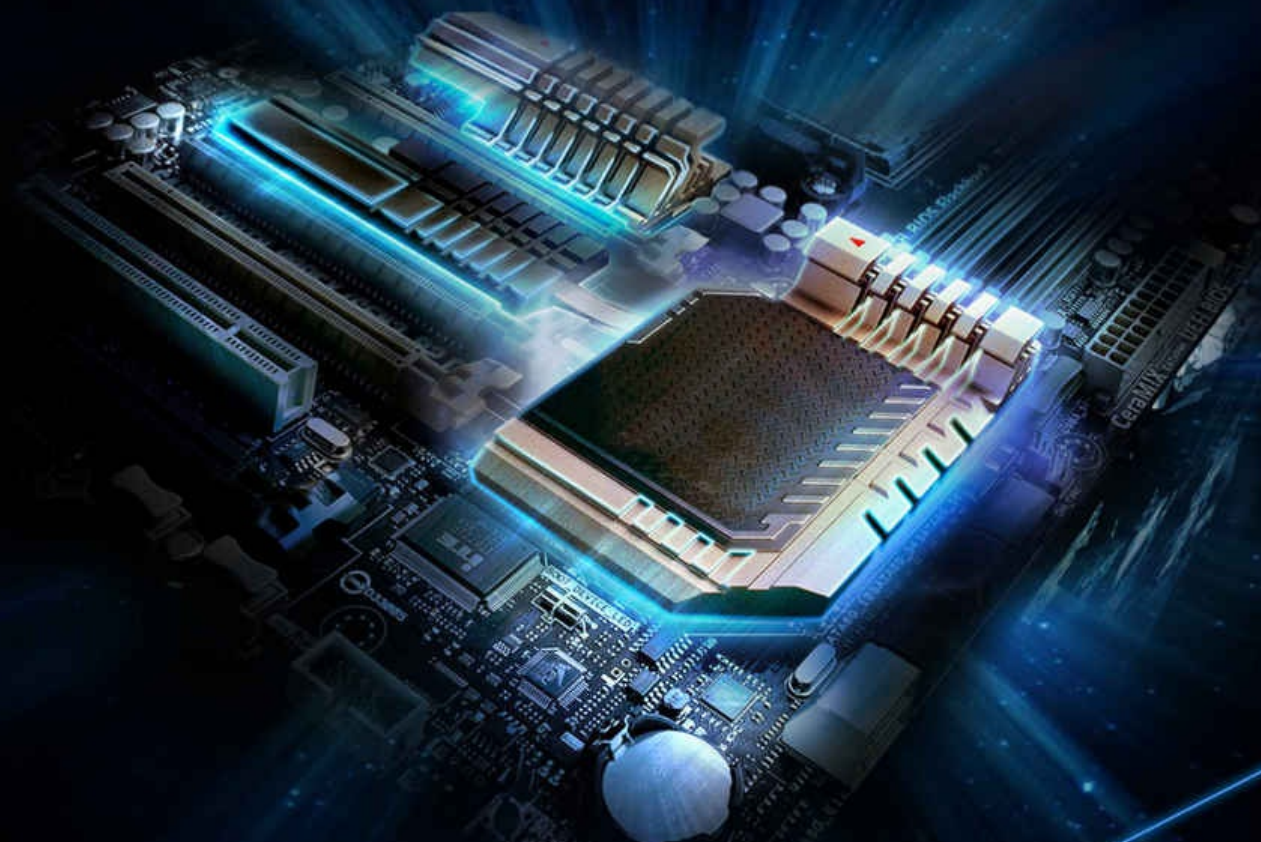


HOW TO UPDATE YOUR PC BIOS IN **3** EASY STEPS

▼ Wims BIOS



By: Wim Bervoets

How to update your PC BIOS in 3 easy steps

Wim Bervoets

This book is for sale at <http://leanpub.com/update-bios-in-3-easysteps>

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While every attempt has been made to provide information that is both accurate and effective, the author does not assume any responsibility for the accuracy or use/misuse of this information.

