Install OLIMEXINO-328

by LadyMM

The olimexino-328 is an arduino-like borad, which runs programs called “sketches”. The programs themselves are written in C/C++ and compiled in the Arduino environment and then uploaded to the board’s memory via miniUSB.

Special drivers and settings are needed, however, for your computer to correctly recognise the board. Installation instructions are below.

1.Installation of the arduino-based board

(Instrusctions and screenshots from Limor Fried
http://www.ladyada.net/learn/arduino)

Visit http://www.ftdichip.com/Drivers/VCP.htm for the latest drivers for your Olimexino-328 board
*(Instructions for other arduino boards can be found at **http://arduino.cc/en/Guide/HomePage**)*

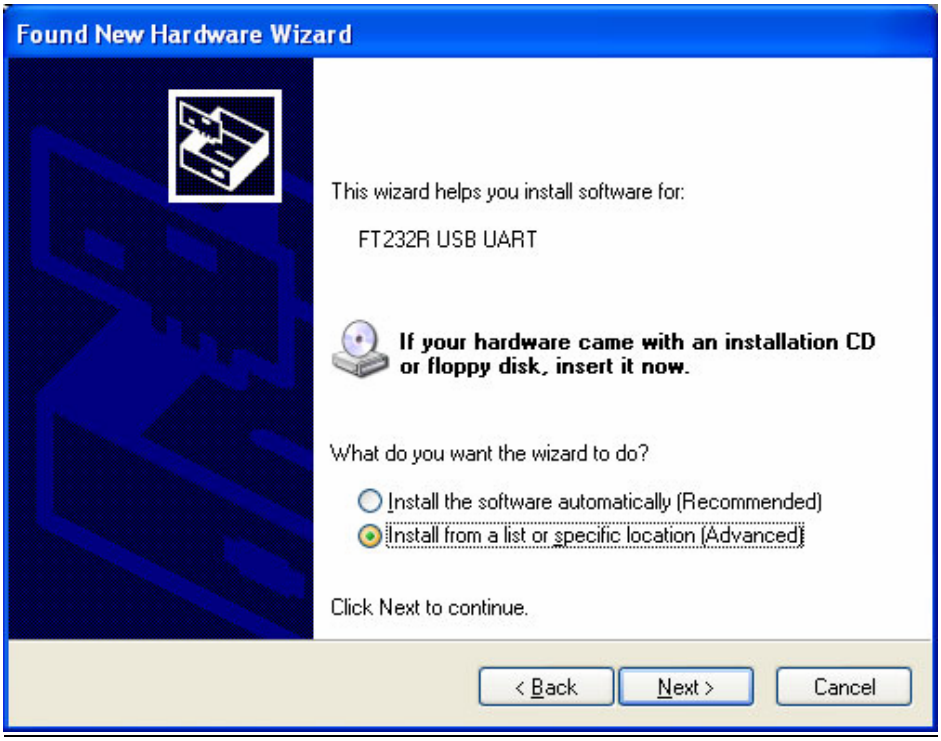
Windows:

(The screenshots show a Windows XP machine, but the installation is the same for XP/Vista/Windows7)

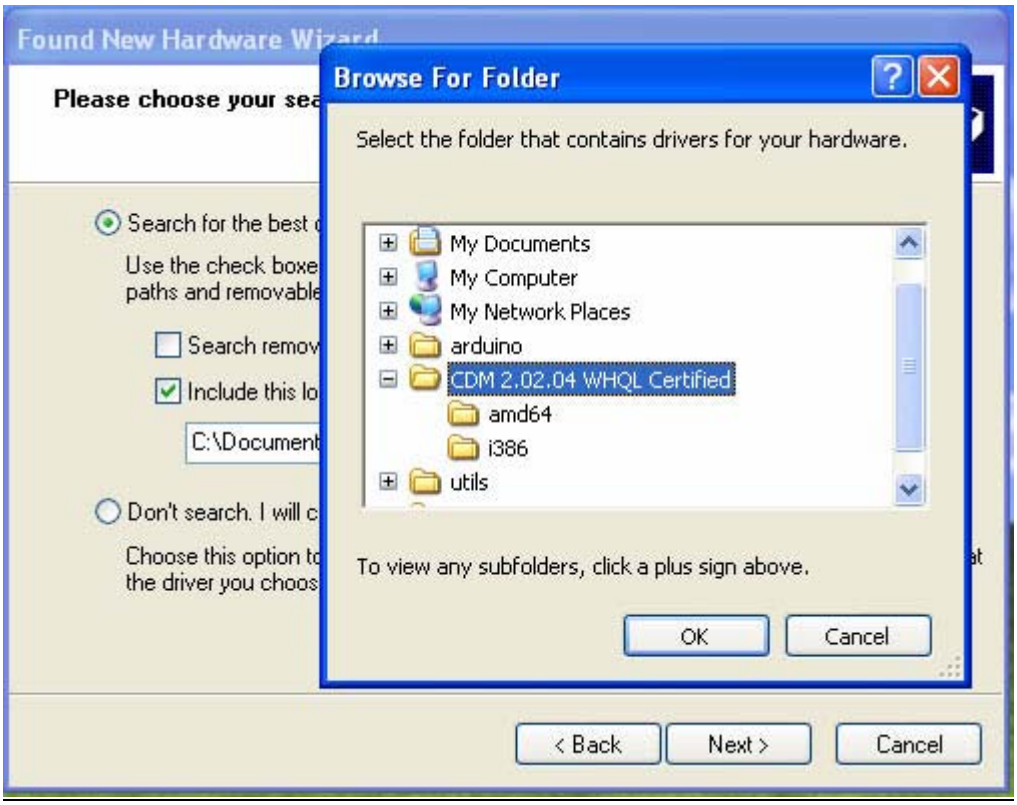
When you plug in the Arduino, you may hear a sound from the computer and a little popup bubble in the bottom right corner of the screen that says Found New Hardware FT232R USB UART

