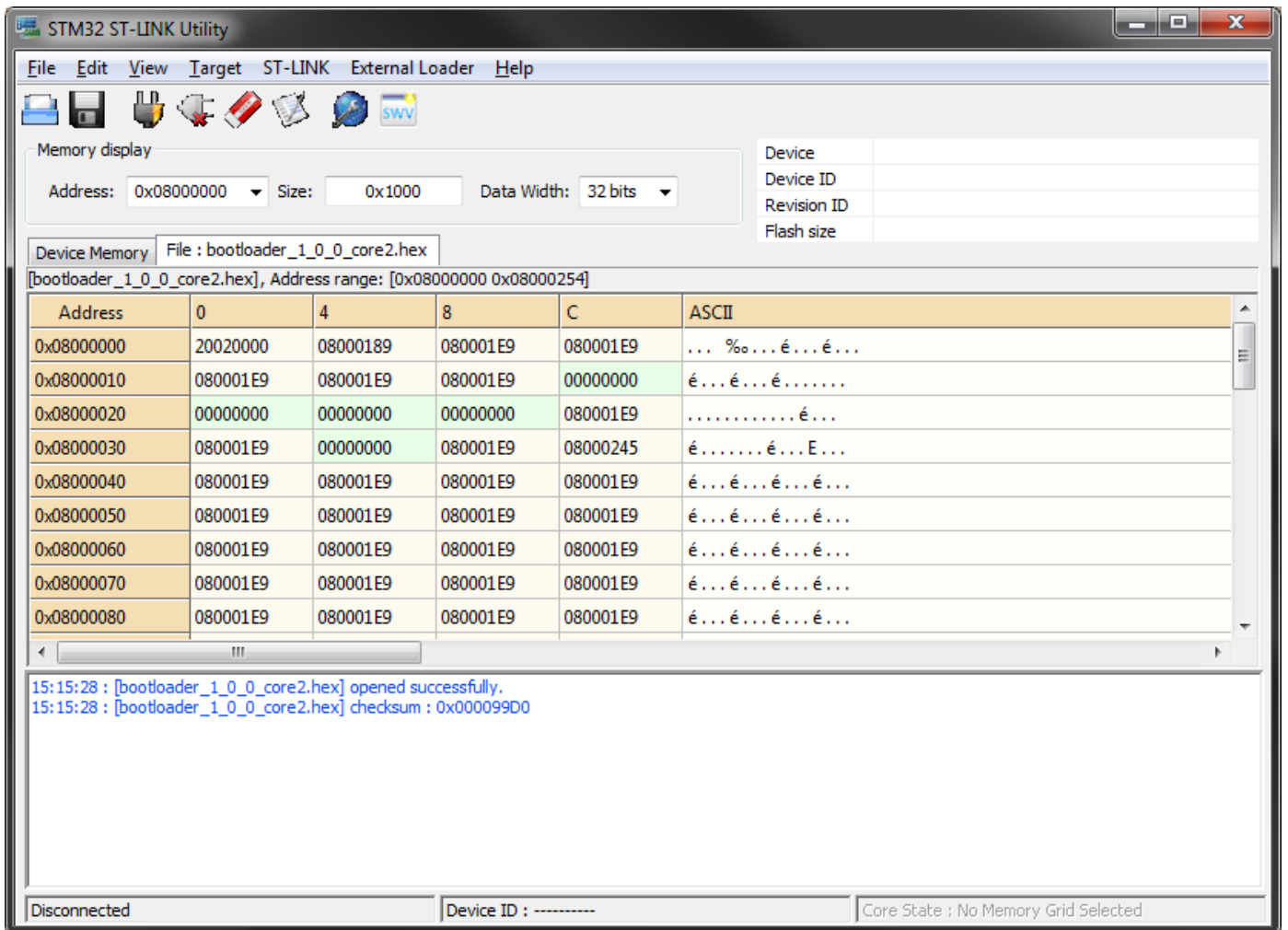
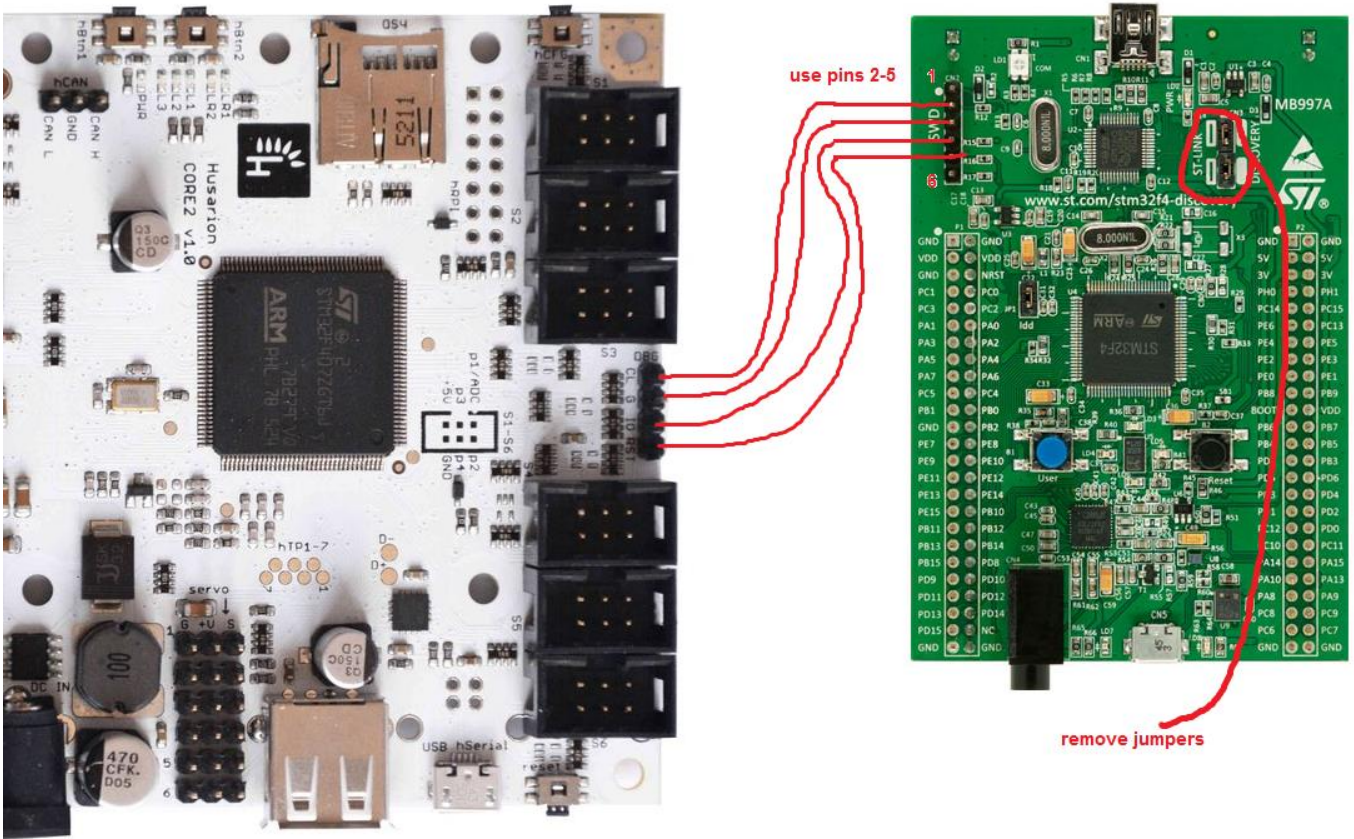


