

# Setting Up Your LaunchPad

Texas Instruments provides its own installation instructions [here](#). The instructions below are my own. If you have trouble following my instructions, check out the TI instructions or Google your symptoms. Remember, engineers are professional problem solvers! Be proactive in resolving issues yourself. If that doesn't work, come find me.

- (1) Unplug your USB cable from your laptop and your LaunchPad. Then set your cable aside. Note: Not all USB cables are created equally! The cable that came with your LaunchPad is a power and data cable. Some cables, like those that may come with cellphone chargers, look identical, but are power only—no data. They will *not* work with your LaunchPad!

- (2) Arrange your jumpers  as illustrated by the white rectangles in the figure. Next, connect your jumper wire  to the pins circled white in the figure. Leave your board set up exactly like this (unless boxed or stored away) for the rest of the semester! Set your LaunchPad aside.

- (3) Download the **drivers** for the CC3200 using one of the links below. (Drivers allow your computer to recognize whatever is connected to them. This way, your computer doesn't mistake your LaunchPad for a mouse, printer, speaker, etc.).

**Windows:** [Link 1](#)      [Link 2](#)

**Mac:** [Link 1](#)      [Link 2](#)

- (4) Unzip/extract the drivers folder and then double-click on the appropriate (unzipped/extracted) file:

**Windows:** DPinst64.exe

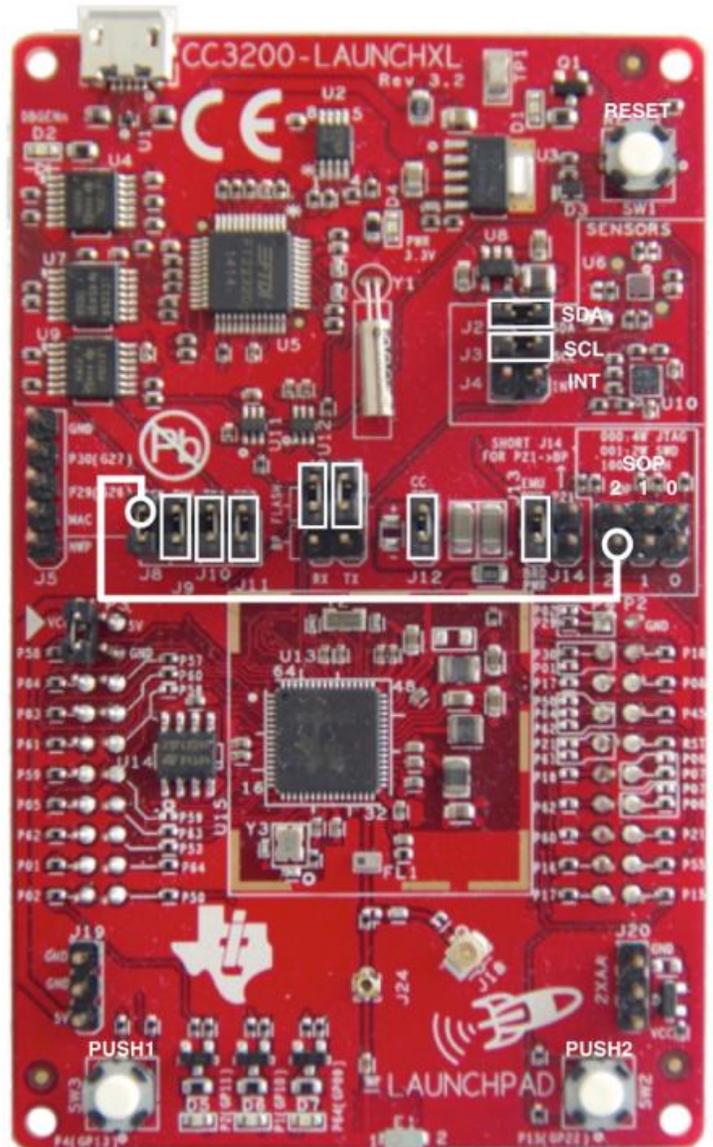
**Mac:** EnergiaFTDIDrivers2.3-signed.pkg

Follow the instructions in the installation wizard. If done correctly, there should be some sign that the installation was successful. Once done, you may need or want to restart your computer.

