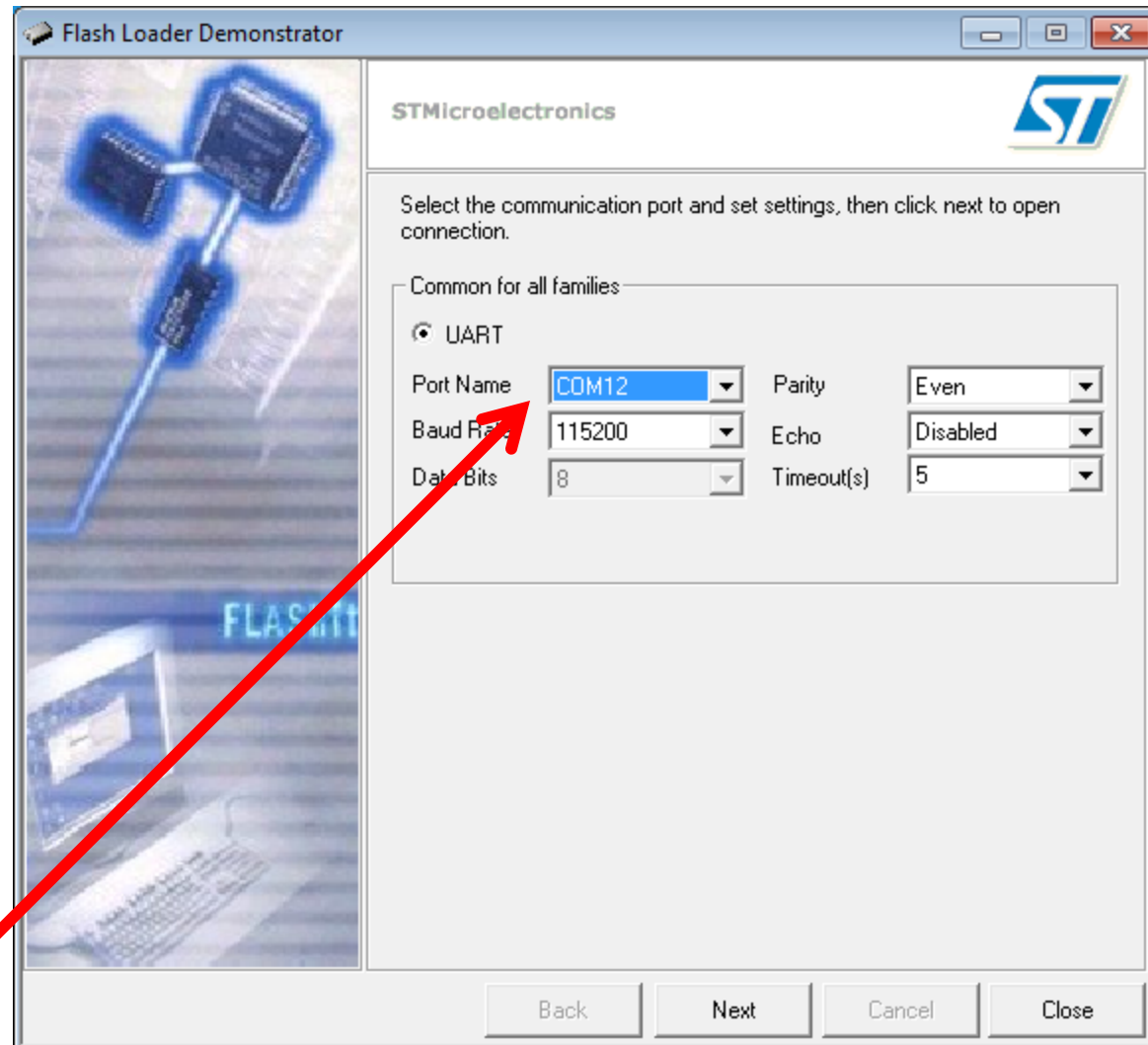


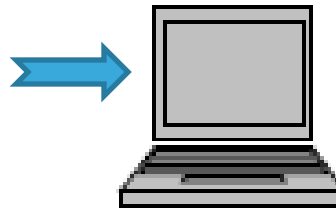
