

Errata

Agilent References in this manual

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M9536A AG10 and AG16 BIOS Restore/Upgrade Instructions

Agilent Technologies M9536A AXIe Embedded Controller

Introduction

The following instructions describe how to restore or upgrade to BIOS version AG10 or AG16 in your M9536A AXIe Embedded Controller.

To determine which BIOS version is currently installed in your M9536A:

1. Turn chassis power off and then on again.
2. At startup, press the **Delete** key when the Agilent Splash screen appears. This opens the BIOS menu Main page displaying the currently installed version of BIOS.

Note BIOS version AG16 may be installed only on an M9536A running Microsoft Windows Embedded Standard 7 (WES 7) Operating System. BIOS version AG10 of the M9536A BIOS can be installed on the M9536A using either Windows 7 Pro or WES 7.

AG16 BIOS Features

The only significant difference between AG10 and AG16 is that AG16 BIOS allows the M9536A AXIe Embedded Controller to properly enumerate large PCIe systems, including up to three M9514A AXIe 14-slot Chassis.

Installation Overview

The instructions on the following pages contain detailed steps on how to restore or upgrade the Agilent M9536A BIOS. The process contains these stages:

1. Download the AGxx BIOS files from Agilent.com – Page 2
2. Obtain and run AFUWIN from American Megatrends, Inc. – Page 3.
3. Update the M9536A BIOS and reboot – Page 7.

Note Do not cycle power while the BIOS is updating.

Install the BIOS

Note In order to restore or upgrade the BIOS, you must be logged in on the Agilent M9536A controller as a single user with Administrator privileges. If you are not, you must logout and then login again as a single user to an account with Administrator privileges. Set the User Account Control to the default position.

Note You will need to download the AFUWIN (amiflash.zip) utility from American Megatrends, Inc. Instructions are provided in Section II of this guide (page 3) for locating, downloading and using the AFUWIN utility.

I. Download the Agilent AG10 or AG16 BIOS files to your M9536A Embedded Controller

1. On the M9536A, create a folder at the root level of the C: drive for saving the new BIOS files.
2. Download and save the Agilent AGxx BIOS files to the folder created in Step 1 above. You can get the Agilent AGxx BIOS files from the M9536A website: (www.agilent.com/find/M9536A).

Connect to the M9536A website (this website will always have the latest BIOS and driver files), select **Visit Technical Support**, then the **Drivers, Firmware and Software** tab.

3. Save the *M9536A_AGxx.zip* file to your hard disk and unzip it to the folder you created in Step 1 above. The following table lists the files that are unzipped:

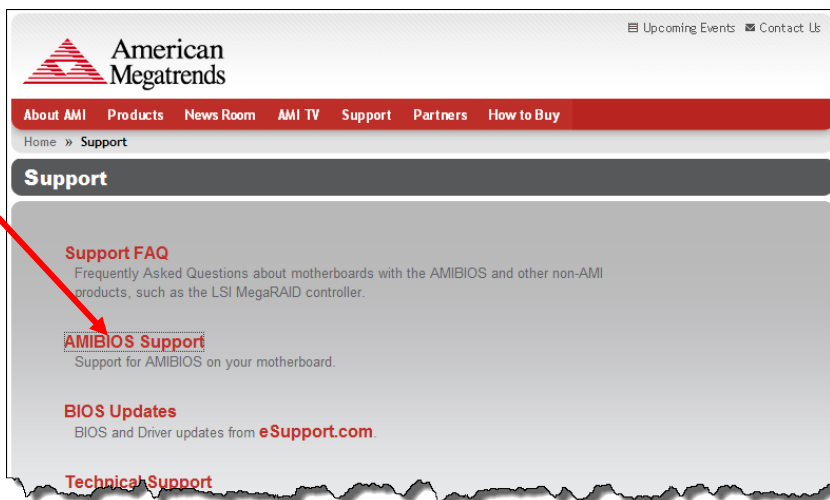
AG10 BIOS Files:	AG16 BIOS Files:
<i>9536A10.ROM</i>	<i>9536A16.ROM</i>
<i>HISTORY.TXT</i>	<i>HISTORY.TXT</i>
<i>FLASHROM.CMD</i>	<i>FLASHROM.CMD</i>
<i>README.TXT</i>	<i>README.TXT</i>

