



American Megatrends

Aptio Utility Overview

AMI-China

Get your computer addicted to AMIBIOS

Confidential - NDA Required

Slide 1

1.800.UBUYAMI



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Agenda

❧ AFU (AMI Firmware Update)

❧ 命令列下的 Firmware Update Utility 在 DOS, EFI, Windows, Linux 和 FreeBSD

❧ WinFlash

❧ Windows 下的 GUI Flash Update Utility.

❧ ChangeLogo

❧ OEM Logo Customization Utility for Windows.

❧ MMTool (Module Management Tool)

❧ Module Management Tool 让使用者管理 Aptio firmware image 所包含的 firmware modules

❧ DMIEDIT (Desktop Management Interface Editor)

❧ Desktop Management Interface Edit 让使用者更改 SMBIOS tables 下的字串

AMI Firmware update

🌀 **AFU** 是 **utilities** 系列中，用于更新 **system Firmware** 的工具，可用在不同的环境下：

- **DOS**
- **EFI**
- **Windows**
- **Linux**
- **FreeBSD**

🌀 **AFU** 需要 **Aptio Firmware** 具备 **SMI Flash Support**

AFU – 使用

➤ **afuxxx /i<ROM filename> [/o<save ROM filename>] [/n] [/p[b][n][c]] [/m][/q] [/h]**

➤ **/i – Input Firmware File to be flashed**

➤ **/o – Name of the firmware file to save after reading from the Flash.**

➤ **/n - Don't check ROM ID**

➤ **/pbn -**

- **b - Program Boot Block (recovery firmware volume)**

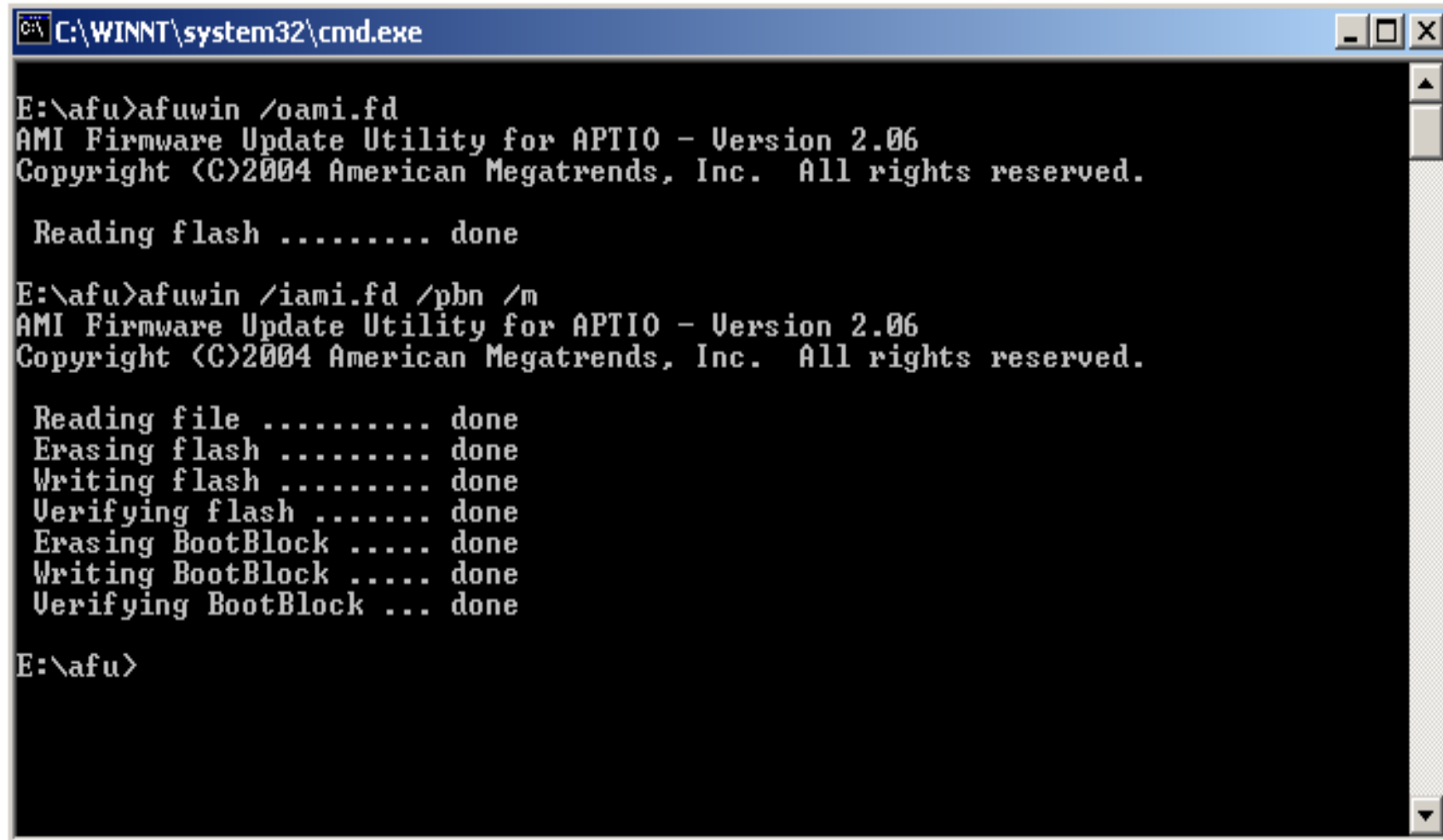
- **n - Program NVRAM (non-volatile firmware volume)**

