

BlueInno2 User's Guide for OSX User

2016-8-24

Ver 0.1

This guide explains how to setup the development environment of BlueInno2 for OSX(Mac OS) users.

1. Prerequisites

First, you need to prepare followings,

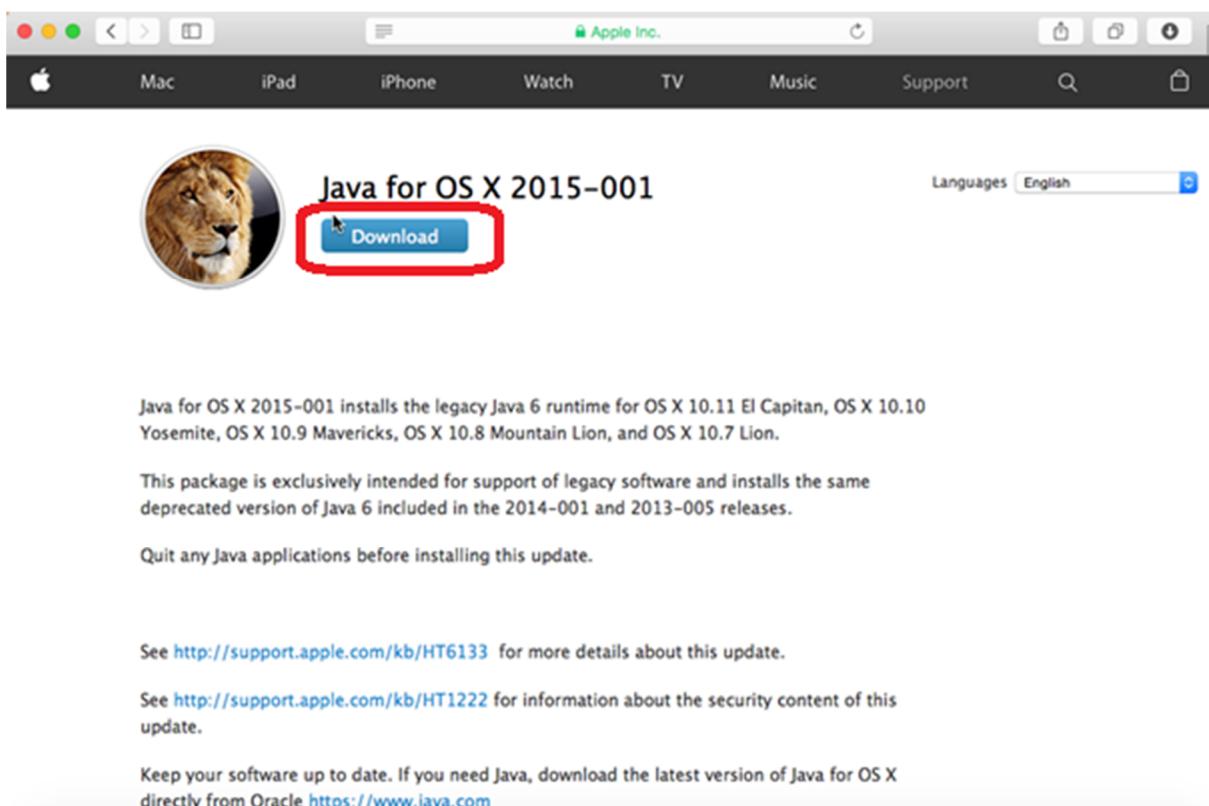
- Mac Machine : OS X 10.10 Yosemite
- Arduino IDE : Sketch 1.6.9 or above for Mac(<https://www.arduino.cc/>)

From now on, we assume that you have Mac machine.

