

PRODUCT FACTS

BIOS Update with USB Memory Stick

Issue May 2009
Product BIOS Update USB Stick

Pages 6

Overview

Since 1995, when the Universal Serial Bus (USB) has been introduced, this PC interface has become very popular and is used for a variety of devices. More and more peripherals that used other interfaces like serial, parallel, FireWire and SCSI are now using the USB interface.

In particular, USB Memory Sticks have become widely-used. This storage medium is using flash memory as the base technology. Flash memory is storing the data in semiconductor chips; the data is nonvolatile. USB Memory Sticks are small, lightweight and robust. They are currently available with a capacity up to 16 GByte.

At the same time as the USB interface and USB memory sticks became popular, the floppy disk storage device was less used in PCs. The reason is very simple: Standard floppy disks have only a limited capacity of only 1.44 MByte. Therefore, typical data volumes used today can no longer be stored on this media. Only for compatibility reasons floppy disk drives and media are still used in some PCs. Until recently, one important application for floppy disk drives has been the BIOS update for the mainboard.

Fujitsu Technology Solutions is reacting to the new situation and is offering a powerful BIOS update procedure not only utilizing floppy disks but also USB Memory Sticks.

In this Product Facts document, you will find a detailed step-by-step description how to perform BIOS updates with a USB Memory Stick.

Benefits

- Easy and reliable BIOS update using a USB Memory Stick instead of a floppy disk
- Comprehensive tool set provided by Fujitsu Technology Solutions for preparing USB Memory Sticks; hassle-free update process!

USB Memory Stick



Part 1: Preparation of the USB Memory Stick

Data Backup

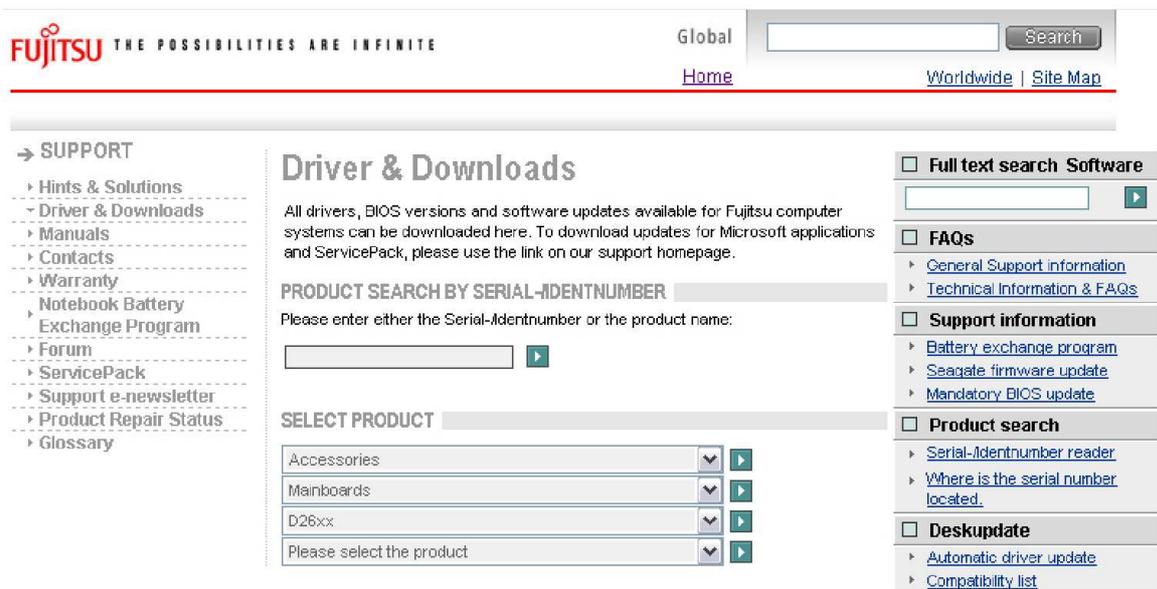
Before using your USB Memory Stick for a BIOS update, backup all data on the memory stick. The memory stick will be formatted and FreeDOS will be copied to the memory stick. This makes the memory stick bootable. **However, all data stored on the USB Memory Stick will be lost!**

Download of the self-extracting BIOS update file

After backing up your data download and run the one-click utility to prepare your memory stick. The utility and the BIOS image are available as a single self-extracting file from the following Internet page:
<http://ts.fujitsu.com/support/downloads.html>

Perform the following steps to find and select the correct BIOS image for your mainboard (the following description is using the BIOS for the mainboard D2608-A1 as an example):

- On the “Drivers & Downloads” website, go to the “Select Products” group and select Accessories/Mainboards/Product Family/Product



- After the product selection, select an operating system, e.g. Windows XP (for a BIOS update, it doesn't matter which OS is selected)
- From the list of applicable software and drivers, choose “Flash BIOS”
 - A comprehensive list of available BIOS versions for the specific mainboard will show up.

