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RFduino Quickstart Guide

RFD22102 RFduino DIP

RFD22121 USB Shield RFD22122 RGB LED / Button Shield RFD22123 Servo Shield RFD22124 PCB USB Shield RFD22125 Proto Shield RFD22126 Dual AAA Battery Shield RFD22127 Single AAA Battery Shield RFD22128 CR2032 Battery Shield RFD22130 MicroSD Shield RFD22131 Dual Relay Shield

RFD90101, RFD90102, RFD90103, RFD90104, RFD90105 Eval / Dev Kits

An RFduino "Shield" is a modular accessory that directly plugs into the RFduino.

Shrunk an Arduino to the size of a finger-tip and made it Wireless!





RFduino is a RF Module with Built-In BLE Stack and ARM Cortex M0 Microcontroller for Rapid Development and Prototyping Projects

Simple to use Arduino IDE and sketches running on professional grade hardware

Manufactured by RF Digital Corp. - Support: support@RFduino.com

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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.





Description	Min	Nom	Мах	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		

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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.

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Compiler warnings:	None 👻
🔽 Display line numb	bers
Verify code after	upload
🔲 Use external edi	tor
Check for update	es on startup
Update sketch fi	es to new extension on save (.pde -> .ino)
Automatically as	sociate ino files with Arduino
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Provy Settings	ying or uploading
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Server: (HTTPS)	Port (HTTPS): 8443
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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.

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	Arduino Ethernet
	Arduino BT
	LilyPad Arduino USB
	LilyPad Arduino
	Arduino Pro or Pro Mini
	Arduino NG or older
1	Arduino Robot Control
	Arduino Robot Motor

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RFduino IDE Installation on Windows

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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.

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		Arduino Mega ADK		Print	Ctrl+P	08.Strings
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						with
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						RFduinoBLE
						RFduinoGZLL
						RFduinoNonBLE
						Servo
						SPI

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

Wire

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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.

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Arduino Due.	
More info	
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Intel i686 Boards by Intel	
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Boards included in this package: Reduino	
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RFduino USB Driver Installation on Windows

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



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6	void loop	Programmer COM3	
7	// put y	Burn Bootloader	
9	}		

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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.

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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.

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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.



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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.

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Board Port Programmer sketch_apr24a 1 void setup() { 2 // put your setup code here, to run once:	Boards Manager Arduino AVR Boards ✓ Arduino Yun Arduino Uno Arduino Duemilanove or Diecimila Arduino Nano		Close Save Save As Upload Upload Using Programmer Page Setup Print	#W #S 쇼뷰S #U 쇼뷰U 쇼뷰P #P	02.Digital 03.Analog 04.Communication 05.Control 06.Sensors 07.Display 08.Strings 09.USB	* * * * * * *
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8. Congratulations, you are now ready to program the RFduino!

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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"



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