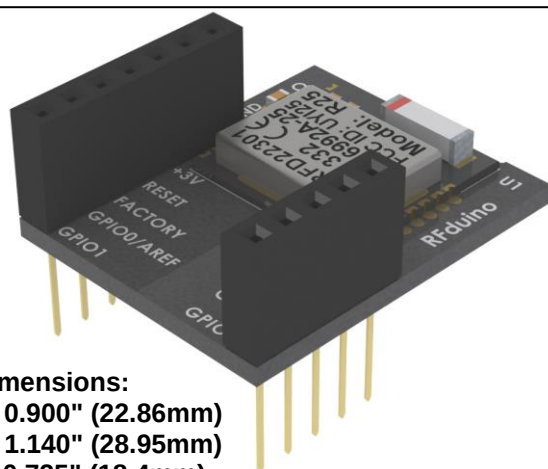


www.RFduino.com • sales@RFduino.com
1601 Pacific Coast Hwy • Suite 290
Hermosa Beach • CA • 90254
Tel: 949.610.0008

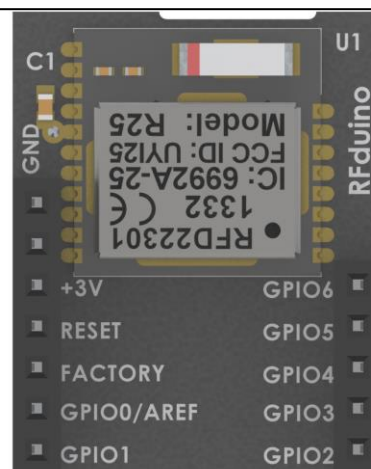


RFD22102 RFduino DIP

The RFduino is RF Module with Built-In BLE Stack and ARM Cortex M0 Microcontroller for Rapid Development and Prototyping Projects. It features the RFD22301 SMT Module.



Dimensions:
X: 0.900" (22.86mm)
Y: 1.140" (28.95mm)
Z: 0.725" (18.4mm)



Description	Min	Nom	Max	Notes
VDD - Supply Voltage	1.9 V	3.0 V	3.6 V	
General Purpose I/O (GPIO) input high voltage	0.7 * VDD		VDD	
General Purpose I/O (GPIO) input low voltage	VSS		0.3 * VDD	
Output standard drive current		0.5 mA		
Output high drive current		5 mA		Max 3 pins
ULP Current with RC OSC Running		4uA		
Transmit Current		18mA		
Receive Current		18mA		
ARM CPU Running Current		4mA		



RFduino IDE Installation on Windows

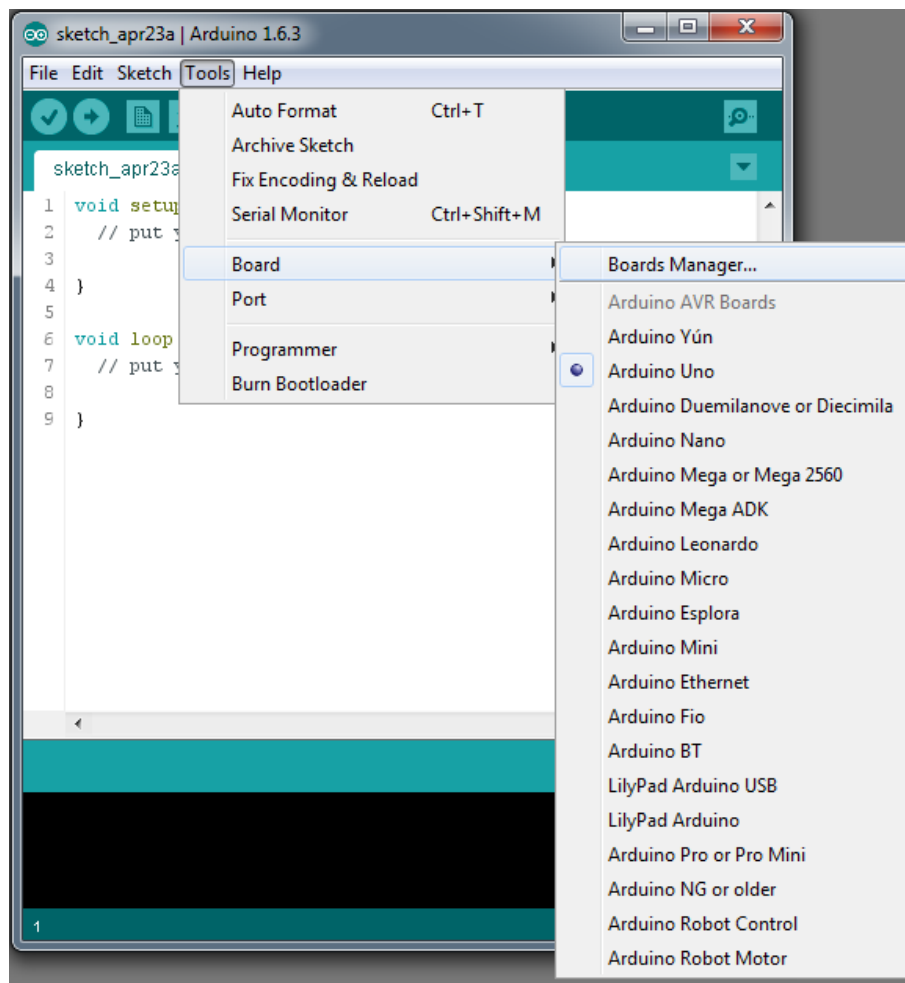
5. Go to Edit Preferences, and add http://rfduino.com/package_rfduino_index.json to Additional Board Manager URLs and save.