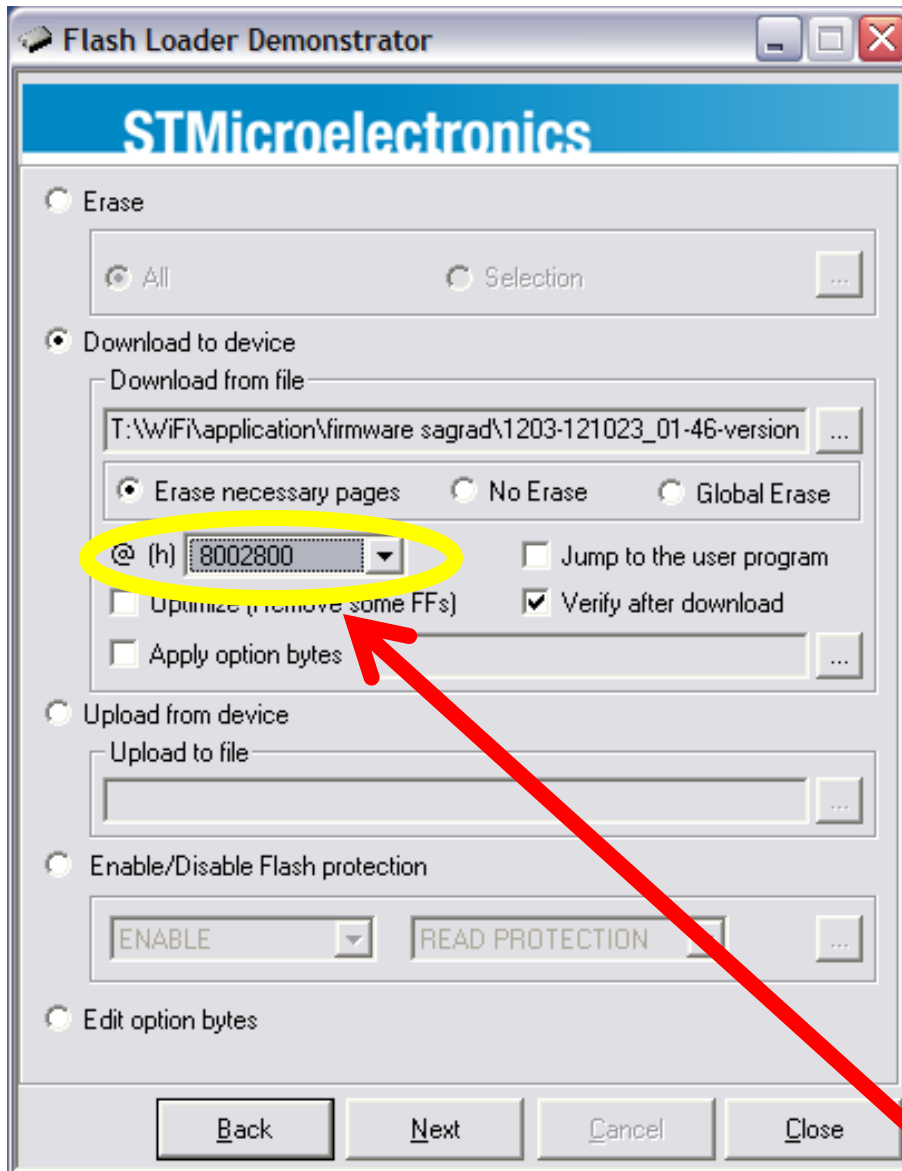
Firmware Upgrading Procedure on STM_WiFi via USB