1. Download ST-link utility and install.
2. Download the bootloader file from here:
https://files.husarion.com/bootloader/bootloader_1_0_0_core2.hex
3. Run the GUI version of ST-link Utility and load (File -> open) the bootloader file. It should look like below:



- Connect the CORE2 with Discovery board. Connect the power supply to CORE2, connect Discovery to the computer with USB cable:



- Then try to connect with the CORE2 board:

The screenshot shows the STM32 ST-LINK Utility software. The 'Connect' button in the toolbar is highlighted with a red circle. The main window displays a memory dump table for the file 'bootloader_1_0_0_core2.hex'.

Address	0	4	8	C	ASCII
0x08000000	20020000	08000189	080001E9	080001E9	... %o... é... é...
0x08000010	080001E9	080001E9	080001E9	00000000	é... é... é.....
0x08000020	00000000	00000000	00000000	080001E9 é...
0x08000030	080001E9	00000000	080001E9	08000245	é..... é... E...
0x08000040	080001E9	080001E9	080001E9	080001E9	é... é... é... é...
0x08000050	080001E9	080001E9	080001E9	080001E9	é... é... é... é...
0x08000060	080001E9	080001E9	080001E9	080001E9	é... é... é... é...
0x08000070	080001E9	080001E9	080001E9	080001E9	é... é... é... é...
0x08000080	080001E9	080001E9	080001E9	080001E9	é... é... é... é...

