

UM0412 DfuSe 실습

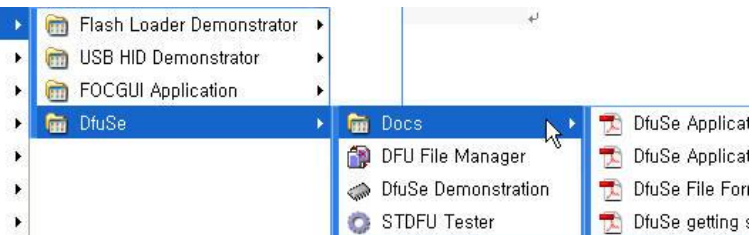
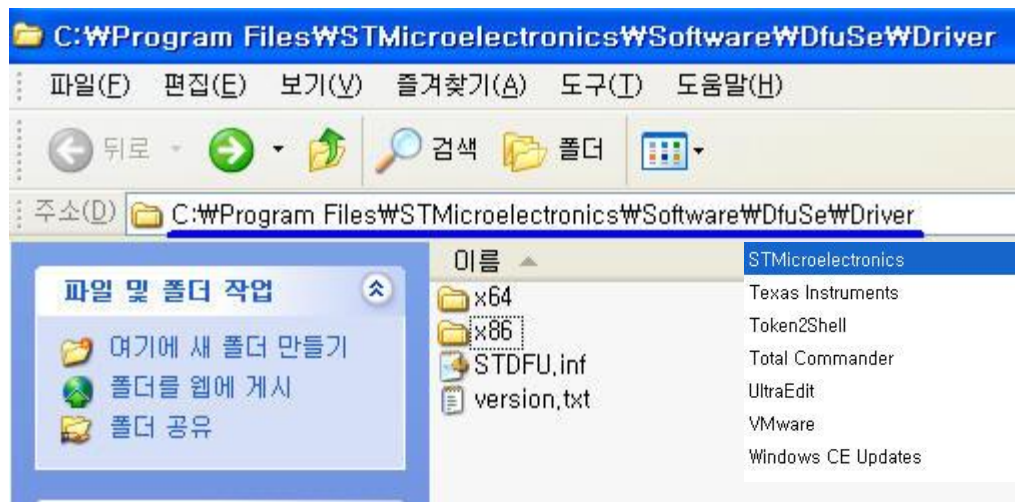
2009.11.20