A screenshot of the 'Preferences' dialog box in the Arduino IDE. The dialog has a title bar with the Arduino logo and the word 'Preferences'. It contains several sections of settings. The 'Sketchbook location' is set to 'C:\Users\J21\Documents\Arduino'. The 'Editor language' is 'System Default' and the 'Editor font size' is '11'. There are checkboxes for 'Show verbose output during' (checked for 'compilation', unchecked for 'upload'), 'Compiler warnings' (set to 'None'), 'Display line numbers' (checked), 'Verify code after upload' (checked), 'Use external editor' (unchecked), 'Check for updates on startup' (checked), 'Update sketch files to new extension on save (.pde -> .ino)' (checked), 'Automatically associate .ino files with Arduino' (checked), and 'Save when verifying or uploading' (checked). A 'Proxy Settings' section contains fields for 'Server (HTTP): rfduino.com', 'Port (HTTP): 8080', 'Server: (HTTPS)', 'Port (HTTPS): 8443', 'Username:', and 'Password:'. The 'Additional Boards Manager URLs:' field contains the text 'http://rfduino.com/package_rfduino_index.json'. At the bottom, there is a note: 'More preferences can be edited directly in the file C:\Users\J21\AppData\Roaming\Arduino15\preferences.txt (edit only when Arduino is not running)'. There are 'OK' and 'Cancel' buttons at the bottom right.



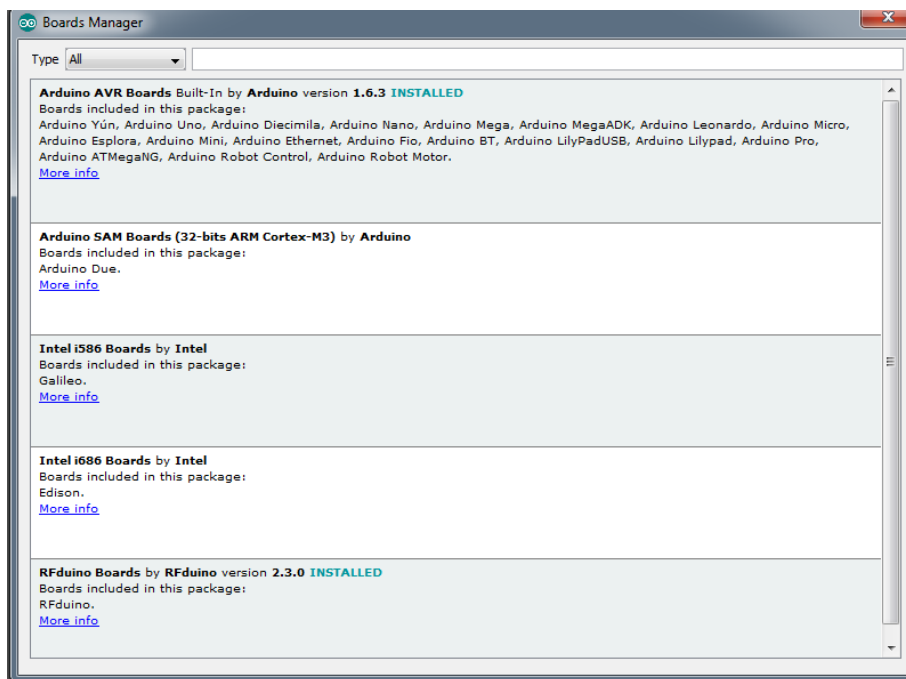
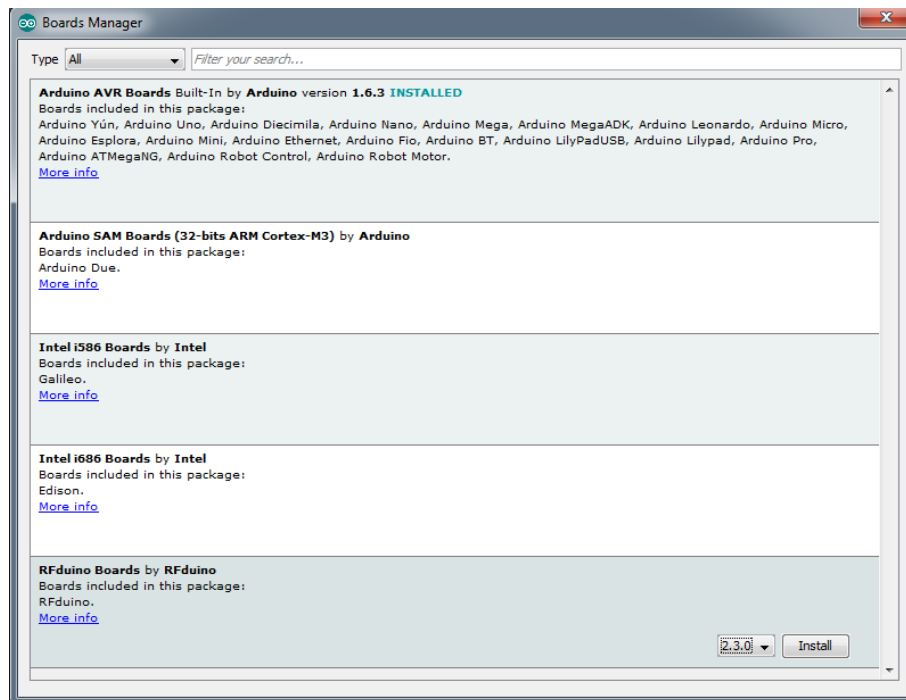
RFduino IDE Installation on Windows

6. Go to **Tools > Board > Board Manager...** to open the Board Manager. A list of various Boards will show in a list. Scroll down until you see **RFduino Boards by RFduino**. Click on this Item to select it. Once selected, an option on the right will appear to install the RFduino library. Clicking this will install the latest RFduino library by default. Once installed, you can close the Board Manager Menu.





