

# Practical work February 25, 2015

## Getting started with LaunchPad MSP430G and Energia

The purpose of this lab is to become familiar with the LaunchPad MSP430G2 and its environment.

1) Install **Energia** on you PC (or Mac). For all versions, you must decompress <http://energia.nu/download/>

On *Windows*, you must install the driver : [http://energia.nu/Guide\\_Windows.html](http://energia.nu/Guide_Windows.html)

2) Run Energia. Open the example **Blink** (Menu : *File, Examples, Basics, Blink*).  
Compile-it (Icon **Verify**).

3) Watch the **LaunchPad**. Have a look on the 2 red and green LEDs, and the push-button  
Connect the USB cable. The Power LED should light.  
Upload the program in the flash memory of the **MSP430G** (icon **Upload**). Observe what happens.

4) Change the blinking frequency.  
Change the program to make the green LED blinking at the same time as the red LED.

5) Change the program to make the red LED blinking only when the push-button is pressed.

It seems logical to use : `pinMode (P1_3, INPUT)...`

and `if (digitalRead(P1_3))...`

But you must think about the schematic, and choose :

`pinMode (P1_3, INPUT_PULLUP)` and invert the condition to make the program correct.

6) (*optional*) Write a program of your choice, using the 2 LEDs and the push-button.  
If you don't have ideas, write a program that flashes the 2 LEDs, but at different frequencies.

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