- Select the file “Flash BIOS Update - USB Stick”

→ SUPPORT

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- ▶ Glossary

Downloads results for D2608-A1x

You have selected the following product

Product: D2608-A1x

Save this product for future searching

▶ [Select a new Product](#)

Selected operating system

Windows XP

▶ [Change selected operating system](#)

If your driver is not shown below, then the driver may already be part of the operating system.
If you need more help please contact [local Help Desk](#)

Show all drivers

Flash - BIOS

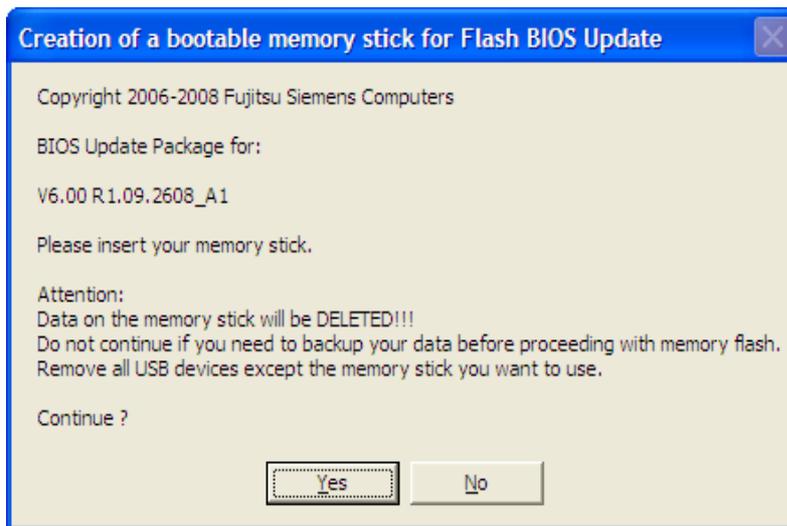
Flash - BIOS

Flash BIOS Update - Linux Boot Disk	Version: 6.00 1.11 Size: 1,41 MB Language:	Date: 05.02.2009 Status:
Download ▶		
Flash BIOS Update - Compressed Flash Files	Version: 6.00 1.11 Size: 0,61 MB Language:	Date: 05.02.2009 Status:
Download ▶		
Flash BIOS Update - Desk Flash	Version: 6.00 1.11 Size: 0,56 MB Language:	Date: 05.02.2009 Status:
Download ▶		
Flash BIOS Update - Floppy Boot Disk	Version: 6.00 1.11 Size: 1,23 MB Language:	Date: 05.02.2009 Status:
Download ▶		
Flash BIOS Update - USB Stick	Version: 6.00 1.11 Size: 1,93 MB Language:	Date: 05.02.2009 Status:
Download ▶		
Flash BIOS Update - Desk Flash Instant	Version: 6.00 1.11 Size: 2,7 MB Language:	Date: 05.02.2009 Status:
Download ▶		
Flash BIOS Update - Floppy Boot Disk	Version: 6.00 1.09	Date: 14.11.2008

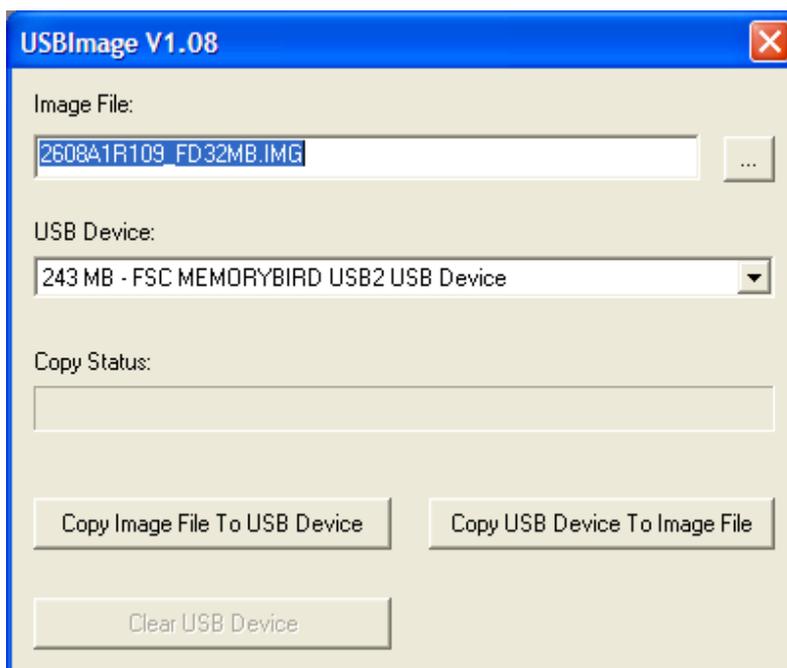
- Select “Download” after accepting the license conditions by clicking of the license condition check box
- A security warning will appear; start the file by clicking “Run”; the self-extracting file will be downloaded and run.



- The following window will be displayed, showing the BIOS version which is about to be transferred to the USB Memory Stick. Make sure that the USB Memory Stick is attached to your system and select "Yes" to continue.