Preface

Thanks for downloading our free guide on how to update the BIOS of your PC!

In this guide we will show you why you would want to update your BIOS and how you can do it in a secure and safe manner! At the end of the guide you'll be on your way to become a BIOS Master!

Chapter 1: What is a BIOS?

BIOS is an abbreviation for the basic input/output system. It is a piece of software built into the PC motherboard, which gets executed at bootup. The BIOS initializes the hardware and then starts the operating system. (eg. Windows, Linux, ...).



The BIOS additionally provides an abstraction layer for the hardware, i.e. a consistent way for application programs and operating systems to interact with the keyboard, display, and other input/output devices. Variations in the system hardware are hidden by the BIOS from programs that use BIOS services instead of directly accessing the hardware. Modern operating systems ignore the abstraction layer provided by the BIOS and access the hardware components directly.

BIOS software is stored on a non-volatile ROM chip on the motherboard. It is specifically designed to work with each particular model of computer, interfacing with various devices that make up the complementary chipset of the system.

In modern computer systems, the BIOS contents are stored on a flash memory chip so that the contents can be rewritten without removing the chip from the motherboard. This allows BIOS software to be easily upgraded to add new features or fix bugs.

Unified Extensible Firmware Interface (UEFI), the successor of BIOS, is a specification that defines a software interface between an operating system and platform firmware. It resolves many PC BIOS limitations and is rapidly becoming more widely used.

Chapter 2: Why update your BIOS?

Often people will say that you shouldn't update your BIOS unless you really need the new version. If it ain't broke, don't try to fix it they say.

It is true, you don't always need a BIOS update if your current system is running fine. The advice is also rooted in the possibility that if a BIOS update fails, you could end up with a non booting system. This can happen, but this really only happens when you're trying to install an incorrect BIOS which was not written for your motherboard or PC these days.

And as we will explain there are some nifty scan tools which identify the correct BIOS update automatically.

So what are good reasons to update your BIOS? Below we list the most common reasons for a BIOS update:

- Better stability of your PC
- Improved recognition of peripherals. (like hard disks, video cards, memory sticks)
- Support for newer CPUs which were not yet available at the time you bought your motherboard / PC
- Improve the performance of
 - hard disk
 - memory
 - SSD
 - CPU
 - Better Overclocking support (eg. more stable, more features)
- Improved support for new operating systems (Windows 7, Windows 8, Linux, ...)
- Improved support for battery savings (eg. on laptops)

Chapter 3: How to update your BIOS

In this section we will show you how to update your BIOS using the paid service [BIOSAgentPlus](#). In the section that follows, we will explain how to update your BIOS the manual way.

Risk free BIOS update via BIOSAgentPlus

Here is in a nutshell the process of updating your BIOS with the BIOSAgentPlus service:

Get Your BIOS Update in 2 Minutes or Less in 3 Easy Steps!



- Download and run BIOSAgentPlus - it safely checks your PC to see if a newer BIOS is available for your computer.
- After it has scanned your system you are given instant access to a detailed BIOS and driver report. (this is a free report)
- If there is a BIOS update available you can choose to sign up with the service to be able to download the BIOS update

Below we'll explain in more detail the exact steps to follow.

1. Go to [BIOSAgentPlus](#) website. If needed you can change the site language in the drop down at the right top of the website



Welcome **WIM'S BIOS** visitors!



BIOS UPDATES

Optimize your PC with BIOSAgentPlus

Why have more than 10 million users downloaded BIOSAgentPlus?

- ✓ BIOSAgentPlus safely checks to see if a newer BIOS is available for your computer.
- ✓ Checks your PC for old device drivers and recommends updates.
- ✓ Provides instant access to your detailed BIOS and driver report. [i](#)

 **FREE BIOS SCAN**
Click here to download BIOSAgentPlus

 Try our new Webscan

Supported BIOS:



- Now click on the green FREE BIOS SCAN button. On the next page the BIOS Agent Download will start. (depending on the browser you are using, you'll be shown the exact next steps to take)
- Execute the downloaded BIOSAgent Scan executable. The [BIOSAgent](#) will now scan your system and show you the results after a few seconds.