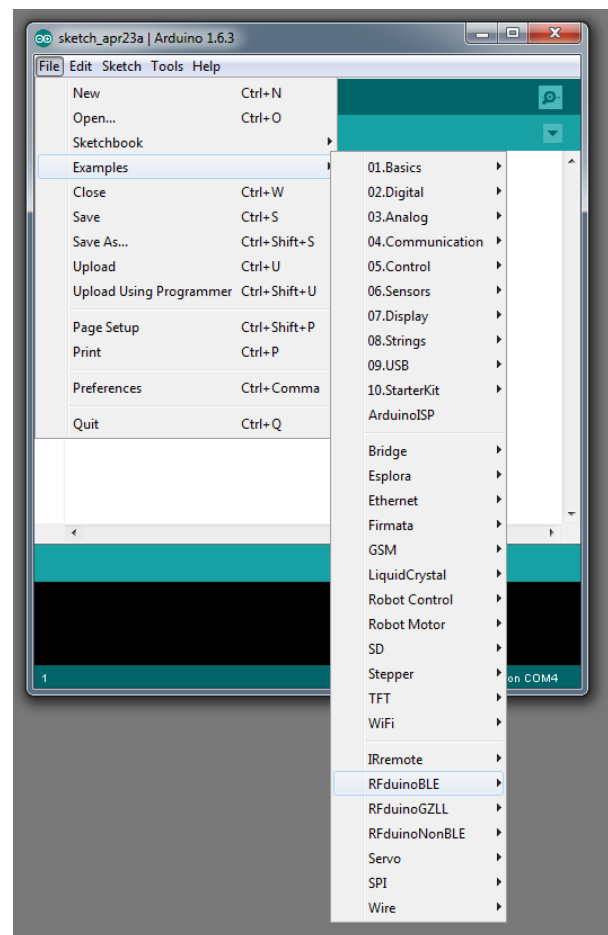
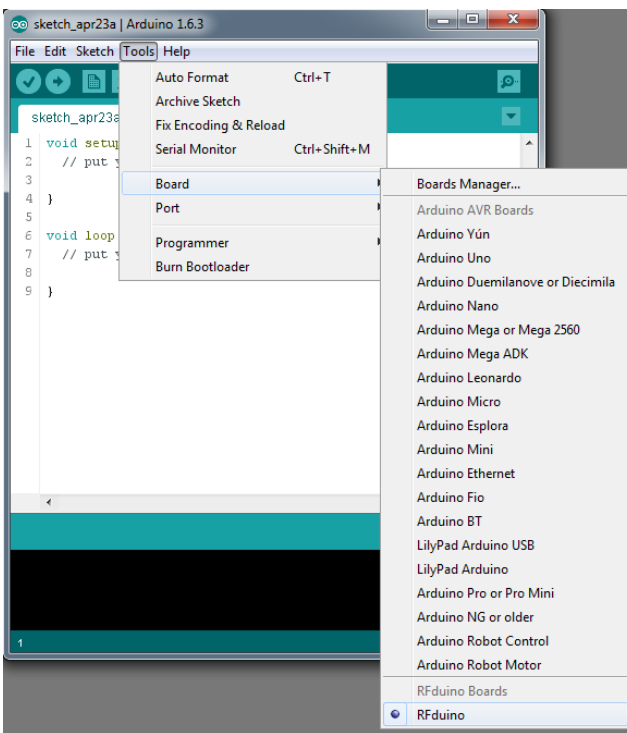
RFduino IDE Installation on Windows





RFduino IDE Installation on Windows

7. Go to Tools > Board menu, and select RFduino. With RFduino selected as the Board, you may now view the RFduino BLE, GZLL, and Non-BLE Examples in the File > Examples drop down list.

