

FRC[®]

FIRST[®] Robotics Competition

How to Configure Your I/O Module 2011 FRC – *LogoMotion*

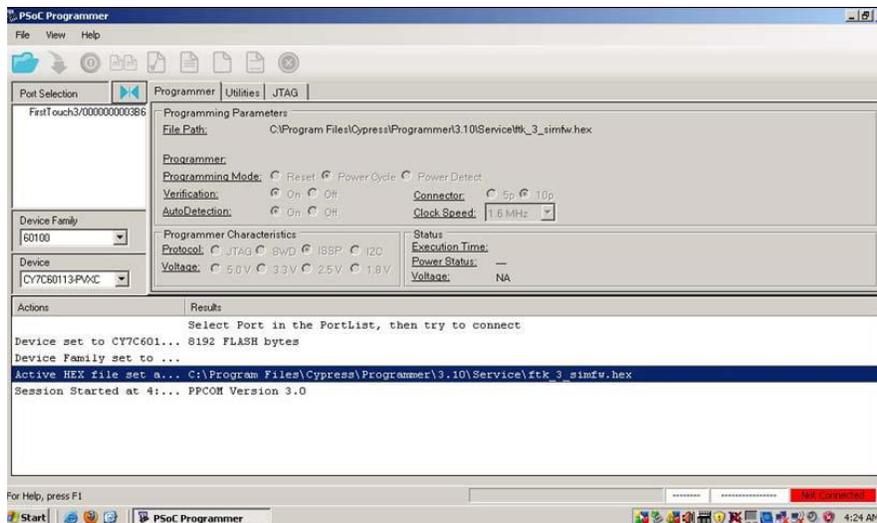
How to Configure Your I/O Module

Now that you've confirmed that your basic Driver Station hardware and software is functional, add the I/O layer. Before using your Cypress FirstTouch I/O module, you must first program firmware into the USB chip on the board. The steps below will walk you through the process. Remember that you only need to do this step once per board. Make sure that you have the most recent version of the Driver Station software before proceeding.

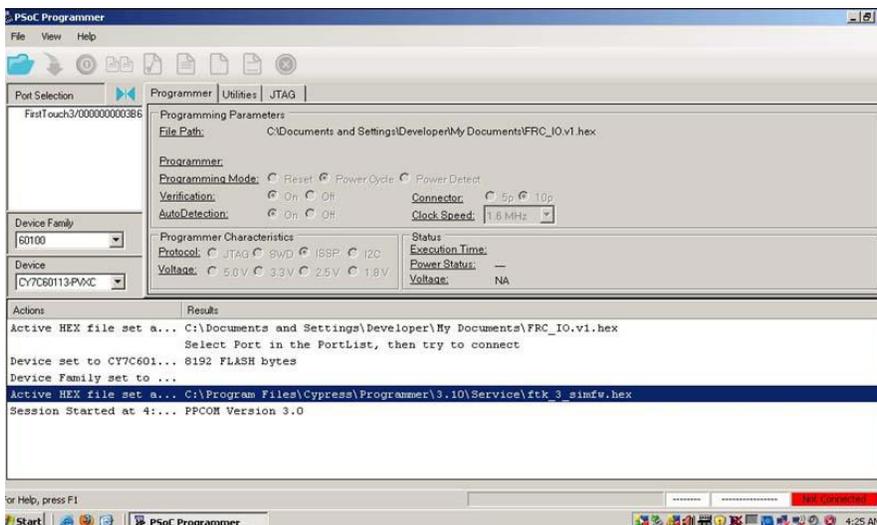
- 1) Log into the Developer account.
- 2) Plug the USB cable provided in the FirstTouch starter kit into the I/O module and the Classmate.
- 3) Allow the computer time to find and connect to the new hardware.
- 4) Next, open the Cypress PSoC Programmer. To do this, click on Start > All Programs > Cypress > PSoC Programmer. If you get an Update Reminder, cancel it.



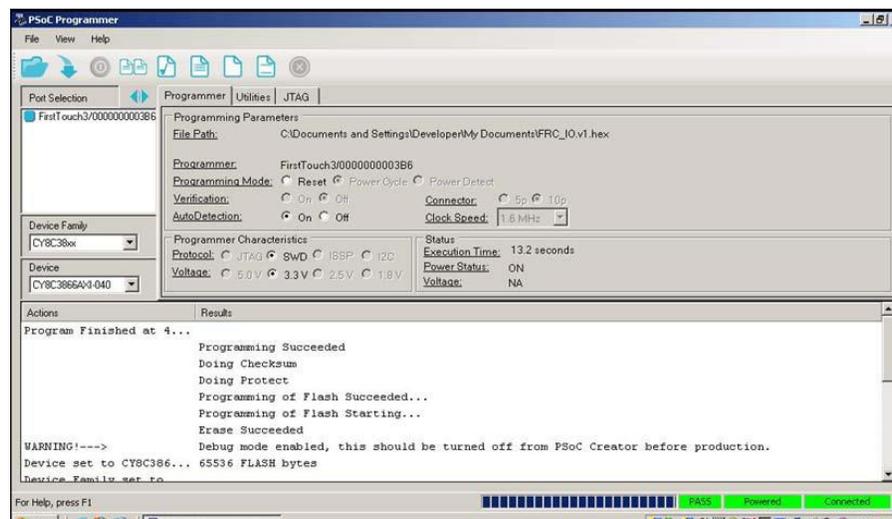
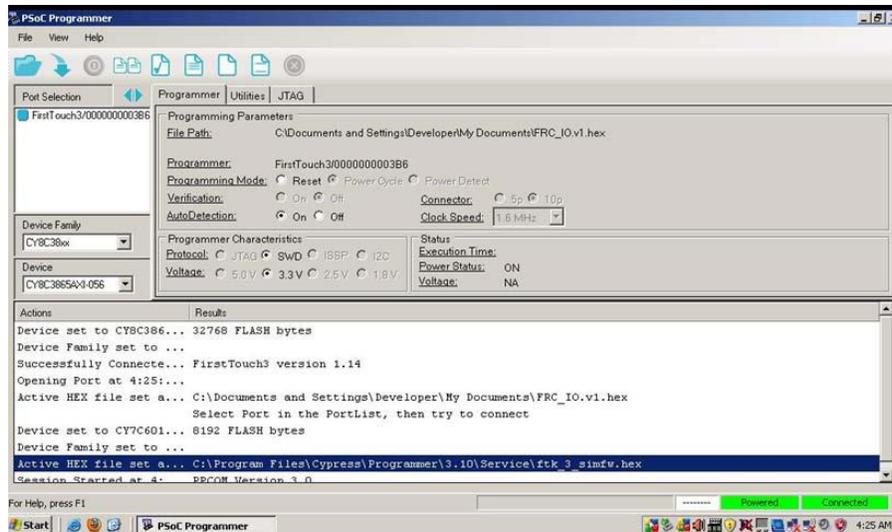
- 5) In the top left of the tool bar, you'll see a blue folder icon. Click the folder, browse to where you saved FRC_IO.v1.hex, and select the FRC_IO.v2.hex file.



- 6) Directly below the tool bar, on the left, there is a Port Selection window with the device listed in it. Select the FirstTouch device.



- 7) Click the program button on the tool bar, and wait for the programming operation to complete. You will see Programming Succeeded in the Results window.



- 8) Unplug and replug the USB cable and your I/O module will be ready to use. You can check to make sure the process was successful by opening the Driver Station software and confirming that the device is being recognized. With the I/O module plugged in, your I/O tab will indicate that the Hardware I/O is selected. Without the I/O module plugged in, it will default to the Virtual I/O.