For our test system, BIOSAgentPlus automatically identified the motherboard used in our PC: a Microstar MS-7583. It also detected the BIOS is not the latest version.



System

Welcome to BIOSAgentPlus

The official BIOS Update and support center for **AMI**, **Phoenix** and **Insyde** BIOS.



A BIOS Update has been detected for your PC!

Your BIOS Info:

Scan ID: f66ceb00

BIOS Type:	AMI
BIOS Date:	August 18th, 2011
BIOS ID:	V1.11
BIOS OEM:	V1.11
Chipset:	Intel D131 rev 17
SuperIO:	Unknown
Make/Model:	MICRO-STAR INTERNATIONAL CO.,LTD MS-7583



24 Device Driver Updates are available for this computer.

[See Full Report](#)

- WDC WD740GD-00FLC0 ATA Device
- Display adapters
 - AMD Radeon HD 5700 Series
- DVD/CD-ROM drives
 - HL-DT-ST DVD-ROM GDR8163B ATA Device
 - _NEC DVD_RW ND-3520AW ATA Device
- Floppy disk drives
- Diskette station
- Human Interface Devices

This automatic identification of your motherboard is really handy and a timesaver. It takes the risks out of a BIOS update because incorrectly identifying your motherboard is the most common cause for a failed BIOS Update.

Ordering the BIOS

After getting the free report you can order the BIOS, by clicking the See Full Report button and secondly the Fix It button.

To order the BIOS you need to enter your name and email address to begin your registration.



Register for BIOSAgentPlus

Home of the largest BIOS Directory on the Internet

Enter your name and email address below to begin your registration.

First Name:

Last Name:

E-Mail:

- ▶ Get instant access to over a million driver files.
- ▶ Better PC Performance.
- ▶ Improved PC Stability.
- ▶ From a trusted source in the computer industry.

Please send updates and notices from BIOSAgentPlus.com*

Already Registered? [Login Here](#)



*Correspondence may include Weekly Driver Alerts, eSupport Monthly Newsletter, and special offers.

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At this moment FileCleaner is included for free when buying [BIOSAgentPlus](#). Click on “Add to Shopping Cart” to order your BIOS.



Special Offer - Act Now

Buy BiosAgentPlus® today at our special download price of only \$29.95 and we will give you FileCleaner - the ultimate Windows cleaner ABSOLUTELY FREE



What is BIOSAgentPlus?

BIOSAgentPlus's is small FREE program that helps you quickly identify and update your Dell BIOS. Its easy to update your computer and finds exactly the right updates. No other program does

"Received my BIOS today, everything worked as advertised. You folks have a good company with a pleasant, competent staff. Thank you!"
- Joe C.

Our Special Offer

BIOSAgentPlus	\$39.95	Save \$10
FileCleaner	\$29.95	FREE
Get all of these amazing products for:	\$69.90	\$29.95



You are entering a secure store.



Benefits to Updating Your BIOS:

- Improved Windows 7 and Windows 8 Support
- Windows Vista and XP ACPI Compliance
- Improved PC Stability
- Better PC Performance
- AGP and PCI Express Video Updates
- Faster Input/Output Speeds

BIOSAgentPlus®

- ✓ BIOSAgentPlus safely checks to see if a newer BIOS is available for your PC.
- ✓ Check you PC for old device drivers and recommends updates.
- ✓ Provides instant access to your detailed BIOS and driver report.



On the last page you enter your address & payment options. Finally click the green Buy now button.