UM0412. DfuSe USB device firmware upgrade

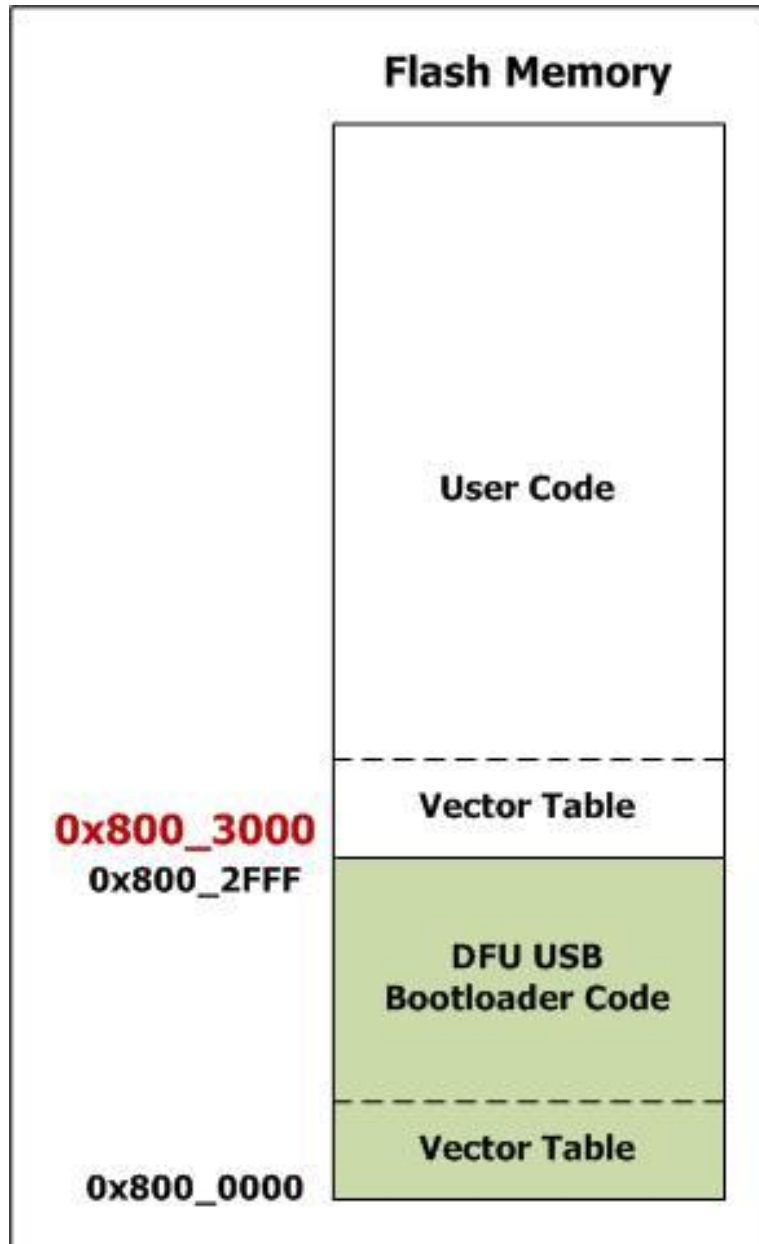
User Manual						
Reference	Description	Version	Date	Size	File	File
UM0462	STM32™ and STM8™ Flash loader demonstrator	6	Jul-2009			
UM0412	DfuSe USB Device Firmware Upgrade STMicroelectronics Extension	4	Jul-2009			
UM0424	STM32F10xxx USB-FS-Device development kit	7	May-2009			
UM0685	CEC (consumer electronic control) C library using the STM32F101xx, STM32F102xx and	1	Mar-2009			

- <http://www.st.com/mcu/devicedocs-STM32F103RE-110.html>
- 13379.pdf, um0412.zip
- um0412.zip 압축을 푼다
 - DfuSe_Demo_V3.0_Setup.exe
 - version.txt
- DfuSe_Demo_V3.0_Setup.exe를 실행해서 설치