2. Setup arduino dev. environment

A. Install Java for OS X

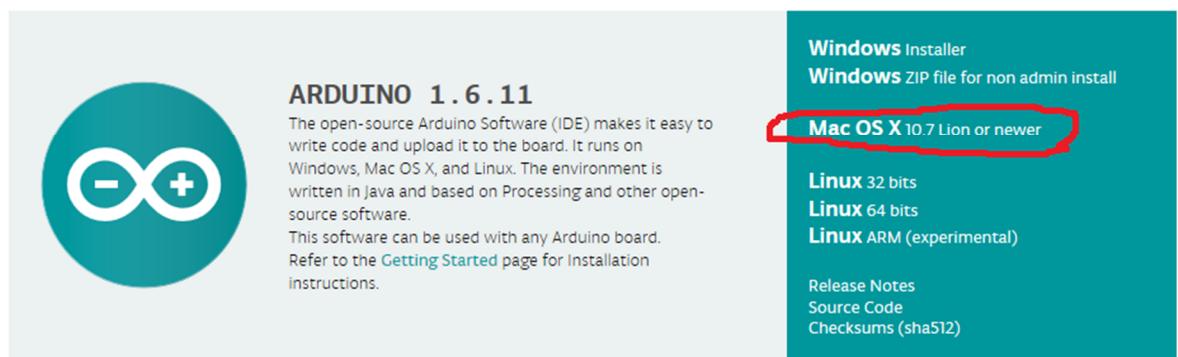
- Download and install Java for OS X using Safari web browser.
(https://support.apple.com/kb/DL1572?locale=ko_KR).



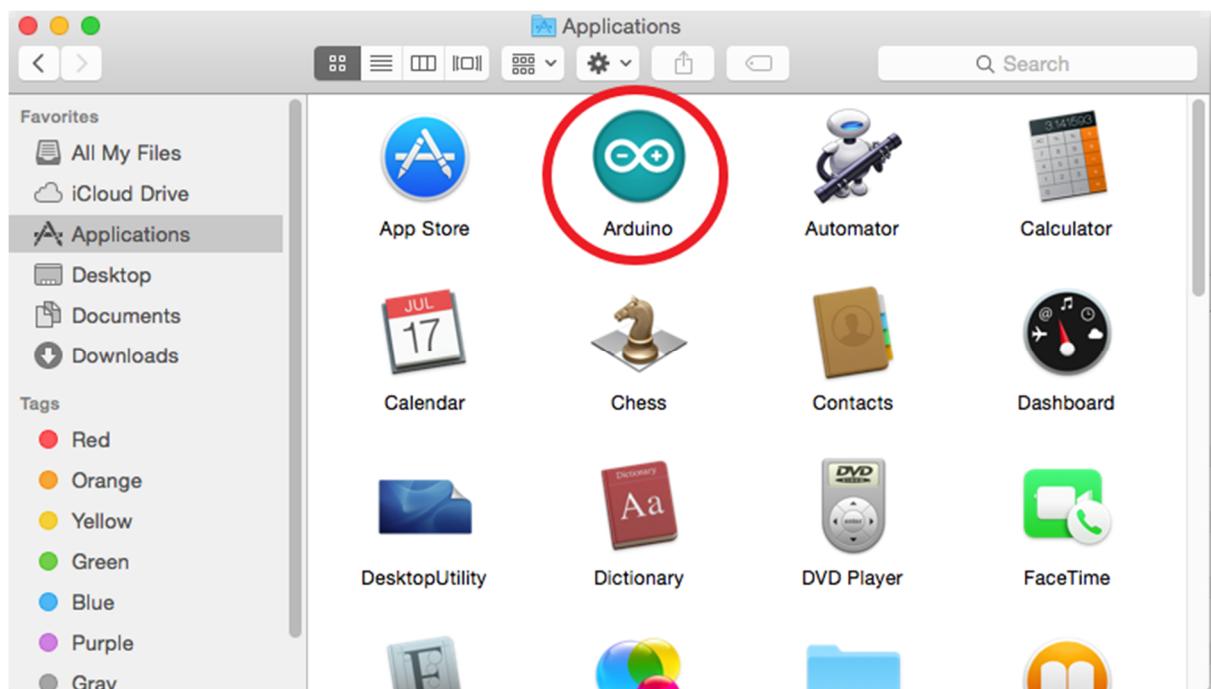
B. Install Arduino IDE

- Download and install arduino ide(1.6.9 or above) from Arduino home page(www.arduino.cc).