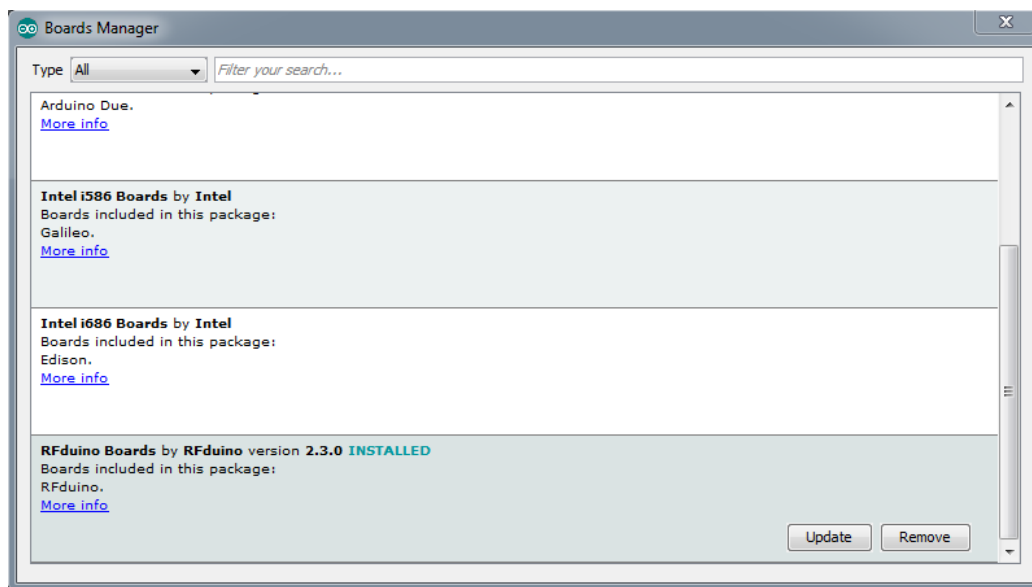


8. Congratulations, you are now ready to program the RFduino!



Updating RFduino Library

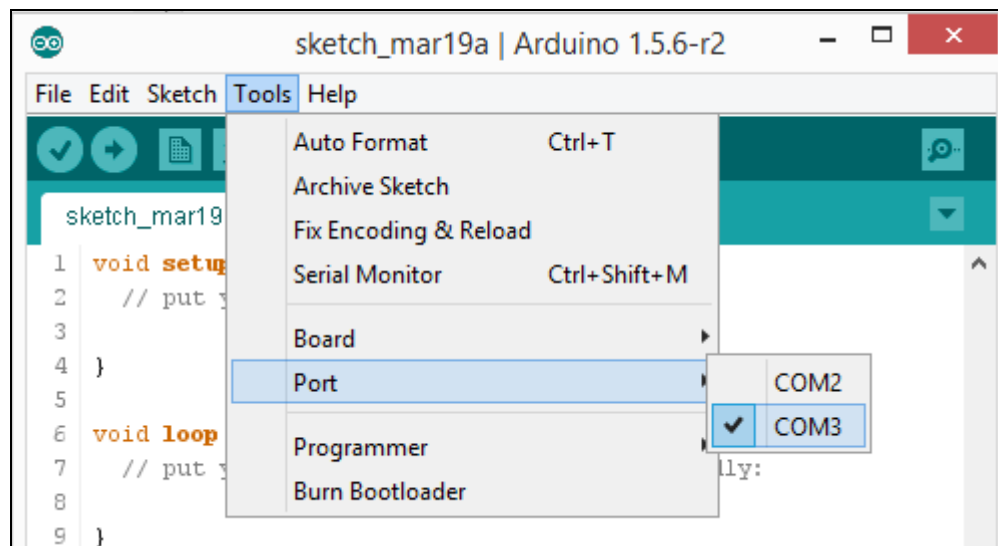
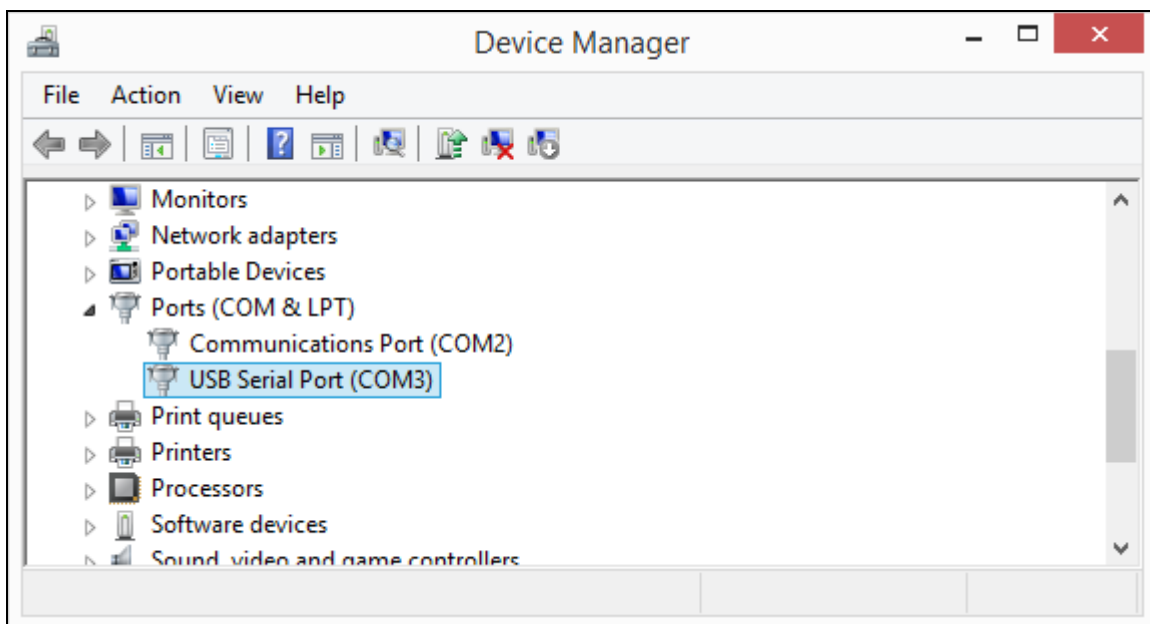
1. Periodically, the RFduino Team will update the RFduino Library files. To keep current with the latest library updates, we recommend following the RFduino Forum and RFduino page.
2. To update the library, go to Tools > Boards > Board Manager. Scroll down to RFduino Boards and click to highlight the option. Click Update to download the latest library.