English ▾

Shopping cart

BIOSAgentPlus: 1 yr, 1-10 PC's ⓘ	€28.20	1	€28.20
---	--------	---	---------------

Delivery: electronic
Operating system(s): Windows

Recommended extensions:

FREE! - FileCleaner: 1 yr, 1 PC ⓘ	€0.00 €28.20	1	€0.00 €28.20
--	----------------------------	---	-----------------------------------

Delivery: Download

RegistryWizard: 1 yr, 1 PC ⓘ	€9.38 €28.20	0	€0.00 €0.00
-------------------------------------	----------------------------	---	----------------------------------

Delivery: Download

Recommended for Restoring the Speed and Health of your PC

Add

Total: €28.20

Includes €4.50 VAT (19% on €23.70). ⓘ

Address

Click here if you are a business.

* First name

* Last name

* Address

* Zip/Postal code

Payment options

Euro ▾

Credit card



PayPal



After clicking "Buy", you will receive an order confirmation screen. On this screen will be among others, the summary of your order, a receipt, the username/password for the BIOSAgentPlus website and links to Technical Support if help is needed.



Thank you for your order.

 If you do not receive a confirmation email from us, please check your spam, bulk or junk mail folders. If you find the email there, it was diverted by your ISP, your spam-blocking software or by filters.

Below you will find your cleverbridge reference number. To ensure the most prompt and efficient service, please always refer to your reference number when contacting us.

Your cleverbridge reference number: 61465580

Payment information

Your credit card (xxxxxxxxxxxx631T) has been successfully authorized. Please note that the charge on your credit card will appear as "www.cleverbridge.net."

Your products

Qty.	Product name	Delivery
1	BIOSAgentPlus: 1 yr, 1-10 PC's	electronic

Your product information:
Username: eric.pellerin+testorder16@esupport.com
Password: (Your password is unchanged)

Thank you for purchasing eSupport.com's BIOSAgentPlus: 1 yr, 1-10 PC's
Please follow the instructions below to being using your BIOSAgentPlus membership.
1) Navigate to www.biosagentplus.com.
2) Select **Member Login** from the navigation menu.
3) Enter the username and password provided above and click **Login**.
If you experience any problems, please contact our Support Team at: support@esupport.com
A self help article on login problems is also available here: http://biosagentplus.com/login_problem.php.

Your purchase documents

Adobe Acrobat Reader is needed to open this PDF file. If this software is not yet installed on your computer, please [download a free version here](#).

7/22/2014 [Invoice](#)  [Download PDF](#)

Support options

Technical and product-related support

If you have any technical or product-related inquiries, you may contact eSupport.com, Inc. using the following information:


Email: support@esupport.com

Payment and order-related support

If you have any payment or order-related inquiries, feel free to contact [cleverbridge Customer Support](#).

Receiving the BIOS

To receive the BIOS, you can login via the username/password on the [BIOSAgentPlus](#) website and go to the BIOS Firmware Request form.



BIOS Firmware Request Form

Thank you for your BIOS and Device Driver Update Inquiry.

Information About Your Current BIOS

BIOS Type: Unknown
BIOS ID: 7UET92WW (3.22)
BIOS Date: 2011.03.11
BIOS Vendor: LENOVO
BIOS Version: 7UET92WW (3.22)
BIOS Size: 8388608
Chipset: Intel 2A40 rev 7
Motherboard Name: LENOVO
Motherboard Model: 2767W7N
System Name: LENOVO
Base Manufacturer: LENOVO
Base Product: 2767W7N

The form submits all the technical details to BIOSAgentPlus. From there, the support people of [BIOSAgentPlus](#) will match up the proper BIOS based on the technical details and revision of the motherboard.



Thank You for your BIOS Update Inquiry

[Print](#)

Your BIOS Update ticket # is: **134AF571** please make note of it.

Please put support@esupport.com on your email whitelist. This is extremely important because if there is a BIOS available for your system, we need to make sure that your email account will accept delivery. You should also make sure that you check any bulk mail or spam folder that your email account may have. (The BIOS will NOT be sent as an attachment ; it will be sent as a link to a file on our website)

A BIOS Technician will respond to your inquiry within 12-24 hours.

