Intel® RAID Activation Key AXXRAKSAS2

Install Guide

Order Number: D92007-001

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Intel server boards contain a number of high-density VLSI and power delivery components that need adequate airflow for cooling. Intel's own chassis are designed and tested to meet the intended thermal requirements of these components when the fully integrated system is used together. It is the responsibility of the system integrator that chooses not to use Intel developed server building blocks to consult vendor datasheets and operating parameters to determine the amount of airflow required for their specific application and environmental conditions. Intel Corporation can not be held responsible if components fail or the server board does not operate correctly when used outside any of their published operating or non-operating limits.

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Important Safety Instructions

Read all caution and safety statements in this document before performing any of the instructions. See *Intel Server Boards and Server Chassis Safety Information* at http://support.intel.com/support/motherboards/server/sb/cs-010770.htm.

Wichtige Sicherheitshinweise

Lesen Sie zunächst sämtliche Warn- und Sicherheitshinweise in diesem Dokument, bevor Sie eine der Anweisungen ausführen. Beachten Sie hierzu auch die Sicherheitshinweise zu Intel-Serverplatinen und -Servergehäusen unter http://support.intel.com/support/motherboards/server/sb/cs-010770.htm.

重要安全指导

在执行任何指令之前，请阅读本文档中的所有注意事项及安全声明。和/或http://support.intel.com/support/motherboards/server/sb/cs-010770.htm 上的 *Intel Server Boards and Server Chassis Safety Information*（《Intel 服务器主板与服务器机箱安全信息》）。

Important Safety InstructionsConsignes de sécurité

Lisez attention toutes les consignes de sécurité et les mises en garde indiquées dans ce document avant de suivre toute instruction. Consultez *Intel Server Boards and Server Chassis Safety Information* rendez-vous sur le site http://support.intel.com/support/motherboards/server/sb/cs-010770.htm.

Instrucciones de seguridad importantes

Lea todas las declaraciones de seguridad y precaución de este documento antes de realizar cualquiera de las instrucciones. Vea *Intel Server Boards and Server Chassis Safety Information* en http://support.intel.com/support/motherboards/server/sb/cs-010770.htm.

⚠ **WARNINGS**

Server power on/off: The push-button on/off power switch on the front panel of the server does not turn off the AC power. To remove AC power from the server, you must unplug the AC power cord from either the power supply or wall outlet.

Hazardous conditions: power supply, cables: Hazardous voltage, current, and energy levels are present inside the power supply enclosure and may be present on power and communication cables. Turn off the server and disconnect all cables attached to the server before opening it. Otherwise, personal injury or equipment damage can result

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Preface

About this Manual

Thank you for purchasing and using the Intel® RAID Activation Key AXXRAKSAS2.

This manual is for system technicians who are responsible this RAID Activation Key. It provides a brief overview of the features of the AXXRAKSAS2, and instructions on how to install the component. For the latest version of this manual, see http://support.intel.com/support/motherboards/server/.

Product Contents

Your kit came with these components

- One Intel® RAID Activation Key AXXRAKSAS2
- These instructions

1   About Intel® RAID Activation Keys

Intel® RAID Activation Keys enable RAID features on Intel® server boards. Several models of Intel® RAID Activation Keys are available for different RAID products and to serve different purposes.

This guide is specific to the Intel® RAID Activation Key with the order code, AXXRAKSAS2. This key enables hardware RAID across all modes (0, 1, 5, 6, 10, 50, and 60) on these Intel® server boards and systems that include an Intel® Integrated Server RAID Module using the LSI* 1078 ROC controller:

- Intel® Server System S7000FC4UR with SAS riser
- Intel® Server System SR1550ALSAS with 1078-based active midplane
- Intel® Server System SR2500ALLX with 1078-based active midplane

This guide does not apply to these Intel® RAID Activation Keys:

- AXXRAK18E enables integrated hardware RAID 0,1,5,10 and 50 on these systems:
    - Intel® Server System SR4850HW4/M with product code SHW4URM3SA
    - Intel® Server System SR6850HW4/M with product code SHW6URM3SA
    - Intel® Server System S5000PSLROMB using LSI* 1068
    - Intel® Server System SC5400RA using LSI 1068
    - Intel® Server System SR1550ALSAS using LSI 1068-based active midplane.
    - Intel® Server System SR2500ALLX using LSI 1068-based active midplane.