This procedure use the system memory bootloader of the STM32

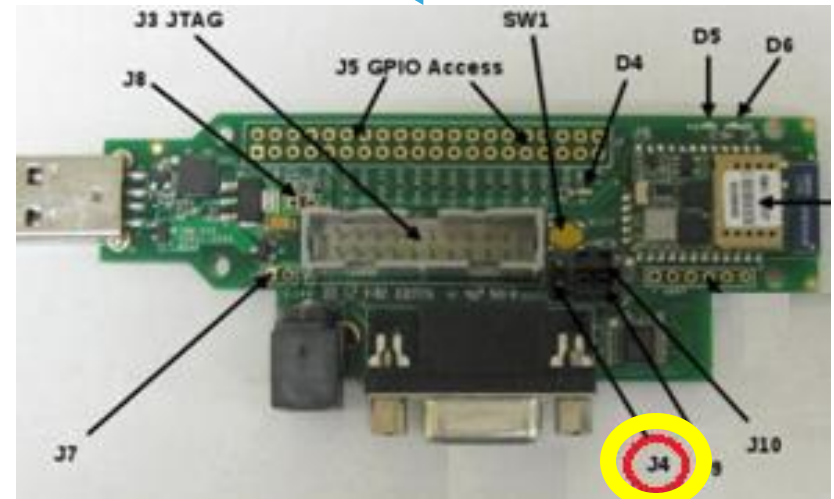
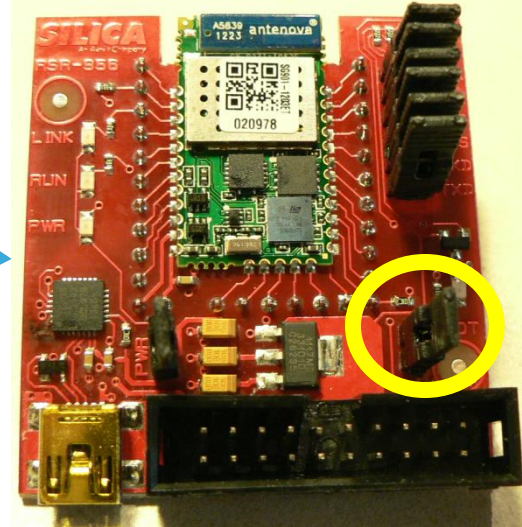
- Insert the jumper on the Boot pin present on the EvaBoard
- Connect the module to PC by USB
- Use the Flash Loader Demonstrator, an application available on the ST website
- **STM WiFi Port Name**



Firmware Upgrading Procedure on STM WiFi



USB
cable



Attention, Must be:
0x08002800

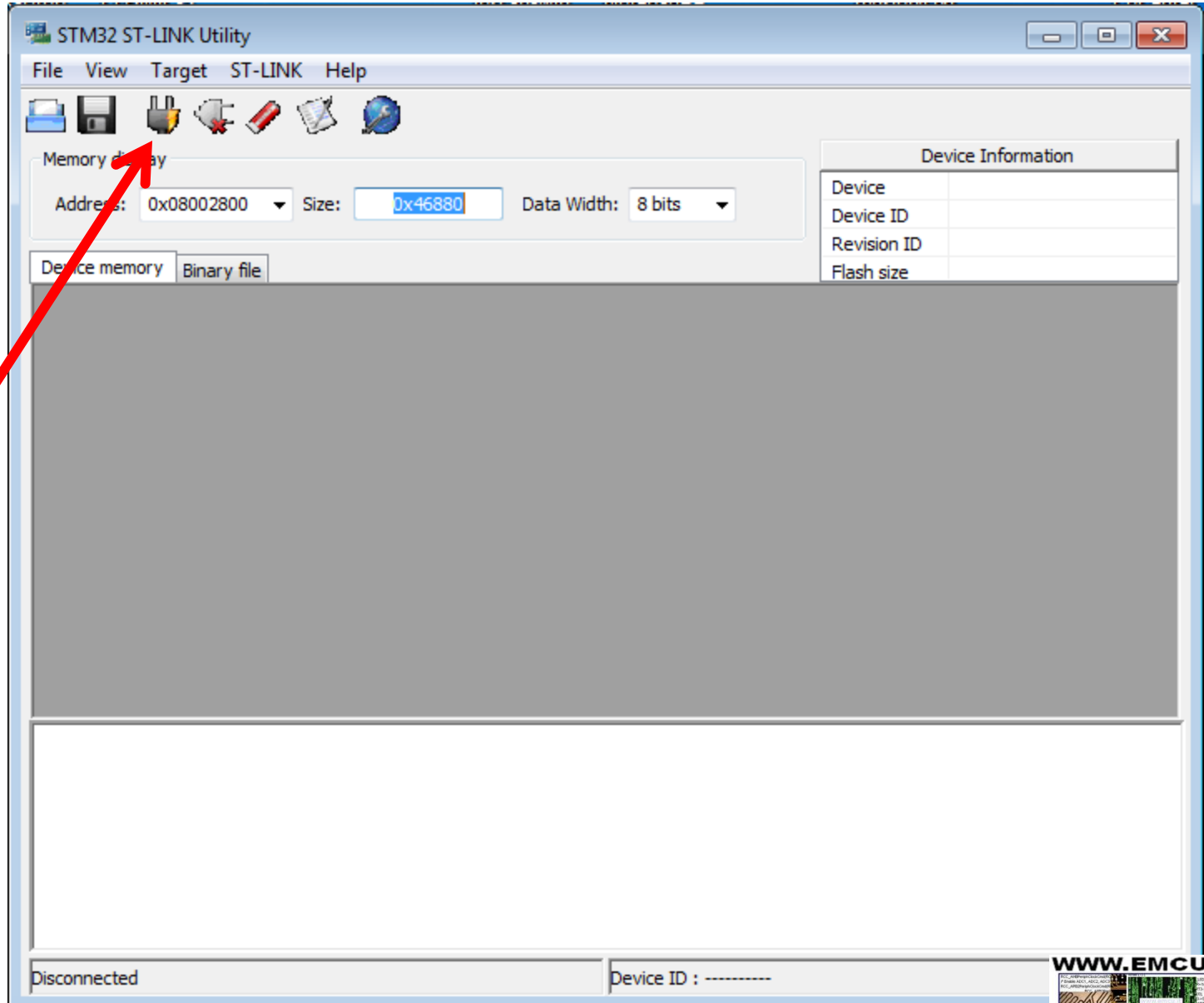
Firmware Upgrading Procedure on STM_WiFi