DfuSe Demo 설치



Flash Structure



DFU main

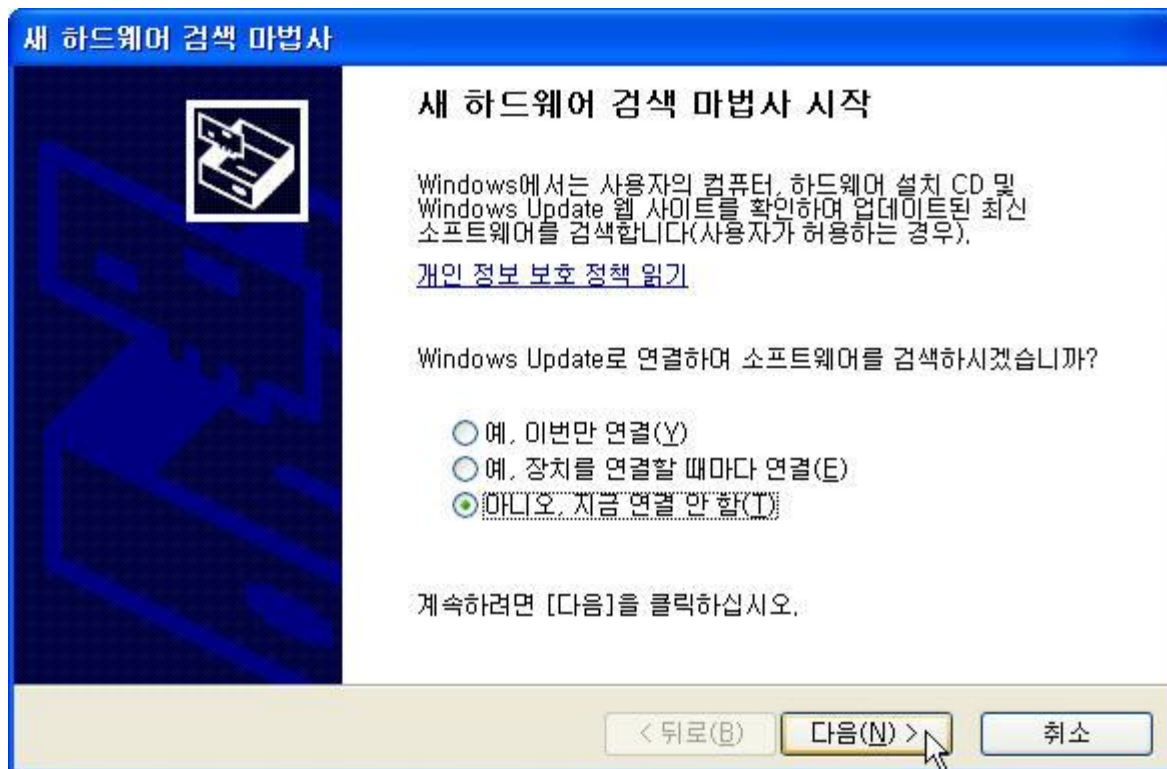
```
#define ApplicationAddress 0x08003000
int main(void) {
.....
if (DFU_Button_Read() == 0x00) {
    if (((*(__IO uint32_t*)ApplicationAddress) & 0x2FFE0000 ) == 0x20000000)
    { /* Jump to user application */
        JumpAddress = *(__IO uint32_t*) (ApplicationAddress + 4);
        Jump_To_Application = (pFunction) JumpAddress;
        /* Initialize user application's Stack Pointer */
        __set_MSP(*(__IO uint32_t*) ApplicationAddress);
        Jump_To_Application();
    }} /* Otherwise enters DFU mode to allow user to program his application */

    /* Enter DFU mode */
    DeviceState = STATE_dfuERROR;
    DeviceStatus[0] = STATUS_ERRFIRMWARE;
    DeviceStatus[4] = DeviceState;

    Set_System();
    Set_USBClock();
    USB_Init();

.....
}
```

Driver 설치 (1)

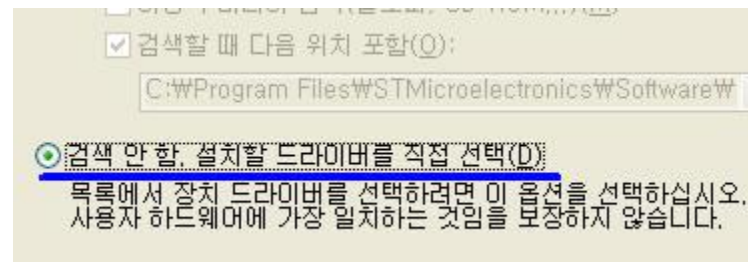


하드웨어에 포함된 설치 CD 또는 플로피 디스크가
있으면 지금 삽입하십시오.

