



Intel® Server Raid Controller
Flash Recovery Procedure
For Firmware version 6.x or higher
Updating Firmware Versions 5.x or less to Version 6.x

Revision 1.0
January 2002



Intel RAID Firmware Version 6.x or Higher Flash Update

Revision History		
Date	Rev	Modifications
01/23/02	1.0	Initial Release

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Intel® RAID Controller Flash Recovery Updating Firmware Versions 5.x or less to Version 6.x

Intel® RAID controllers contain a flash part that stores the firmware portion of code required for the operation of the controller. The firmware may be updated to correct errata or to add features to the operation of the product. In addition to normal flash recovery, this procedure directly addresses updating RAID controllers from firmware versions of 5.x or less to version 6.x or higher. The flash recovery procedure requires moving a jumper on the RAID controller to the flash update/recovery position. The update will not proceed if this jumper is not moved to the flash update/recovery position prior to performing the update. Following the update, the jumper must be moved back to its original “normal” position.

Only one RAID controller card may be installed in the system during the firmware update process. If you have multiple cards that require a flash update, then the process must be repeated for each card. The update procedure can be performed in one of two options listed below. The firmware update can be downloaded from <http://support.intel.com/support/motherboards/server/>, then choose the link for the appropriate RAID controller.

Prior to performing any service or upgrade to your system, including this firmware update, a verified complete backup should be made of all system, program, and data files.

Perform the firmware update automatically from a bootable floppy.

The update process is designed to run from a bootable floppy. When the system is booted from this floppy, a RAM drive is created in memory and contents of the floppy are copied to the RAM drive, expanded, and executed automatically.

You must first download the firmware update and extract the contents to a blank floppy. You must then make the floppy bootable to ROM DOS version 6.22.

NOTE: This update will not work with any other version of DOS. ROM DOS is shipped with every Intel® RAID controller and Intel Server Board on the Resource CD. To perform the update, complete the following steps:

1. Download the firmware update utility and image.
2. Place a formatted blank floppy diskette in the floppy drive and execute the update package that was downloaded. A non-bootable firmware update floppy will be created.
3. To make the floppy bootable, boot the server to the Resource CD that was shipped with the RAID controller, or boot with a Resource CD that was shipped with one of the Intel Server Boards.
 - a. Place the CD in the CD drive and power on the server.
 - b. Press the <ESC> key during POST (Power On Self Test) just after the first text appears on the screen.

- c. You will then be presented with a pop up menu to choose the boot device. Choose “CD-Rom Drive” and press enter.
4. At the ROM-DOS menu screen, exit to DOS.
 - a. This can be done by choosing the “quit to DOS” option on some versions of the menu.
 - b. Other versions of the ROM-DOS menu require pressing <F8> to confirm loading of configuration files. Confirm all config.sys files by pressing <Y>, but choose <N> when prompted to process the autoexec.bat file.
5. You should now be at the C:\ prompt. Insert the update diskette into the floppy drive and type “sys a:”, press the enter key.
6. Copy himem.sys and finddisk.exe from the CD to the floppy disk. These files are located either in the ROM-DOS directory or the utilities directory of the CD.

NOTE: Prior to opening the server system and touching any internal components, care should be taken to prevent electrostatic discharge that may damage components inside the computer. Please observe proper ESD precautions which include proper grounding and the use of an anti static wrist strap and/or shoe strap.

7. Power down the system and move the RAID Controller’s flash update/recovery jumper to the update/recovery position.
8. Boot the server to the newly created floppy disk.
9. The update will be performed automatically and you will be prompted to reboot the system when the process is complete.
10. Power off the system and return the recovery jumper back to the normal position.

You may now boot the system normally