



Instructions for iFlash BIOS Update

With the iFlash BIOS update utility you can update the BIOS from a USB device, bootable CD-ROM, or diskette. (Information on how to create a bootable USB device or CD is listed at the end of this document.)

All BIOS update files for Intel® Desktop Boards are available on Intel's Download Center at <http://downloadcenter.intel.com/>.

Important Notes:

- Update the BIOS on your computer only if the newer BIOS version specifically solves a problem you have. We do not recommend BIOS updates for computers that do not need it. You can view all BIOS changes in the Release Notes included on the BIOS download page in Download Center.
- Downgrading the BIOS to an earlier version is not recommended and may not be supported. An earlier BIOS version may not contain the support for the latest processors, bug fixes, critical security updates, or support the latest board revisions currently being manufactured.
- Before initiating a BIOS update, be sure to read and precisely follow the instructions included in this document. You may wish to print the instructions for easy reference.
- If a BIOS update process is interrupted, your computer may not function properly. We recommend the process be done in an environment with a steady power supply (preferably with UPS).
- Before updating the BIOS on the Intel® Desktop Board, manually record all BIOS settings that have been changed (from default) so they can be restored after completing the BIOS update.
- All images in this example are for illustration purposes only. You need to select the correct BIOS files for your board.

Using the iFlash BIOS update is a two-part process:

Part 1: Create the bootable media (USB device, diskette, or CD) containing the BIOS update

Part 2: Update the BIOS of the target computer

If Using a Bootable USB Device

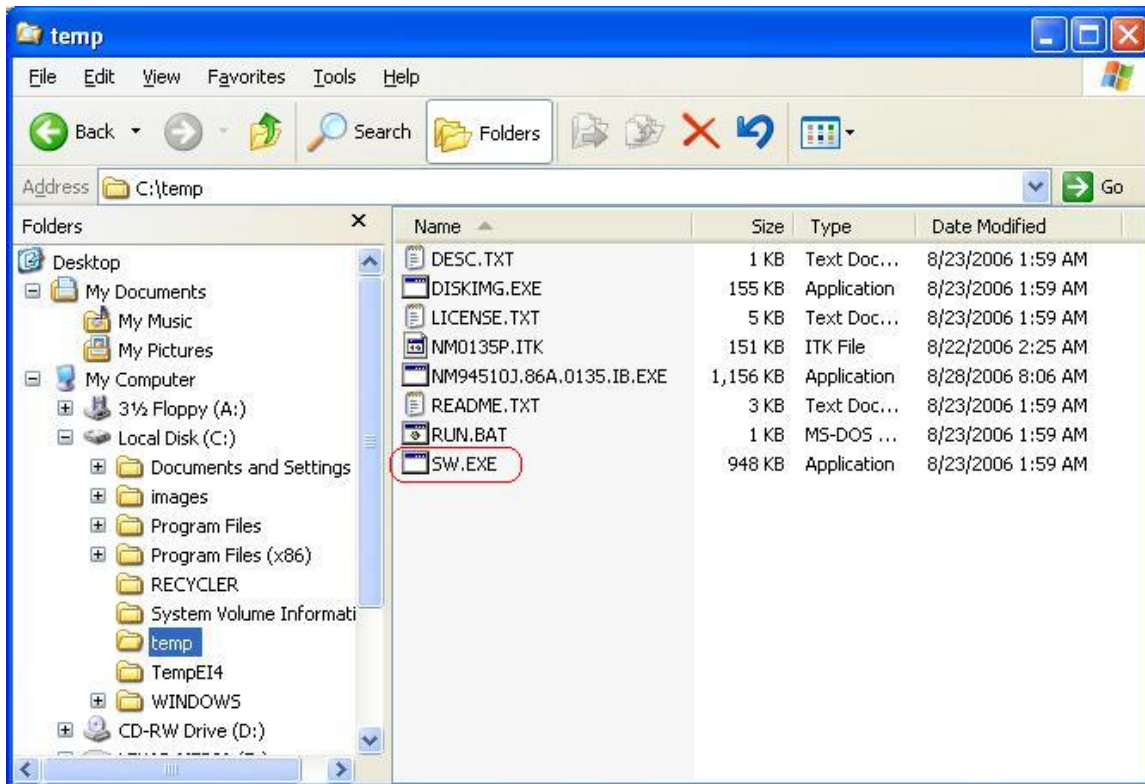
You will need a bootable USB device, such as a USB thumb drive or USB external hard drive. (Information on how to create a bootable USB device is listed at the end of this document.)