User FLOW Description

- To place the module in “firmware download” mode, the BOOT0 pin needs to be pulled high (3.3v). This is accomplished by installing the jumper on J4.
- Insert the dongle in a USB slot of the PC
- Run the Flash Loader Demonstrator (UART Baud rate 115200)
- Specify the file to be downloaded (i.e. 1203-121023_01-46-g7c6bd6b-stm_demo.bin)
- Specify the 8002800 as starting address (as in the figure). ATTENTION!!! BE CAREFUL TO SPECIFY THE RIGHT ADDRESS
- Follow the steps (default) until the end of the process
- Put the boot pin to 0 to disable the flash memory boot mode. (i.e. remove the jumper)
- Reset the dongle

If this procedure **fails**, update the SW via **ST-LINK-v2**, see next pages.

Firmware Upgrading Procedure on STM_WiFi via ST-LINK Utility



Click here

Firmware Upgrading Procedure on STM_WiFi via ST-LINK Utility

You must see something like this

STM32 ST-LINK Utility

File View Target ST-LINK Help

Memory display
Address: 0x08002800 Size: 0x46880 Data Width: 32 bits

Device Information

Device	...STM32F10xxx High-den
Device ID	0x414
Revision ID	Rev Z
Flash size	Kbytes 512

Device Memory @ 0x08002800 : Binary file

Address	0	4	8	C	ASCII
0x08002800	20010000	08002A29	080029E1	08003181	...) * . á) . . 1 . .
0x08002810	080029E1	080029E1	080029E1	00000000	á) . . á) . . á)
0x08002820	00000000	00000000	00000000	08024B1F K . .
0x08002830	080029E1	00000000	08024BC9	08024C05	á) É K . . L . .
0x08002840	080029E1	080029E1	080029E1	08002E85	á) . . á) . . á)
0x08002850	080029E1	080029E1	08008825	08008979	á) . . á) . . % ^ . . y % . . .
0x08002860	080089C1	08008A09	08008A51	080029E1	Á % . . . Š . . Q Š . . á) . .
0x08002870	080040C9	08004055	080029E1	080029E1	É @ . . U @ . . á) . . á) . .
0x08002880	080029E1	080029E1	080029E1	080029E1	á) . . á) . . á) . . á) . .
0x08002890	080029E1	080029E1	080029E1	08008899	á) . . á) . . á) . . ™ ^ . .

