

megawin

USB DFU

User Manual

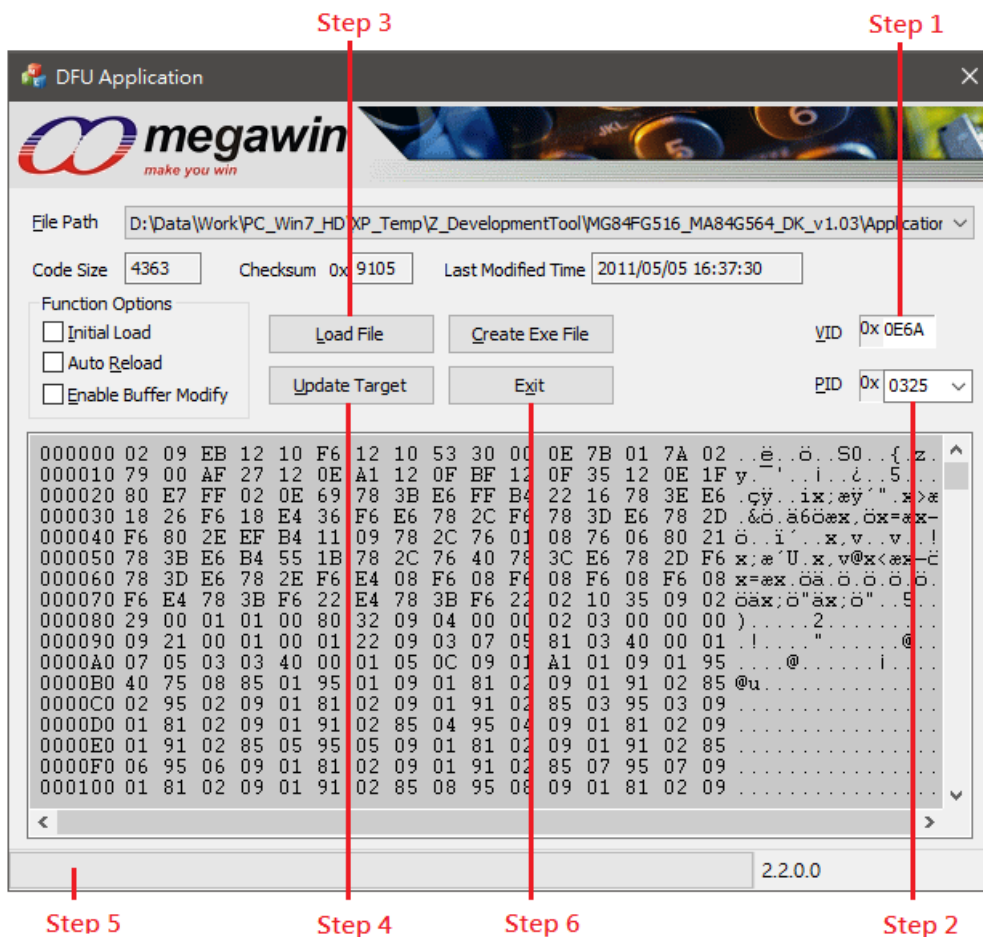
Device Firmware Upgrade

1 Introduction

DFU (Device Firmware Upgrade) can perform Firmware Upgrade directly through USB Cable, without reconnecting Device, by taking some simple steps. Please refer to the following detail steps.

2 Use DFU (Fig-1)

2.1 Normal Operation



(Fig-1)

Step1: This ID is registered at USB-IF by Vender. (" 0x0E6A " is registered under Megawin

Technology Co., Ltd. at USB-IF. Any third party needs the written approval from Megawin in order to use this VID.)(****note**)

Step2: This is a product ID that defined by vendor. (****note**)

Step3: “**Load File**“ which you want to upgrade.

