



AwardBIOS™

WinFlash Utility Guide

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Revision History

Document Revision History		
Date	Revision	Description
	1.0	Initial Release

Award WinFlash Utility

Award WinFlash utility is a window version of Award BIOS flash writer utility. It is a 32-bit windows-based application that offers you several advantages over its old predecessors. In the first place, winflash.exe can be operated in a number of environments, currently available are windows 95/98, Millennium, Windows NT 4.0 and Windows 2000. You are no longer restrained from running the utility in DOS mode or in Windows DOS-prompt box as awdfash.exe and aflash32.exe do. In addition, the newly designed easy to understand interface helps users get started more easily. The traditional command line interface is now replaced by graphic mode interface that acquires fewer efforts to master. The complex command parameters found on the older versions are condensed to a list of commonly used commands without slashing out its powerful function to ease the burdens of learning hassles. Here's what we'll put into the Winflash.exe user guide manual:

- Award WinFlash Chipsets Support Table
- Preparation
- WinFlash setup and installation
- WinFlash menu commands explanation
- BIOS update examples in real practice
- WinFlash Un-installation
- Error messages

Support Chipset Table

ALI	AMD	Intel	SiS	VIA	Others
1631	75x	i440BX	530	694X	
Allatin 7		i810	640	KX133	
		i820			
		i840			
		i815			

Preparation

1. A winflash.exe supported Award 4.5 or 6.0 binary code.
2. System requirement: Windows 95/98, Millenium OS, Win NT 4.0 or Win 2000.

3. A floppy drive and a diskette (Optional).
4. Award winflash.exe utility.

Required:

For Windows 95/98 and Millennium OS winflash.exe.

For Windows NT 4 and Windows 2000 winflash.exe and winflash.sys

Optional:

Award WinFlash installation/un-installation wizard.

Utility Setup and Installation

Two ways to install the program. For temporary use, simply locate the utility and run “winflash.exe. If you wish to have a permanent program resides on you program menu, you should first run winflash.exe installation wizard that can guide you through setting up WinFlash utility. The below steps assume you are running the program with WinFlash installation wizard

Ascertaining BIOS Support

Non-WinFlash supported BIOS is unable to operate under WinFlash. Make sure your working BIOS is WinFlash supported. You can contact Award Taiwan office for this function support BIOS. **Source Code customers can re-build the BIOS themselves by adding “NT_Flash” difintion** and then flash the supported BIOS back to ROM using DOS mode Award flash writer utility—awdf flash.exe.

Utility Directory

Have all the required files stored in the current directory where this utility is being executed.

Installation Wizard

1. Navigate to the utility folder and run "setup.exe".

This will launch WinFlash installation wizard.



1. Click on "Next".

This can continue installation process. During the installation, you'll be asked to point a destination folder to extract the files from the utility and to provide the program folder name where it appears on the program menu.

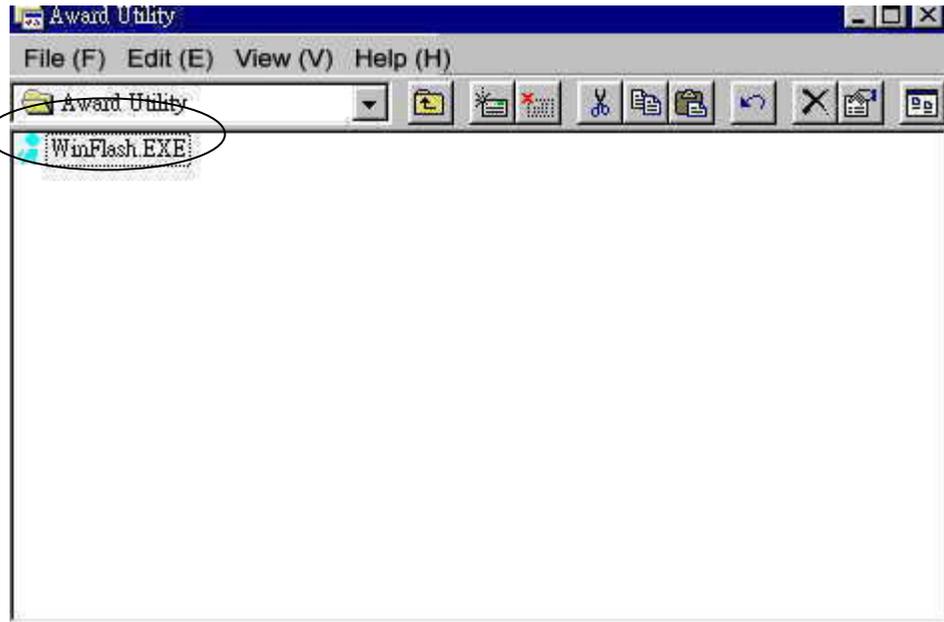
Default destination folder is: c:\>Program Files\Award\Winflash

Default program folder name on program menu is: Award Utility

2. Click on "Finish".

When installation process is complete, winflash.exe window appears.