RFduino USB Driver Installation on Windows

1. Visit the following link: <http://www.ftdichip.com/Drivers/VCP.htm>
2. Download and install the drivers for your system
3. On Windows you should have a new com port called “USB Serial Port”



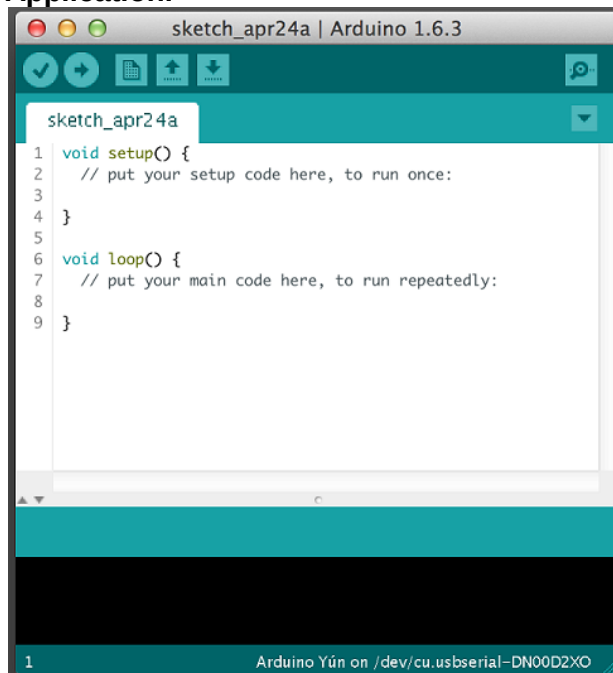


RFduino IDE Installation on Mac OS X

1. Visit the following link: <http://arduino.cc/en/Main/Software>
2. Download Arduino IDE v1.6.4 or newer for Mac OS X
3. Extract the Arduino app to your Application folder



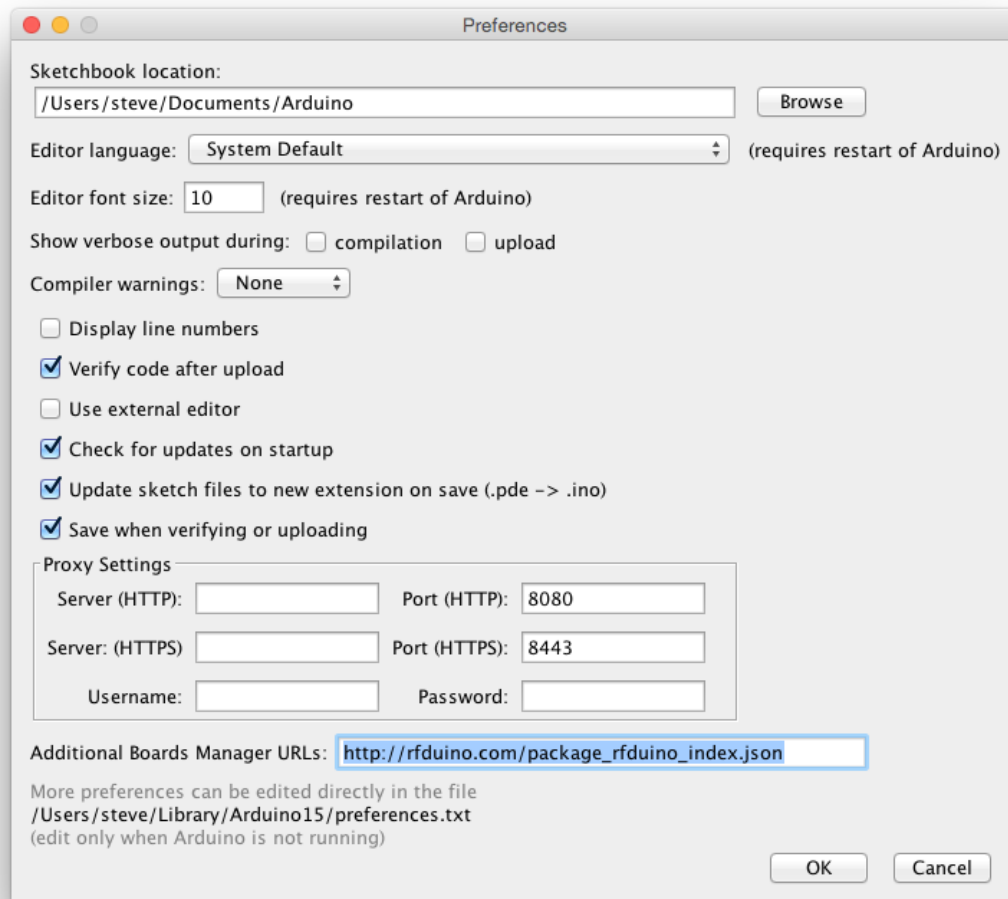
4. Open the Arduino Application.