15:15:28 : [bootloader_1_0_0_core2.hex] opened successfully.
 15:15:28 : [bootloader_1_0_0_core2.hex] checksum : 0x000099D0

Disconnected | Device ID : ----- | Core State : No Memory Grid Selected

It should look like this:

The screenshot shows the STM32 ST-LINK Utility application window. The title bar reads "STM32 ST-LINK Utility". The menu bar includes "File", "Edit", "View", "Target", "ST-LINK", "External Loader", and "Help". Below the menu bar is a toolbar with various icons. The "Memory display" section is active, showing "Address: 0x08000000", "Size: 0x1000", and "Data Width: 32 bits". To the right, a table displays device information:

Device	STM32F405xx/F407xx/F415xx/F417xx
Device ID	0x413
Revision ID	Rev 2.0
Flash size	1MBytes

Below this, the "Device Memory @ 0x08000000" section shows the file "bootloader_1_0_0_core2.hex" and a "LiveUpdate" checkbox. The "Target memory, Address range: [0x08000000 0x08001000]" section contains a table with columns for Address, 0, 4, 8, C, and ASCII:

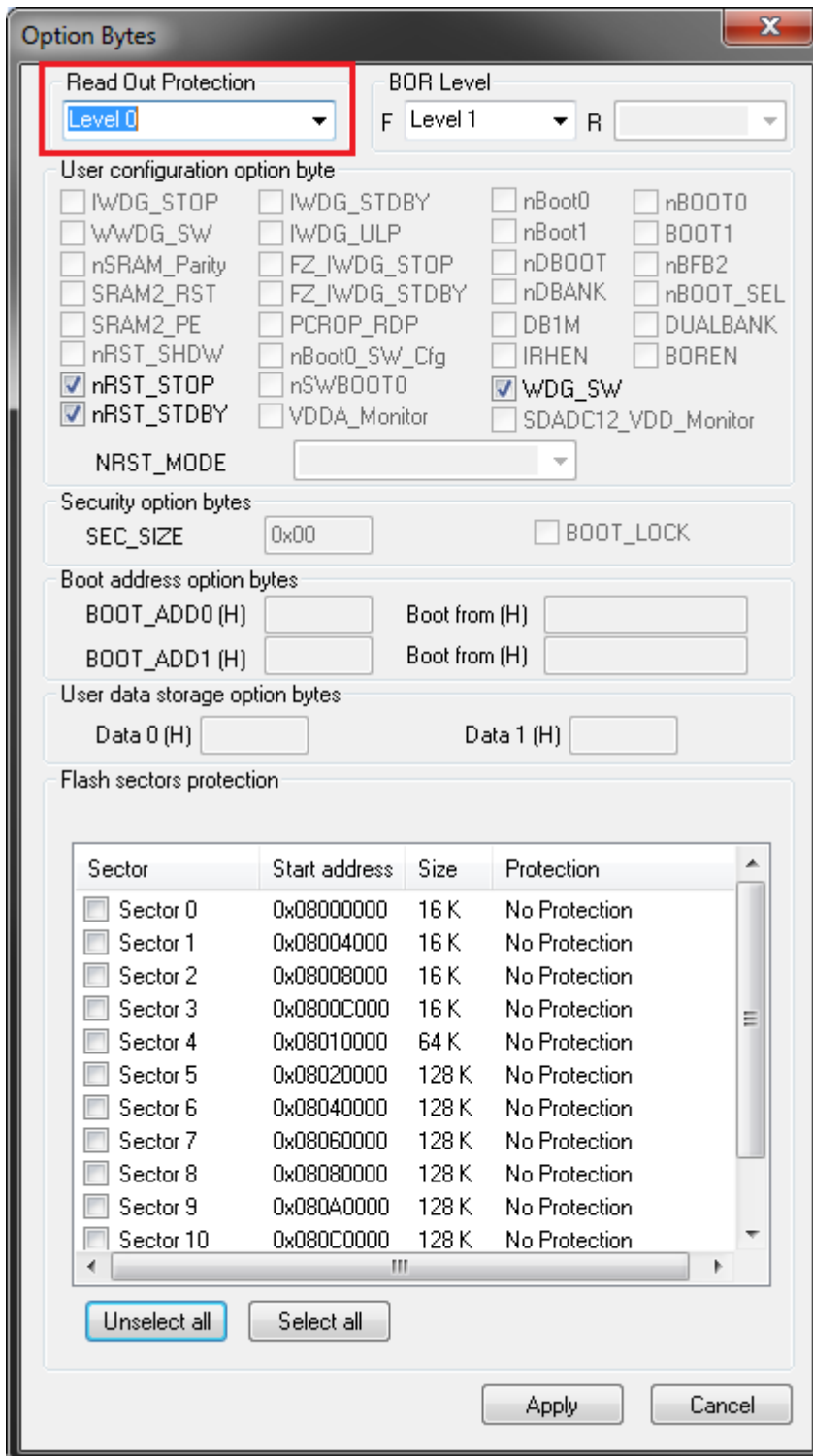
Address	0	4	8	C	ASCII
0x08000000	20001C20	080046D5	080046C9	080046C9	.. Ó F..É F..É F..
0x08000010	080046C9	080046C9	080046C9	080046C9	É F..É F..É F..É F..
0x08000020	080046C9	080046C9	080046C9	080046C9	É F..É F..É F..É F..
0x08000030	080046C9	080046C9	080046C9	080046C9	É F..É F..É F..É F..
0x08000040	080046C9	080046C9	080046C9	080046C9	É F..É F..É F..É F..
0x08000050	080046C9	080046C9	080046C9	080046C9	É F..É F..É F..É F..
0x08000060	080046C9	080046C9	080046C9	080046C9	É F..É F..É F..É F..
0x08000070	080046C9	080046C9	080046C9	080046C9	É F..É F..É F..É F..
0x08000080	080046C9	080046C9	080046C9	080046C9	É F..É F..É F..É F..

