Instructions for Recovery BIOS Update

In the unlikely event that a BIOS update is interrupted, it is possible the BIOS may be left in an unusable state. The recovery process requires the chassis to be opened to move the onboard BIOS Configuration Jumper.

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 for illustration purposes only. You need to select the correct BIOS files for your board.

WARNING: This process is intended to be performed by a trained technician.

Recovery with USB Device

1. Download and save the Recovery BIOS (.BIO) file to a temporary directory. Example:

   File name: BE0028P.BIO **Version:** 0028
   Date: 07/15/2011 **Status:** Latest
   Size: 6.91 MB **Language:** English
   Operating Systems: OS Independent, Windows 7, 32-bit*, Windows 7, 64-bit*, Windows Vista 32*, Windows Vis Edition*, Windows XP Media Center Edition*, Windows XP Professional x64 Edition*, Windows XP Professional*

   For legacy Intel® Desktop Boards that do not have a .BIO file on Download Center, follow these steps:
   a. Download the iFlash BIOS Update file (example filename: VA84510A.86A.0056.P20.IB.EXE)
   b. Double-click the *.EXE to extract all files.
   c. Double-click the SW.EXE file to extract additional files, one of which is the .BIO file.

2. Copy the recovery file (*.BIO) to a USB device.

3. Plug the device into a USB port of the target computer.

4. Shut down the computer and unplug the AC power adapter.

5. Open the chassis and remove the BIOS Configuration Jumper. See the Technical Product Specification for details including the location of this jumper.

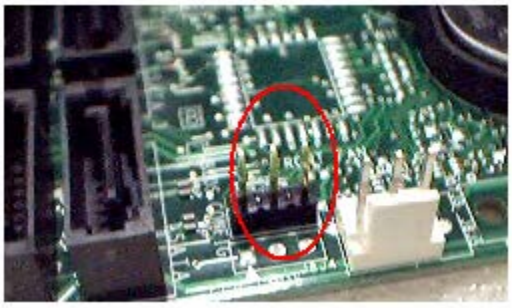

Image 1: Jumper removed
(BIOS Recovery Mode)

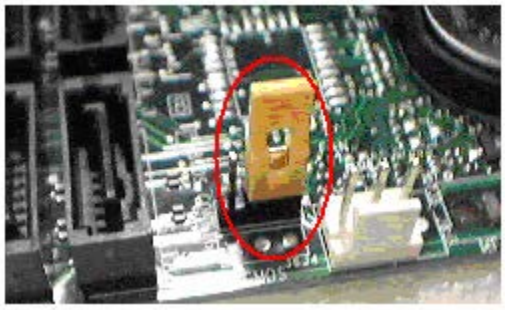

Image 2: Jumper in place
(Normal Mode)

6. Power the computer on.

7. Wait 2-5 minutes for the update to complete.

```
Current revision:      BEH6110H.86A.0023.2011.0524.1826
Updating to revision:  BEH6110H.86A.0028.2011.0715.1815

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.
```

8. The computer will either turn off when the recovery process is completed or it will prompt you to turn it off.

9. Remove the USB device.

10. Replace the BIOS Configuration Jumper (image 2 above).

11. Close the chassis.

12. Restart the computer.

Recovery with Diskette

Use this method if the recovery file (*.BIO) is small enough to fit on a diskette (smaller than 1.44MB) and the desktop board includes diskette drive support. The diskette does NOT need to be bootable; however, it must be formatted.

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

File name: BE0028P.BIO **Version:** 0028

Date: 07/15/2011 **Status:** Latest

Size: 6.91 MB **Language:** English

Operating Systems: OS Independent, Windows 7, 32-bit*, Windows 7, 64-bit*, Windows Vista 32*, Windows Vis
Edition*, Windows XP Media Center Edition*, Windows XP Professional x64 Edition*, Windows XP Professional*

2. Copy the recovery file (*.BIO) to a formatted diskette.

3. Place the diskette in the drive (drive A) of the target computer.

4. Shut down the computer and unplug the AC power adapter.

5. Open the chassis and remove the BIOS Configuration Jumper. See the Technical Product Specification for details including the location of this jumper.