After a few seconds, the new hardware wizard will start. Select "No not this time" and click Next>

At the next screen, select Install from a list or specific location

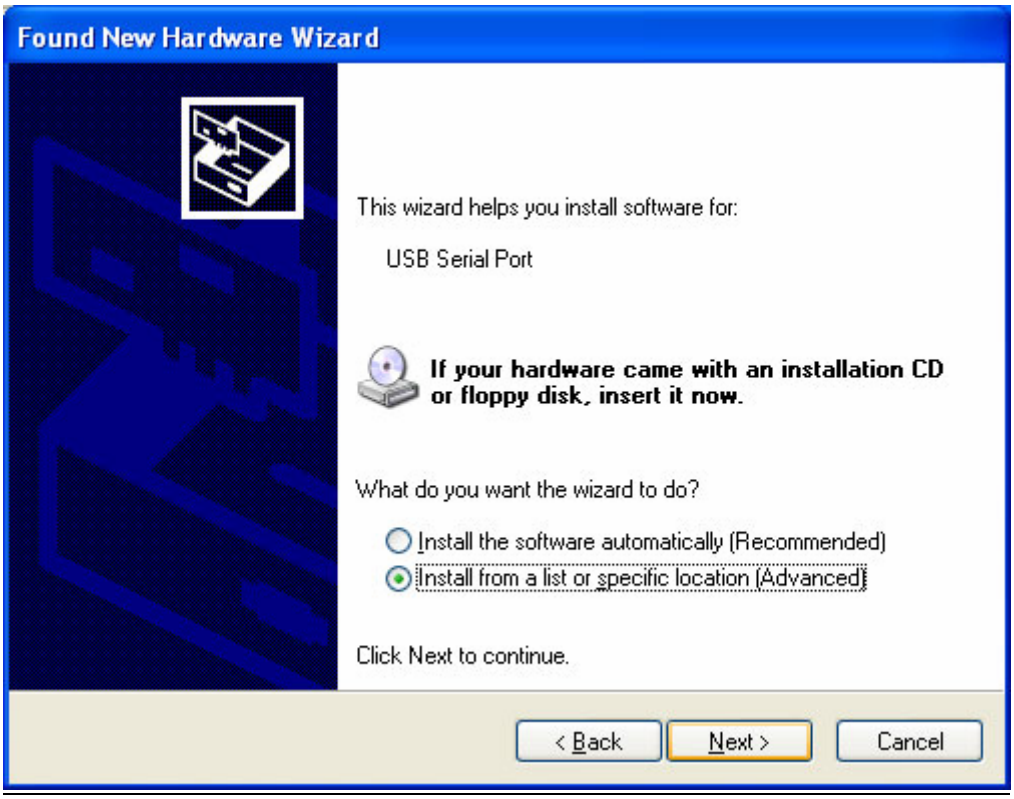


At the next screen make sure Include this location is selected and browse to the folder that contains the driver you downloaded. Select the folder and click OK



It should copy some files and then come up with this window. Click Finish

Almost immediately, another window will pop up, this time it will say USB Serial Port. As before, click Install from a list or specific location

