## **Intel® RAID Activation Guide**

Intel® Server Board SE7520AF2
Intel® Server Platform SR4850HW4
Intel® Server Platform SR6850HW4

Order Number: C71359-002



# **Important Safety Instructions**

### **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 <a href="http://support.intel.com/support/motherboards/server/sb/cs-010770.htm">http://support.intel.com/support/motherboards/server/sb/cs-010770.htm</a>.

#### 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<u>http://support.intel.com/support/motherboards/server/sb/cs-010770.htm</u> 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 <a href="http://support.intel.com/support/motherboards/server/sb/cs-010770.htm">http://support.intel.com/support/motherboards/server/sb/cs-010770.htm</a>.

### 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 <a href="http://support.intel.com/support/motherboards/server/sb/cs-010770.htm">http://support.intel.com/support/motherboards/server/sb/cs-010770.htm</a>.

## MARNINGS

**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:** Hazardous voltage, current, and energy levels are present inside the power supply enclosure. There are no user-serviceable parts inside it; servicing should only be done by technically qualified personnel.

**Hazardous conditions—devices and cables:** Hazardous electrical conditions may be present on power, telephone, and communication cables. Turn off the server and disconnect telecommunications systems, networks, modems, and the power cord attached to the server before opening it. Otherwise, personal injury or equipment damage can result.

#### **Disclaimer**

Information in this document is provided in connection with Intel® products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel products are not designed, intended or authorized for use in any medical, life saving, or life sustaining applications or for any other application in which the failure of the Intel product could create a situation where personal injury or death may occur. Intel may make changes to specifications and product descriptions at any time, without notice.

Intel is a registered trademark of Intel Corporation or its subsidiaries in the United States and other countries.

Copyright © 2004-2005 Intel Corporation. All Rights Reserved.

<sup>\*</sup> Other names and brands may be claimed as the property of others.

## **Contents**

About the Intel® RAID Activation Kits	. 5
Server Board SE7520AF2 Requirements	5
Server Platform SR4850HW4/SR6850HW4 Requirements	
Intel® RAID Activation Key Kit Contents	
Activating RAID on the Intel® Server Board SE7520AF2	6
Prepare the Server	6
Install the Intel® RAID Activation Key	
Install the Intel® Portable Cache Module or RAID DIMM	
Finish Up	7
Activating RAID on the Intel® Server Platform SR4850HW4 or SR6850HW4	8
Prepare the Server	8
Install the RAID DIMM	8
Install the Intel® RAID Activation Key	8
Finish Up	9

### About the Intel® RAID Activation Kits

The Intel® Activation RAID Activation Key is required to enable RAID on the following Intel® Server Board and Platforms:

- Intel® Server Board SE7520AF2
- Intel® Server Platform SR4850HW4
- Intel® Server Platform SR6850HW4

## **Server Board SE7520AF2 Requirements**

In addition to the RAID Activation Key on the Server Board SE7520AF2, you must also either install either one DIMM or the Intel® Portable Cache Module into the ROMB Cache DIMM socket on the server board. If a memory DIMM is to be used, the DIMM requirement for the Server Board SE7520AF2 is:

- Un-buffered ECC DDR333 DIMM
- DIMM capacity of 128, 256, or 512 MB,

This guide describes installing the Intel® RAID Activation Key into the Server Board SE7520AF2.

The instructions for installing the Intel® Portable Cache Module are included with the Cache Module kit. The Cache Module instructions can also be used to install a memory DIMM. If you are installing a memory DIMM instead of the Intel® Portable Cache Module, download the instructions from <a href="http://support.intel.com/support/motherboards/server/se7520af2">http://support.intel.com/support/motherboards/server/se7520af2</a>

# Server Platform SR4850HW4/SR6850HW4 Requirements

In addition to the RAID Activation Key on the Server Platforms SR4850HW4 and SR6850HW4 you must install a DDR2-400 DIMM into the ROMB Cache DIMM socket. The requirement is:

- DDR2-400 DIMM
- DIMM capacity of 128, 256, or 512MB

For a list of memory modules tested for compatibility with the RAID on Motherboard implementation for this server board, see the tested memory list available on <a href="http://support.intel.com">http://support.intel.com</a>.

## Intel® RAID Activation Key Kit Contents

- One RAID Activation Key
- These instructions

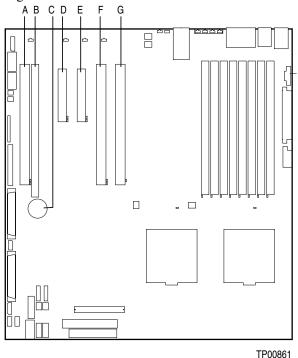
# Activating RAID on the Intel® Server Board SE7520AF2

## **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 it, 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. Locate the socket on the server board SE7520AF2 for the RAID Activation Key at location J2F4. See letter C in Figure 1.



