



SIMIOBOARD BOOTLOADER FOR SIMIO BOARDS

Doc. Ver.: SIMIOB-BOOTLOADER V.1.0 EN

Date: 03/08/2014



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1. Description.

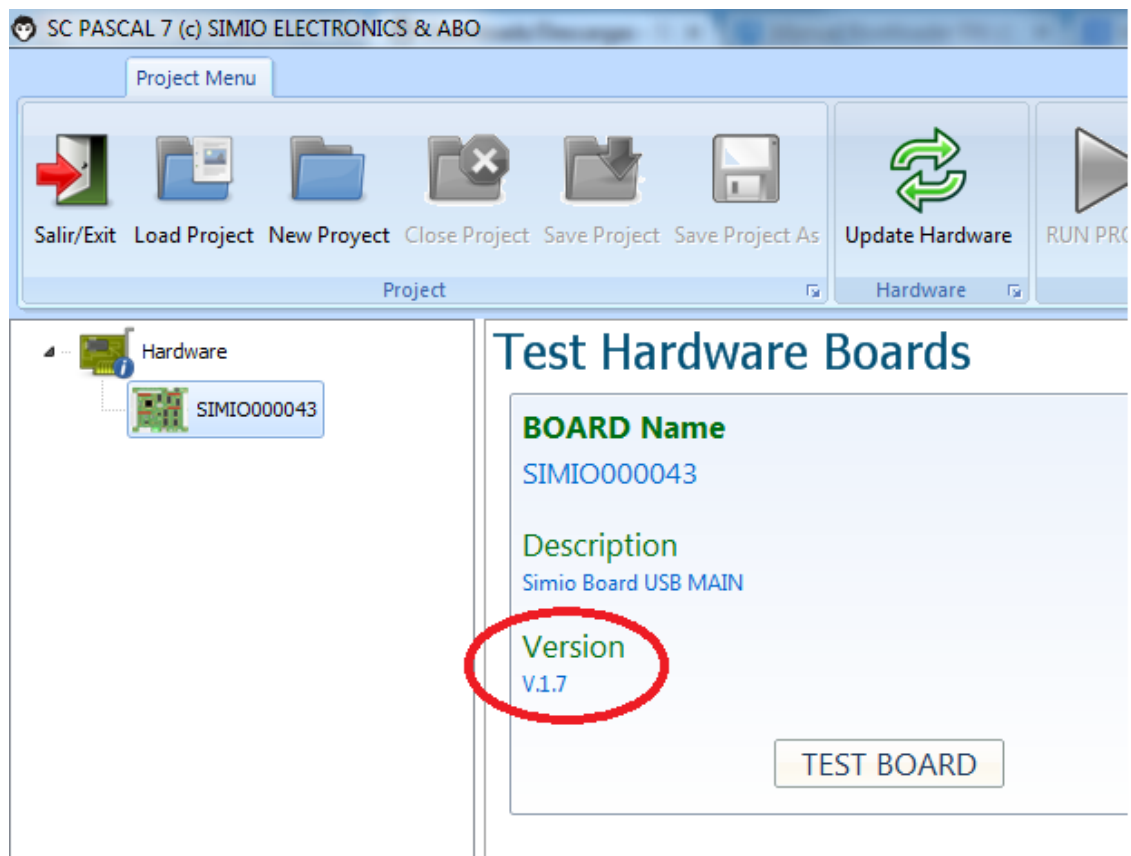
Every SIMIOBOARD can be updated with the last version of firmware. In order to update this firmware we need:

- To know which firmware we have installed in our card
- The hardware version of our card
- In the case of SIMIO USB MAIN with hardware version ≥ 2.0 , we need SC-PASCAL7 Version 7.3 or higher installed in our computer
- In the case of SIMIO USB MAIN with hardware version < 2.0 , we need USB SIMIOBOARD BOOTLOADER installed in our computer