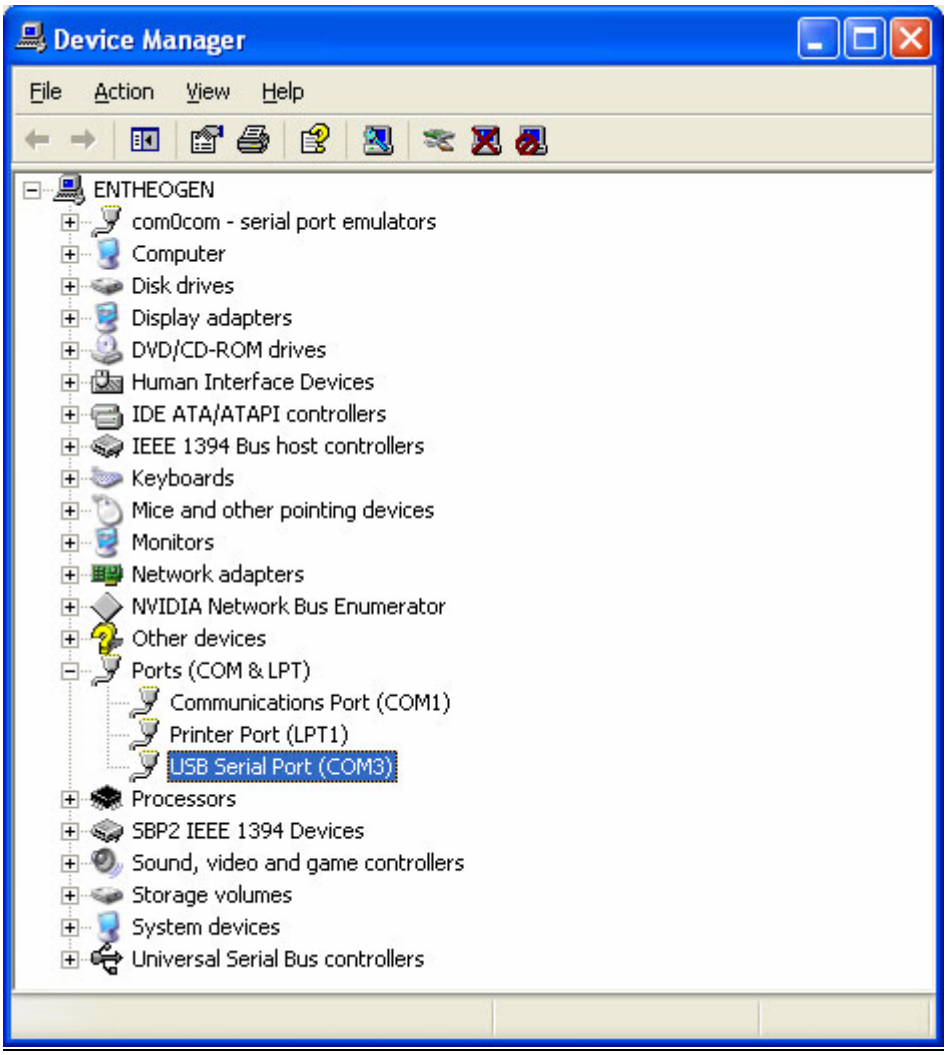


Browse to the same folder again...

And it should complete successfully!

You may need to reboot the computer.

When the computer is done rebooting, make sure the Arduino is plugged in (and the green light is lit). Go to the Device Manager (From the Start Menu, select Settings->Control Panel. Double click on System and select the Hardware tab. Then click on the Device Manager button)



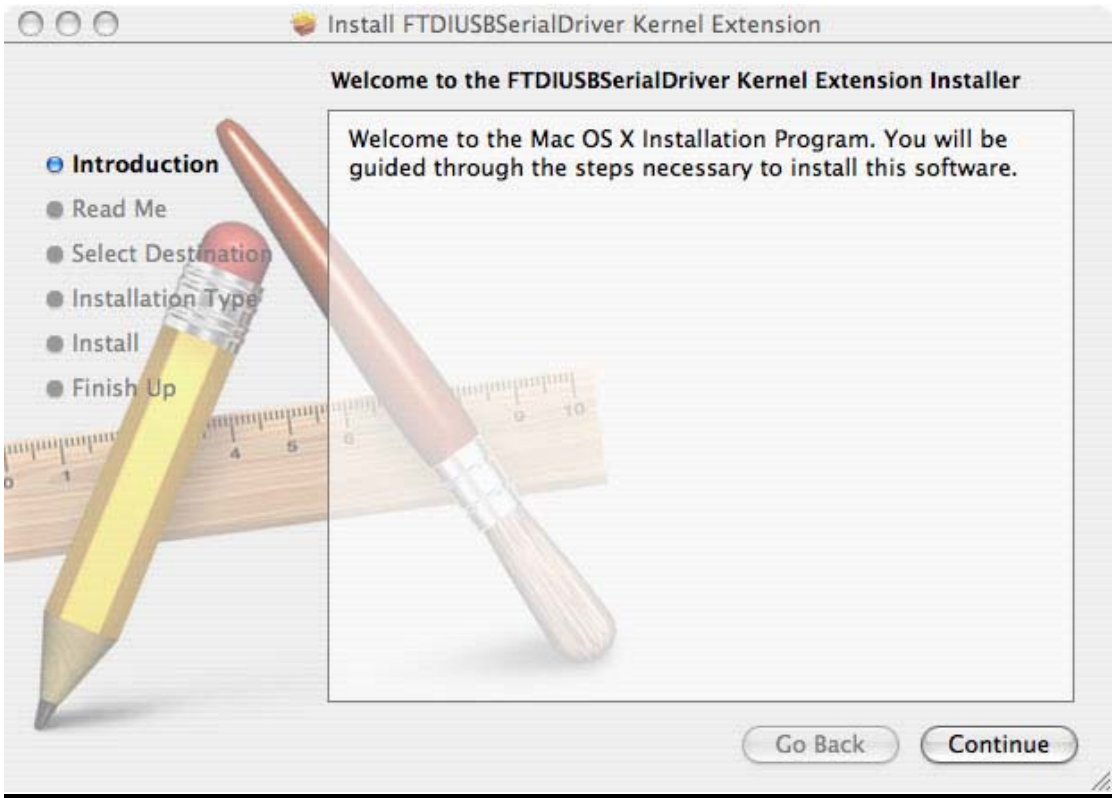
Look for an entry under Ports (COM & LPT) that says USB Serial Port (COM) the COM number may vary but it should be something like COM3 or COM4. The COM stands for "communication", and each one has a unique number, known as the COM Port number. In this case the COM Port number is COM3.