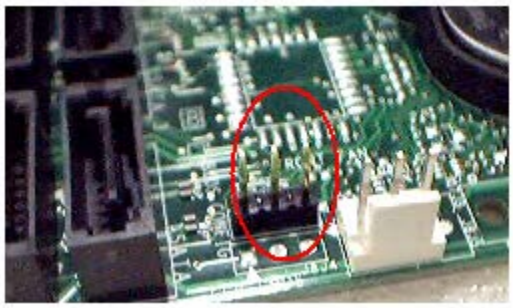

Image 1: Jumper removed (BIOS Recovery Mode)

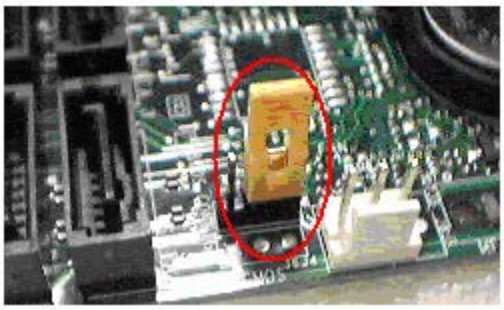

Image 2: Jumper in place (Normal Mode)

6. Power the computer on.

7. Wait 2-5 minutes for the update to complete. When the drive LED is lit, the computer is copying the recovery code into the FLASH device.

8. The computer will either turn off when the recovery process is completed or it will prompt you to turn it off.

9. Remove diskette from drive A:

10. Replace the BIOS Configuration Jumper (image 2 above).

11. Close the chassis.

12. Restart the computer.

Recovery with CD-ROM

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

File name: BE0028P.BIO **Version:** 0028

Date: 07/15/2011 **Status:** Latest

Size: 6.91 MB **Language:** English

Operating Systems: OS Independent, Windows 7, 32-bit*, Windows 7, 64-bit*, Windows Vista 32*, Windows Vis Edition*, Windows XP Media Center Edition*, Windows XP Professional x64 Edition*, Windows XP Professional*

2. Copy the recovery file (*.BIO) to a CD.
3. Place the CD in the CD-ROM drive of the target computer.
4. Shut down the computer and unplug the AC power adapter.
5. Open the chassis and remove the BIOS Configuration Jumper (Image 1 below). See the Technical Product Specification for details including the location of this jumper.

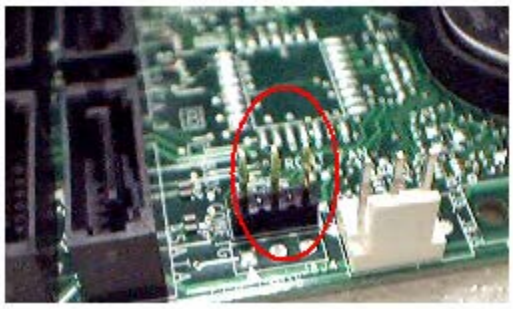

Image 1: Jumper removed (BIOS Recovery Mode)

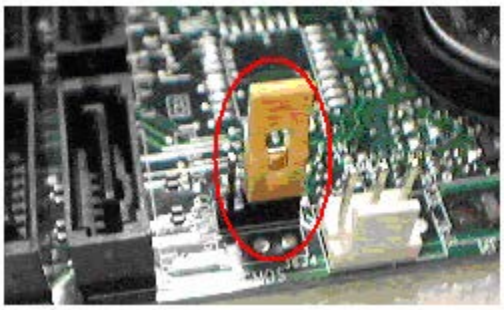

Image 2: Jumper in place (Normal Mode)

6. Power the computer on.
7. Wait 2-5 minutes for the update to complete.

```
Current revision:     BEH6110H.86A.0023.2011.0524.1826
Updating to revision: BEH6110H.86A.0028.2011.0715.1815

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.
```

8. The computer will either turn off when the recovery process is completed or it will prompt you to turn it off.
9. Replace the BIOS Configuration Jumper (Image 2 above).
10. Close the chassis.
11. Restart the computer.

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