Firmware

The n-Core® firmware is a software that belongs to the n-Core® platform and runs embedded in the n-Core® *Sirius* devices. This software manages all the *Sirius* devices capabilities, from the memory assignment to the definition of complex behaviors.

All the files with the latest firmware versions can be downloaded from the support area of the n-Core® website (http://www.n-core.info). This way, the n-Core® *Sirius* devices can be updated using these files and the Bootloader tool.
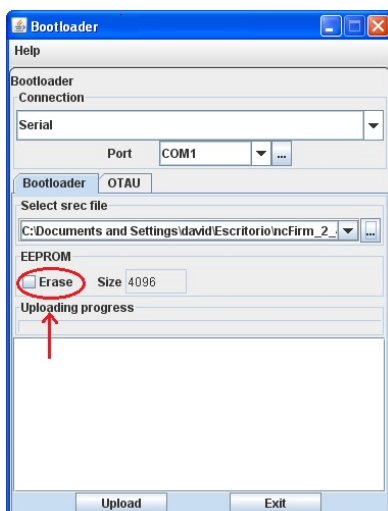
Bootloader

To update the firmware of the n-Core® *Sirius* devices it is necessary to use a program called *Bootloader*. This program is included into the USB flash provided with the development kit.

Firmware update

Connect the n-Core® *Sirius* device to a USB port on the computer, open the **Bootloader GUI** and select the next **parameters**:
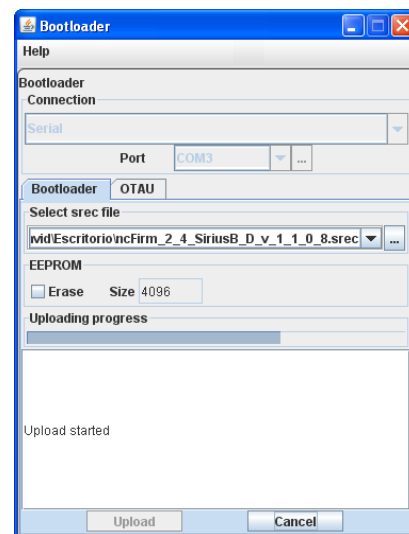
- **Connection:** Serial
- **Port:** COM Port where the n-Core® *Sirius* device is plugged to the computer.
- **Select srec file (Bootloader tag):** SREC file with the firmware update (for example: ncFirm_2_4_SiriusB_D_v_1_1_0_8.srec)
- **ERASE EEPROM checkbox disabled**.

IMPORTANT NOTE: It is absolutely necessary to DISABLE the "ERASE EEPROM" checkbox when the firmware of a *Sirius* device is going to be updated through the Bootloader. If this checkbox is not disabled then all the n-Core® functionalities of that device will not work properly when the updating process is finished.
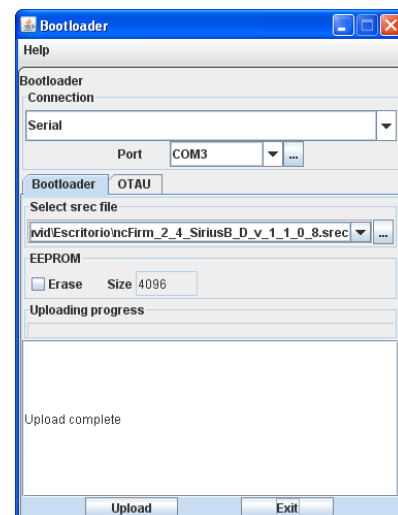

When the **Upload** button is pressed, the program will request the user to reset the device (***Please Restart Device***), so it is necessary to press the Reset button on the device (see User Manual of the appropriate n-Core® *Sirius* device) to start the firmware update (***Upload Started***).

IMPORTANT NOTE: The *Sirius* device must not be reset or disconnected during the updating process. If this happens the process will be interrupted and the device will not work correctly. In this case, all the previous steps must be repeated.

Once the firmware updating process has finished, the Bootloader will show the next message **"Upload complete"** in the screen.

NOTE: The firmware update of the n-Core® *Sirius* device does not modify any of the parameters defined or modified previously that were stored in the EEPROM memory on the device. For further information about modifying the parameters of any of the functional blocks of the n-Core® platform, please, consult the n-Core® User Manual.