03:12:10 : Old ST-LINK firmware detected!
Please upgrade it from ST-LINK->'Firmware update' menu.

03:12:10 : Connected via SWD.

03:12:11 : Device ID:0x414

03:12:11 : Device flash Size : 512 Kbytes

03:12:11 : Device family :STM32F10xxx High-density device

Connected via SWD. Device ID:0x414

STM32 ST-LINK Utility

File View Target ST-LINK Help

Memory display
Address: 0x08002800 Size: 0x46880 Data Width: 8 bits

Device Information

Device	...STM32F10xxx High-den
Device ID	0x414
Revision ID	Rev Z
Flash size	Kbytes 512

Reading target memory...
Please wait...

Firmware update' menu.

-density device

Device ID:0x414



Firmware Upgrading Procedure on STM_WiFi via ST-LINK Utility

1

The screenshot shows the STM32 ST-LINK Utility interface with an 'Open' dialog box overlaid. A red arrow labeled '1' points to the 'File' menu in the utility. Another red arrow labeled '2' points to the selected file '1203-121218_01-30-gf756599-stm_demo.bin' in the Windows Explorer dialog. A third red arrow labeled '3' points to the 'Open' button in the dialog. The utility's console shows the following log messages:

```
03:12:10 : Old ST-LINK firmware detected!  
Please upgrade it from ST-LINK->Firm  
03:12:10 : Connected via SWD.  
03:12:11 : Device ID:0x414  
03:12:11 : Device flash Size : 512 Kbytes  
03:12:11 : Device family :STM32F10xxx High-den
```

The utility's status bar indicates 'Connected via SWD.' and 'Device ID:0x414'.



Firmware Upgrading Procedure on STM_WiFi via ST-LINK Utility

The screenshot shows the STM32 ST-LINK Utility application window. The main window has a menu bar (File, View, Target, ST-LINK, Help) and a toolbar. Below the toolbar is a 'Memory display' section with fields for Address (0x08002800), Size (0x46880), and Data Width (32 bits). A table titled 'Device Memory @ 0x08002800' shows memory addresses and their corresponding data. A 'Device Information' panel on the right lists: Device (...STM32F10xxx High-den), Device ID (0x414), Revision ID (Rev Z), and Flash size (Kbytes 512). A dialog box is overlaid on the memory display, containing a warning icon and the text: '[1203-121218_01-30-gf756599-stm_demo.bin] opened successfully. NOTE: The file is NOT downloaded to the device. Do you want to download it now?'. The dialog has 'OK' and 'Cancel' buttons, with a red arrow pointing to the 'OK' button. The bottom status bar shows 'Connected via SWD.' and 'Device ID:0x414'. The bottom log area contains the following text:

```
03:12:10 : Old ST-LINK firmware detected!  
           Please upgrade it from ST-LINK->'Firmware update' menu.  
03:12:10 : Connected via SWD.  
03:12:11 : Device ID:0x414  
03:12:11 : Device flash Size : 512 Kbytes  
03:12:11 : Device family :STM32F10xxx High-density device  
03:22:06 : [1203-121218_01-30-gf756599-stm_demo.bin] opened successfully.
```

Firmware Upgrading Procedure on STM_WiFi via ST-LINK Utility

1
Attention, Must be:
0x08002800

2

STM32 ST-LINK Utility

File View Target ST-LINK Help

Memory display

Address: 0x08002800 Size: 0x46880 Data Width: 32 bits

Device Information

Device	...STM32F10xxx High-den
Device ID	0x414
Revision ID	Rev Z
Flash size	Kbytes 512

Device Memory @ 0x08002800 : File : 1203-121218_01-30-gf756599-stm_demo.bin

Address	0	4	8	C	ASCII
0x00000000	20010000	08002A29	080029E1	08003181	...) * . á) . . 1 . .
0x00000010	080029E1				
0x00000020	00000000				
0x00000030	080029E1				
0x00000040	080029E1				
0x00000050	080029E1				
0x00000060	080089C1				
0x00000070	080040C9				
0x00000080	080029E1				
0x00000090	080029E1	080029E1	080029E1	08008899	á) . . á) . . á) . . .™ ^ . .