RFduino Installation on Mac OS X

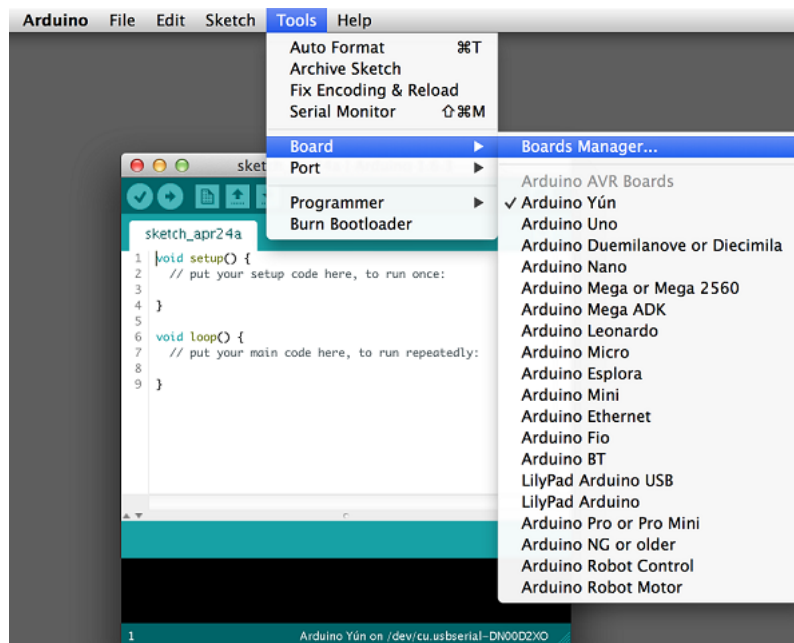
5. Go to Edit Preferences, and add http://rfduino.com/package_rfduino_index.json to Additional Board Manager URLs and save.





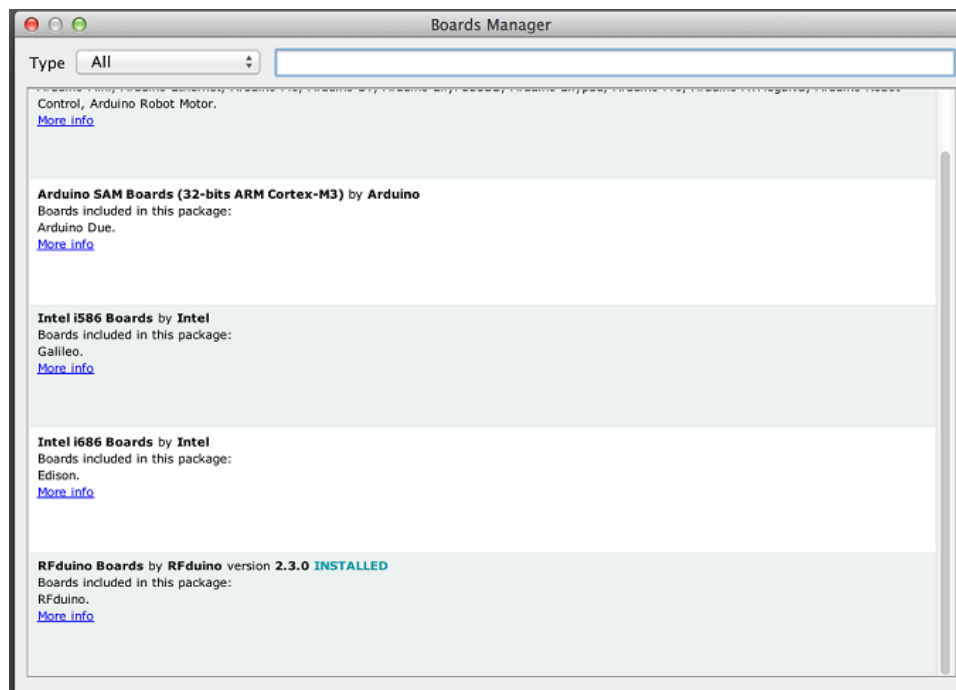
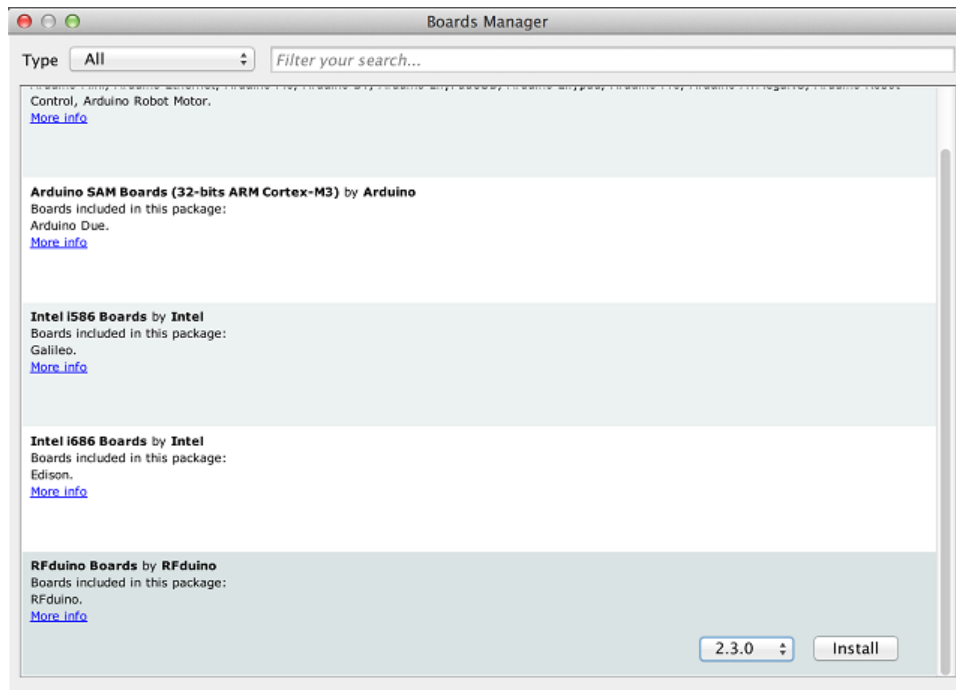
RFduino IDE Installation on Mac OS X