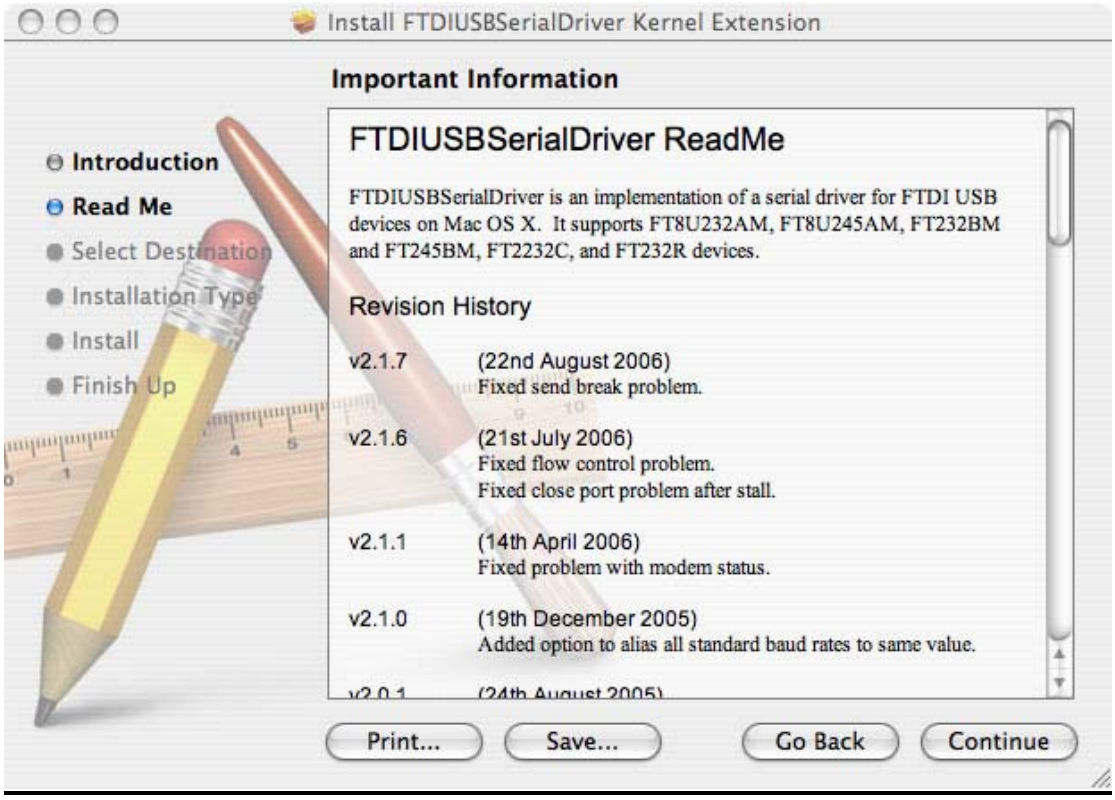
If you don't see the COM port verify the Arduino is plugged in, and check that you installed the VCP FTDI driver.

MAC OS

Open up the driver dmg file

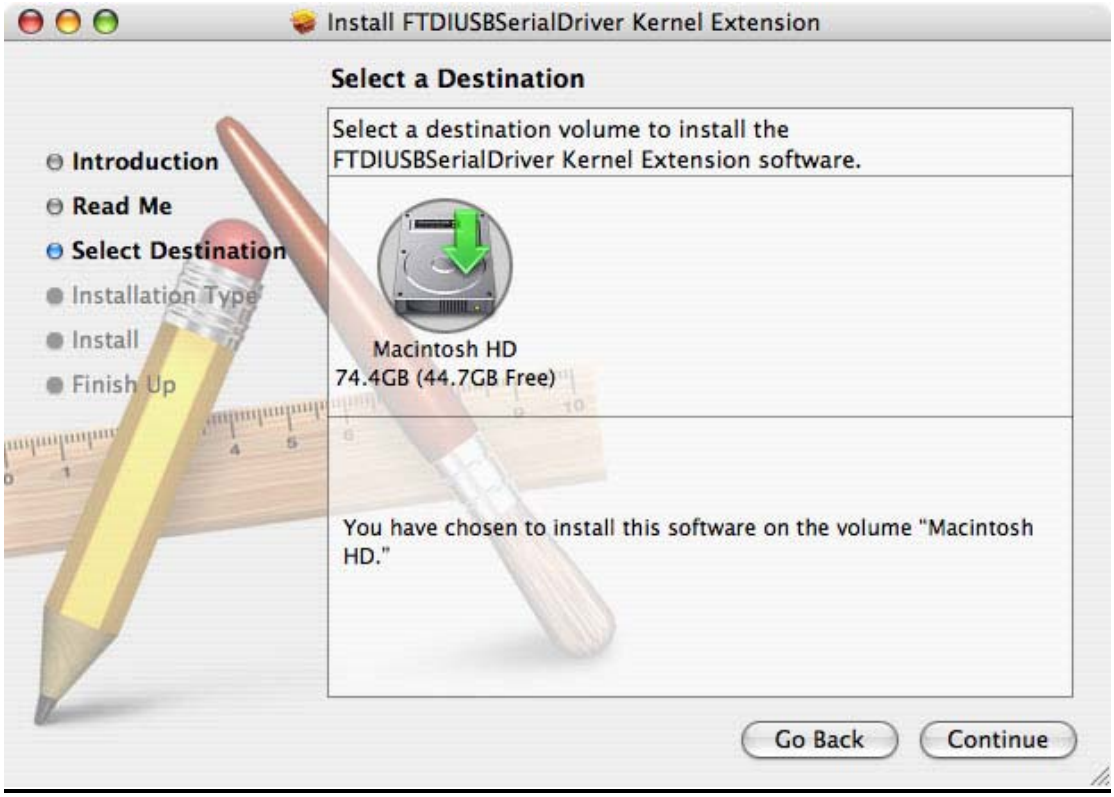
And double click on the driver package, go through all the steps necessary to install the driver