➤ **/m - Clear SMBIOS string**

➤ **/h - Print help**

➤ **/q - Silent execution**

AFU - Screen Shot



```
C:\WINNT\system32\cmd.exe

E:\afu>afuwin /oami.fd
AMI Firmware Update Utility for APTIO - Version 2.06
Copyright (C)2004 American Megatrends, Inc. All rights reserved.

Reading flash ..... done

E:\afu>afuwin /iami.fd /pbn /m
AMI Firmware Update Utility for APTIO - Version 2.06
Copyright (C)2004 American Megatrends, Inc. All rights reserved.

Reading file ..... done
Erasing flash ..... done
Writing flash ..... done
Verifying flash ..... done
Erasing BootBlock ..... done
Writing BootBlock ..... done
Verifying BootBlock ... done

E:\afu>
```

WinFlash

- ❧ WinFlash 是 AMI's GUI based Firmware Update Utility 符合 Windows flavors
- ❧ WinFlash 让使用者可以
 - ❧ 存储现有的 **firmware image**
 - ❧ 更新现有的 **firmware image**
 - ❧ 依需要可选择 **update BootBlock, NVRAM and SMBIOS Strings.**
 - ❧ **Create a recovery diskette for safety reasons.**
- ❧ The following slides shows the screen shots of the functionality of WinFlash