6. Go to Tools > Board > Board Manager... to open the Board Manager. A list of various Boards will show in a list. Scroll down until you see RFduino Boards by RFduino. Click on this Item to highlight it. Once selected, an option on the right will appear to install the RFduino library. Clicking this will install the latest RFduino library by default. Once installed, you can close the Board Manager Menu.





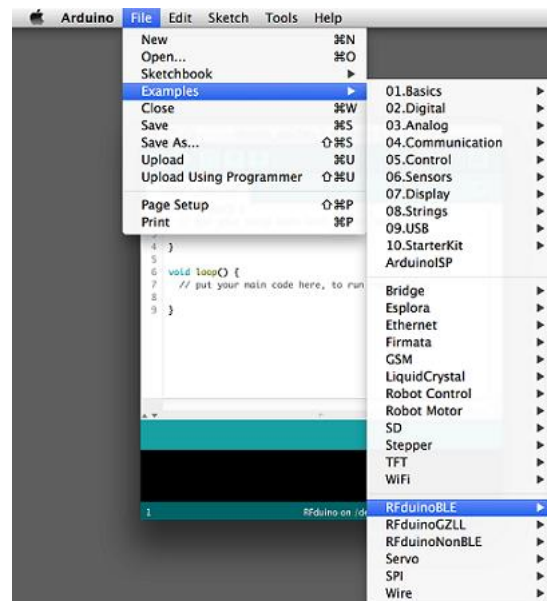
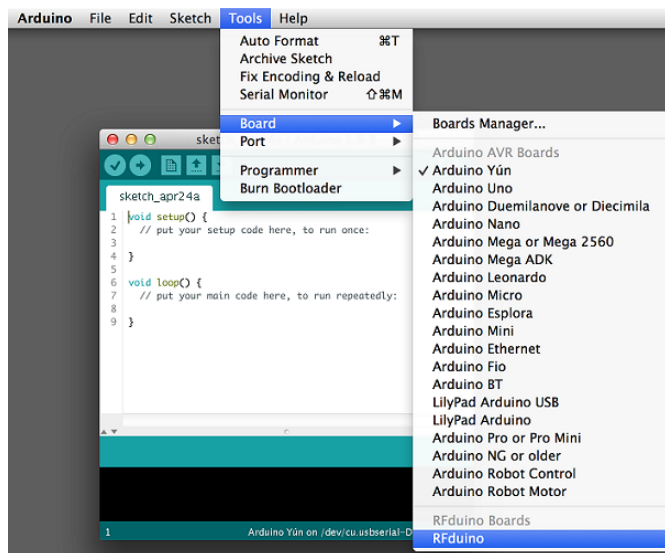
RFduino IDE Installation on Mac OS X





RFduino IDE Installation on Mac OS X

7. Go to Tools > Board menu, and select RFduino. With RFduino selected as the Board, you may now view the RFduino BLE, GZLL, and NonBLE Examples in the File > Examples drop down list.