2. Firmware version.

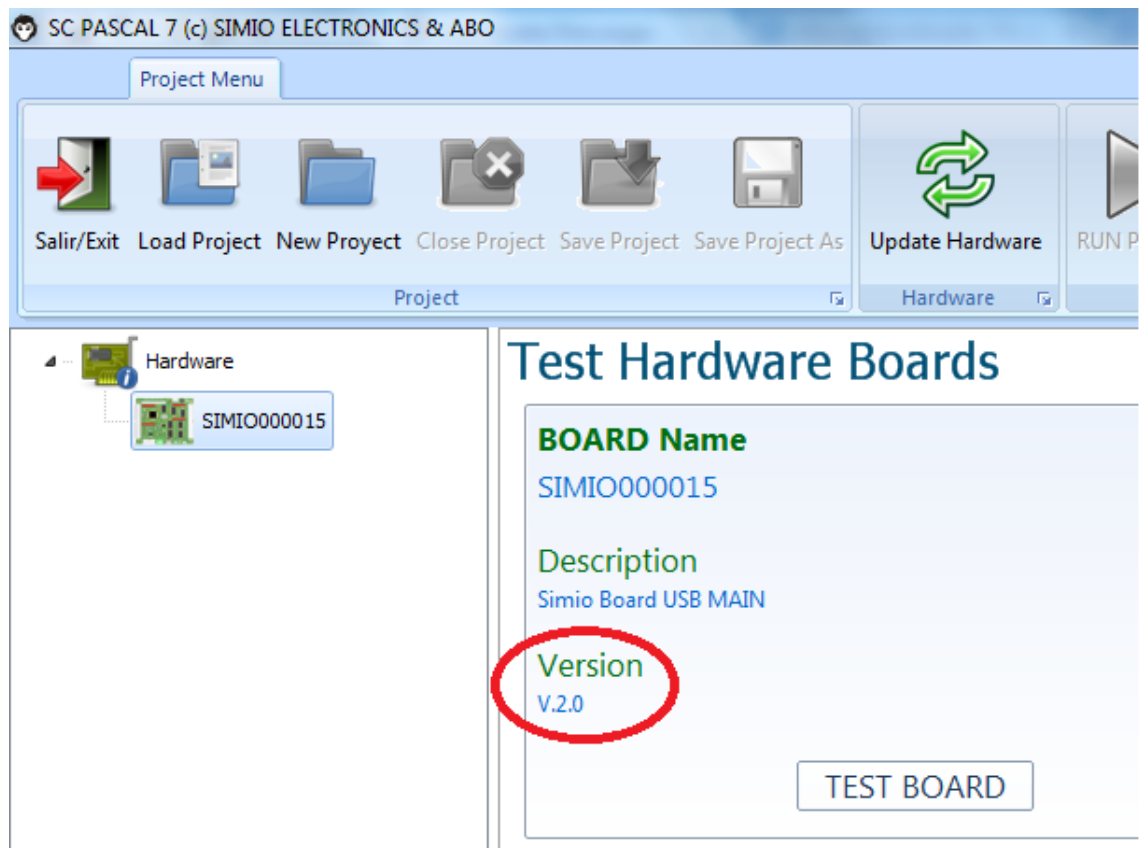
To know which firmware version we have in our cards, we run SC-PASCAL7.