- (5) Download the Energia software from one of the links below.

**Windows:** [Link 1](#)      [Link 2](#)

**Mac:** [Link 1](#)      [Link 2](#)



(6) Unzip/extract the entire folder downloaded above. Then move the entire, unzipped/extracted folder to:

**Windows:** your C Drive

**Mac:** your Applications folder

(7) Since we will be using this software so much, it would be very helpful to have more direct access to it. For Windows users, I would encourage you to right click on *energia.exe* (inside your unzipped/extracted *energia* folder) and select *Send to* → *Desktop (as shortcut)*. For Mac users (which I am not), I would suggest doing something similar.

(8) Double-click on *energia.exe* to open the Energia IDE (Integrated Development Environment). It should be indicated by the icon .

(9) Again, we will be using this software almost daily, so make it easy to open. For Windows users, I would encourage you to right click on the Energia icon on the task bar and click *Pin this program to the task bar*. For Mac users, I would suggest doing something similar to add Energia to your dock.

(10) In Energia, go to *Tools* → *Board:* → *Boards Manager...* In the search box, type in *CC3200*. Select the board that appears and click *Install*. If two boards are listed, for some reason, install the one that does NOT have EMT listed in its name/description. After the install, go to *Tools* → *Board:* ... and select *CC3200*.

(11) Gently plug in the USB cable to your LaunchPad. Support the USB receiver with a thumb/finger as you insert the cable so that nothing gets broken, which would be a \$40 mistake! Next, plug the other end of your cable into one of your computer's USB ports. Be observant and take note of the following:

Which LEDs are glowing? \_\_\_\_\_

Which LEDs are flashing? \_\_\_\_\_

(12) Now, go to *Tools* → *Port* and select the USB port that your LaunchPad is connected to. For Mac users, it should be obvious. (One of your options will include something along the lines of *...cc3100...*). For Windows users, there are ways to figure out which of the USB ports is correct, but the easiest way is typically guessing the last option listed. Then, if that one doesn't happen to work, continue with a trail-and-error approach working your way up the list. If you are Windows proficient, check the Device Manager.

**If *Port* is grayed out, then you did not install the drivers correctly. Back up to Step 3 and try again!**

(13) Go to *File* → *Examples* → *01.Basics* → *Blink*. Then click the *Upload* button . As soon as you do this, the code will **compile** (checked for errors and then converted to a form usable by the microcontroller). After a few seconds (or much more), the code should begin uploading to your LaunchPad. Be observant and note what the LEDs are doing **during** the upload process:

Which LEDs are glowing? \_\_\_\_\_

Which LEDs are flashing? \_\_\_\_\_

After the upload is complete, be observant and note what the LEDs are doing now:

Which LEDs are glowing? \_\_\_\_\_

Which LEDs are flashing? \_\_\_\_\_

Do you see anything blinking? If so, congrats! If not, look at the dark, bottom half of the Energia interface. This area is called the **debugger**. (It is used to troubleshoot code.)

If you see any mention of *MSP430*, *MSP432*, ... then you do not have the correct board selected in *Tools* → *Board*:... Make sure *CC3200* is selected.

If you see “*failed to trigger bootloader*”, then your jumpers/jumper wire are probably not connected correctly. Double-check your wiring

- (14) The last thing I would like you to do is to download the pinmap/pinout for our LaunchPads. (The pinmap/pinout shows how pins are defined on your board and what function(s) they serve.) This is like a formula sheet in a science or math class. We want it immediately accessible. So, first, download it from one of the following links: [Link 1](#) [Link 2](#) Once the file is downloaded, navigate to it, right click and select *Set as desktop background* (or something similar). Now, we are ready to being the real work!

### **One last warning before I forget...**

**Never mess with the wiring on your LaunchPad while it is plugged into your laptop’s USB port!**

**Don’t move jumpers around**

**Don’t mess with the jumper wire!**

**In general, never tinker with any circuit while it is powered!**

**You could create a short and electrocute yourself or damage your laptop/LaunchPad. If this happens, best-case scenario, you are out \$40 to replace your LaunchPad or much more to repair your laptop!**