II. Obtain and run the AFUWIN utility from American Megatrends Inc.

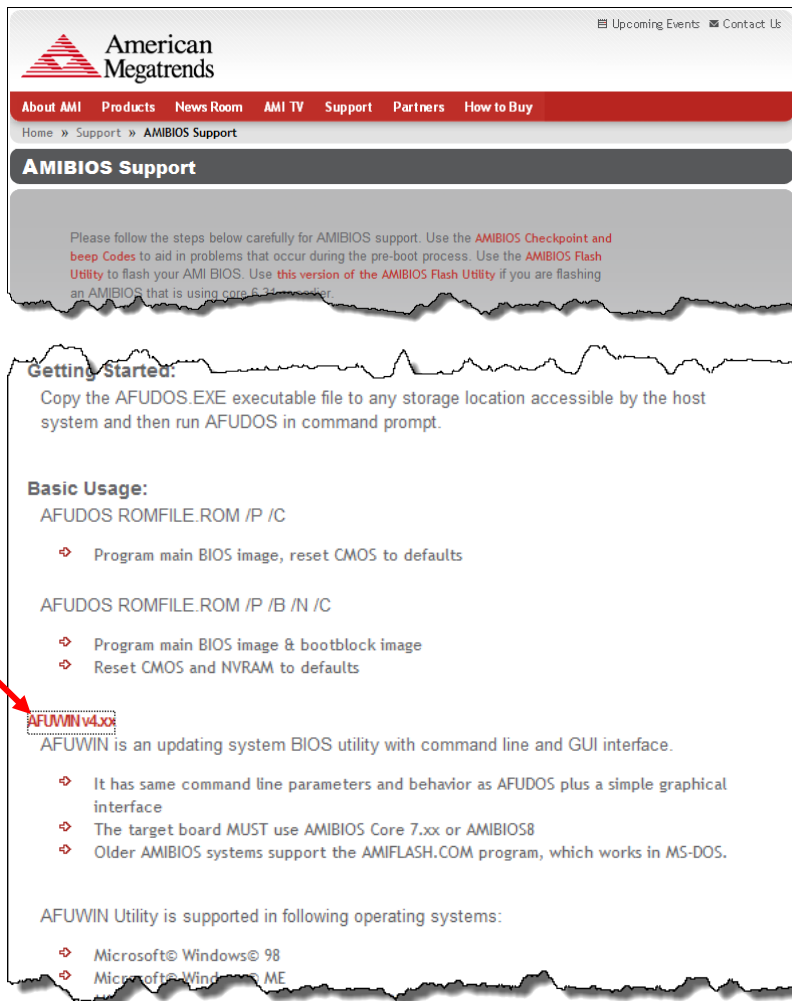
1. Go to the American Megatrends, Inc. (AMI) website: <http://ami.com>
2. From the AMI home page, select **Support**:



3. This opens the AMI Support web page. Click **AMIBIOS Support**:



- This opens the AMIBIOS Support web page. Scroll about half way down the page. Locate and click **AFUWIN v4.xx**:

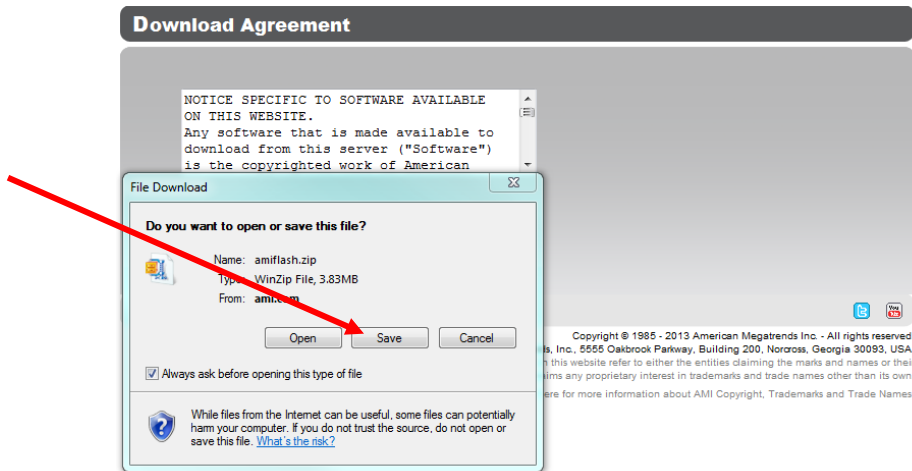


- This opens the Download Agreement dialog box. Read through the agreement and, if you agree to the terms, click **I Agree**:

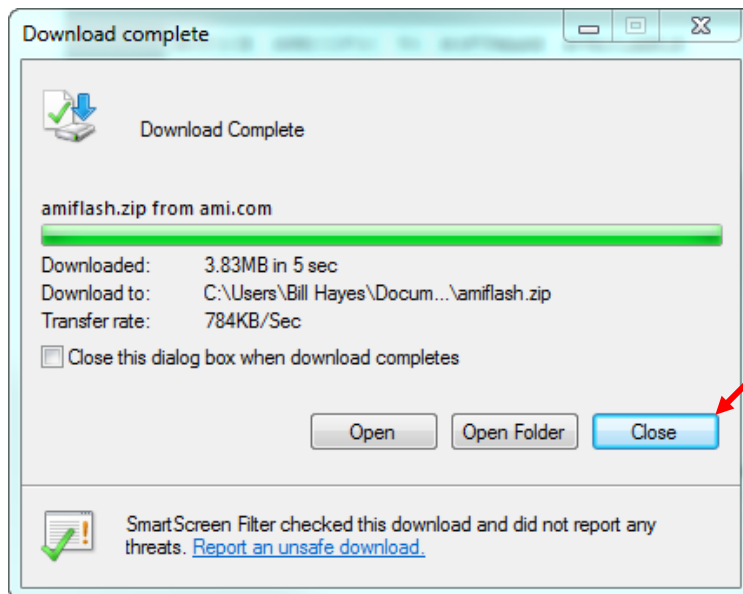


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- This opens the File Download window. Click **Save**.



- This opens Windows Explorer. Browse to the folder where you want to save the AFUWIN file (*amiflash.zip*). Click **Save**.
- When the file has completed downloading to the computer, click **Close** to close the download window.



- Open Windows explorer and navigate to the folder where you saved the *amiflash.zip* file.
- Double click the *amiflash.zip* file and extract the contents to the folder. This extraction creates one folder named **amiflash** with multiple subfolders. The **AMIBIOS** folder contains files used in this update.

11. The **AMBIOS** folder has multiple subfolders. You will use the contents of the **AFUWin** subfolder to upgrade the M9536A BIOS.
12. The **AFUWin** folder has two subfolders: **32** (used for 32-bit OS) and **64** (used for 64-bit OS). If you have a 32-bit system, go to step 13. If you have a 64-bit system, go to step 14.
13. **If you have a 32-bit system:** From folder **32**, copy just the *afuwin.exe* and *Ucoresys.sys* files and paste them into the folder you created in Section I, Step 1. Skip step 14 and go directly to step 15 below.
14. **If you have a 64-bit system:** From folder **64**, copy just the *afuwinx64.exe* and *Ucorew64.sys* files and paste them into the folder you created in Section I, Step 1. Go to Step 15 below.
15. At this point, you should have six files in the folder you created in Section I, Step 1:

For BIOS version AG10:	For a 32-bit system:	For a 64-bit system:
	<i>9536A10.ROM</i>	<i>9536A10.ROM</i>
	<i>HISTORY.TXT</i>	<i>HISTORY.TXT</i>
	<i>FLASHROM.CMD</i>	<i>FLASHROM.CMD</i>
	<i>README.TXT</i>	<i>README.TXT</i>
	<i>AFUWIN.exe</i>	<i>AFUWINx64.exe</i>
	<i>Ucoresys.sys</i>	<i>Ucorew64.sys</i>