The current local time is 5:17:38 PM Tuesday EDT

Hours of Operation:



Day	Time
Monday	9:00 AM - 5:00 PM EDT
Tuesday	9:00 AM - 5:00 PM EDT
Wednesday	9:00 AM - 5:00 PM EDT
Thursday	9:00 AM - 5:00 PM EDT
Friday	9:00 AM - 5:00 PM EDT

[BIOSAgentPlus](#) support will then email the customer with the link to download the BIOS, as well as documentation on how to Flash their PC.



Dear Eric Pellerin,

Thank you for your recent BIOS inquiry. We've processed the request that you recently submitted and have placed the necessary update files at:

<http://biosagentplus.com/showbios.php?part=ThinkPadT400&ref=750>



A subscription to BIOSAgentPlus includes:

New Phoenix-Award or AMI BIOS built specifically for your motherboard

- » This e-mail contains a link to download the Zip File which includes everything you need to perform the update.
- » Certified Phoenix-Award or AMI Flash BIOS Update Specific to Your PC.
- » 30 Day Satisfaction Guarantee.
- » The Zip File is typically less than 500K and includes the "Sure Flash" flash loader, binary, and detailed installation instructions for Phoenix-Award BIOS.
- » Virtual Technical Support.

[SCAN FOR BIOS UPDATES](#)

Chapter 4: Update your BIOS - manual procedure

The first step to update your BIOS is to identify your motherboard manufacturer and model.

Many users don't know the name of their clone motherboard. This is because the company name is not mentioned anywhere in the manual, or on the motherboard.

If you want to upgrade your BIOS you really have to know the motherboard manufacturer, because if you flash the wrong BIOS upgrade your system could stop booting.