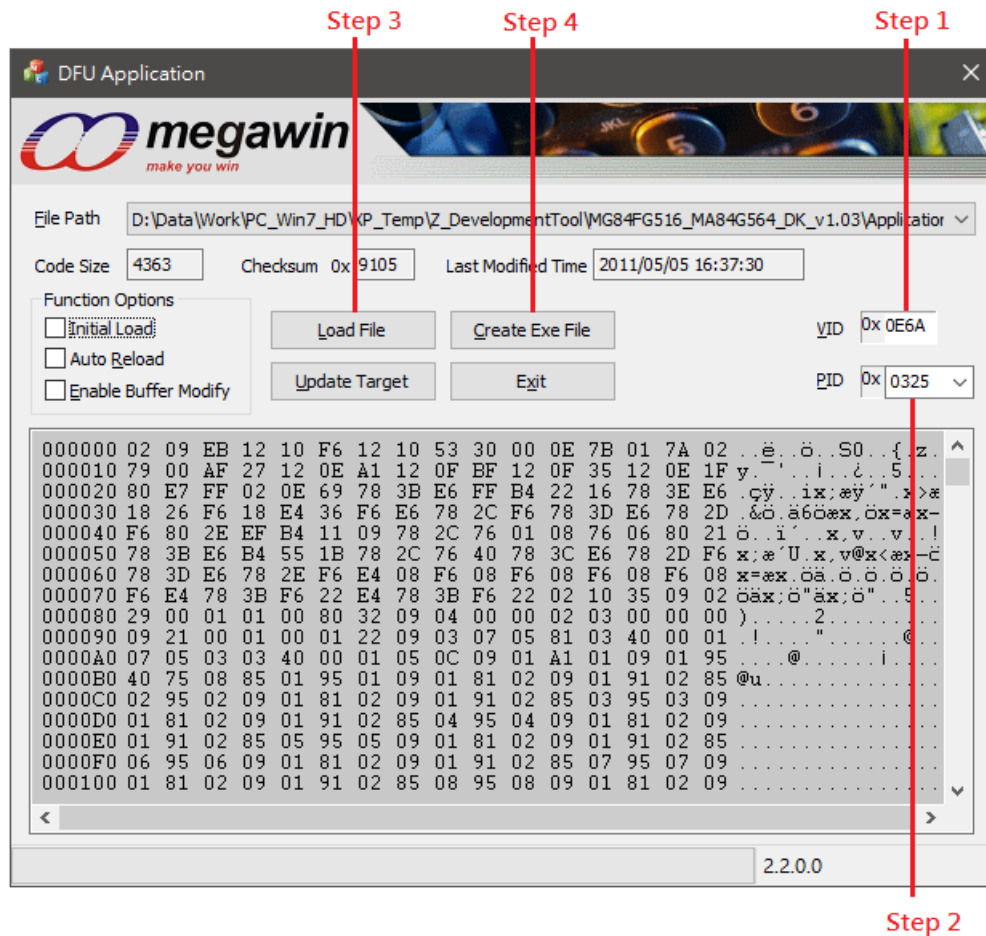
Step4: “**Update Target**“ to process update procedure.

Step5: Upgrade information will be shown in here.

Step6: “**Exit**” will exit the DFU Application.

****note:** If the user has manual switched the Device to DFU section (as stated at following Q2), this step could be omitted

2.2 Specially Operation



(Fig-2)

Step 1: Do like the step1 in section 2.1.

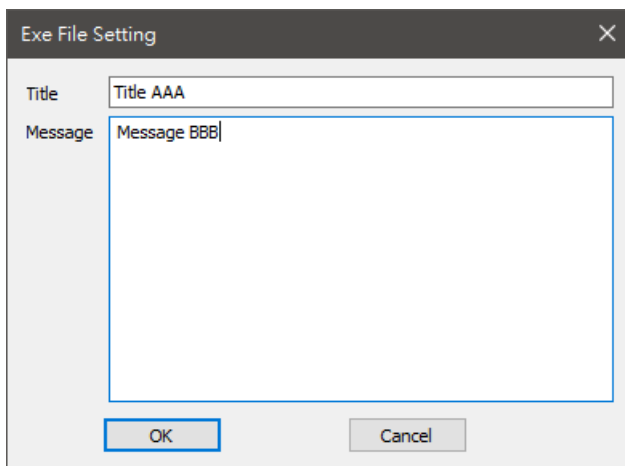
Step 2: Do like the step2 in section 2.1

Step 3: Do like the step3 in section 2.1.

Step 4: “Create Exe File”. A dialog will be displayed as Fig-3.

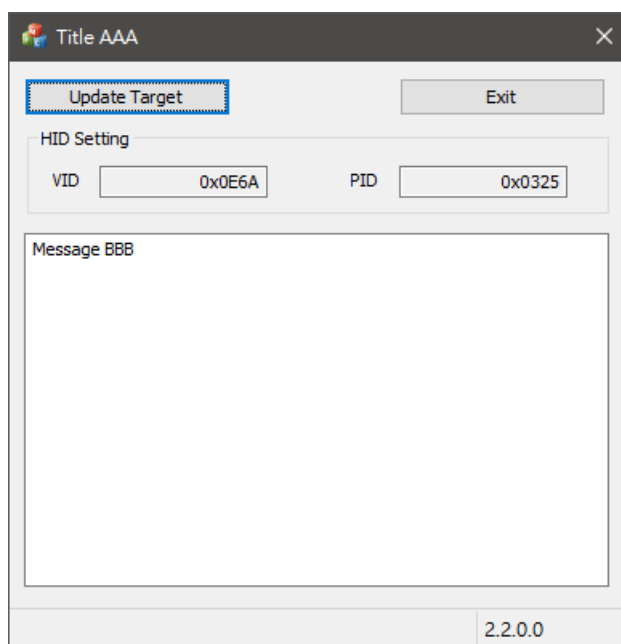
Step 5: Fill in the title and message to be displayed by the executable file, and then press “OK”.

Step 6: Enter the name of the file you want to save.



(Fig-3)

Step 7. Execute this program and the program will be as shown in Fig-4. Users only need to press “Update Target” to update the firmware.



