Aptio* V Integrator Tool - iFlashV
User Guide

December 2025



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Revision History

Date	Revision	Description
December 2019	1.0	Initial release.
May 2020	2.0	Additional command line examples.
December 2020	3.0	Edited OEM Key command syntax, taking the space out between “a/:” and “<OEM….
January 2021	4.0	Added Tiger Lake Support
October 2021	5.0	• Added error when using unsupported options or commands • Fixed issue: “49-Error: A Platform condition has prevented executing”, caused by some Crucial memory SO-DIMMs.
December 2023	6.0	ASUS rebrand
November 2024	7.0	Remove amifldrv32.sys and amifldrv64.sys driver
December 2025	8.0	“/k1” is replaced by “/logo” due to layout design change.

1.0 Introduction

ASUS® Aptio* V Integrator Tools are designed to assist integrators (who usually work in manufacturing or enterprise environment) with the process of BIOS/SMBIOS customization, OEM Windows* product key injection (OEM Activation 3.0, OA3), changing the Logo, etc. of ASUS® NUC AptioV based products.

The table describes the purpose of each of the Tools.

Tool	Description
iFlashV	iFlashV is a command line tool that allows you to: • Update the system BIOS • Update a logo image • Insert a specific OEM activation key
iDmiEdit	iDmiEdit (Desktop Management Interface Edit) allows you to modify strings associated with SMBIOS tables.
iCHLogo	iCHLogo allows you to replace the default ASUS logo image with a custom image.
iSetupCfg	iSetupCfg is a command line tool which provides you an easy way to update NVRAM variables from within the EFI, Linux*, or Windows*-based environment. You can: • Extract variables directly from the BIOS. • Change settings using a text editor and then update the BIOS with the custom settings.

2.0 iFlashV User Guide

2.1 Overview

iFlashV is a package of utilities used to update the system BIOS under various operating systems.

Notes
• **BIOS update may have some potential risks so that ASUS suggests closing all programs and stopping anti-virus software temporarily.** • **DO NOT power off or restart the computer when the system is reading or updating the BIOS.** • **DO NOT remove the hard disk or USB or any devices during a BIOS update.**

2.2 Requirements

2.2.1 Supported Operating Systems

iFlashV is supported by the following operating systems:

iFlashV for Windows	• iFlashVWin32.exe is supported on Windows 32-bit operating systems. It requires amigendrv32.sys. (both are included in the download). • iFlashVWin64.exe is supported on Windows 64-bit operating systems. It requires amigendrv64.sys. (both are included in the download).
iFlashV for EFI	• iFlashVEfi32.efi: is supported in EFI shell. • iFlashVEfi64.efi: is supported in EFIx64 shell.
iFlashV for Linux	• iFlashVLnx32 is supported in Linux 32-bit operating systems. • iFlashVLnx64 is supported in Linux 64-bit operating systems.

2.2.2 Firmware Requirements

The iFlashV application requires that the input file be a **BIOS capsule file** (e.g. **FN0039.CAP**).

2.3 iFlashV Usage

The iFlashV application operates in command line mode. The below command switches are supported

2.3.1 Command Line Switches

/q	Silent (quiet) execution
/k1 /logo	Program the non-critical block for splash screen logo update
/a: <filename.bin>	OEM Activation file
/oad	Delete OEM Activation Key
/jbc	Bypass the AC adapter and battery check. *By default, iFlashV checks that an AC adapter is connected or if the battery has enough power to complete a BIOS update. If you're not running iFlashV on a laptop, you can use the /jbc switch to bypass this check.*
/cmd:"{OAID:OEMID:OEMTBLID}"	Input of the OEM ID and OEMTABLE ID that will be associated with the key. • OEM ID must be 6 characters • OEM Table ID must be 8 characters. If either of these is less than the required length, fill with spaces.

2.3.2 Update the BIOS Version

The BIOS update operation has the following syntax, dependent on the operating system:

OS / Environment	**Command syntax**
Windows 64-bit	iFlashVWin64 <BIOS capsule file> [/q] [/jbc]
Windows 32-bit	iFlashVWin32 <BIOS capsule file> [/q] [/jbc]
EFIx64 shell	iFlashVEfi64 <BIOS capsule file> [/q] [/jbc]
EFI shell	iFlashVEfi32 <BIOS capsule file> [/q] [/jbc]
Linux 32-bit	iFlashVLnx32 <BIOS capsule file> [/q] [/jbc]
Linux 64-bit	iFlashVLnx64 <BIOS capsule file> [/q] [/jbc]

Example: **iFlashVWin64 FN0039.cap**

2.3.3 POST Splash Screen Logo Update

The following command updates the logo image from the input BIOS capsule file.

OS / Environment	Command syntax
Windows 64-bit	iFlashVWin64 <BIOS capsule file> </k1> [/jbc]
Windows 32-bit	iFlashVWin32 <BIOS capsule file> </k1> [/jbc]
EFIx64 shell	iFlashVEfi64 <BIOS capsule file> </k1> [/jbc]
EFI shell	iFlashVEfi64 <BIOS capsule file> </k1> [/jbc]
Linux 32-bit	iFlashVLnx32 <BIOS capsule file> </k1> [/jbc]
Linux 64-bit	iFlashVLnx64 <BIOS capsule file> </k1> [/jbc]

You must use the iCHLogo application to generate a new BIOS capsule file with your own custom logo image before using iFlashV to install the new logo.

Note: due to new BIOS layout design since NUC16, </k1> is replaced by </logo>.

2.3.4 OEM Windows Key Injection

This feature is used to inject a Windows product key into the BIOS for OEM activation. This tool supports the OEM Activation 3.0 (OA 3.0) process as defined by Microsoft.

The /a command inserts a specific OEM activation key into the empty key inside the current system BIOS.
The command line is as follows:

OS / Environment	Command syntax
Windows 64-bit	iFlashVWin64 /a:<OEM Activation Key Bin File Name> [/cmd:"{OAID:OEMID:OEMTBLID}"]
Windows 32-bit	iFlashVWin32 /a:<OEM Activation Key Bin File Name> [/cmd:"{OAID:OEMID:OEMTBLID}"]
EFIx64 shell	iFlashVEfi64 /a:<OEM Activation Key Bin File Name> [/cmd:"{OAID:OEMID:OEMTBLID}"]
EFI shell	iFlashVEfi64 /a:<OEM Activation Key Bin File Name> [/cmd:"{OAID:OEMID:OEMTBLID}"]
Linux 32-bit	iFlashVLnx32 /a:<OEM Activation Key Bin File Name> [/cmd:"{OAID:OEMID:OEMTBLID}"]
Linux 64-bit	iFlashVLnx64 /a:<OEM Activation Key Bin File Name> [/cmd:"{OAID:OEMID:OEMTBLID}"]

Note:

- <OEM Activation Key Bin File Name> is the path and filename of the OEM activation key file with extension.
- OEM ID must be 6 characters
- OEM Table ID must be 8 characters.

If either the OEM ID or OEM Table ID is less than the required length, fill with spaces.

Make sure that the OEM Activation Key region is empty before inserting the key or perform the /OAD command before insertion to delete the current key.

Example command line: **iFlashVWin64 /a:D:\OEMKeys.bin /cmd:"{OAID:ABCDEF:12345678}"**