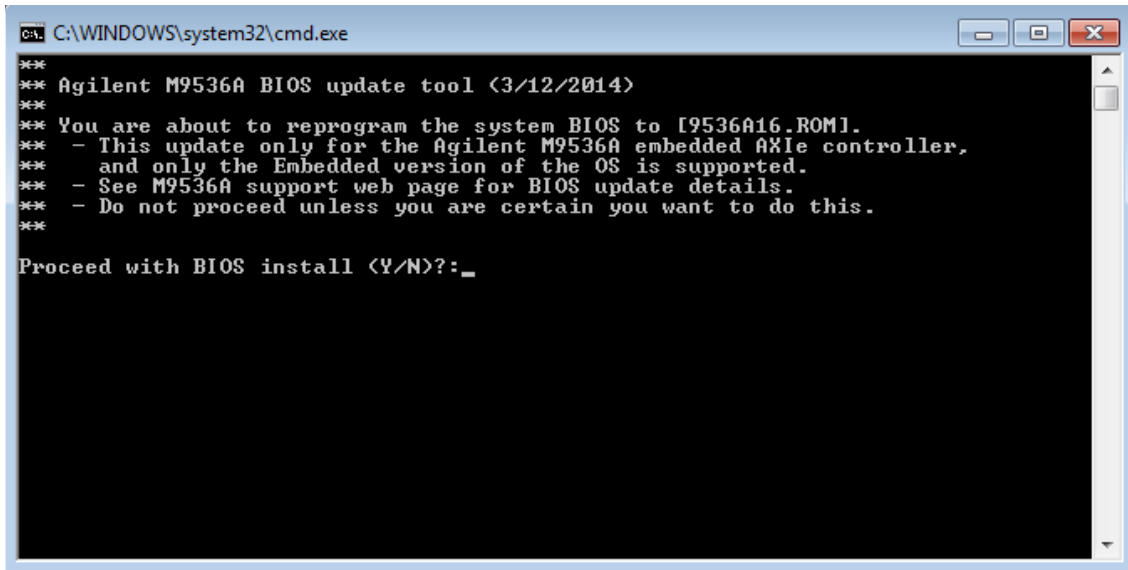
For BIOS version AG16:	For a 32-bit system:	For a 64-bit system:
	<i>9536A16.ROM</i>	<i>9536A16.ROM</i>
	<i>HISTORY.TXT</i>	<i>HISTORY.TXT</i>
	<i>FLASHROM.CMD</i>	<i>FLASHROM.CMD</i>
	<i>README.TXT</i>	<i>README.TXT</i>
	<i>AFUWIN.exe</i>	<i>AFUWINx64.exe</i>
	<i>Ucoresys.sys</i>	<i>Ucorew64.sys</i>

