Instructions for ISO Image BIOS Update

The ISO Image BIOS Update allows for the update of an Intel® Desktop Board BIOS to the latest production release regardless of the operating system installed on the computer's hard drive and without the need to remove the BIOS configuration jumper. It requires a blank CD-R, a read/writeable CD drive, and software capable of uncompressing and writing the ISO image to CD. The image uses ISOLINUX* bootloader and automatically launches a script to upgrade the board's BIOS via the Iflash utility.

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.

1. Download and save the ISO Image BIOS Update file. Example:

File name: NM0159P.ISO	**Version:** 0159
Date: 09/07/2007	**Status:** Latest
Size: 2.32 MB	**Language:** English
Operating Systems: Linux*, OS Independent, Windows 2000*, Windows XP Home Edition*, Windows XP Media XP Professional x64 Edition*, Windows XP Professional*	

2. Using software capable of uncompressing and writing an ISO image to a CD, burn the data to a blank CD. Note: Copying the ISO image file to CD will not work; the completed CD should contain multiple files and a directory.

3. Insert the CD that was created from the ISO image in the previous step into the CD-ROM drive of the computer to be upgraded and boot the computer.

4. Press **ENTER** when prompted to begin the BIOS update process.

```
SOLINUX 2.10 2004-06-18  Copyright © 1994-2004 H. Peter Anvin

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│              BIOS Upgrade Bootable CD-ROM                 │
│            http://www.intel.com/products/motherbd/        │
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Press ENTER to continue booting from CD-ROM
  (will boot from HDD if no key is pressed within 15 second…)

Boot:
```

5. Press any key at the Welcome screen.

```
──────────── Welcome to the Intel Desktop Board BIOS Upgrade CD-ROM ────────────


This system is about to be upgraded with BIOS release: NM0159P.BIO
  (Press CTRL-C to cancel)

Press any key to continue …
```
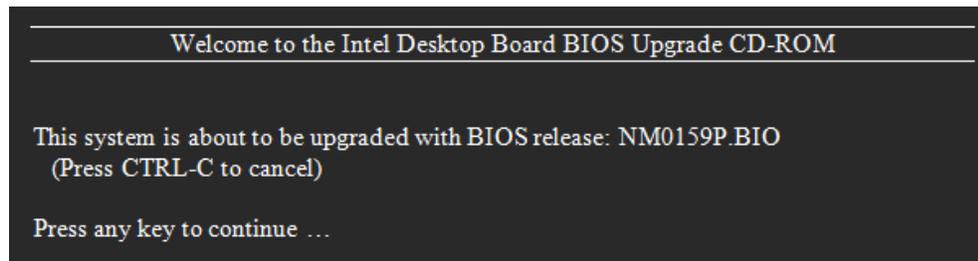
6. When prompted, remove the CD from the CD-ROM drive and press **Enter**.

```
The system is now ready to program the BIOS.  The display will be blank and tones will
be heard for up to 2 minutes during the programming process.

 DO NOT REMOVE POWER –OR- ATTEMPT TO SHUT THE SYSTEM DOWN
UNTIL THIS UPDATE HAS COMPLETED

Remove the floppy disk now and press enter to continue.
```
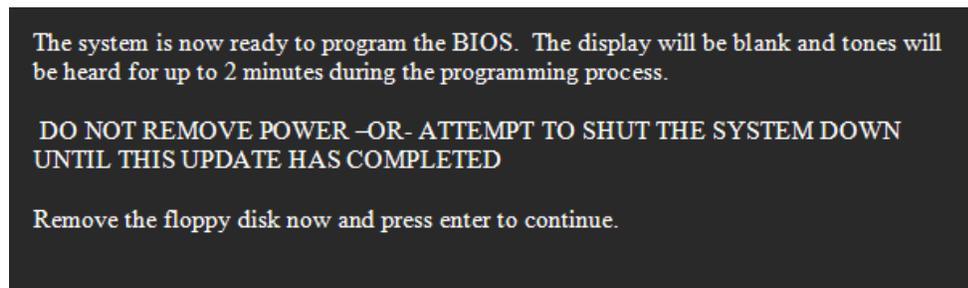
7. During the update, you will see the BIOS update process status window. **CAUTION!!! DO NOT POWER DOWN YOUR COMPUTER** before the update is complete. This may take up to 5 minutes.

```
Current revision:       NM94510J.86A.0135.2006.0817.1032
Updating to revision:  NM94510J.86A.0159.2007.0905.2027

Preparing image for recovery firmware … [done]
Preparing image for main firmware … [done]
Preparing image for logos … [done]
Preparing image for maagent … [done]
Flashing image for recovery firmware … [done]
Flashing image for main firmware … [done]
Flashing image for logos … [done]
Flashing image for maagent … [done]
Flashing processor updates … [done]
Updating firmware ID … [done]

Flash update has completed successfully.
```

Note: Source code for the open source software used is available at Intel's Download Center at http://aiedownload.intel.com/df-support/9730/eng/FDOEMCD.source.zip.