- SIMIO USB MAIN version 1.7



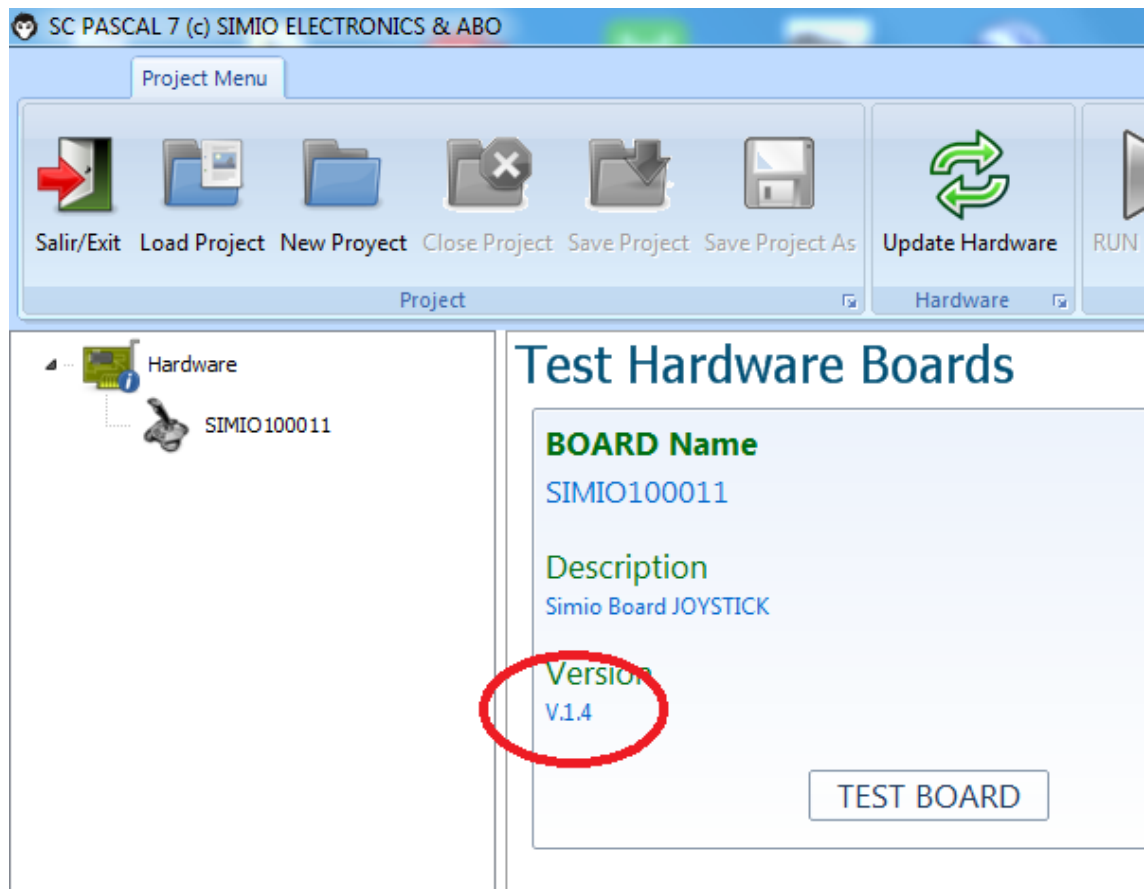


- SIMIO USB MAIN version 2.0





- SIMIO JOYSTICK version 1.4



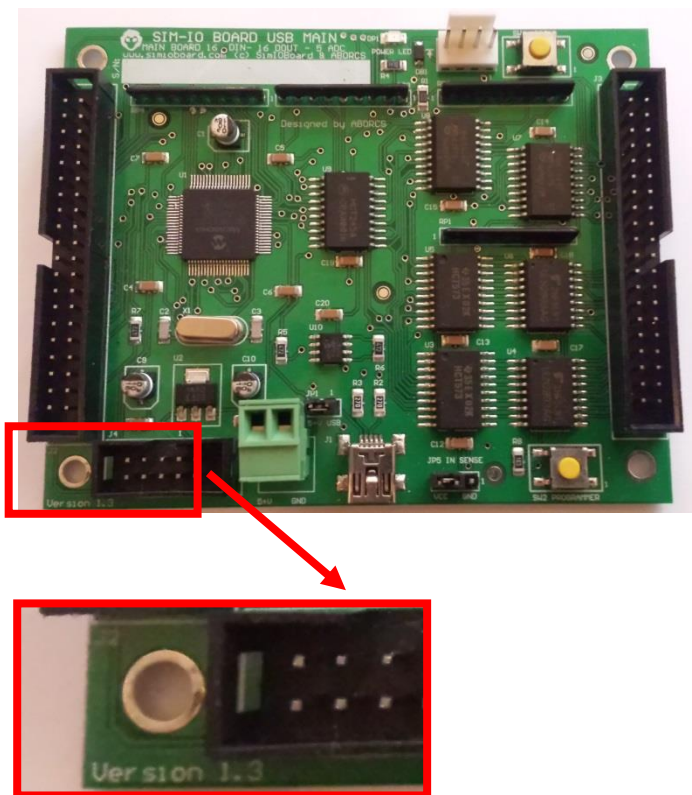
For SIMIO JOYSTICK cards with firmware corresponding to a standard game device (automatically detected by our operative system as a joystick), SC-PASCAL will not show the firmware version.