III. Update the M9536A BIOS

1. In Windows Explorer, navigate to the folder you created in Section I, Step 1.

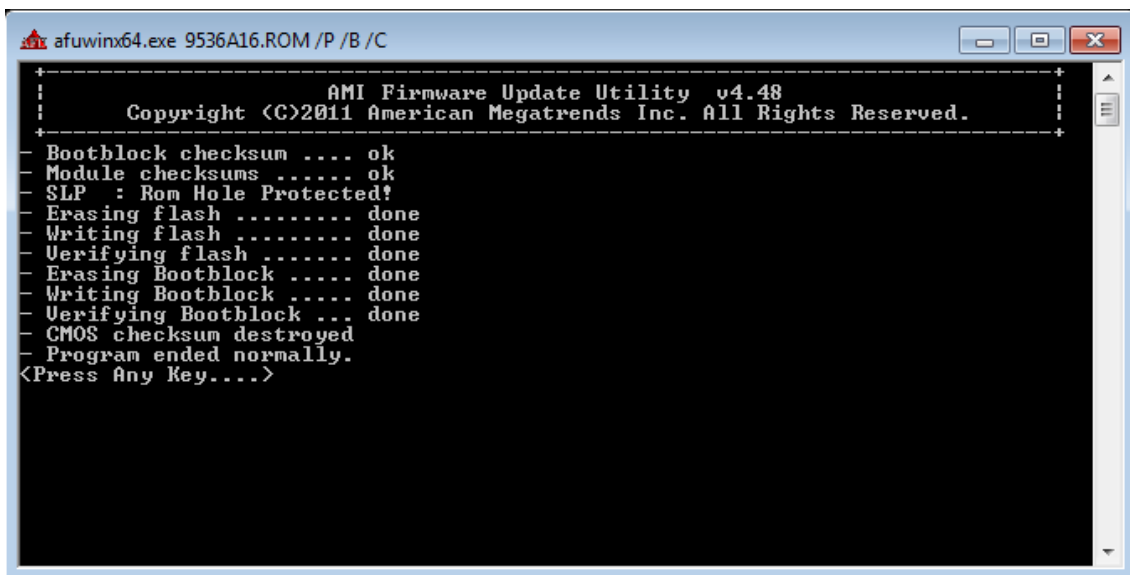
Note Updating or restoring the M9536A BIOS will cause any custom BIOS settings you may have made to be cleared. After updating your BIOS, you will need to manually reconfigure any custom settings using the BIOS Setup Utility.

2. To begin the BIOS update procedure, double click on the *FLASHROM.CMD* file. This opens the following CMD screen:



```
C:\WINDOWS\system32\cmd.exe
** Agilent M9536A BIOS update tool (3/12/2014)
**
** You are about to reprogram the system BIOS to [9536A16.ROM].
** - This update only for the Agilent M9536A embedded AXIe controller,
**   and only the Embedded version of the OS is supported.
** - See M9536A support web page for BIOS update details.
** - Do not proceed unless you are certain you want to do this.
**
Proceed with BIOS install (Y/N)?:_
```

3. Type **Y** and press **Enter**. Do not cycle power until the BIOS has successfully updated. The screen shows the update process. When the update ends, the following screen appears:



```
afuwinx64.exe 9536A16.ROM /P /B /C
-----
                AMI Firmware Update Utility v4.48
      Copyright (C)2011 American Megatrends Inc. All Rights Reserved.
-----
- Bootblock checksum .... ok
- Module checksums ..... ok
- SLP : Rom Hole Protected!
- Erasing flash ..... done
- Writing flash ..... done
- Verifying flash ..... done
- Erasing Bootblock .... done
- Writing Bootblock .... done
- Verifying Bootblock ... done
- CMOS checksum destroyed
- Program ended normally.
<Press Any Key....>
```

4. Press any key to continue. This returns the display to the initial CMD window:


```

C:\WINDOWS\system32\cmd.exe
**
** Agilent M9536A BIOS update tool (3/12/2014)
**
** You are about to reprogram the system BIOS to [9536A16.ROM].
** - This update only for the Agilent M9536A embedded AXIe controller,
** and only the Embedded version of the OS is supported.
** - See M9536A support web page for BIOS update details.
** - Do not proceed unless you are certain you want to do this.
**
Proceed with BIOS install <Y/N>?:y
Doing BIOS update on 64-bit system...DO NOT CYCLE POWER...
...BIOS[9536A16.ROM] update complete.
At next boot, select F2 at the 'CMOS Checksum Bad' prompt.
Reboot system.
Done.
Press any key to continue . . . _

```

5. Press any key to close the CMD window and return to Windows.
6. Cycle chassis power.

Note The first time the M9536A boots, it displays an American Megatrends, Inc. prompt stating, "CMOS Checksum Bad." You must press **F2** to load the default CMOS settings. Then press the **ESC** key to continue.

7. Cycle chassis power a second time. At startup, press the **Delete** key when the Agilent Splash screen appears. This opens the BIOS menu displaying the installed version of BIOS. Verify that the BIOS version that you programmed (either AG10 or AG16) is displayed. Configure any other settings as needed. Save, and then exit the BIOS Setup.