Download the Arduino Software



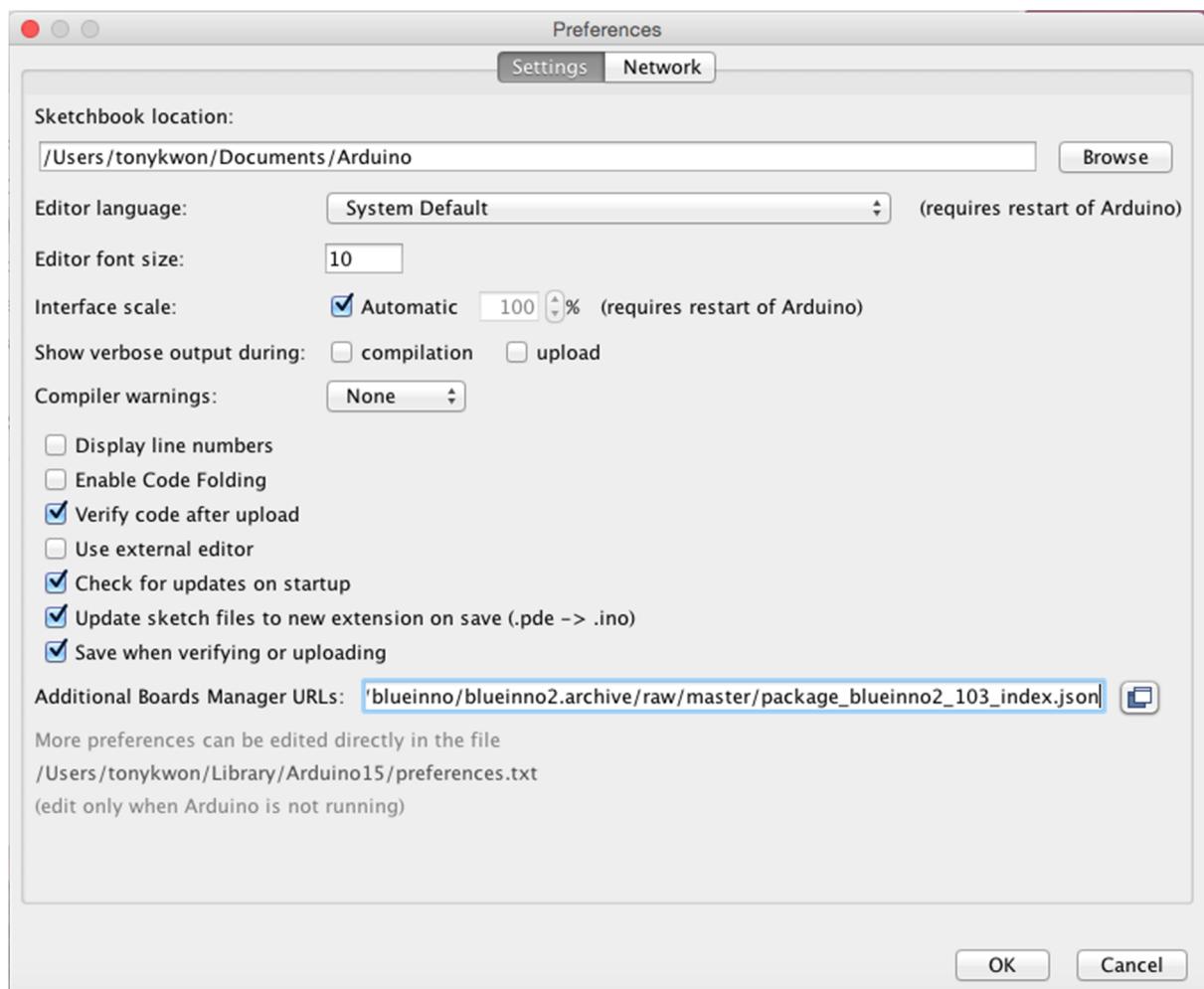
After downloading arduino ide, move into Applications folder.