Part 1: Create the bootable media (USB Device) containing the BIOS update

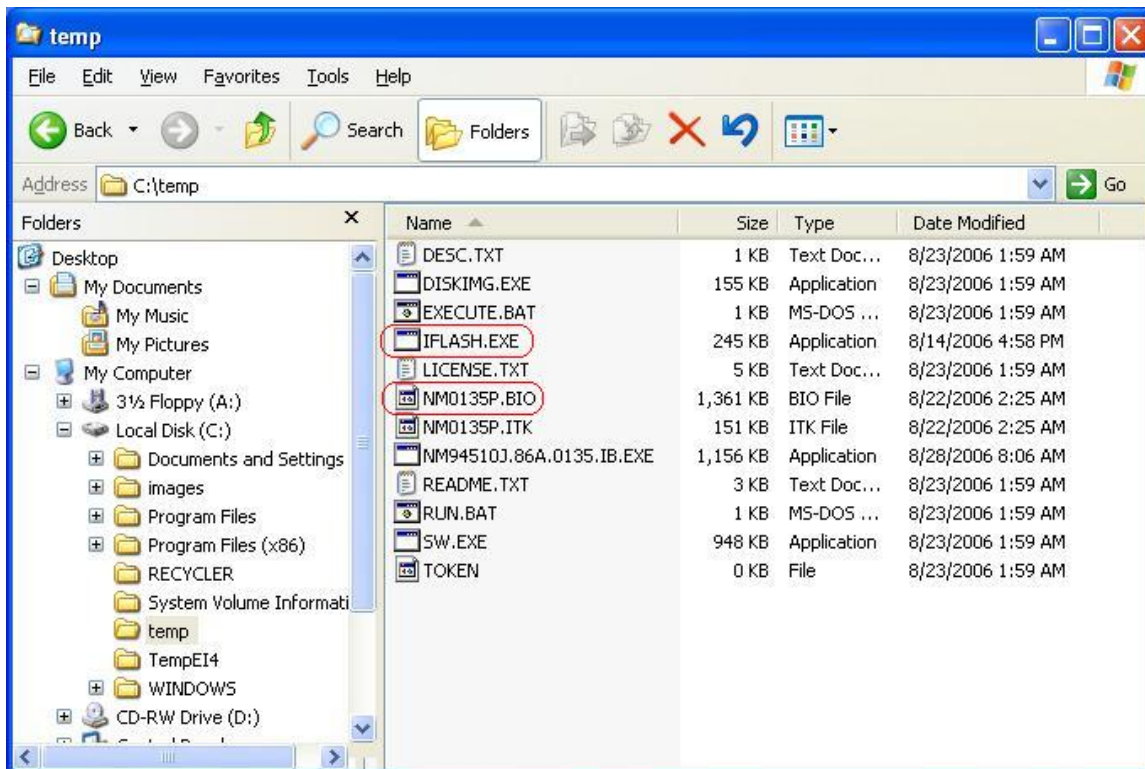
1. Download and save the iFlash BIOS Update file to a temporary directory. Example:

File name: NM94510J.86A.0135.IB.EXE	Version: 0135
Date: 08/22/2006	Status: Latest
Size: 1.13 MB	Language: English
Operating Systems: Linux*, OS Independent, Windows 2000*, Windows XP Home Edition*, Windows XP Professional x64 Edition*, Windows XP Professional*	

2. Double-click the *.EXE to extract necessary files.
3. Double-click the **SW.EXE** file to extract additional files.



4. Copy IFLASH.EXE (or IFLASH2.EXE, depending on your board model) and the .BIO file to the bootable USB device.



5. Configure the BIOS of the target computer to boot to the USB device:
 - a. Press F2 during boot to enter BIOS Setup.
 - b. Go to the Boot menu.
 - c. Enable USB Boot.
 - d. Save by pressing F10 and exit the BIOS Setup.