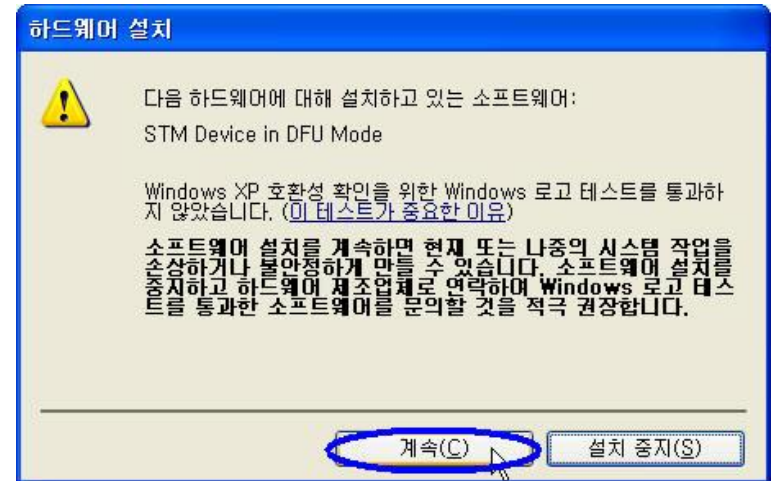
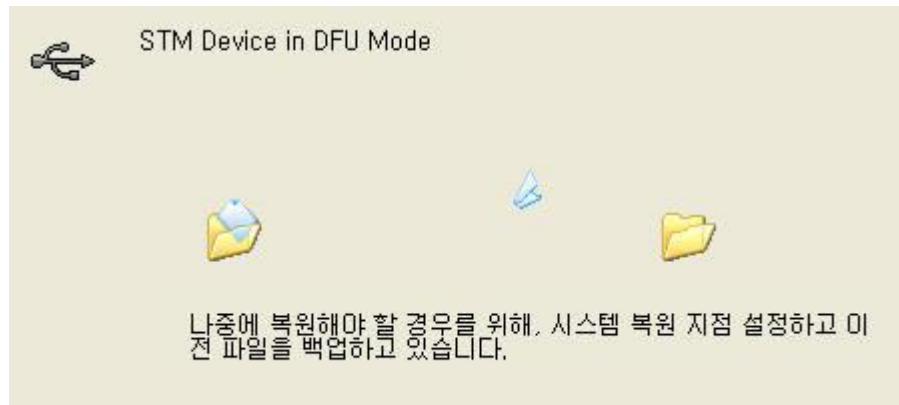
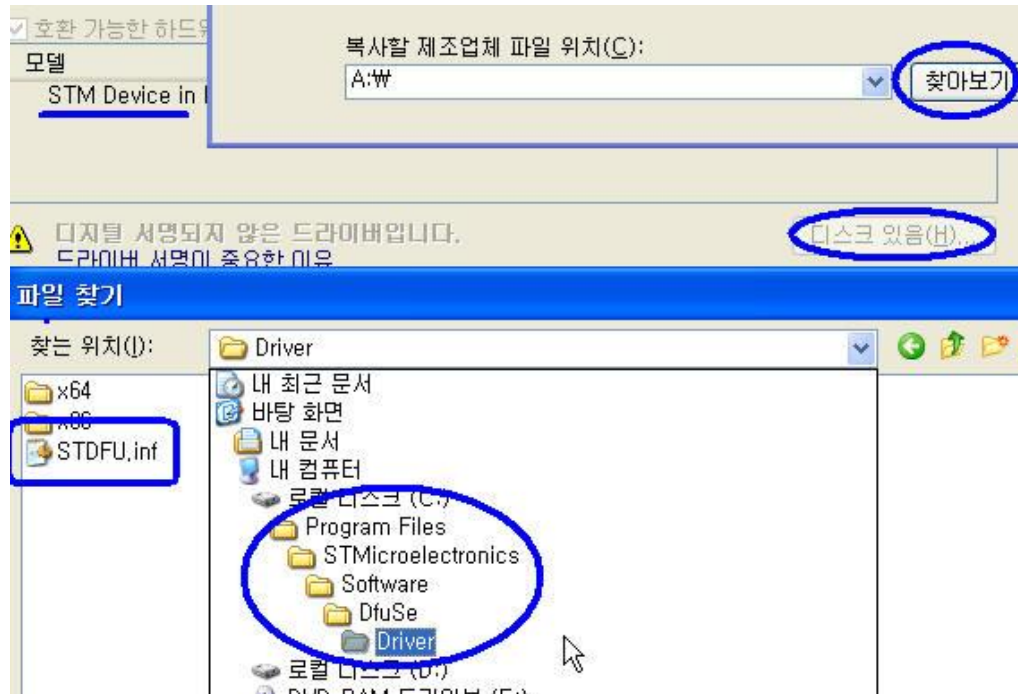
원하는 작업을 선택하십시오.

- ☐ 소프트웨어 자동으로 설치(권장)(I)
- ☒ 목록 또는 특정 위치에서 설치(고급)(S)

계속하려면 [다음]을 클릭하십시오.