- AXXRAKSW5 enables software RAID 5 on Intel® Server Boards that include Intel® Embedded Server RAID Technology II. This key enables software RAID 5 with the ESB2 SATA controller and / or the 1064E SAS / SATA controller. Except for the Intel Server Platforms SR1550AL and SR2500AS (product codes SR1550ALSAS and SR2500ALLX), SAS server boards can include two AXXRAKSW5 sockets.

- AXXRAKU42E is used to enable RAID on the SCSI ROMB models of these Intel® Server Boards and Platforms that include an on-board SCSI controller:
    - Intel® Server Board SE7520AF2
    - Intel® Server System SR4850HW4/M with product code SHW4UR/M
    - Intel® Server System SR6850HW4/M with product code SHW6UR/M

Intel® Integrated Server RAID Requirements

Intel® Integrated Server RAID requires a DIMM in addition to the standard server board DIMMs or FBDIMMs. The Intel® Server System S7000FC4UR SAS riser includes a full-size DIMM socket for this DIMM, and the SR1550ALSAS and SR2500LX provide a mini-DIMM socket. Only use memory DIMMs listed under the RAID module section of the *Tested Memory List,* available under the listing for your system at http://support.intel.com/support/motherboards/server.

A backup battery, the Intel® RAID Smart Battery Backup Unit (AXXRSBBU4), is available to prevent data loss in the RAM cache if AC power is lost. The backup battery maintains the data for up to 72 hours. The Smart Battery Backup Unit mounts to the RAID controller card.

Installing the Intel® RAID Activation Key

Prepare the Server

1. Observe all safety and ESD precautions at the beginning of this guide and in the documentation for your server board and chassis.
2. If your server system is running, power off all peripheral devices attached to the server, power down the server, and disconnect the AC power cord from the server.
3. Remove the chassis cover. See your server chassis documentation for instructions.

Install the Intel® RAID Activation Key

1. Remove the RAID Activation Key from its packaging.
2. See your server board or system documentation to locate the ROMB connection in your server. It may be on a midplane board or on the SAS riser board in a specially keyed PCI Express* slot.
3. With the Intel name on the RAID Activation Key facing up, insert the RAID Activation Key into the socket.
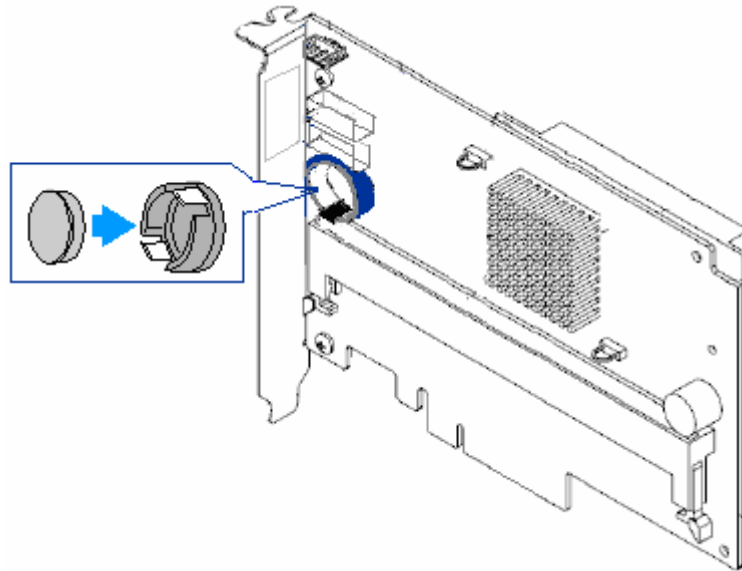4. Make sure the Key is fully seated. The metal clips on the socket sit on the top edge of the Key.