Double click
on the icon to
launch the



3. Double click on  icon.

This can launch Award WinFlash program. You can also select
Program Menu • Award Utility • Winflash.exe

 If you are working under Win95/98 or Millennium operating system, you are not required to reboot your machine. The utility can be used right after the setup. But if you are working under Win NT 4.0 or Win 2000, you need to restart your system for the changes to take effect.

An opening screen should look like this:

The screenshot shows the WinFlash utility window titled "awdbios.bin - WinFlash". The window is divided into several sections:

- Titlebar:** Displays "awdbios.bin - WinFlash".
- Toolbar:** Contains icons for File, Options, View, and Help.
- Update Option Area:** Includes checkboxes for "BootBlock" (checked), "PnP Area", "DMI Area", and "Clear CMOS".
- Bin File Information:** Shows "Checksum: 2F2CH", "Build Date: 12/31/1999", and "Flash Type: SST 29EE020 /5V".
- Update Control:** Features "Skip Update" (green) and "Update" (blue) buttons.
- BIOS Structure Area:** A vertical stack of four blocks: "BootBlock" (blue), "ESCD Block" (green), "DMI Block" (green), and "MainBlock" (blue).
- Footer:** Includes "For Help, press F1" and a "NUM" button.

Callout Boxes:

- The titlebar displays Award WinFlash product title**
- The toolbar provides quick access to WinFlash commands**
- WinFlash Update Option Area**
This area allows you to select different update function.
Default Value: "Bootblock"
- CMOS Option Area**
This area allows you to enable "Clear CMOS" feature while updating BIOS.
- Bin File Information**
This includes bin file checksum value, built date and flash type.
- Graphics Color:**
Display the update control status for each block.
Green: The block(s) is not selected and remain un-updated.
Blue: The block(s) is selected and will be updated.
- BIOS Structure Area.**
Composed by 4 blocks-
-Boot Block, ESCD Block, DMI Block and Main Block.
"MainBlock" is default updated and can't be skipped. The other 3 can be updated/un-updated by update control method.

WinFlash window is mainly divided by 2 panels. The left panel is the option area composed by update option and CMOS option.

The right panel is a BIOS structure graphics that illustrates each block status. The default opening screen is “**Bootblock**” update option enabled.

Menu Command Description

Now you have learned how to set up the program and have an overview of the WinFlash window screen, here you will learn many useful facilities of WinFlash. WinFlash has three main command menus: file list, option list and view list menus.

File List Commands menu	Command	Shortcut	Function
	Open	Ctrl+O	Open an existing binary file for BIOS update.
	Save Old BIOS**	Ctrl+S	Save a copy of the old BIOS. Default name is “ awdbios.bin ”. You can later on recover from the old BIOS if the new one is damaged.
	Update BIOS	Ctrl+U	Select this to begin update process.
	Exit	Ctrl+X	Exit from WinFlash Utility.

**** Since performing BIOS update is a risky step, we recommend you always back up your old BIOS before executing BIOS update.**

Option List Commands Menu	Command	Function
	Update BootBlock	Update a recovery block content.
	Clear DMI**	Clear DMI data where DMI configuration is stored.

Clear PnP	Clear PnP data where PnP device information is stored.
Update BIOS ALL	Perform all update options—Bootblock, DMI and PnP.
Clear CMOS	Clear CMOS data where specific system configuration parameters are stored.
Load CMOS Default	Restore CMOS default settings for system to operate.

**** Select this function may lead to some DMI information lost. Unless you have strong reason to update this area, we strongly recommend you not perform this update function.**

**View List
Commands
Menu**

Command	Function
Toolbar	Provide quick mouse access to many tools used in WinFlash toolbar.
Status Bar	Display messages that describe the actions of toolbar buttons as you point them.
View BIOS Struct	Display BIOS Structure graph in WinFlash window
BIOS Information	Display onboard system BIOS part number ID, build date and flash type information.

Examples in Practice

You have learned the basics of the menu commands and now are ready to apply what you have learned into practice. The examples quoted here will guide you through updating BIOS using each feature. Note that each step described here is not always required, you may skip one of them. The following examples assume you are using 6A6S2xxx.BIN as working BIOS.

Update Options

The available options are Bootblock, PnP and DMI area.

Update BootBlock

1. Open WinFlash Utility.

“**Bootblock**” update option is enabled by default as you enter the opening screen.

2. Open *Option List Menu • View BIOS Information.*

Before performing BIOS update, you can first view your onboard



BIOS information.

3. Open *File List Menu • Save Old BIOS • OK*

This can save a copy of the old BIOS to your hard drive. For safety concern, you should always save the BIOS on a floppy diskette instead of on a hard drive. This can ease any later BIOS recovery hassles. By default, the backup BIOS name is **awdbios.bin**. If you want to abort the backup process, click on “Quit”.