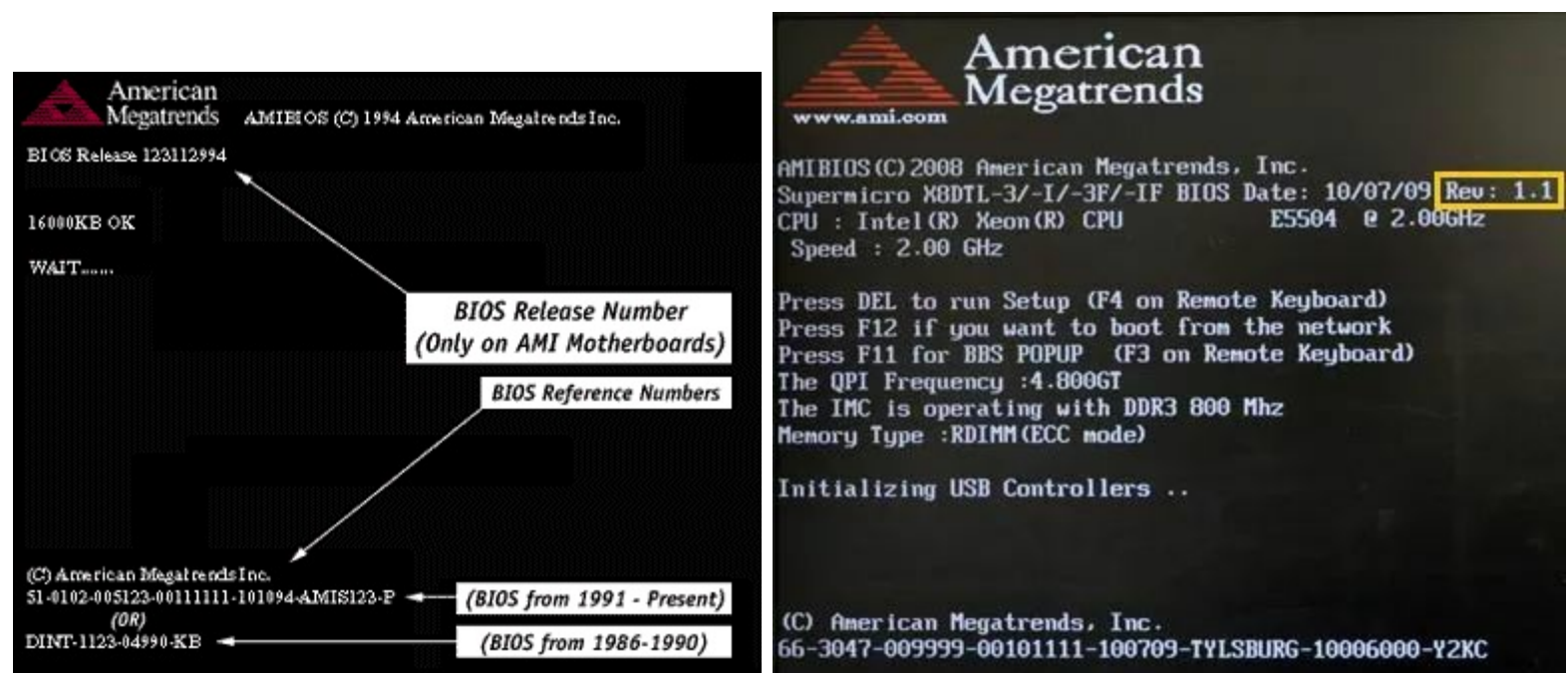
Identify the motherboard manufacturer

One way of identifying your motherboard, is using the BIOS ID which is displayed on most computers at bootup.

The BIOS ID syntax differs between the different BIOS vendors: AMI, Award, Phoenix, ... With the screenshots below for the different BIOS vendors you should be able to find the BIOS ID.

AMI (American Megatrends) BIOS syntax

In the screenshot below you can see where to find the AMI BIOS ID during bootup:



Two different syntaxes are used:

- AMI BIOS from 1986 - 1990: Example BIOS ID: DINT-1123-04990-K8
- AMI BIOS from 1991: Example BIOS ID:
 - 51-0722-001169-00111111-071595-SIS5571-007_66_SIS5571
 - 66-3047-009999-00101111-100709-TYLSBURG-10006000-Y2KC

Let's analyze the AMI BIOS ID: 51-0722-001169-00111111-071595-SIS5571-007_66_SIS5571

To find your motherboard manufacturer, please look at the third (3) set of numbers in your BIOS string. In this case it's 1169 and by matching this with [the AMI BIOS ID list on Wim's BIOS](#); it indicates the manufacturer is Microstar.

Now that we know the manufacturer it is time to search for the model. You can try looking for markings on the motherboard or you can see if Wim's BIOS has listed the full BIOS ID string 51-0722-001169-00111111-071595-SIS5571-007_66_SIS5571

Go to our [BIOS Updates](#) page and choose [Microstar](#). Next click on the AMI BIOS ID tab:

[Microstar BIOS Updates](#) [Award BIOS IDs](#) **[AMI BIOS IDs](#)** [Microstar Website links](#)

Our AMI BIOS id is listed:

51-0722-001169-00111111-071595-SIS5571-007_66_SIS5571 Microstar MS-5144 / MS-5146

So the motherboard is a Microstar MS-5144 or MS-5146 model. To know which motherboard you have, you could * look for model markings on the motherboard * look for the model in the motherboard manual

To download the BIOS you'll need to go the official site of your motherboard manufacturer. (if it exists). For your convenience we have added links to motherboard manufacturer sites on Wim's BIOS:

[Microstar BIOS Updates](#) [Award BIOS IDs](#) [AMI BIOS IDs](#) **[Microstar Website links](#)**

Here is a list of official and unofficial sites where you can find and download Microstar BIOS updates for free.

- <http://www.msicomputer.com/>
- https://web.archive.org/web/*/http://www.msi.com.tw
- <http://de.msi.com/>
- <http://www.msi-computer.fr/>
- <http://nl.msi.com/>
- <http://www.msi.com.tw/>
- <http://www.msi-forum.de/index.php?page=Board&boardID=82>

Award (Phoenix) BIOS syntax

Locating the Award BIOS ID syntax is similar to the AMI BIOS ID procedure above. Below are some Award BIOS bootup screenshots.