Figure 1. Installing the RAID Activation Key on Intel® Server System S7000FC4UR SAS Riser
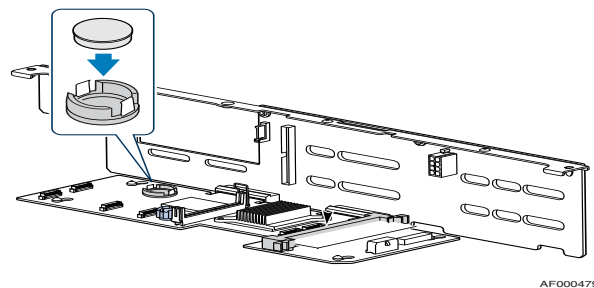

Figure 2. Installing RAID Activation Key on Midplane Board

Install the RAID DIMM or Mini-DIMM

1. Open the clips on each side of the DIMM socket.
2. Holding the DIMM by the edges, remove it from its anti-static package.
3. Align the notch on the DIMM with the key in the DIMM socket.
4. Push the DIMM firmly into the socket. The clips will latch. Make sure the clips are firmly latched.
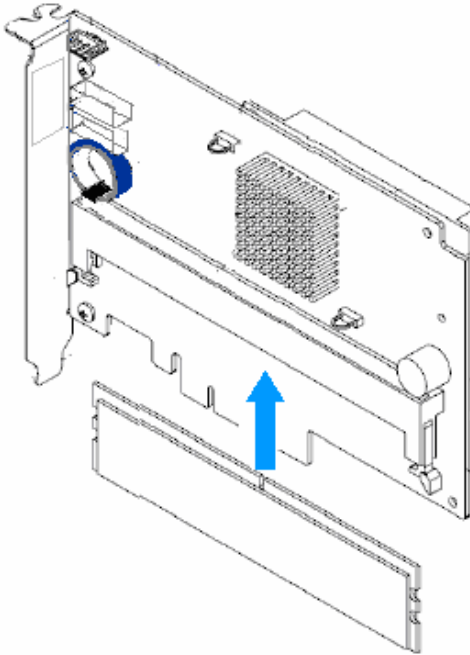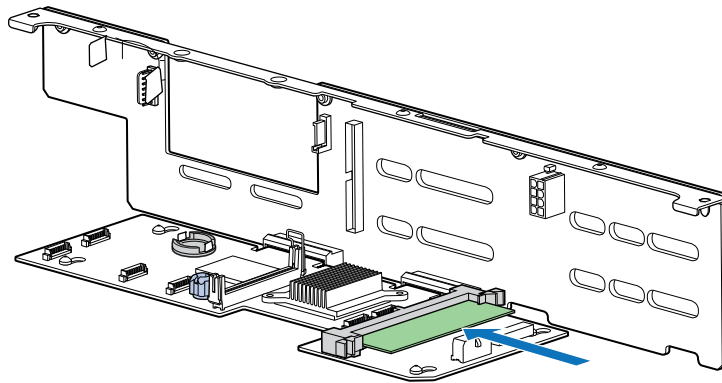

Figure 3. Installing DIMM on Intel® Server System S7000FC4UR SAS Riser

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Figure 4. Installing Mini-DIMM on Midplane Board

Finish the Installation

1. (Optional) Follow the instructions included with the Intel RAID Smart Battery (AXXRSBBU4) to install this accessory.
2. Reinstall any components inside of the server chassis that you needed to remove. See your server board or chassis documentation for instructions.
3. Install the server chassis cover and connect the AC power supply.

Enable and Configure Hardware RAID

After you boot your system, update the firmware for the RAID function of the LSI* 1078 controller. The update package is available at http://support.intel.com. Follow the instructions in the firmware package to update the firmware and enable hardware RAID.

For RAID configuration instructions, see the RAID Software User's Guide.