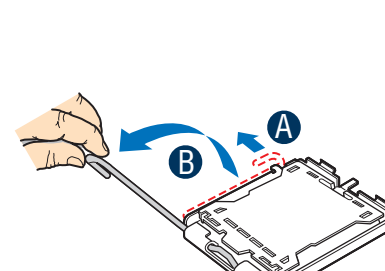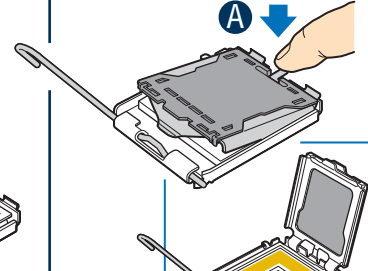
Ⓐ Push the lever handle down and away from the socket to release it.

Ⓑ Pull the lever and open all the way.

B. Open 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 Processor Protective Cover

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

D. Install Processor

⚠ CAUTION: The underside of the processor has components that may damage the socket pins if installed improperly. Processor must align correctly with socket opening before installation. DO NOT DROP processor into socket!
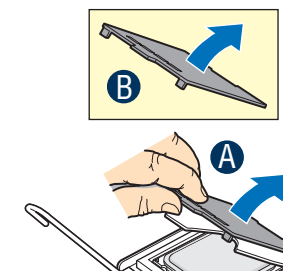
Components

Ⓐ Orient the processor with the socket so that the processor cutouts match the socket notches.

Ⓑ Install the processor.
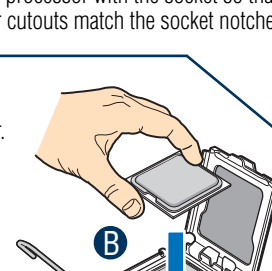
E. Remove Socket Protective Cover

Ⓐ 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.

F. Close Load Plate and Socket Lever

Ⓐ Close the load plate all the way as shown.

Ⓑ Push down on the load plate as shown.

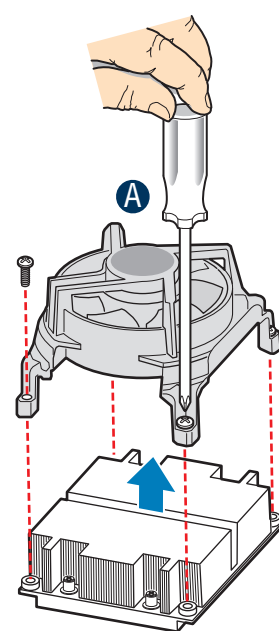Ⓒ Close the socket lever and ensure that the load plate tab engages under the socket lever when fully closed.

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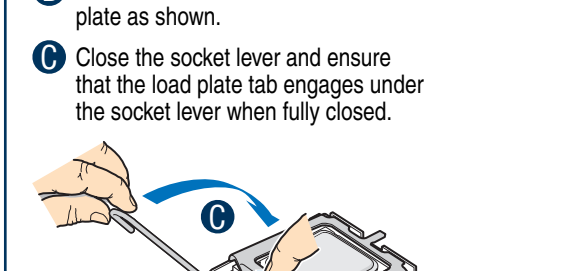
5 Remove Fan(s) from Heatsink(s)

Your heatsink(s) comes with a fan attached.

⚠ CAUTION: Sharp Edges.

Ⓐ Remove the four screws securing the fan to the heatsink.

The fan(s) and screws will not be used in this system.

6 Install Heatsink(s)

⚠ CAUTION: Do not over-tighten fasteners.

⚠ 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.

Ⓐ Remove the protective film from the TIM.

Ⓑ 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 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: Heatsink styles may vary.

Air Flow

TIM

Chassis Front
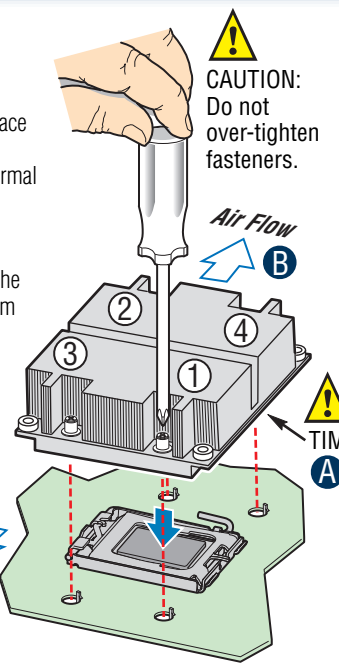
7 Install Memory DIMMs

DDR2 FBDIMM Memory Identification:

⚠ This compute module supports up to eight DDR2-667 Fully Buffered DIMMs (FBD memory). DDR2 DIMMs that are not FBD memory are not supported on this compute module.

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

DIMM notch and socket bump must align as shown.
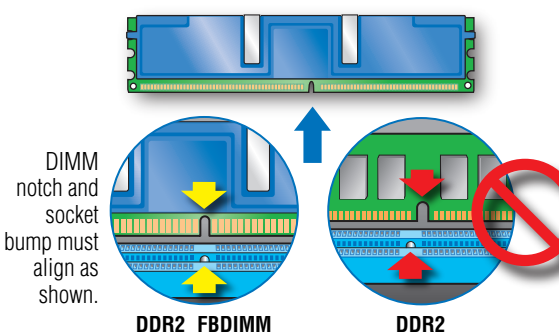
DDR2 FBDIMM **DDR2**
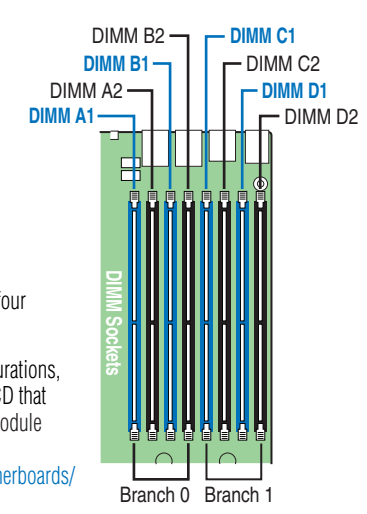
Memory Configurations and Population Order:

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

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

For best performance, a minimum of four DIMMs is recommended.

Note: For additional memory configurations, see the *User Guide* on the Resource CD that accompanied your Intel® Compute Module MFS5000SI, or go to: http://support.intel.com/support/motherboards/server/MFS5000SI
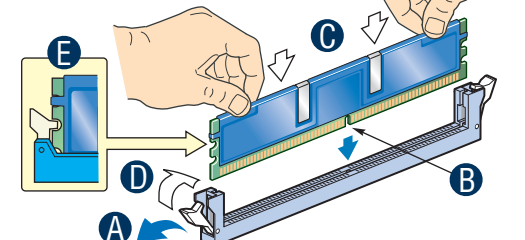
Memory sizing and configuration is supported only for qualified DIMMs approved by Intel. For a list of supported memory, see the *Tested Memory List* at http://support.intel.com/support/motherboards/server/MFS5000SI/compat.htm

DIMM B2 — DIMM C1
DIMM B1 — DIMM C2
DIMM A2 — DIMM D1
DIMM A1 — DIMM D2

Branch 0   Branch 1

To Install DIMMs:

⚠ CAUTION: Avoid touching contacts when handling or installing 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.

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