Award Modular BIOS v4.51PG, An Energy Star Ally
Copyright (C) 1984-99, Award Software, Inc.

GREEN AGP/PCI/ISA SYSTEM

Award Plug and Play BIOS Extension v1.8A
Copyright (C) 1999, Award Software, Inc.
Detecting IDE Primary Master ... IBM-DPTA-371368
Detecting IDE Primary Slave ... None
Detecting IDE Secondary Master... SONY CM4811



Press DEL to enter SETUP
11/08/1999-i440BX-W83977-2A69KA1UC-PL

The syntax is as follows:

- 11/08/1999-i440BX-W83977-2A69KA1UC-PL
- 09/23/2003-i865PE-W83627-6A79AA1IC-11

Let's show you an example of an Award BIOS id: 09/23/2003-i865PE-W83627-6A79AA1IC-11

- 09/23/2003 is the release date of the BIOS
- i865PE is the chipset used on the motherboard - in this case an Intel i865PE chipset
- W83627 is the IO Controller used on your motherboard (used for connecting SATA HDDs, SSDs, etc.)
- The first 5 characters of the 6A79AA1IC, 6A79A, identify a particular chipset. At [Wim's BIOS Award BIOS Ids page](#), we have the most complete list of these chipsets on the internet.

6A79A

Intel i865/i865P/i865PE/i865G/i848P

- The sixth & seventh character identify the manufacturer: in this case it's A1. If you look at [the Award Hardware Vendors list](#) on Wim's BIOS you'll find that the manufacturer is Abit
- The 8th character (most of the times, not always!) identifies the motherboard model. I say 'most of the times' because the manufacturer can use the same 8th character for all models based on a particular chipset!

As we now know the motherboard is made by ABIT, you can visit our [Abit BIOS updates](#) page at Wim's BIOS to see if there is a full match with an Award BIOS ID we have listed.

We're lucky as a complete match is present:

09/23/2003-i865PE-W83627-6A79AA1IC-11

Abit AI7

Now you can try locating your BIOS for the Abit AI7 motherboard on the official Abit websites we have listed on our [Abit BIOS Update page](#).

Abit BIOS Updates	Award BIOS IDs	AMI BIOS IDs	Abit Website links
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Here is a list of official and unofficial sites where you can find and download Abit BIOS updates for free.

- <http://abit.ws>
- http://web.archive.org/web/*/http://www.abit.com.tw/
- http://web.archive.org/web/*/http://www.abit-usa.com/
- http://web.archive.org/web/*/http://www.abit.nl/
- http://web.archive.org/web/*/http://www.uabit.com/

Updating the BIOS

Download the correct bios

As explained in the previous section we have now identified the motherboard make and model and downloaded the correct BIOS on the official motherboard manufacturer website.

We advise you to follow the instructions provided by the motherboard manufacturer on how to update your BIOS. If none are provided we will show you a generic flash procedure via a DOS USB boot disk below.

To flash your BIOS you'll need two items:

1. a flasher program (DOS, Windows, Linux based)
2. a data-file - the BIOS code itself

Normally when you download the BIOS data file, the manufacturer also includes the correct flasher to use in the archive. If it is not included, you can always download the correct flasher for [AMI](#), [Award](#) and [Phoenix](#) BIOS on our website for different operating systems.

The flasher programs the data-file into the BIOS chip. After the flasher has done its work, a reboot is all that is needed to boot with the new BIOS version

Most of the time the flasher that you have downloaded will be DOS based. This means you can't flash the new BIOS from within Windows. Instead a bootable disk has to be prepared.