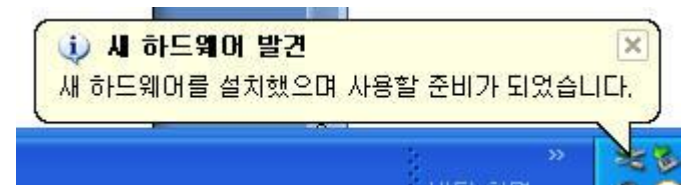
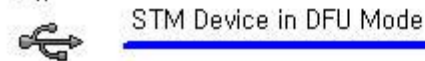


Driver 설치 (2)



새 하드웨어 검색 마법사 완료

이 마법사가 다음 하드웨어에 대한 소프트웨어 설치를 끝냈습니다.



KeyInterrupt_for_DFU 변경 사항

026, 안동대\SourceCode\Src, 5-1-3, KeyInterrupt_for_AN2557, IAP

Folder

inc
project
IAR
Debug
settings
stm32f10x_flash.icf
src
hw_config.c

Change Folder

inc
project
IAR
Debug
settings
stm32f10x_flash.icf
src
hw_config.c

D:\WkPjt\외부교육\E091026, 안동대\SourceCode\Src, 5-1-3, KeyInter...

1 :tion handled by ICF editor, don't touch! ****/
2 :ation file-*/
3 le="\$TOOLKIT_DIR\$\config\ide\IcfEditor\a_v1_0.xml
4
5 ICFEDIT intvec start = 0x08002000;
6 ons-*/
7 ICFEDIT region ROM start = 0x08002000 ;
8 __ICFEDIT_region_ROM_end__ = 0x0807FFFF;
9 __ICFEDIT_region_RAM_start__ = 0x20000000;
10 __ICFEDIT_region_RAM_end__ = 0x2000FFFF;
11
12 ICFEDIT size cstack = 0x400;

D:\WkPjt\외부교육\E091026, 안동대\SourceCode\Src, 5-2-2, KeyInter...

1 :tion handled by ICF editor, don't touch! ****/
2 :ation file-*/
3 le="\$TOOLKIT_DIR\$\config\ide\IcfEditor\a_v1_0.xml
4
5 ICFEDIT intvec start = 0x08003000;
6 ons-*/
7 ICFEDIT region ROM start = 0x08003000 ;
8 __ICFEDIT_region_ROM_end__ = 0x0807FFFF;
9 __ICFEDIT_region_RAM_start__ = 0x20000000;
10 __ICFEDIT_region_RAM_end__ = 0x2000FFFF;
11
12 ICFEDIT size cstack = 0x400;