Below the table, a log window shows the following messages:

```
15:15:28 : [bootloader_1_0_0_core2.hex] checksum : 0x000099D0
15:20:16 : ST-LINK SN : 49FF6D066687505136191467
15:20:16 : ST-LINK Firmware version : V2J27S6
15:20:16 : Connected via SWD.
15:20:16 : SWD Frequency = 4,0 MHz.
15:20:16 : Connection mode : Normal.
15:20:16 : Debug in Low Power mode enabled.
15:20:16 : Device ID:0x413
15:20:16 : Device flash Size : 1MBytes
15:20:16 : Device family :STM32F405xx/F407xx/F415xx/F417xx
```

At the bottom, a status bar displays "Debug in Low Power mode enabled.", "Device ID:0x413", and "Core State : Live Update Disabled".

6. Press CTRL + B. The new window should appear:



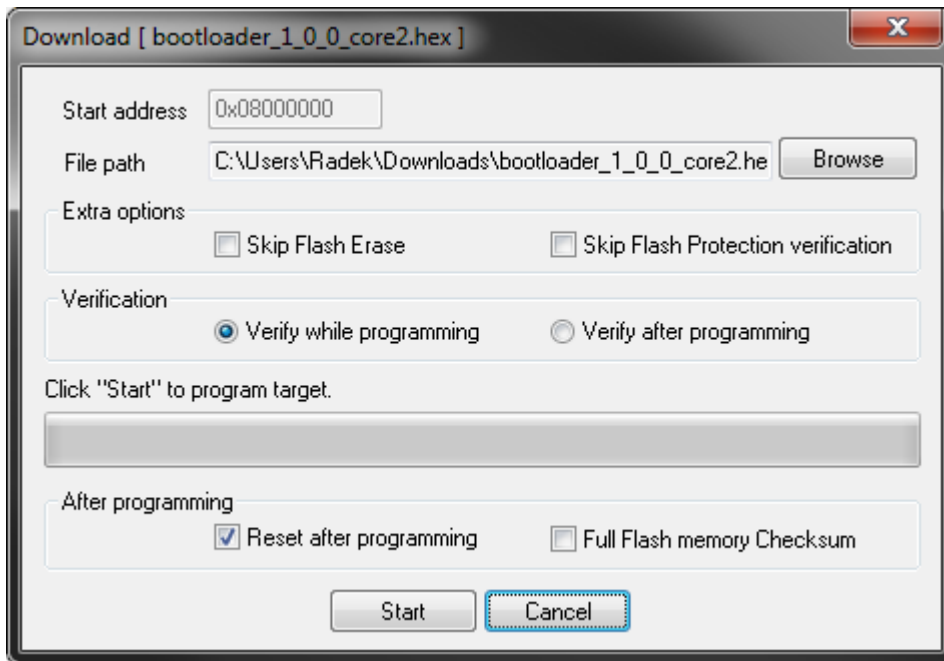
Make sure that Read Out Protection is set to “Level 0”. If it was not set to level 0 before, that could be the reason for malfunctioning the CORE2 board.