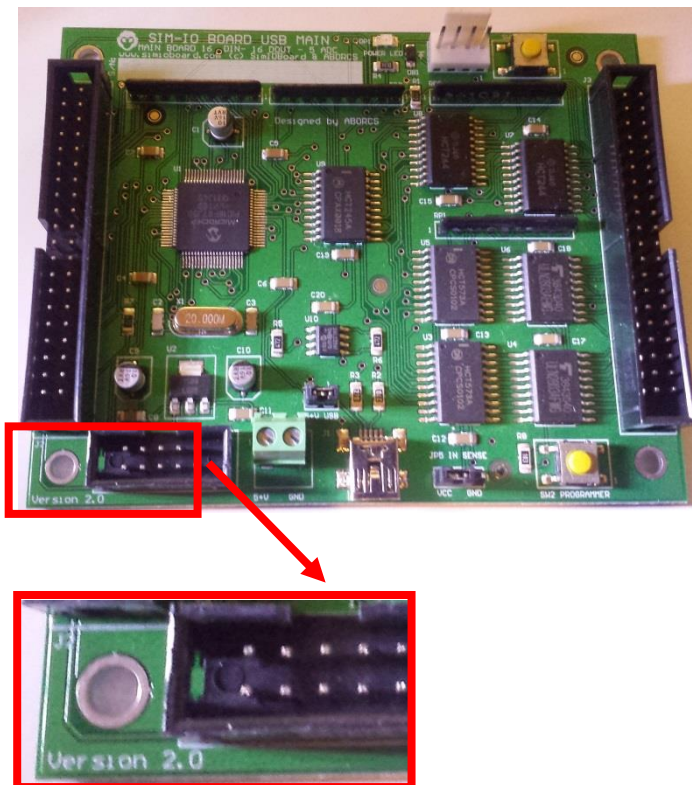
3. Hardware version.

On every SIMIO card, you can find the hardware version written on the silkscreen:

- SIMIOBOARD USB MAIN <2.0

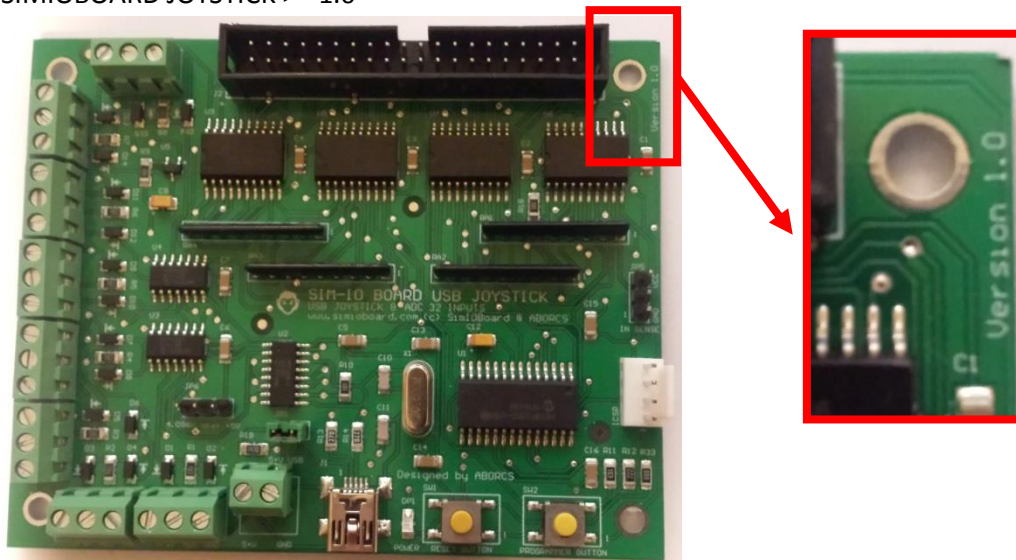


- SIMIOBOARD USB MAIN >=2.0





- SIMIOBOARD JOYSTICK >= 1.0



4. SC-PASCAL 7.3 or higher.

You can download the last version of SC-PASCAL following this link:

<http://www.simioboard.com/index.php/descargas-downloads/category/2-sc-pascal-docs>

5. USB SIMIOBOARD BOOTLOADER.

For SIMIOBOARD USB MAIN with hardware version <2.0, you need to download USB SIMIOBOARD BOOTLOADER software from this link:

<http://www.simioboard.com/index.php/descargas-downloads/category/4-simio-usb-main-board?download=6:simioboard-s-bootloader-installer>