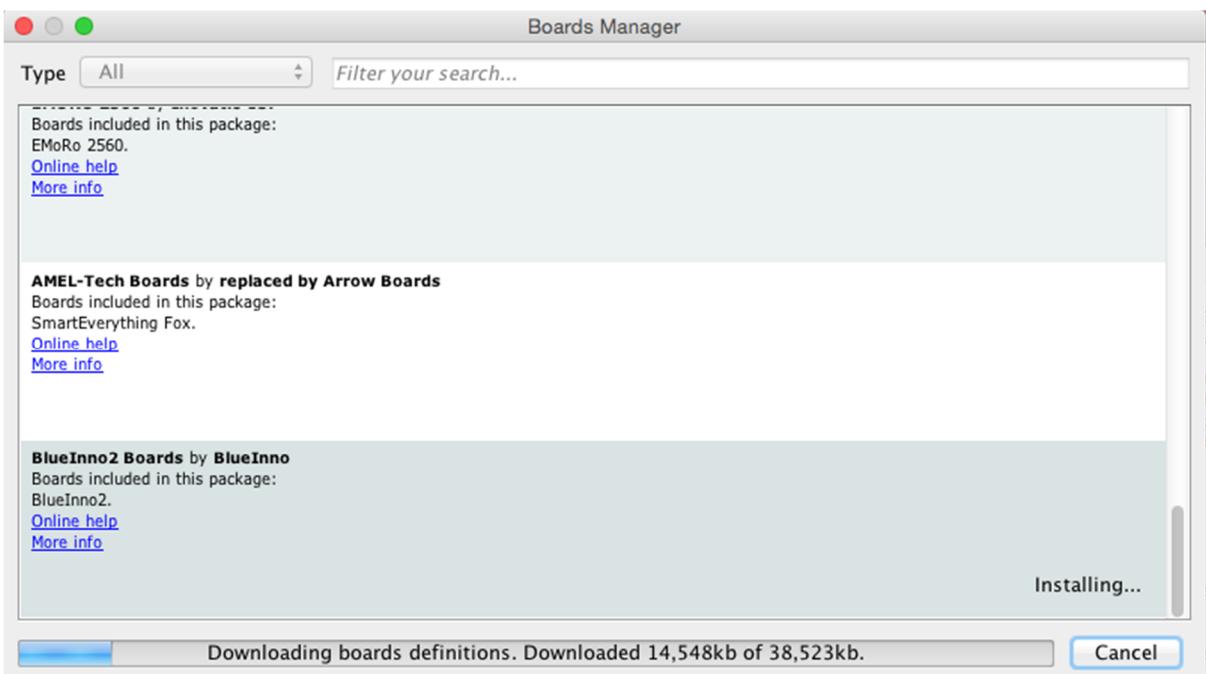
C. Install BlueInno2 library

First, execute arduino ide and setup for installing BlueInno2 library.

Edit Preferences(Arduino-> Preferences) and add
["https://github.com/blueinno/blueinno2.archive/raw/master/package_blueinno2_103_index.json"](https://github.com/blueinno/blueinno2.archive/raw/master/package_blueinno2_103_index.json) to Additional Board Manager URLs and save.



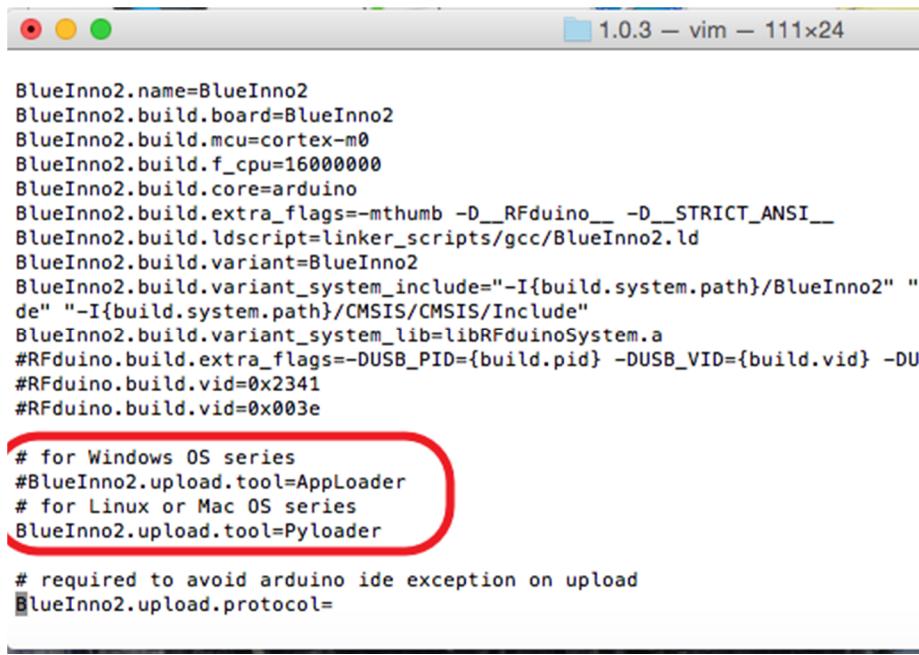
Install BlueInno2 Board in Boards Manager(Tools->Board Manager->BlueInno2 Boards).