In the lower part of the window you can see listed sectors of Flash memory. Make sure that all are unchecked.

Click Apply.

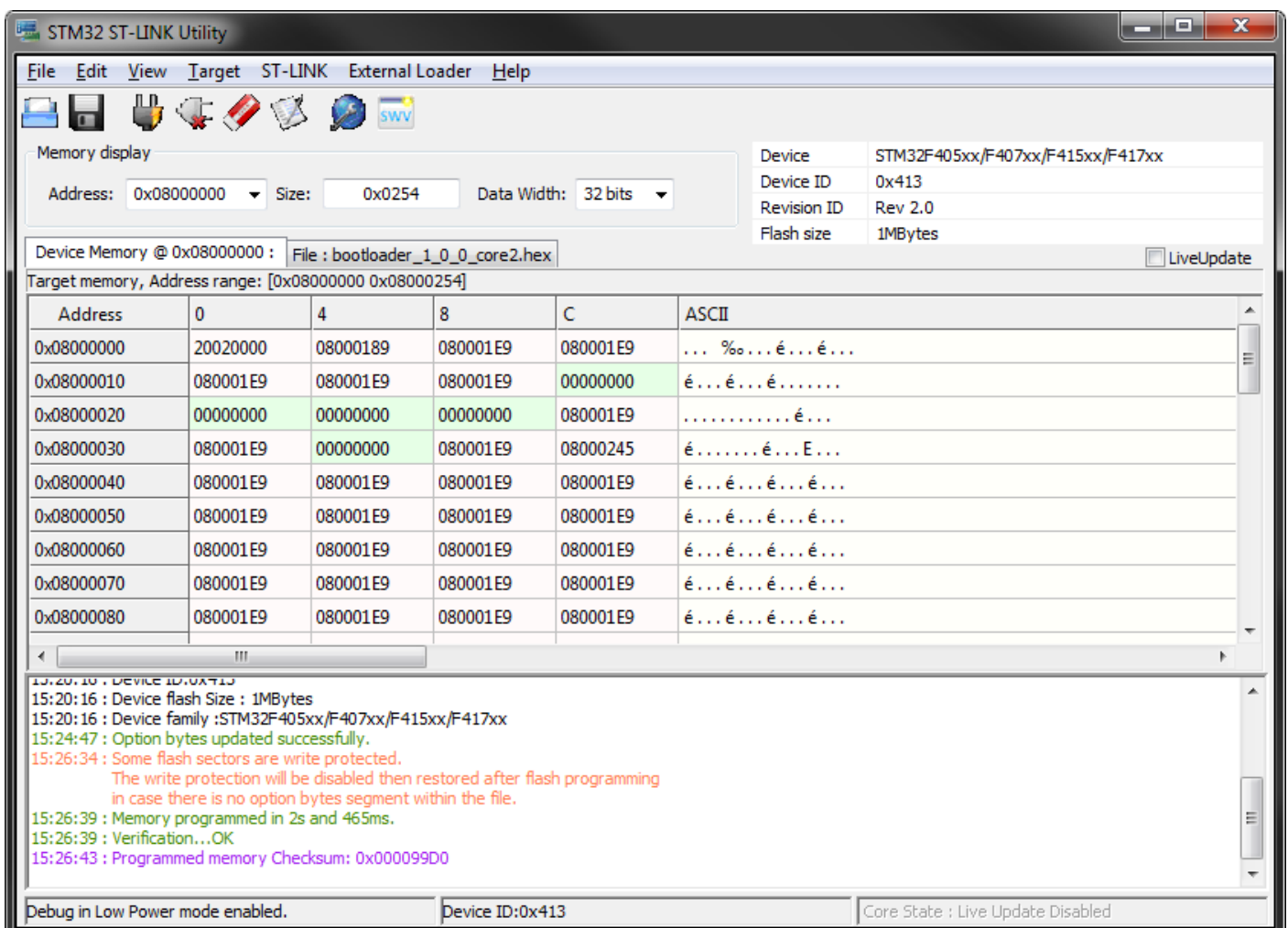
7. In the main window, in the message area, you should see the green message “Option bytes updated successfully”.

8. Press CTRL + P. You should see a new window:



Keep the default settings and press Start.

Hopefully you will see some positive messages after programming:



Now the CORE2 should work fine!