Part 2: Update the BIOS of the target computer

1. Configure the BIOS of the target computer to boot to the USB device:
 - a. Press F2 during boot to enter BIOS Setup.
 - b. Go to the Boot menu.
 - c. Enable USB Boot.
 - d. Save by pressing F10 and exit the BIOS Setup.
2. Boot the target computer with the USB device connected.
3. At the prompt, type ***IFLASH /PF XXX.BIO***, where XXX.BIO is the filename of the .BIO file (or ***IFLASH2 /PF XXX.BIO***, depending on the version of iFlash you have) to launch the iFlash BIOS update process. Follow all prompts.

If Using a Diskette

You can use this method if the iFlash files are small enough to fit on a diskette and the desktop board includes diskette drive support. You will need a blank diskette.

Part 1: Create the bootable diskette containing the BIOS update

1. Download and save the iFlash BIOS Update file to a temporary directory. Example:

File name: NM94510J.86A.0135.IB.EXE	Version: 0135
Date: 08/22/2006	Status: Latest
Size: 1.13 MB	Language: English
Operating Systems: Linux*, OS Independent, Windows 2000*, Windows XP Home Edition*, Windows XP Professional x64 Edition*, Windows XP Professional*	

2. Insert a blank diskette into the diskette drive.
3. Double-click the *.EXE file to begin the iFlash BIOS update process. Press “y” to extract necessary files to the temporary directory. Example:

The files contained in this self-extracting ZIP are:

NM94510J.86A.0159

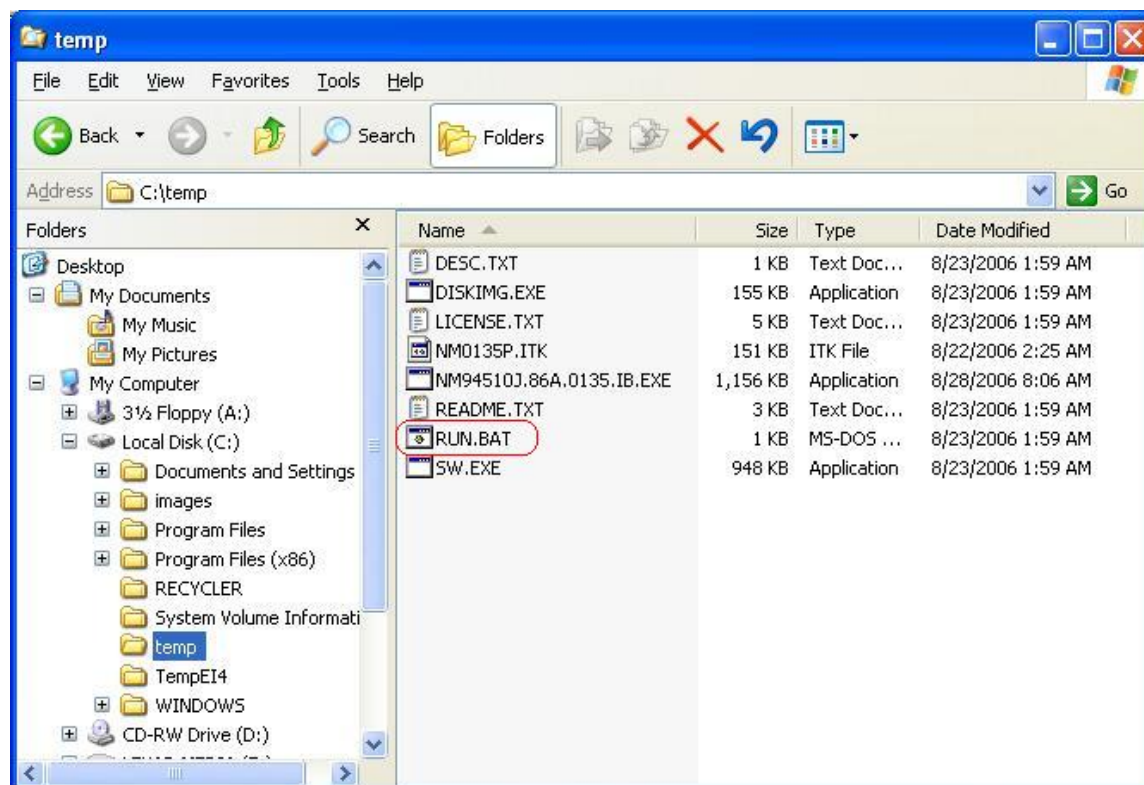
INTEL END USER LICENSE AGREEMENT

Before you run the enclosed SW.EXE file, you must first read and agree to the end-user license agreement contained in the LICENSE.TXT file included in this EXE file.

If you do not agree to the terms of this agreement, promptly delete this EXE file and the files it contained.

Do you want to extract these files now (y/n)?

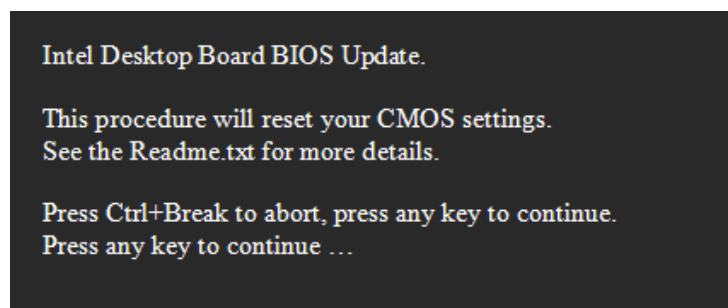
4. After the extract is complete, the following files will be present in the temporary directory:



5. Double-click the **RUN.BAT** file. Follow the prompts to create the bootable diskette.

Part 2: Update the BIOS of the target computer

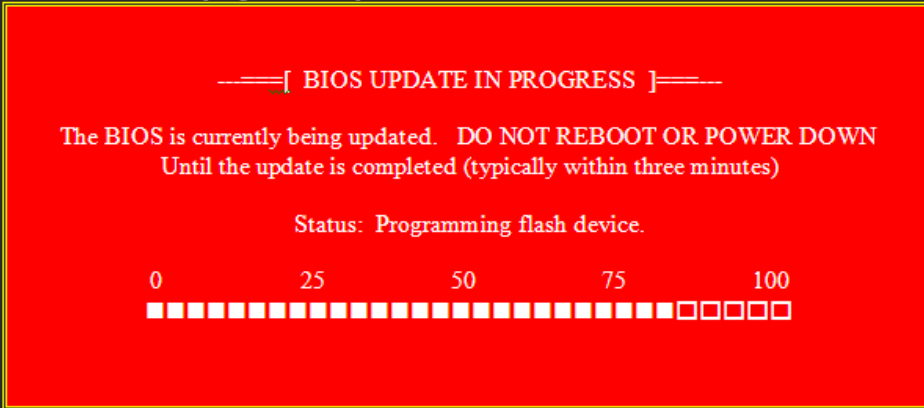
1. Boot the target computer with the diskette in the diskette drive. The BIOS update process will begin automatically.
2. On the welcome screen, press any key to continue.



3. You'll see the status of the BIOS update as shown here. **DO NOT shutdown or power off the computer at any time during the update process.**

Please wait for BIOS update to be completed.

Intel Flash Memory Update Utility Part 643643-058



4. Once the update is completed, remove the diskette from the drive and press Enter to restart the computer.

The system flash memory has been successfully reprogrammed.
The system must reboot for the changes to take effect.

Hit the Reset button or press <Enter> to reboot.