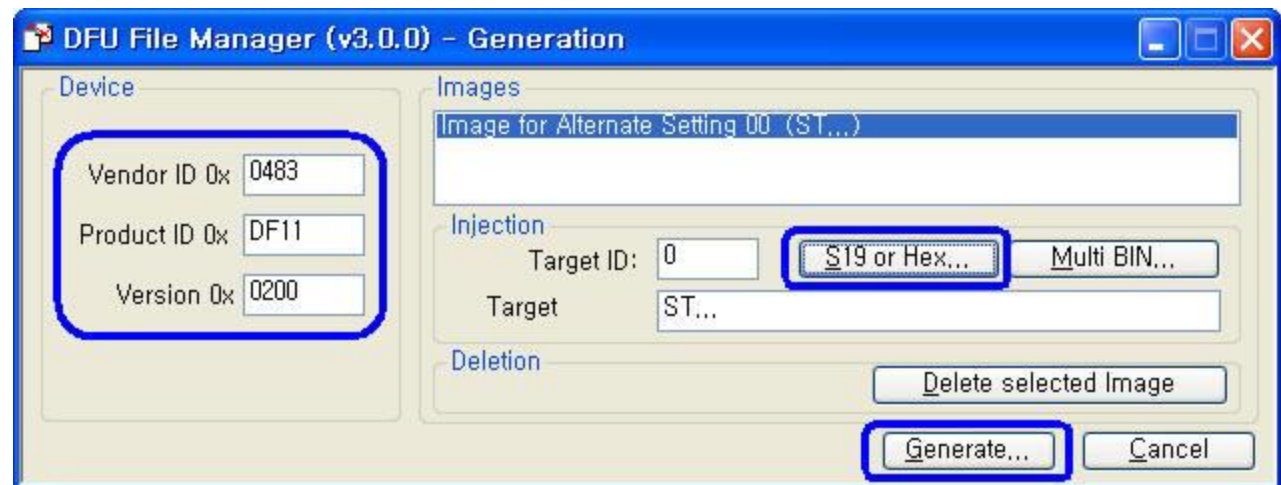
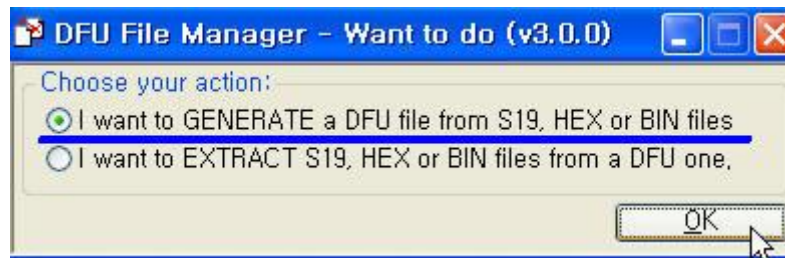
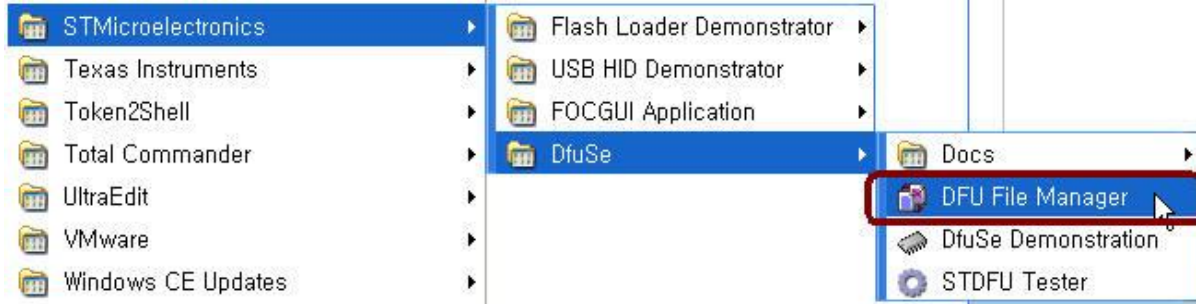
D:\WkPjt\외부교육\E091026, 안동대\SourceCode\Src, 5-1-3, KeyInter...

100 : None
101 *****
102 _Configuration(void)
103
104 InitTypeDef NVIC_InitStructure;
105
106 ECT_TAB_RAM
107 t the Vector Table base location at 0x20000000
108 SetVectorTable(NVIC_VectTab_RAM, 0x0);
109 VECT_TAB_FLASH */
110 t the Vector Table base location at 0x08000000
111 SetVectorTable(NVIC_VectTab_FLASH, 0x2000);
112

D:\WkPjt\외부교육\E091026, 안동대\SourceCode\Src, 5-2-2, KeyInter...

100 : None
101 *****
102 _Configuration(void)
103
104 InitTypeDef NVIC_InitStructure;
105
106 ECT_TAB_RAM
107 t the Vector Table base location at 0x20000000
108 SetVectorTable(NVIC_VectTab_RAM, 0x0);
109 VECT_TAB_FLASH */
110 t the Vector Table base location at 0x08000000
111 SetVectorTable(NVIC_VectTab_FLASH, 0x3000);
112