6. Correspondence table.

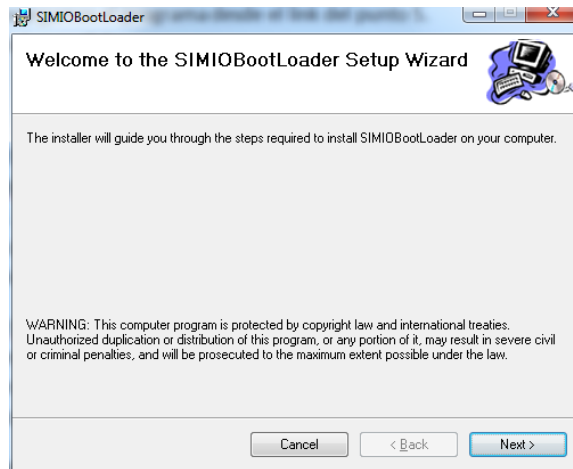
	USB SIMIOBOARD BOOTLOADER	SC-PASCAL 7.3
SIMIOBOARD USB MAIN HARDWARE 1.x	✓	✗
SIMIOBOARD USB MAIN HARDWARE 2.x	✗	✓
SIMIOBOARD USB JOYSTICK 1.x	✗	✓



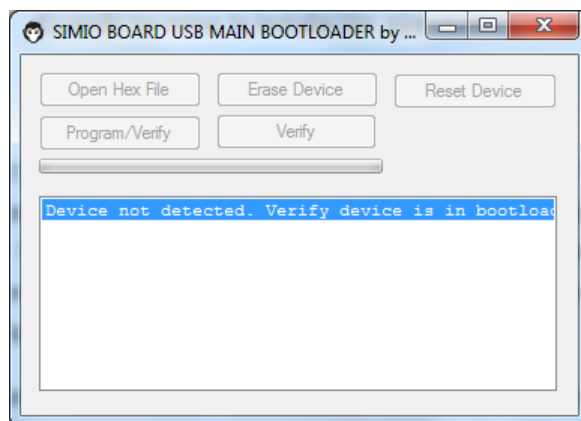
7. Using USB SIMIOBOARD BOOTLADER.

a. Download the program from the link on point 5 of this document.

b. Install the program in your computer.

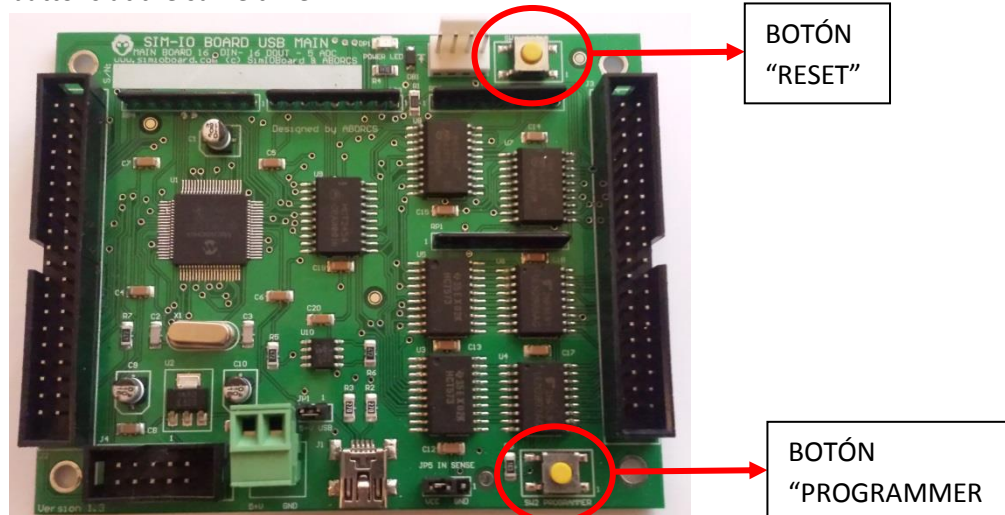


c. Run it.



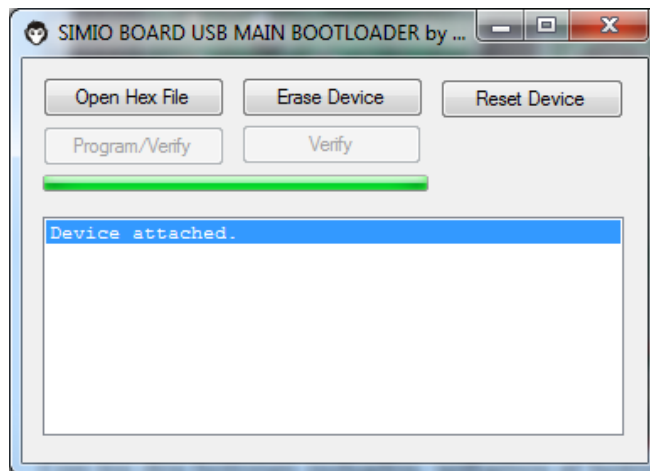
d. Conect you SIMIO USB MAIN to your computer.

e. Set the programming mode by clicking and holding “RESET” and “PROGRAMMER” buttons at the same time.