If Using a Bootable CD-ROM

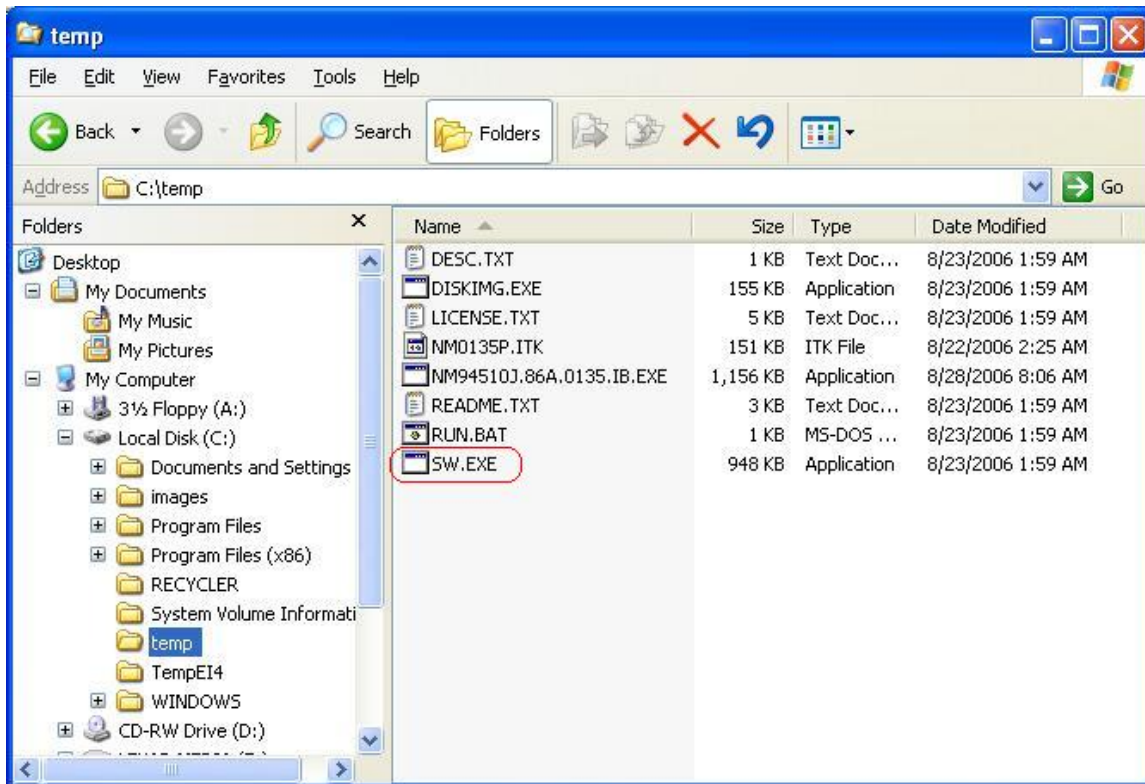
You will need a bootable CD-ROM. (Information on how to create a bootable CD is listed at the end of this document.)