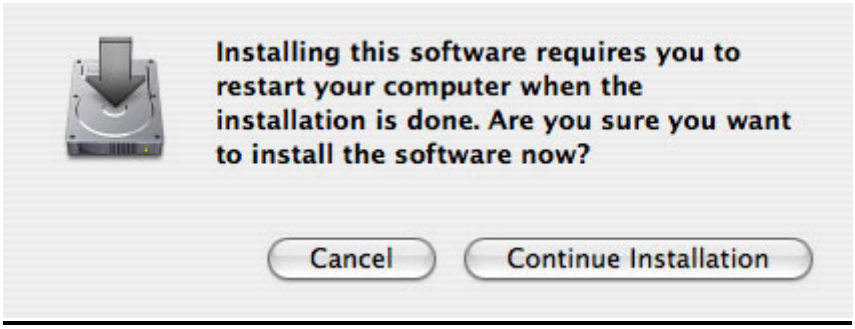


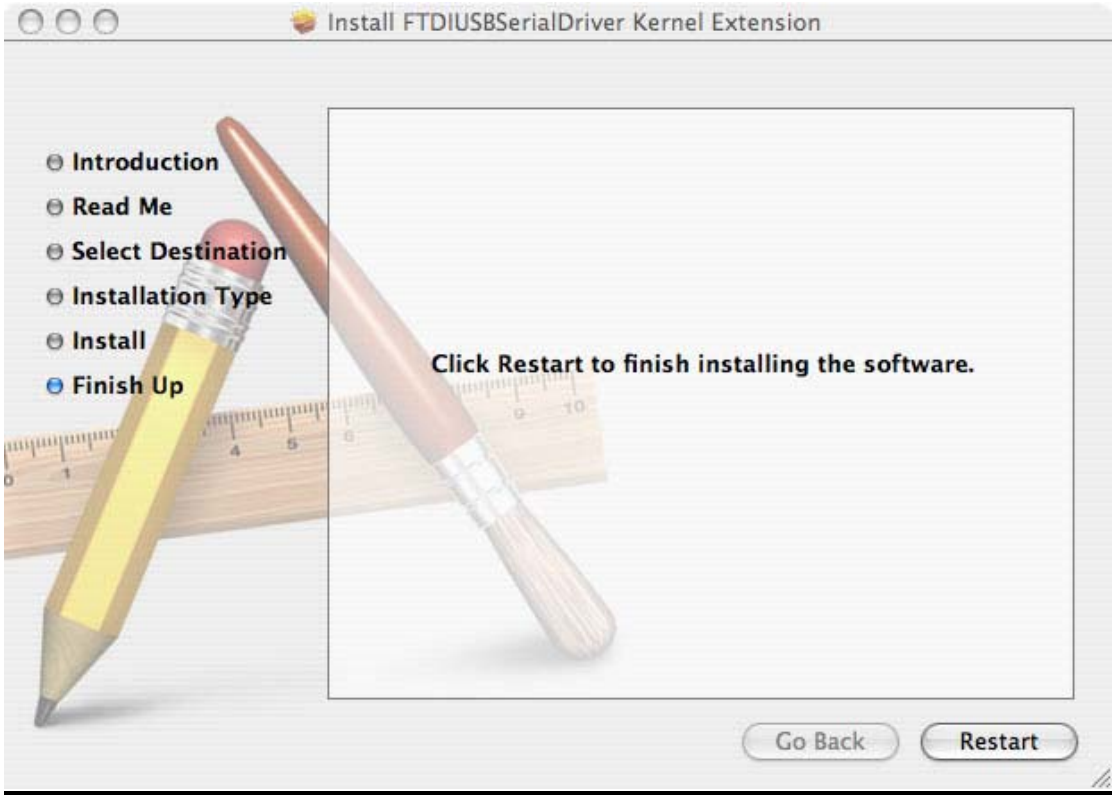


You will need administrative priviledges to install the software

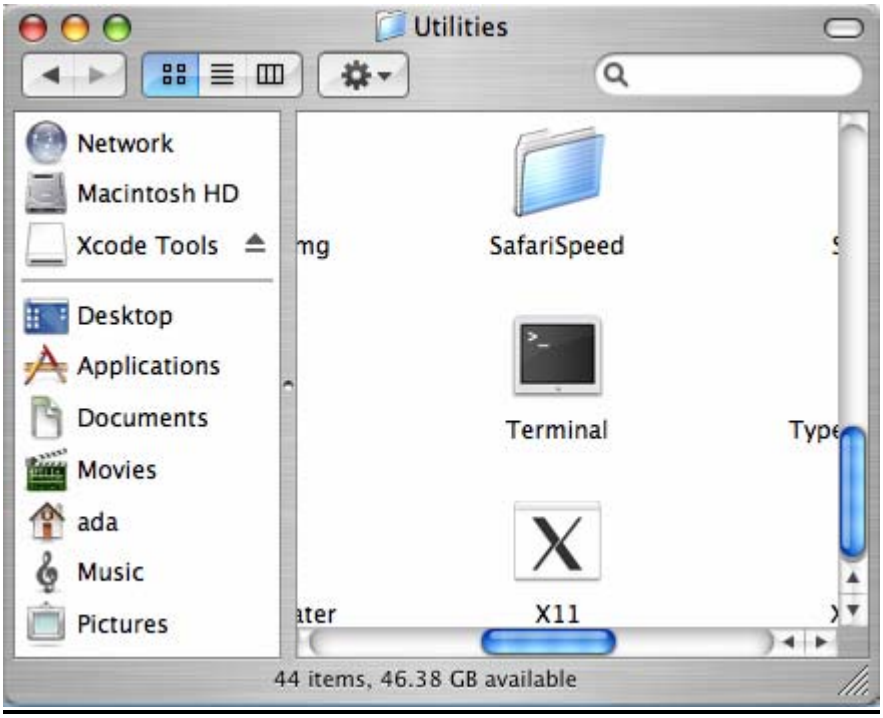
When it's done, restart the computer


Install FTDIUSBSerialDriver Kernel Extension
Select a Destination
Introduction
Read Me
Select Destination
Installation Type
Install
Finish Up
Select a destination volume to install the FTDIUSBSerialDriver Kernel Extension software.
Macintosh HD
74.4GB (44.7GB Free)
You have chosen to install this software on the volume "Macintosh HD."
Go Back
Continue

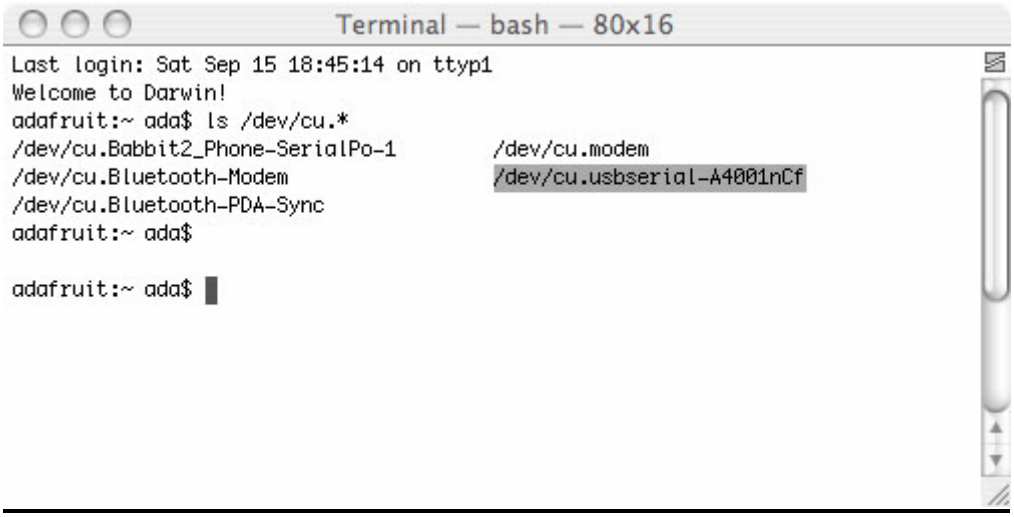