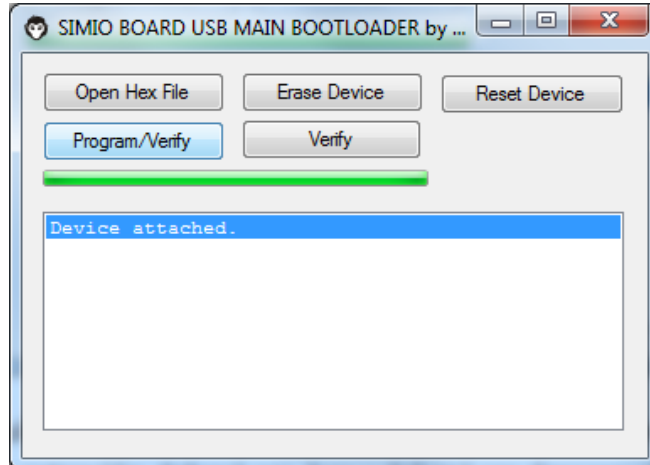




- f. Release only “RESET” button, and 3 seconds later release “PROGRAMMER” button
- g. You will read “Device attached” on the program.

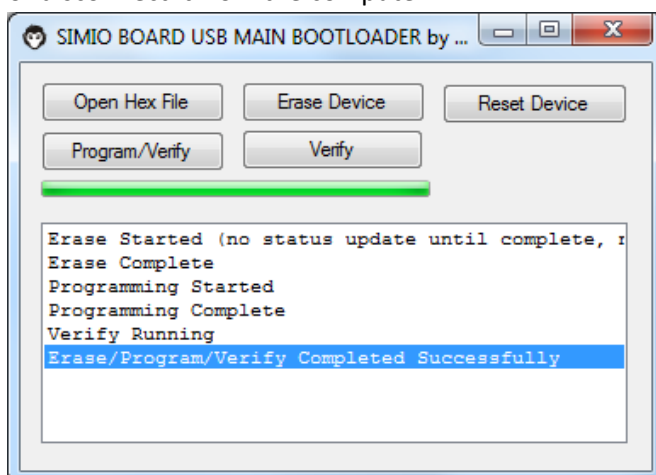


- h. Now click on “Open Hex File” and choose the firmware file (*.hex) that you want to install in your card. You can download the last version from this link:
<http://www.simioboard.com/index.php/descargas-downloads/category/4-simio-usb-main-board>
- i. Click on “Program/Verify” button and wait until the process ends.



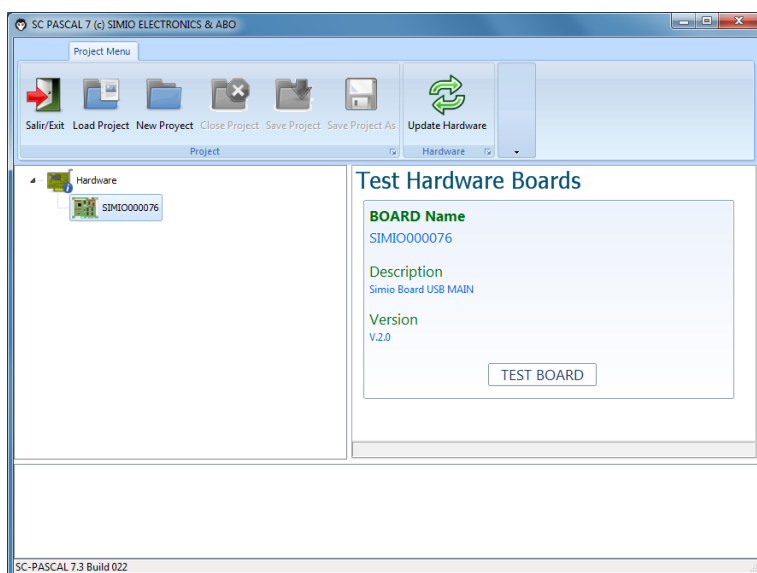


- j. The last firmware has been installed in our card. Just click on the “RESET” button or disconnect it from the computer.

