

# **Intel® Server Board SE7520AF2 / Intel® RAID Controller SCRU42E**

## **Intel® Portable Cache Module Installation Guide**

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Order Number: C71360-001



# Important Safety Instructions

## Important Safety Instructions

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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/safecert.htm>.

## Wichtige Sicherheitshinweise

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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/safecert.htm>.

## 重要安全指导

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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/safecert.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 Instructions Consignes de sécurité

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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/safecert.htm>.

## Instrucciones de seguridad importantes

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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/safecert.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:** 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.

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# About the Intel® Portable Cache Module

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The Intel® Portable Cache Module is required to enable write-back for your RAID configuration. When using write-back, data loss can occur if a system failure occurs before the data cache is written to the hard drive. The Intel® Portable Cache Module prevents this potential data loss by providing a battery backup for this data. With the Intel® Portable Cache Module, the battery supplies power to maintain the data that is stored in the cache. The data is written to the hard drive when the system recovers.

On the Intel® Server Board SE7520AF2, the Intel® Portable Cache Module is used in conjunction with the Intel® RAID Activation Key to enable RAID on the server board. You must purchase and install the Intel® RAID Activation Key in order to enable RAID on this server board.

## Intel® Portable Cache Module Kit Contents

- Intel® Portable Cache Module
- Screws (used for Intel® RAID Controller SRCU42E only)
- These instructions

# Portable Cache Module Installation Procedures

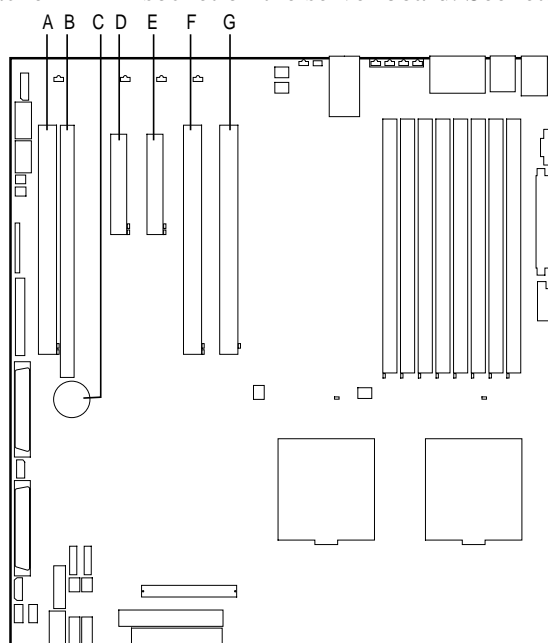
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## Required Tools

- Cross-head (Phillips\*) screwdriver

## Installing the Intel® Portable Cache Module onto the Intel® Server Board SE7520AF2

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.
4. Remove the Intel Portable Cache Module from its packaging.
5. Locate the ROMB Cache DIMM socket on the server board. See letter B in Figure 1.

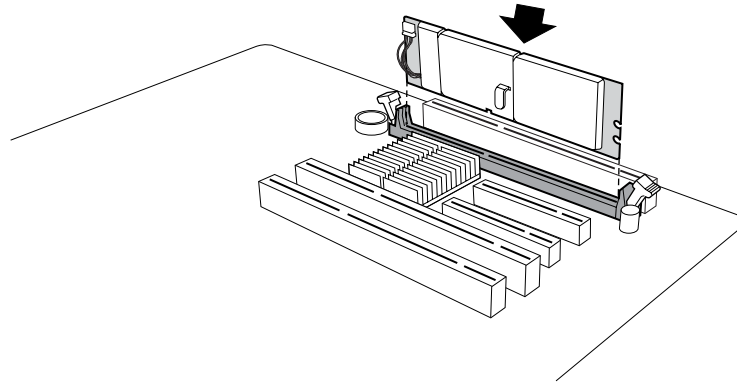


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|--|--------------------------------|
| A. PCI Slot 1 (PCI-X 64/66)              | E. PCI Slot 4 (PCI Express x8) |
| <b>B. Slot 2: ROMB Cache DIMM Socket</b> | F. PCI Slot 5 (PCI-x, 64/266)  |
| C. Intel® RAID Activation Key Socket     | G. PCI Slot 6 (PCI-X 64/100)   |
| D. PCI Slot 3 (PCI Express x4)           |                                |

**Figure 1. Socket for Intel® Portable Cache Module on the Server Board SE7520AF2**

6. Open both socket levers at the edges of the ROMB Cache DIMM socket.
7. Note the location of the alignment notch.
8. Insert the Intel Portable Cache Module, making sure the connector edge of the module aligns correctly with the slot.
9. Press the Intel Portable Cache Module firmly into the socket until the socket levers close.
10. Check that the socket levers are securely latched.



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**Figure 2. Installing the Intel® Portable Cache Module onto the Server Board SE7520AF2**

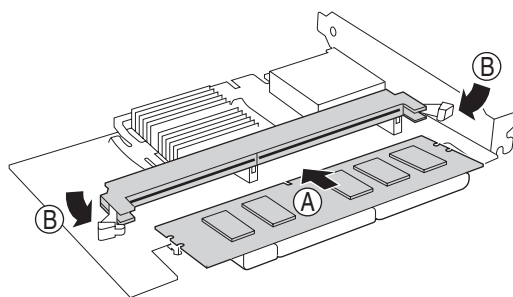
**Note:** The Intel® RAID Activation Key is also required to configure RAID on the Server Board SE7520AF2. See the instructions that accompany the Intel RAID Activation Key for installation instructions.

11. 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.
12. Install the chassis cover and connect the AC power supply. Power on the system and enter the BIOS Setup utility.
13. In the BIOS Setup Utility, navigate to the PCI Configuration Menu and enable the IOP ROMB option.
14. Restart the server system and press Ctrl-G during POST to enter the Option ROM Setup utility.
15. Allow the server system to remain powered on for 96 hours to fully charge the Intel Portable Cache Module. The Module must be fully charged before it will operate as specified.

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*.

# Installing the Intel® Portable Cache Module onto the Intel® RAID Controller SRCU42E

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.
4. If your RAID adapter is installed in a system, uninstall it and place it on a non-conductive, antistatic surface. See your server board or chassis documentation for instructions on removing PCI cards.
5. Remove the Intel Portable Cache Module from its packaging.
6. Open both DIMM socket levers on the RAID Controller SRCU42E. See letter B in Figure 3.
7. If your RAID controller has a DIMM module installed in it, remove the DIMM module.
8. Note the location of the alignment notch on the Intel Portable Cache Module and the RAID card and insert the Portable Cache Module, making sure the connector edge of the module aligns correctly with the slot. See letter A in Figure 3.
9. Push the Intel Portable Cache Module in firmly until the socket levers close.
10. Check that the socket levers are securely latched. See letter B in Figure 3.
11. Insert the screw provided with the Intel Portable Cache Module through the back of the RAID Controller SRCU42E and into the bracket on the Module.
12. Install the RAID controller in the server system. See your server board or chassis documentation for instructions on installing PCI cards.
13. Reinstall any components inside of the server chassis that you needed to remove. Install the chassis cover and connect the AC power supply.
14. Power on the server and allow it to remain powered on for 96 hours to fully charge the Intel Portable Cache Module. The Module must be fully charged before it will operate as specified.



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**Figure 3. Installing the Intel® Portable Cache Module onto the RAID Controller SRCU42E**

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*.