(Fig-4)

2.3 Options

Auto Reload : If the option is checked. After user re-built the project in the Keil IDE and the hex file is changed. DFU application will reload the hex file.

Initial Load : When the application start up, it will load the most recent used file.

Enable Buffer Modify : User can modify the code buffer, the checksum will be updated.

3 FAQ

Q1 : Why appears an error message, “DFU_Reset_To_ISP_Fail !”, after pushing the “Upgrade” bottom?

Ans1 : Two reasons would lead to the situation. One is the different ID of VID and PID within the Device. The other is that while using Library of EasyCOM (without HID Interface Device) the user didn't manual switch the Device to DFU Section.

Q2 : How to manual switch the Device to DFU Section? Why we need this function?

Ans2 : User 47k resistor to pull low the P4.3 on MG84FL54 or P4.5 on MG84FG516 or PC5 on MG32F02U128/U64 and Enable RST (varies depending on each chip), then the device will boot from DFU section, This function enables the user to keep another track of performing DFU at the initial stage, where PC side AP is not available to trigger Device boot from DFU section.

Q3 : How to get the information about current VID and PID within the Device?

Ans3 : The user may use “ UVCView “ provided by Microsoft. (**Fig-2**)

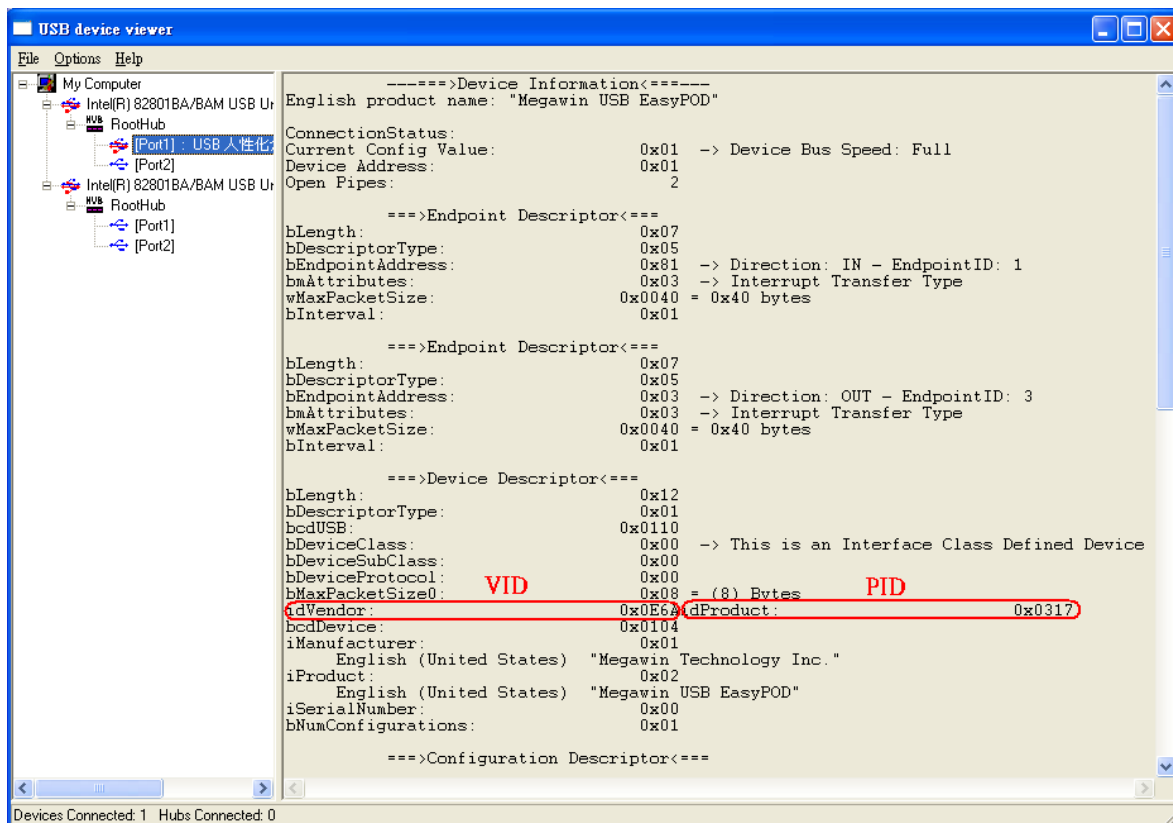


Fig-2

4. Revision History

Revision	Description	Date
v1.00	Initial version	2008/06/30
v1.11	Add the information status	2008/12/29
v1.20	Support MG84FG516 device	2011/04/01
v1.21	Update the Fig-1 Add the description about "Auto Reload Code"	2018/06/07
v1.22	Update the Fig-1 and logo	2021/05/26
v1.23	Support M0 DFU PID	2022/06/21
v2.00	Add Drop File and Initial Load functions Add the description about MG32F02U128/U64 in FAQ Q2.	2022/08/05
v2.01	Modify the description in Ans2.	2024/08/26
v2.02	Add "Enable Buffer Modify" Add "Create Exe File"	2025/06/05