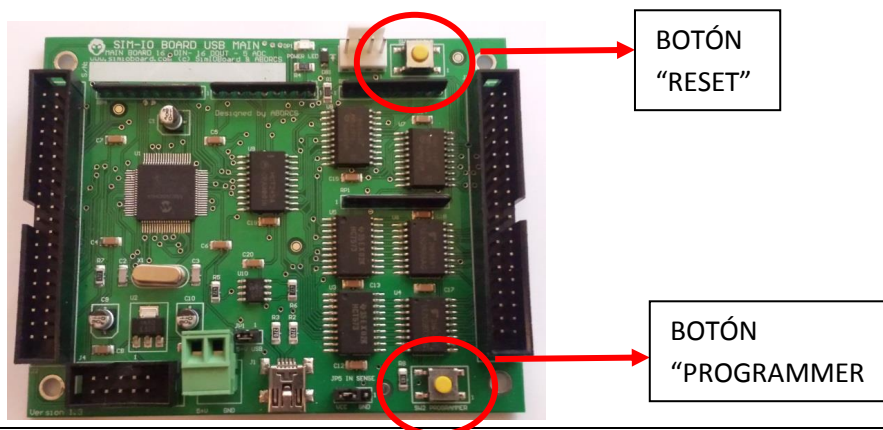


8. Programming by SC-PASCAL 7.3 or higher.

- a. Run SC-PASCAL 7.3

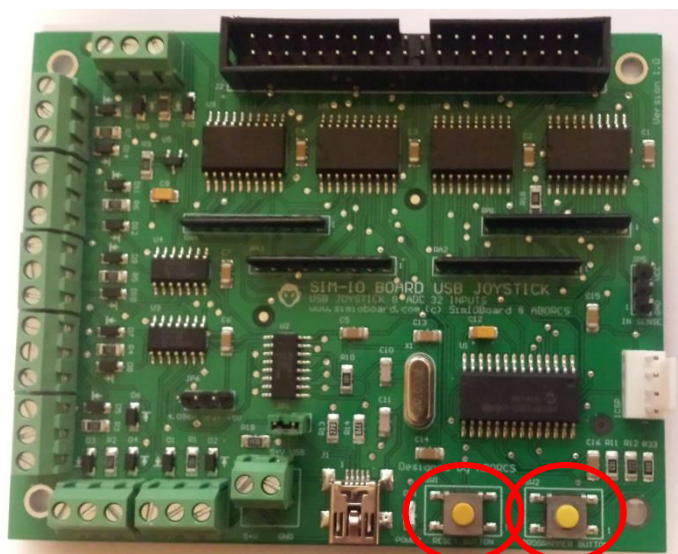


- b. Set the card into programming mode, by clicking and holding “RESET” and PROGRAMMER” buttons at the same time.





SIMIOBOARD USB MAIN 2.0

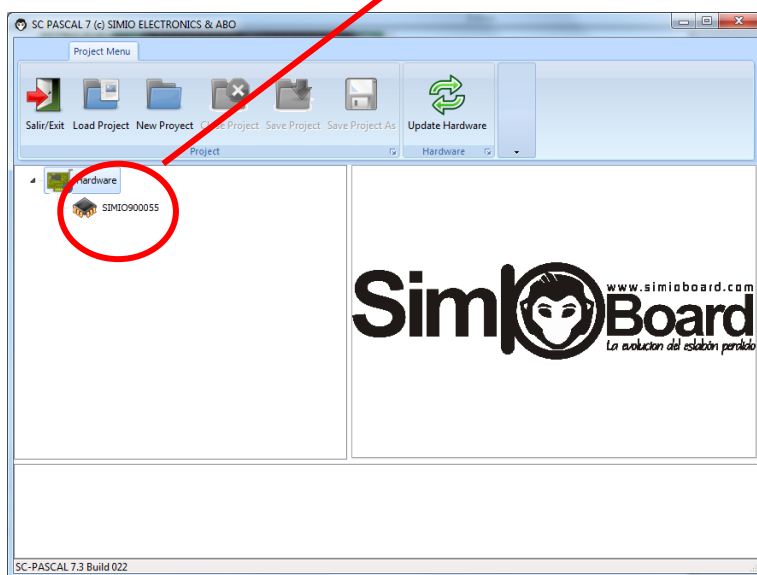


SIMIOBOARD USB JOYSTICK

BOTÓN
"RESET"