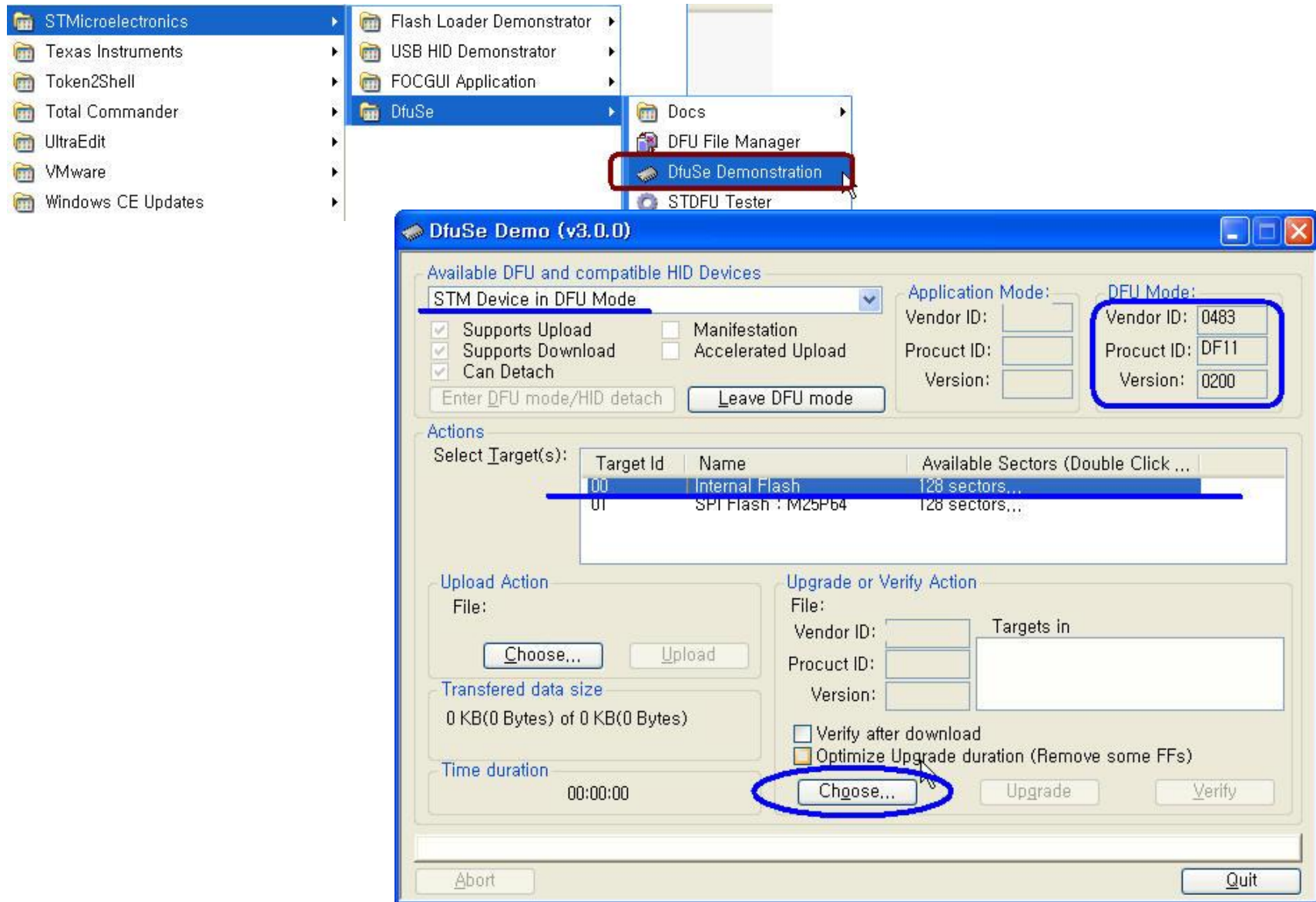
DFU File 변환



usb_desc.c Device Descriptor

```
uint8_t DFU_DeviceDescriptor[DFU_SIZ_DEVICE_DESC] =
{
    0x12, /* bLength */
    0x01, /* bDescriptorType */
    0x00, /* bcdUSB, version 1.00 */
    0x01,
    0x00, /* bDeviceClass : See interface */
    0x00, /* bDeviceSubClass : See interface*/
    0x00, /* bDeviceProtocol : See interface */
    bMaxPacketSize0, /* bMaxPacketSize0 0x40 = 64 */
    0x83, /* idVendor (0483) */
    0x04,
    0x11, /* idProduct (0xDF11) DFU PiD*/
    0xDF,
    0x00, /* bcdDevice*/
    0x02,
    .....
};
```

DfeSe Demo 이용 다운로드 작업 (1)



DfeSe Demo 이용 다운로드 작업 (2)