 **Since updating BIOS is a risky step, you may damage your BIOS. We recommend you always back up the old BIOS.**

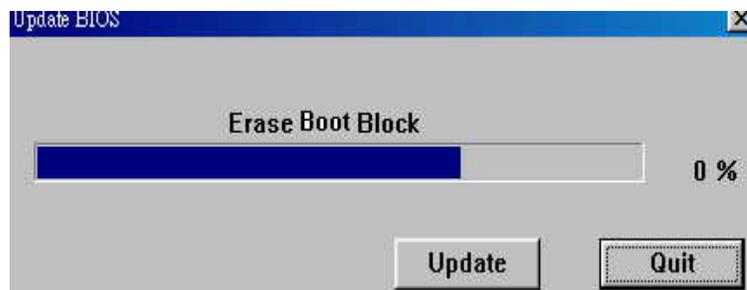
If you have previously done Step 3 to save the old BIOS, open the old BIOS. *File List Menu • Open • awdbios.bin*.

4. Click on “*BootBlock*” update option on the left panel of the window.

This can enable bootblock update feature. You can also point mouse directly to the “**BootBlock**” area on the BIOS structure graph. The color of the bootblock area is changed from “**Green**” to “**Blue**”, indicating the block is being selected.

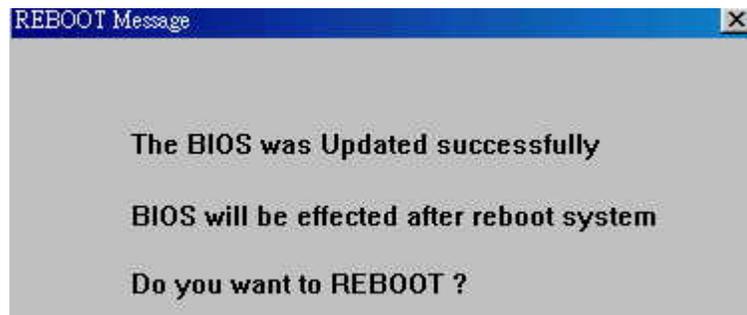
5. Open *File List Menu • Update BIOS • OK*

This can perform BIOS update. The update indicator shows you the bootblock is being updated. If multiple blocks are selected, the indicator will display updated blocks in order.



 Before executing BIOS update, make sure you have all the background programs closed.

6. Restart system.



When update is successful, restart your system.

Update BootBlock & PnP Area

1. Open *File List Menu* • *Save Old BIOS* • *awdbios.bin* • *OK*
2. Click on *BootBlock* • *PnP Area*.

You can also point “**Bootblock**” area and “**ESCD block**” on the BIOS structure graph to select the option. While you do so, the update option on left panel will reflect the change.

3. Open *File List Menu* • *Update BIOS* • *Restart system*.

Update BootBlock, PnP& DMI Area (Update All)

1. Open *File List Menu* • *Save Old BIOS* • *awdbios.bin* • *OK*.
2. Click on *BootBlock* • *PnP Area* • *DMI Area*.

Two other ways to select the update options:

- 1) Pull down *Option list menu* • *Update BIOS All*

2) Click on *Bootblock • ESCD block • DMI block* on the BIOS structure graph.

3. Open *File List Menu • Update BIOS • Restart system*.

 Select DMI option may lead to the lost of some manufacture data. Unless you have strong reason to update this area, we do not recommend you do this option.

CMOS Option

The only available option is **Clear CMOS**. Note that “**Clear CMOS**” feature requires you to operate with other update options. The single function can't work.

Clear CMOS

1. Open *File List Menu • Save Old BIOS • awdbios.bin • OK*.
2. Select any update option, and then “*Clear CMOS*”.
3. Choose *Update BIOS • OK*
4. Restart

When system restarts, the POST message shows “**CMOS Checksum Error**”. Press either **F1** to continue or **DEL** to enter CMOS setup menu.

Load CMOS Default

To avoid seeing “**CMOS Checksum Error**” when system update succeeds and restarts, choose this option. This feature also requires you to work with other update option; single function can't work.

1. Open *File List Menu • Save Old BIOS • Awdbios.bin • OK*

2. Select any update option.

3. Pull down *Open List Menu • Load CMOS Default*

Enable this feature can also clear CMOS data. You can also reach the same effect by selecting *Open List Menu • Clear CMOS • Load CMOS Default*

5. Choose *Update BIOS • OK*

4. Restart

When system restarts, the POST message skips "CMOS Checksum Error" message and auto-load CMOS default value.

WinFlash Un-installation

WinFlash can be un-installed from standard Windows removing program. The following steps run un-installShield wizard to remove WinFlash program from the operating system.

1. Activate *Control Panel • Add/Remove Programs • WinFlash list box entry.*
2. Click on "OK" to complete un-stallation.

Troubleshooting

When the feature does not operate as it did in the previous learning, you may run into difficulty. Here list some common seen errors and situations you may get struck at and then tell you how to recover from the errors.

Error Message	Reason
Can't find driver file for	The error message appears in Win NT

winflash.sys. Please check winflash.sys c:\winnt_dir\system32\drivers

4.0/Win 2000 environment. Winflash.sys file is either not placed in the same directory where the utility is being executed or not successfully installed.

Verify error

The BIOS is not updated successfully.

The BIOS not support Windows 98/NT Mode

Attempt to save old BIOS that is not WinFlash supported.

Problem

Reason

Why can't I view BIOS structure graphics in WinFlash window?

1. “**View BIOS Struct**” function is not open.
2. The working BIOS is not WinFlash supported.