Installing this software requires you to restart your computer when the installation is done. Are you sure you want to install the software now?
Cancel
Continue Installation



Once its rebooted, start up Terminal, located in the Utilities folder



Plug in the Arduino, make sure the green light is on.
In the Terminal window, type in ls /dev/cu.* and/or ls /dev/tty.* which should give the following responses



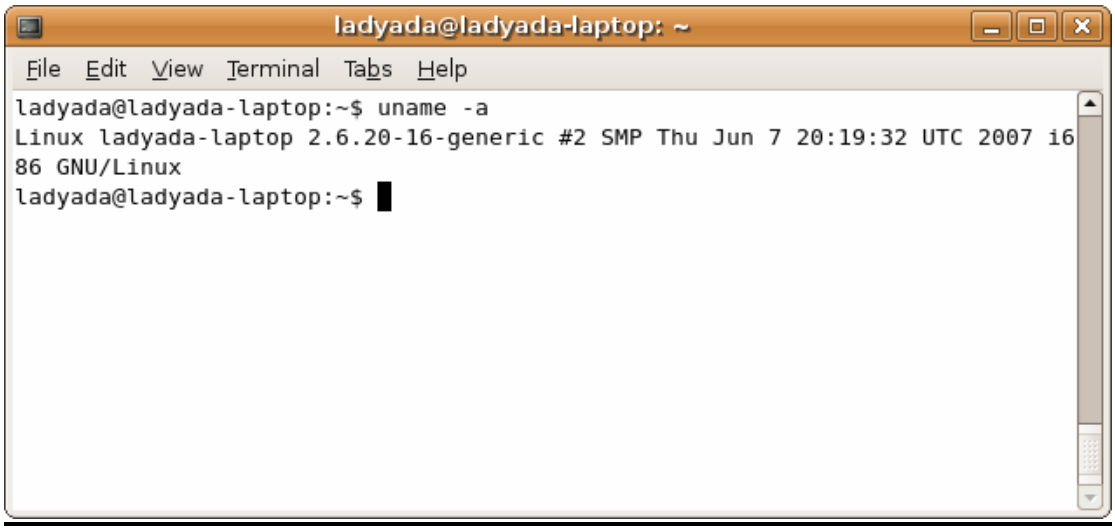
Make sure you see a line with the text /dev/cu.usbserial-xxxxx where the xxx's can be anything. Same for /dev/tty.usbserial-xxxxx. This indicates that the driver installed properly and that the Arduino was found.