WinFlash - Screen Shot



MMTool - Extract

MMTool Aptio- ami.fd

Load Image
Save Image
Save Image as..
Close

Insert Replace Delete Extract

Module file: D:\Aptio\Images\FtwLite Browse

File Index 07
Volume Index 00

Extract FFS
☐ Extract As is
☒ Extract uncompressed

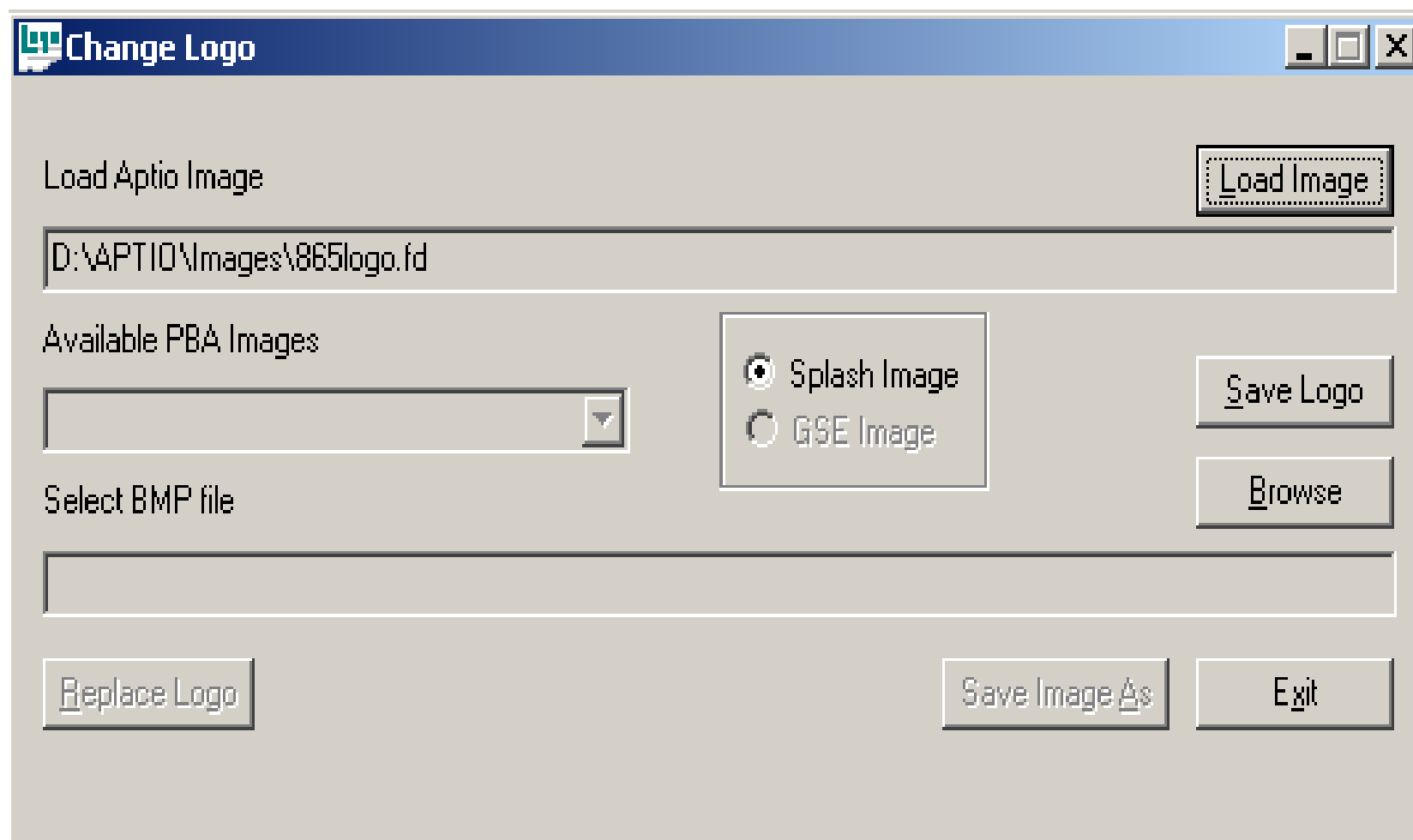
Extract

V...	Index	FileName	Source size	GUID
00	00	Cpulo	00000AD0	BAE7599F-3C6B-43B7-BDF0-9CE07AA91
00	01	HtCpu	00003340	10527025-78B2-4D3E-A9DF-41E75C220I
00	02	Cf9Reset	00000530	CB6A8307-7BDD-49E5-B291-F8E58FC0F
00	03	LegacyMetronome	00000210	07A9330A-F347-11D4-9A49-0090273FC1
00	04	PcRtc	00000C58	378D7B65-8DA9-4773-B6E4-A47826A83
00	05	AcpiS3Save	00000640	2BDED685-F733-455F-A840-43A22B791I
00	06	Crc32SectionExtract	000002B0	51C9F40C-5243-4473-B265-B3C8FFAFF9
00	07	FtwLite	00000EB8	4C862FC6-0E54-4E36-8C8F-FF6F316795
00	08	MonotonicCounter	00000390	AD608272-D07F-4964-801E-7BD3B7888
00	09	Runtime	00000988	B601F8C4-43B7-4784-95B1-F4226CB40C
00	0A	SecurityStub	00000188	F1EFB523-3D59-4888-BB71-EAA5A9662
00	0B	Variable	000011F0	CBD2E4D5-7068-4FF5-B462-9822B4ADE

ChangeLogo

- ❧ ChangeLogo 是一个 GUI based utility 让使用着去自定义 OEM logo 和 PBA Images 在 Aptio Firmware Image 里
- ❧ The logo can be changed and customized without rebuilding the source
- ❧ ChangeLogo is supported all flavors of Windows
- ❧ The ChangeLogo utility requires that the input file be an Aptio firmware file with an existing logo module

Changelogo - Screen Shot



DMIEDIT

- ❧ DMIEDIT allows the user to modify strings associated with SMBIOS tables
- ❧ This utility works with Aptio firmware that includes SMBIOS support
- ❧ 使用者可以用 **DMIEDIT** 去更改下列的SMBIOS tables
 - ❧ **System**
 - ❧ **Base Board**
 - ❧ **Chassis**
 - ❧ **OEM String**
- ❧ DMIEDIT is supported in DOS/EFI and Microsoft Windows 9x/2000/XP

DMIEDIT - Working

- ❧ DMIEDIT requires an input file in a specific format
- ❧ The input file must include at least one SMBIOS table entry
- ❧ Each SMBIOS table entry contains the SMBIOS table type name followed by the strings to be edited
- ❧ The DMIEDIT program can fail if it encounters an error in the input file
- ❧ Run the utility from the command prompt with the input file
 - ❧ `C:\dmiedit set.dms <Enter>`

SET.DMS - Example

🌀 The following is an example of an input file

[System]

Manufacturer = AMI

Product = Dummy

Version = 6.22

SerialNum = 123455

[BaseBoard]

Manufacturer = AMI

Product = Dummy

Version = 1.22

SerialNum = 122333

[Chassis]

Manufacturer = AMI

Version = 1.22

SerialNum = 12222

TagNum = 122212



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