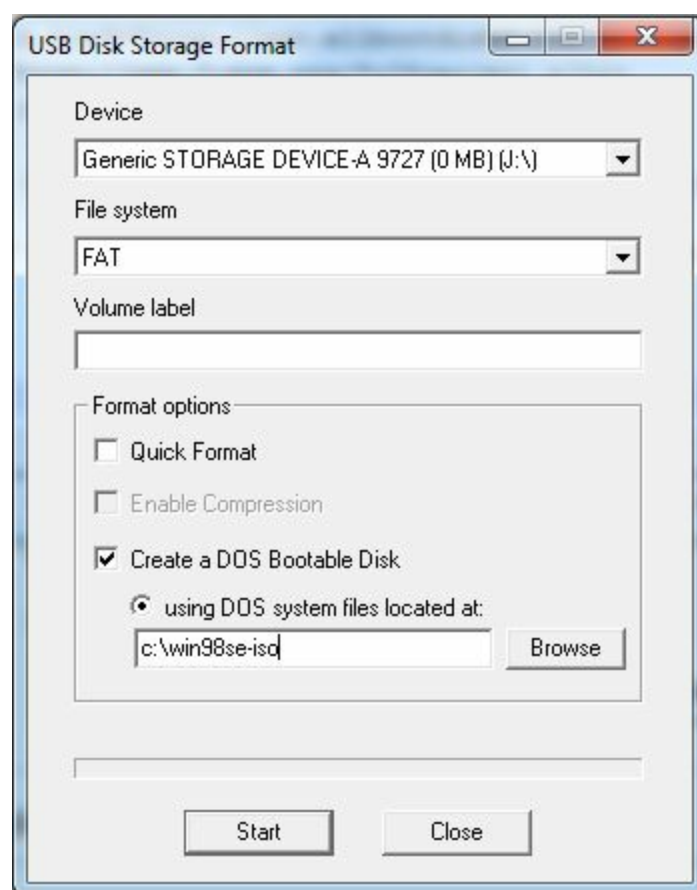
All recent motherboards support booting from a variety of devices: Floppy disk, USB Memory stick, CD-ROM. We recommend USB or CD-ROM flashing if possible due to the fact that a floppy disk is more prone to bad sectors which could make your motherboard

inoperable. Recent BIOSs are also too big to fit on a floppy-disk.

Create a bootable USB memory stick

Here is how to create a bootable USB memory stick:

- Download the [Hiren Generic USB Format tool](#)
- Download the Win98SE_bootdisk.iso at [All Boot disks](#)
- Unzip the iso file (eg. with [7Zip](#))
- Start the USB format tool. Choose the following options:
 - Device: USB Stick you want to use (keep in mind that it'll be formatted and you'll lose any data on it)
 - File system: FAT or FAT32
 - Check "Create a DOS Bootable Disk" using DOS system files located at the directory where you have unzipped the ISO
 - Click on Start



Your boot disk has now been created. Now you just need to copy the flasher and the BIOS data file on it. Reboot your PC and change the Boot Sequence in the BIOS to boot from the USB Memory stick.

Flashing the new BIOS

After booting the USB stick you'll execute the flasher and supply the name of the bios data file on the DOS commandline interface:

- awdf flash xxx.bin (for Award BIOSs)
- amiflash xxx.rom (for AMI BIOSs)

Notes:

- The names of the flasher can be different (eg. afudos). The name of the data-file extension can also be different.
- Most flashers will ask you to save the current BIOS. Choose Yes, so that you can always flash back to the original version if you're having problems with the new one.

Chapter 5: Conclusion

We have come to the end of our quick BIOS update guide explaining two ways to update your BIOS: via the [BIOSAgentPlus](#) service (automatic identification + support) or the self service way in the second section.

We hope you liked it, please let us know your comments on our forum at <http://www.wimsbios.com/forum/> ! There is also a lot more content online at <http://www.wimsbios.com> which we couldn't cover in this guide, so please check it out!

See you next time!

Wim Bervoets

wb@wimsbios.com

Founder of Wim's BIOS

Disclosure of Material Connection: Some of the links in the post above are affiliate links. This means if you click on the link and purchase the item, I will receive an affiliate commission. Regardless, I only recommend products or services I use personally and believe will add value to my readers.