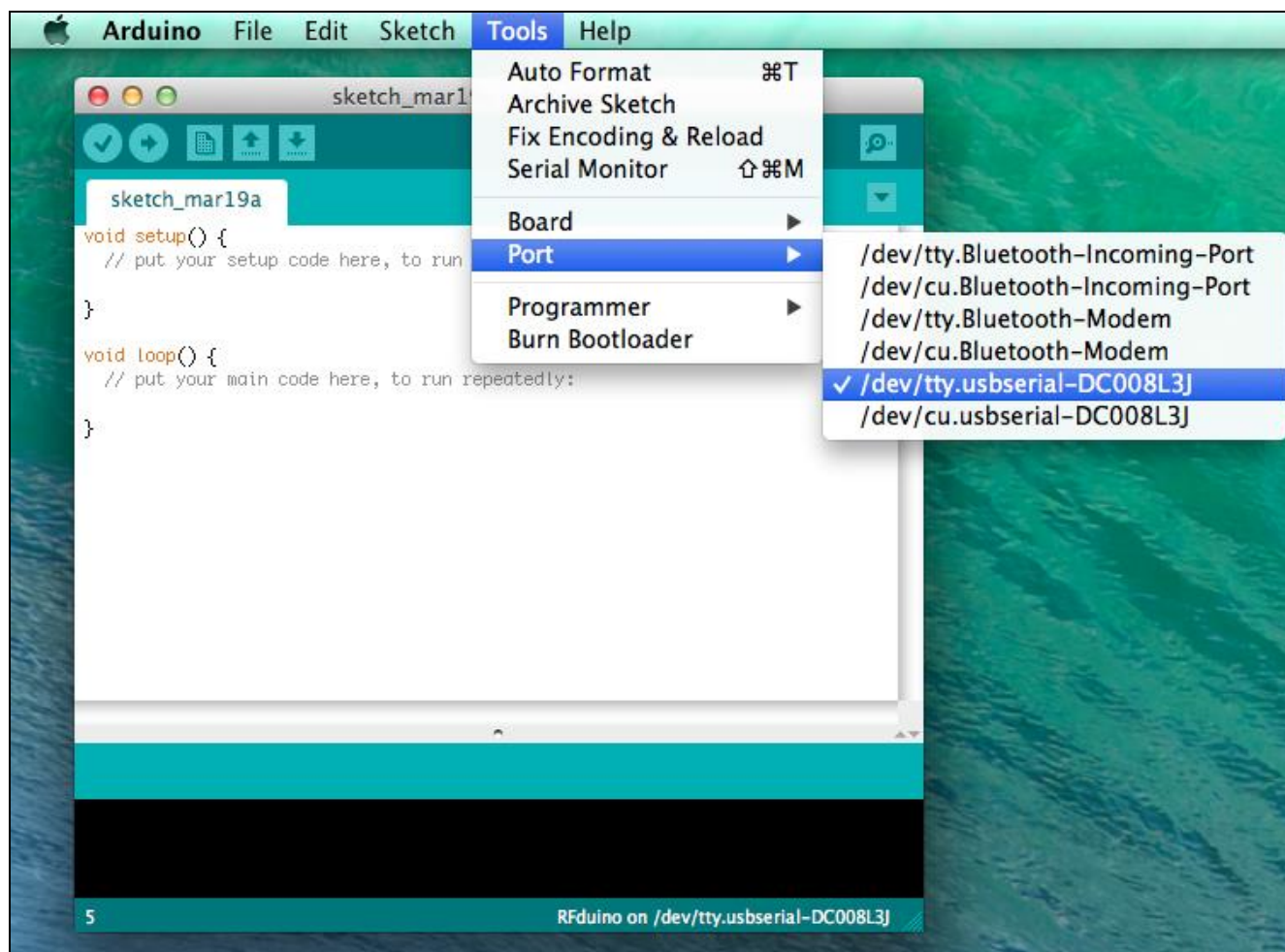


8. Congratulations, you are now ready to program the RFduino!



RFduino USB Driver Installation on Mac OS X

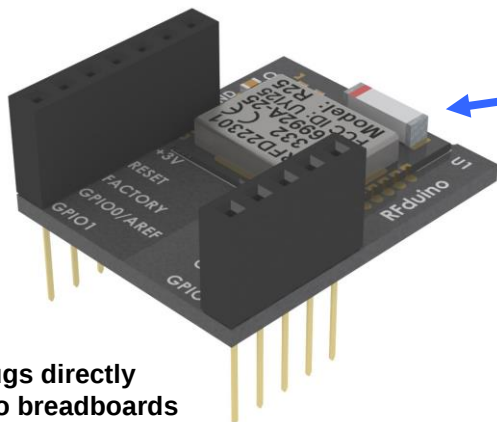
1. Visit the following link: <http://www.ftdichip.com/Drivers/VCP.htm>
2. Download and install the drivers for your system
3. On Mac OS X you should have a new com port called “/dev/tty.usbserial-xxxxxxx”





RFD22102 RFduino DIP is based on RFD22301 SMT

RFD22102 RFduino DIP

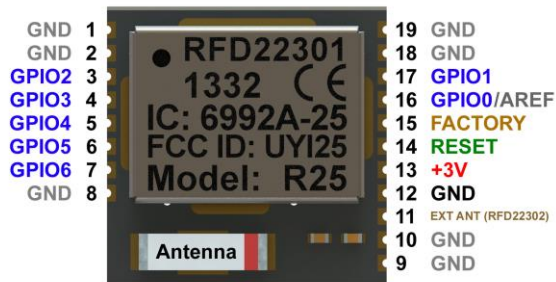
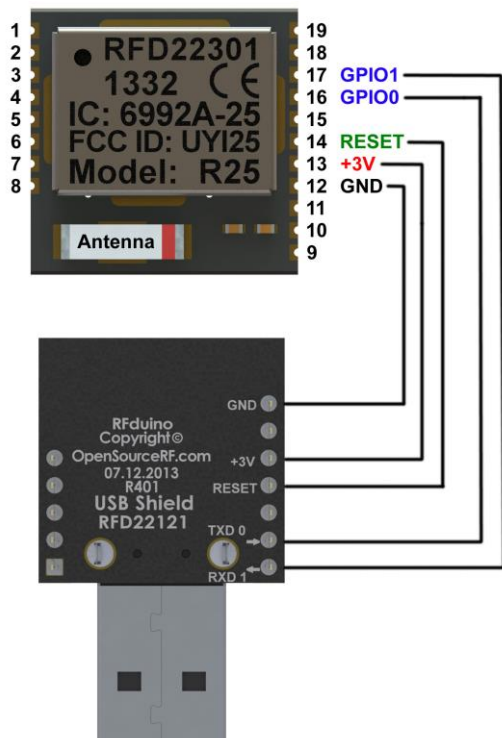


Plugs directly
into breadboards

RFD22301 RFduino SMT Module



The RFD22301
compliance approved
SMT module is placed
onto a DIP board to
create the RFD22102
RFduino DIP form factor.



**CE, ETSI, IC, FCC
Approved & Certified**

See RFD22301 datasheet at:
<http://www.RFDigital.com/>