Download [1203-121218_01-30-gf756599-stm_demo.bin]

Start address : 0x08002800

File path : C:\STM\COMPONENTS\WIRELESS\WiFi1 Browse

Click "Program" to start programming.

Program Cancel

03:12:10 : Old ST-LINK firmware detected!
Please upgrade it from ST-LINK->'Firmware update' menu.

03:12:10 : Connected via SWD.

03:12:11 : Device ID:0x414

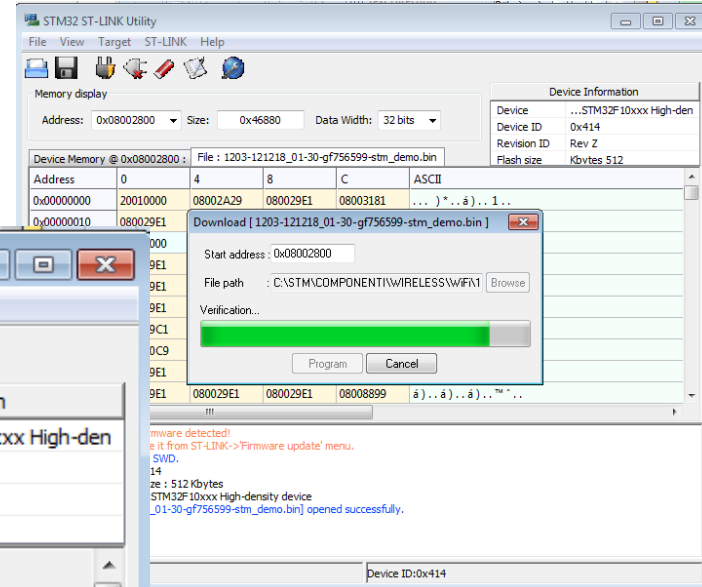
03:12:11 : Device flash Size : 512 Kbytes

03:12:11 : Device family :STM32F10xxx High-density device

03:22:06 : [1203-121218_01-30-gf756599-stm_demo.bin] opened successfully.

Connected via SWD. Device ID:0x414

Firmware Upgrading Procedure on STM_WiFi via ST-LINK Utility



STM32 ST-LINK Utility

File View Target ST-LINK Help

Memory display

Address: 0x08002800 Size: 0x46880 Data Width: 32 bits

Device Memory @ 0x08002800 : File : 1203-121218_01-30-gf756599-stm_demo.bin

Address	0	4	8	C	ASCII
0x08002800	20010000	08002A29	080029E1	08003181	...) * .. á) .. 1 ..
0x08002810	080029E1	080029E1	080029E1	00000000	á) .. á) .. á) ..
0x08002820	00000000	00000000	00000000	08024B1F K ..
0x08002830	080029E1	00000000	08024BC9	08024C05	á) .. É K .. L ..
0x08002840	080029E1	080029E1	080029E1	08002E85	á) .. á) .. á) ..
0x08002850	080029E1	080029E1	08008825	08008979	á) .. á) .. % ^ .. y % ..
0x08002860	080089C1	08008A09	08008A51	080029E1	Á % .. Š .. Q Š .. á) ..
0x08002870	080040C9	08004055	080029E1	080029E1	É @ .. U @ .. á) ..
0x08002880	080029E1	080029E1	080029E1	080029E1	á) .. á) .. á) ..
0x08002890	080029E1	080029E1	080029E1	08008899	á) .. á) .. á) .. ™ ^ ..

03:12:10 : Old ST-LINK firmware detected!
Please upgrade it from ST-LINK->'Firmware update' menu.

03:12:10 : Connected via SWD.

03:12:11 : Device ID:0x414

03:12:11 : Device flash Size : 512 Kbytes

03:12:11 : Device family :STM32F10xxx High-density device

03:22:06 : [1203-121218_01-30-gf756599-stm_demo.bin] opened successfully.

03:25:22 : Flash memory programmed in 48s and 49ms.

03:25:22 : Verification...OK

Connected via SWD. Device ID:0x414