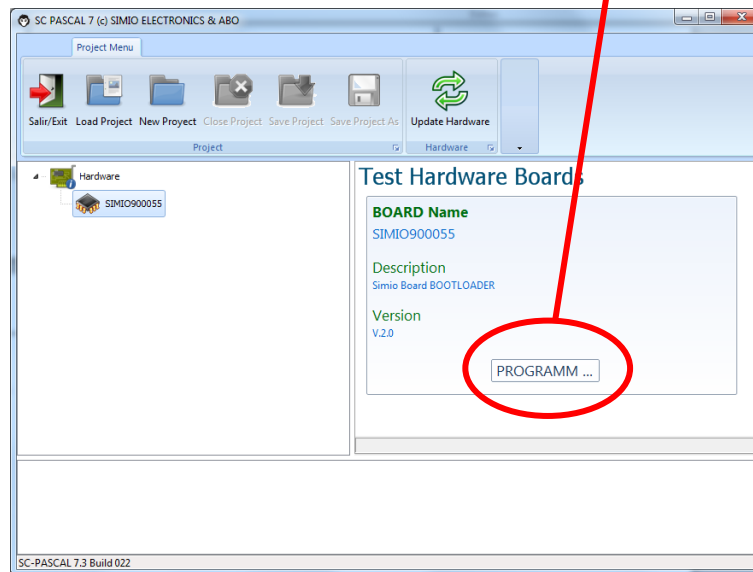
BOTÓN
"PROGRAMMER"

- c. Release "RESET" button and 3 seconds later release "PROGRAMMER" button
- d. On SC-PASCAL 7.3 screen we will read "SIMIO9xxxxx" where xxxxx is the serial number of our card.





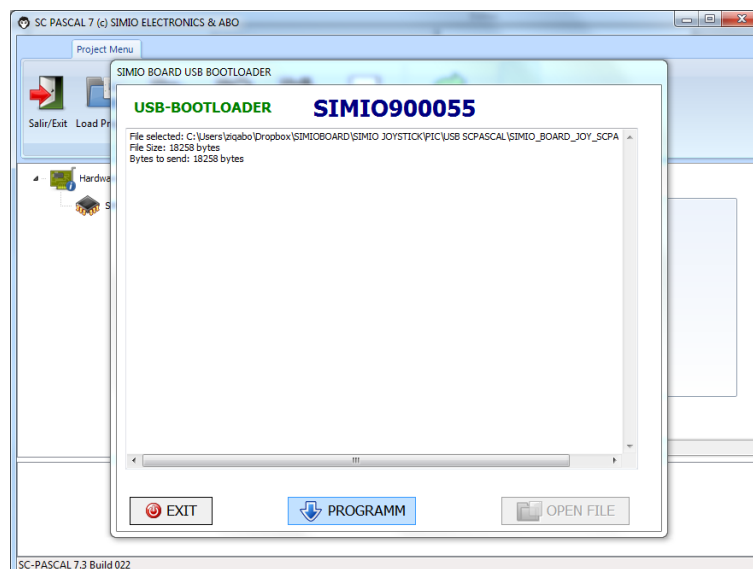
- e. Click on the card icon. The properties of the card will be shown on the right hand area besides the “PROGRAMM...” button too:



- f. Click on the “PROGRAMM...” Button. A new window will pop-up. Click on the “OPEN FILE” button and choose the firmware file (*.hex) that you want to install in your card. You can download the last version from this link:

<http://www.simioboard.com/index.php/descargas-downloads/category/4-simio-usb-main-board>

- g. Then click on “PROGRAMM” and wait until the process ends.



- h. The last firmware will be installed in our card. Just click on the “RESET” button or disconnect it from the computer.



9. Warning, limit of responsabilities and warranty.

SimIO Board's are not a final product, as they are designed to take part of a bigger system like a simulator. The use of SimIO boards and the required cabling must be done by a person with a minimal electronics knowledge. A bad usage of them can result on serious damage on computers or other devices.

Simio Electronics, Hispapanel or any other person that collaborates in this project are not responsible of damages to persons, cards, computers or any other devices connected to SimIO boards due to a wrong use of them. If you don't have a minimum of electronics knowledge, please don't use SimIO boards.

SimIO boards warranty covers any manufacturing defect, but no damages caused to any other devices connected to them due to a bad use of SimIO boards. Neither damages caused to SimIO boards due to defective power sources nor incorrect feeding voltages.

Simio Electronics will replace the wrong boards only for defective reasons. Return costs will be paid by the customer.

For security reasons, please check the following risks that could happen.