A. PCI Slot 1 (PCI-X 64/66)

B. Slot 2: ROMB Cache DIMM Socket

C. Intel® RAID Activation Key Socket

D. PCI Slot 3 (PCI Express\* x4)

E. PCI Slot 4 (PCI Express x8)

F. PCI Slot 5 (PCI-X\*, 64/266)

G. PCI Slot 6 (PCI-X 64/100)

Figure 1. Socket for Intel® RAID Activation Key on the Server Board SE7520AF2

- 3. With the Intel name on the RAID Activation Key facing up insert the Key into the socket.
- 4. Make sure the RAID Activation Key is fully seated. The metal protrusions on the socket will click over the top edges of the RAID Activation Key.

# Install the Intel® Portable Cache Module or RAID DIMM

Either a memory DIMM or the Intel® Portable Cache Module is also required to activate the RAID feature on the Server Board SE7520AF2. See the instructions that accompany the Intel Portable Cache Module for installation instructions. If using a memory DIMM instead of the Intel® Portable Cache Module, download the instructions for the Intel® Portable Cache Module from <a href="http://support.intel.com/support/motherboards/server/se7520af2">http://support.intel.com/support/motherboards/server/se7520af2</a>. Follow the instructions, substituting the memory DIMM wherever the Portable Cache Module is referenced.

## Finish Up

- 1. After both the Intel® Portable Cache Module and the RAID Activation Key are installed, reinstall any components inside of the server chassis that you needed to remove.
- 2. Install the chassis cover and connect the AC power supply. Power on the system and enter the BIOS Setup utility.
- 3. In BIOS Setup, navigate to the PCI Configuration Menu and enable the IOP ROMB option.
- 4. Restart the server system and press Ctrl-G during POST to enter the Option ROM Setup utility.

For information on configuring RAID on your server system, see your Intel® RAID Controller SRCU42E Hardware Guide and the Software User's Guide for Intel RAID Products Intel® RAID Controller SRCS16, SRCU42E, SRCU42X, SRCZCRX, Intel Server Board SE7520AF2.

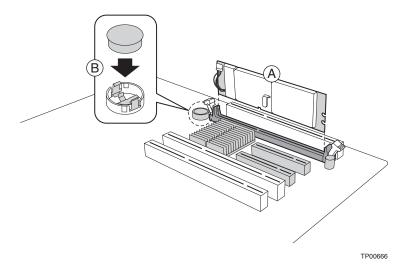


Figure 2. Installing the Intel® RAID Activation Key into a Server Board SE7520AF2

# Activating RAID on the Intel® Server Platform SR4850HW4 or SR6850HW4

## **Prepare the Server**

- 1. Observe the safety precautions, warnings, and cautions at the beginning of this guide and in the documentation for your server platform.
- 2. Turn off all peripheral devices connected to the system.
- 3. Power down the system and unplug both AC power cords.
- 4. Remove the top cover. For instructions, see the *Intel® Server Platform SR4850HW4 Product Guide* or the *Intel® Server Platform SR6850HW4 Product Guide*.
- 5. Remove the Memory Board or the Memory Board air baffle from Slot C. For instructions, see the *Intel*® *Server Platform SR4850HW4 Product Guide* or the *Intel*® *Server Platform SR6850HW4 Product Guide*.

### Install the RAID DIMM

8

- 1. Make sure the clips at either end of the DIMM socket(s) are pushed outward to the open position.
- 2. Holding the DIMM by the edges, remove it from its anti-static package.
- 3. Position the DIMM above the socket. Align the notch on the bottom edge of the DIMM with the key in the DIMM socket.
- 4. Insert the bottom edge of the DIMM into the socket. See letters "A" and "B" in Figure 3.
- 5. When the DIMM is inserted, push down on the top edge of the DIMM until the retaining clips snap into place. Make sure the clips are firmly in place. See Figure 3.

## Install the Intel® RAID Activation Key

- 1. Remove the Intel® RAID Activation Key from its package.
- 2. Insert the Activation Key into the socket on the Main Board and push it into the socket until it is below the two retaining clips. See letter "C" in Figure 3.

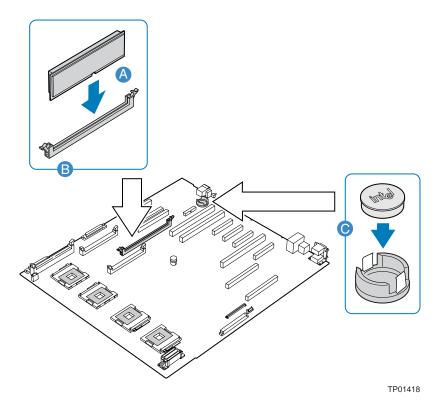


Figure 3. Installing the Intel® RAID Activation Key and RAID DIMM into a Server Platform SR4850HW4 or SR6850HW4

## Finish Up

- 1. Install the Memory Board or the Memory Board air baffle into Slot C. For instructions, see the *Intel*® *Server Platform SR4850HW4 Product Guide* or the *Intel*® *Server Platform SR6850HW4 Product Guide*.
- 2. Install the top cover. For instructions, see the *Intel® Server Platform SR4850HW4 Product Guide* or the *Intel® Server Platform SR6850HW4 Product Guide*.
- 3. Power up the system.
- 4. Reboot the server to activate the RAID Activation Key.