Part 1: Create the bootable media (CD) containing the BIOS update

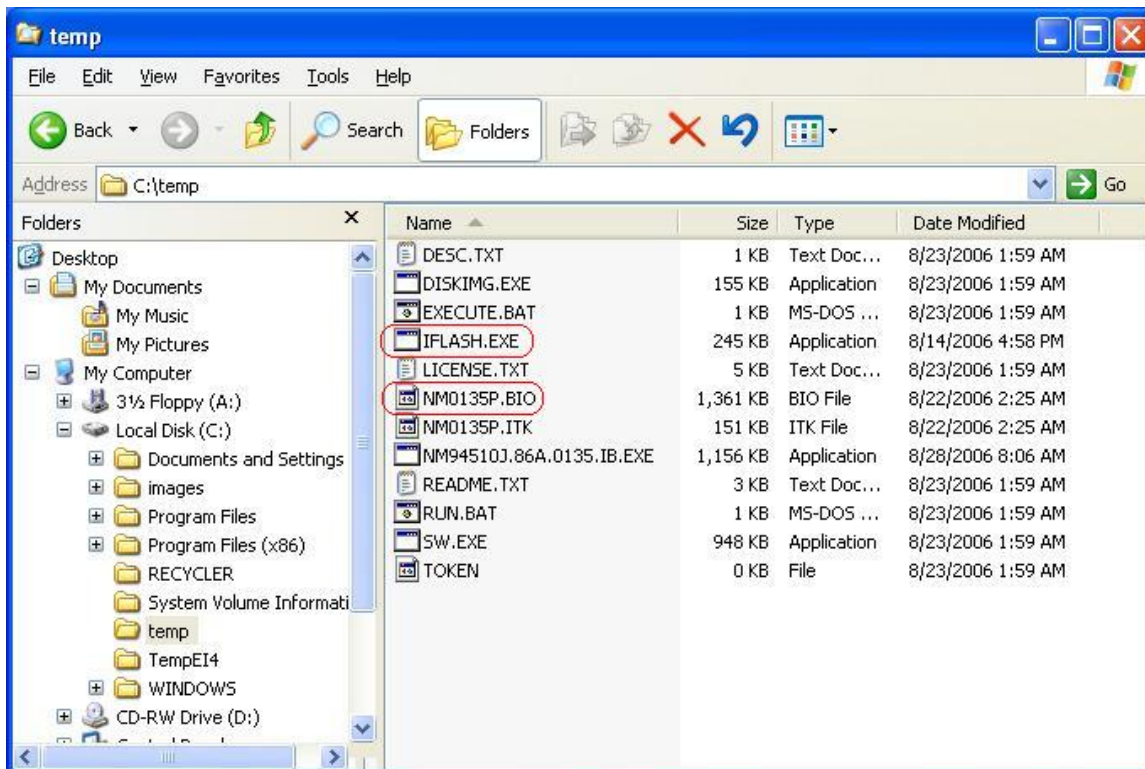
1. Download and save the iFlash BIOS update file to a temporary directory. Example:

File name: NM94510J.86A.0135.IB.EXE	Version: 0135
Date: 08/22/2006	Status: Latest
Size: 1.13 MB	Language: English
Operating Systems: Linux*, OS Independent, Windows 2000*, Windows XP Home Edition*, Windows XP Professional x64 Edition*, Windows XP Professional*	

2. Double-click the *.EXE to extract necessary files.
3. Double-click the **SW.EXE** file to extract additional files.



4. Copy IFLASH.EXE (or IFLASH2.EXE, depending on your board model) and the .BIO file to the bootable CD.



Part 2: Update the BIOS of the target computer

1. Configure the BIOS of the target computer to boot to the CD-ROM drive:
 - a. Press F2 during boot to enter BIOS Setup.
 - b. Go to the Boot menu.
 - c. In Boot Device Priority, set the CD-ROM drive to be the first boot device.
 - d. Save by pressing F10 and exit the BIOS Setup.

2. Boot the target computer with the CD in the drive.
3. At the prompt, type **IFLASH /PF XXX.BIO**, where XXX.BIO is the filename of the .BIO file (or **IFLASH2 /PF XXX.BIO**, depending on the version of iFlash you have) to launch the iFlash BIOS update process. Follow all prompts.

Creating a Bootable USB Device

Making a USB flash device into a bootable drive is not as simple as creating bootable diskettes. Please refer to the documentation provided by the manufacturer of your USB device for information on how to create a bootable USB device. Additionally, you may refer to any of the following websites for tips on creating bootable USB devices. Intel is unable to assist with the creation of bootable devices.

- Make your Thumb Drive Bootable at <http://www.computermag.com/article2/0,1895,1846793,00.asp>
- How to Boot from a USB Device at http://www.weethet.nl/english/hardware_bootfromusbstick.php

You can also search for additional resources on the web for creating bootable USB devices. Search on "How to create bootable USB drives".

Creating a Bootable CD

Creating a bootable CD is not as simple as creating bootable diskettes. Refer to any of the following websites for tips on creating bootable CDs. Intel is unable to assist with the creation of bootable devices.

- Bart's Way to Create Bootable CD-ROMs at <http://www.nu2.nu/bootcd/>
- How to Create a Bootable CD-ROM at <http://www.hardwaresecrets.com/article/75>
- How to Create Bootable CDs at <http://www.techsupportalert.com/search/t1214.pdf>

You can also search for additional resources on the web for creating bootable CDs. Search on "How to create a bootable CD".

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