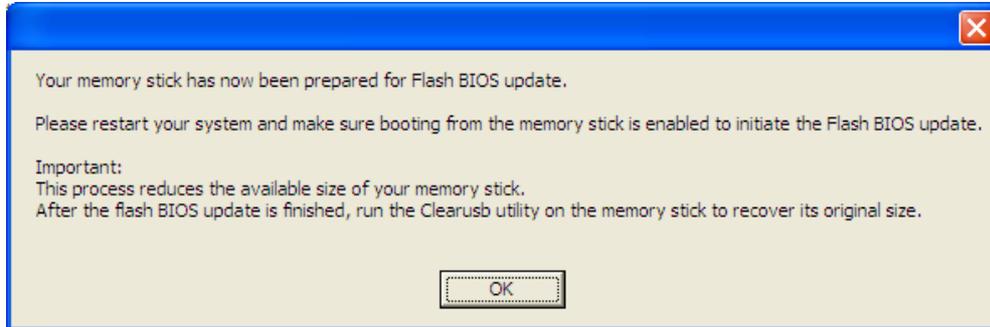


- Then the following window shows the name of the found USB Memory Stick; select "Copy Image File To USB Device" to start the transfer.



- After completion of the USB Memory Stick preparation, the following window will be displayed; click "OK" to finish the preparation process.

Note: In order to avoid different images for different sizes of the memory sticks, all images use the same image. Therefore the size shown in Windows will be reduced to the size after copying the image to the USB Memory stick. The size shown does not reflect the real size of your USB Memory Stick.



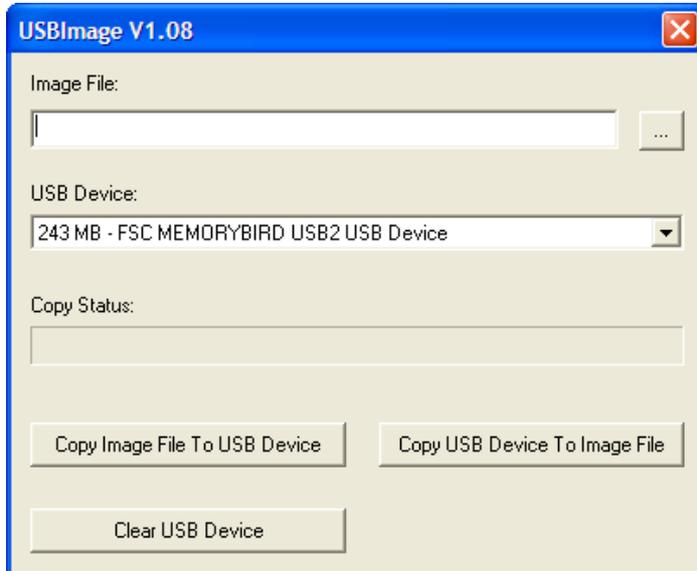
Part 2: BIOS Update

- Reset your system, plug in the USB Memory Stick and boot your system from the prepared USB Memory Stick. Check the BIOS Setup to make sure that the USB Memory Stick is the first boot device. Alternatively, the USB Memory Stick can be selected from the Pre-Boot menu by pressing the <F12> key on the keyboard. Note, that this option will work only if enabled in the BIOS setup (Boot Features, Boot Menu = enabled).
- FreeDOS will boot from the USB Memory Stick and perform the update process; follow the on-screen directions to complete the process.
Please note, that under FreeDOS country-specific keyboard layouts are not available. FreeDOS always assumes a US keyboard layout. This means, for example, that on a German keyboard the key <z> has to be pressed in order to enter "y".
 - The update procedure will automatically check for the version of the BIOS; if the version found on the mainboard is the same or even newer than the version to be flashed the user will be explicitly prompted. The options are to abort or to continue anyway.
 - During the flash memory update itself, the programming progress will be visualized graphically; this gives the user a clear indication of the status.
 - The update procedure also includes an automatic microcode update for the CPU (if required). No further prompt or status indicator will be displayed for this function.
- After completion of the BIOS update, restart your system.

Part 3: Recovery of the size of the USB Memory Stick

If the original size of the USB Memory Stick shall be recovered after the successful BIOS update, the following steps must be taken:

- Restart Windows and run the program *USBImage.exe* that is available on the memory stick. Note that the program can be started directly from the USB Memory Stick.
- *USBImage.exe* will display the following window; select the button “Clear USB Device”



- Finally, you should format the memory stick using the Windows Explorer.
 - Click with the right mouse button on the USB Memory Stick in the Explorer Window
 - Select “Format...”
 - A configuration window will be displayed; enter the options (such as Volume Label) as required
 - Select “Start” (this starts formatting of the USB Memory Stick)

Additional information and downloads

- General Information:
www.ts.fujitsu.com/mainboards
- Documentation and downloads:
<ftp://ts.fujitsu.com/pub/Mainboard-OEM-Sales/>

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