If you can't find the text, verify that your Arduino is plugged in, try a different USB port.
You can also try running the Console application, which will possibly give you some information about why its failing.

LINUX

Linux doesn't have any drivers to install, assuming you're running a v2.6 kernel. These instructions assume you're running Ubuntu. Each linux distribution is different, but the instructions should be basic enough to follow for other distros.

You can verify your kernel version by running uname -a in a terminal window, note that this kernel is version 2.6.20

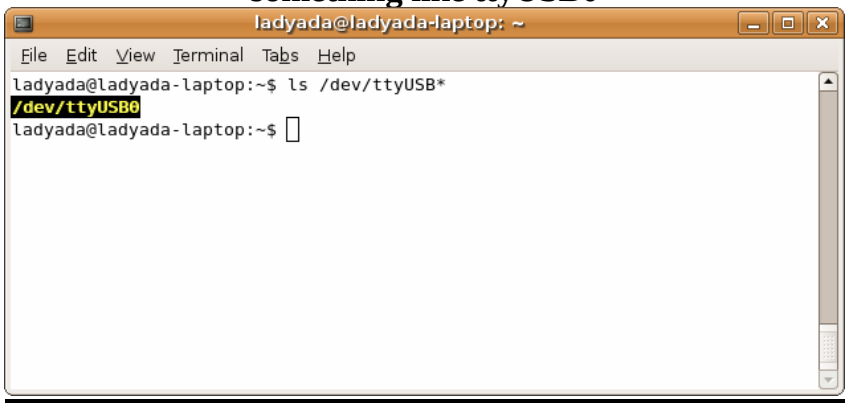


Sometimes the Linux distribution installs brltty (braille device) which will conflict with the Arduino. You must uninstall brltty! Do so by running

sudo apt-get remove brltty

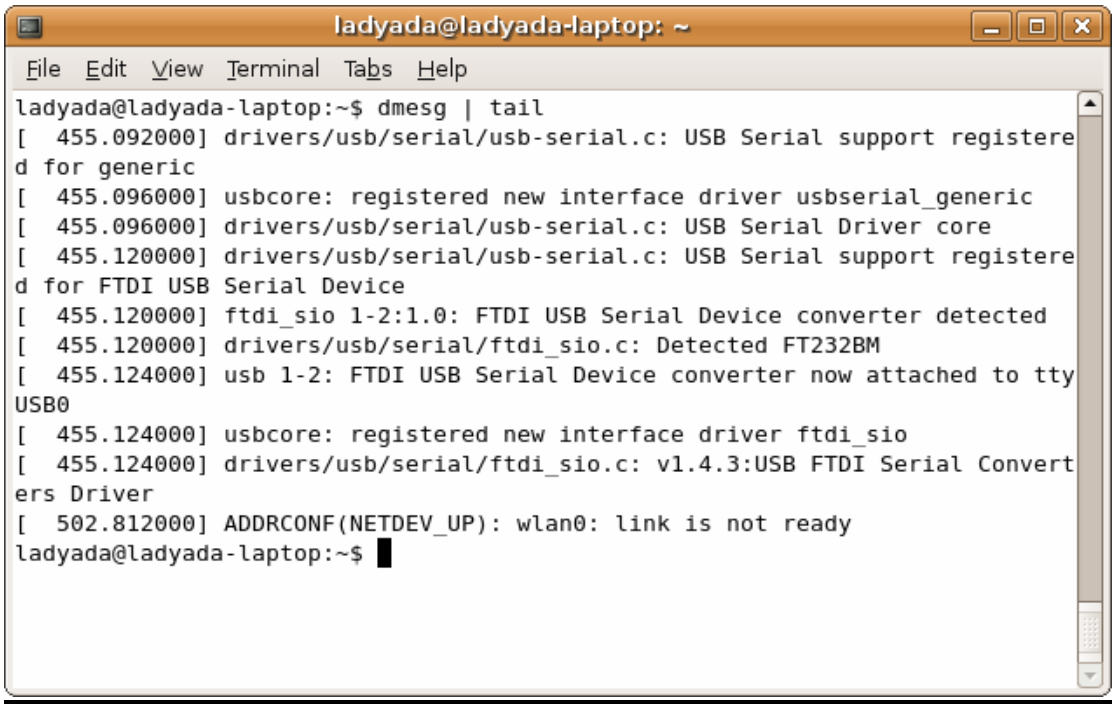
In a terminal window. If it says it's not installed then thats OK. If you're not running a Debian-derived installation use whatever tool is necessary to verify that you don't have brltty running

Plug in the Arduino, verify that the green LED is lit, and type ls /dev/ttyUSB* into a terminal window, you should see a device file called something like ttyUSB0



Depending on your Linux distro, it may be /dev/tty/USB0 or /dev/tty.USB etc.