You can find installed blueinno2 library under
/Users/username/Arduino15/packages/BlueInno2/hardware/BlueInno2

D. Change uploader tool

Open boards.txt file under the folder(/Users/username/Library/Arduino15/packages/BlueInno2/hardware/BlueInno2/1.0.3) and choose Pyloader for Mac OS.



```
1.0.3 – vim – 111x24

BlueInno2.name=BlueInno2
BlueInno2.build.board=BlueInno2
BlueInno2.build.mcu=cortex-m0
BlueInno2.build.f_cpu=16000000
BlueInno2.build.core=arduino
BlueInno2.build.extra_flags=-mthumb -D__RFduino__ -D__STRICT_ANSI__
BlueInno2.build.ldscript=linker_scripts/gcc/BlueInno2.ld
BlueInno2.build.variant=BlueInno2
BlueInno2.build.variant_system_include="-I{build.system.path}/BlueInno2" "-I{build.system.path}/CMSIS/CMSIS/Include"
BlueInno2.build.variant_system_lib=libRFduinoSystem.a
#RFduino.build.extra_flags=-DUSB_PID={build.pid} -DUSB_VID={build.vid} -DUART_VID={build.vid}
#RFduino.build.vid=0x2341
#RFduino.build.vid=0x003e

# for Windows OS series
#BlueInno2.upload.tool=AppLoader
# for Linux or Mac OS series
BlueInno2.upload.tool=Pyloader

# required to avoid arduino ide exception on upload
BlueInno2.upload.protocol=
```

E. Install USB Driver

- Visit the following link : <http://www.ftdichip.com/Drivers/VCP.htm>
- Download and Install the drivers for your system.
- Reboot the computer.

F. Setup intelhex and pyserial tool

Open terminal(Go>Applications>Utilities>Terminal) and install python-pip and intelhex.
You can find the terminal in Utilites.

```
$sudo easy_install pip
```

```
$sudo pip install intelhex
```

```
$sudo pip install pyserial
```

3. Compile & Upload

After executing Arduino IDE, select BlueInno2 as Board and choose /dev/tty.usbserial-D80017GD as Port(Tools->Board, Tools->Port->/dev/tty.usbserial-DB0017GD).

Select an example source.(File->Examples->BlueInno2NonBLE->01.Basics->Blink)

Compile and Upload.

Blink | Arduino 1.6.11

```
/*
Blink
Turns on an LED on for one second, then off for one second, repeatedly.

This example code is in the public domain.
*/

// Pin 3 has an green LED connected on the RGB LED shield
// give it a name:
int led_green = 13;

// the setup routine runs once when you press reset:
void setup() {
    // initialize the digital pin as an output.
    pinMode(led_green, OUTPUT);
}

// the loop routine runs over and over again forever:
void loop() {
    digitalWrite(led_green, HIGH);    // turn the LED on (HIGH is the voltage level
    delay(1000);                   // wait for a second
    digitalWrite(led_green, LOW);    // turn the LED off by making the voltage LOW
}
```

Done uploading.

Progress: [#####] 55%
Progress: [#####] 66%
Progress: [#####] 77%
Progress: [#####] 100%

Success!

23 BlueInno2 on /dev/cu.usbserial-DB00I7GD