If you can't seem to find it, use dmesg | tail right after plugging in the Arduino and look for hints on where it may put the device file. For example here is says Serial Device converter now attached to ttyUSB0



If you see something like this
[1900.712000] ftdi_sio 2-10:1.0: FTDI USB Serial Device converter detected
[1900.712000] drivers/usb/serial/ftdi_sio.c: Detected FT232BM
[1900.712000] usb 2-10: FTDI USB Serial Device converter now attached to ttyUSB0
[1901.868000] usb 2-10: usbfs: interface 0 claimed by ftdi_sio while 'brltty' sets config #1
[1901.872000] ftdi_sio ttyUSB0: FTDI USB Serial Device converter now disconnected from ttyUSB0
[1901.872000] ftdi_sio 2-10:1.0: device disconnected

That means you have not uninstalled brltty and you should try again.

2.Configuring The Arduino Environment

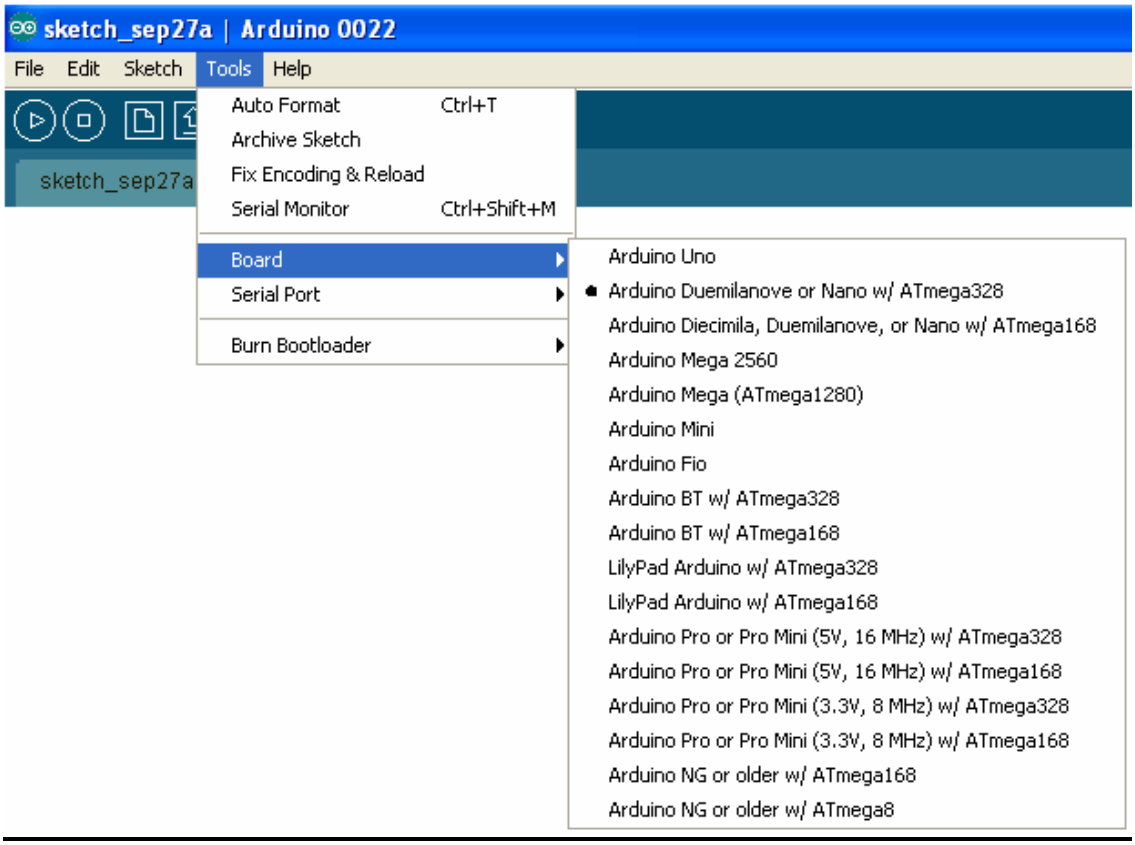
1. Getting the arduino environment:

Download the latest arduino for your OS from:
http://arduino.cc/en/Main/Software

The arduino environment is portable and only needs to be extracted from the archive.

2.Configuring the arduino environment

- **Remember the COM port that your board received during installation – then choose the same number from Tools/Serial Port/COMX where X is the number of the correct port.**
- **Since you are using the Olimexino-328, go to Tools/Board and choose the option shown below on the screenshot.**



Now your board should be configured and you can try running some of the example sketches, or start making your own.

Some useful links for those, who are new to the C/C++ language and/or the Arduino environment:

http://arduino.cc/en/Tutorial/HomePage
http://arduino.cc/en/Reference/HomePage

http://www.acm.uiuc.edu/webmonkeys/book/c_guide/
http://en.wikipedia.org/wiki/C_(programming_language)
http://arduino.cc/en/Guide

http://www.olimex.com/