

# XBee Shield V1.1

-XBee module to Serial Port Module Shield

## Overview



XBee Shield V1.1 is an enhanced serial port XBee module breakout board, it's compatible with Arduino and IFLAT-32, it can directly plug in with Arduino/IFLAT-32 board, and use any pin of the basic board to connect with the XBee module serial port.

## Features

- Double shield interfaces compatible with Arduino or IFlat-32 for easy cascading
- 3 indicator (ON/SLEEP, RSSI, ASS)\* LED for XBee
- Provide maximal 500mA under 3.3V
- Full 2.54mm break out for XBee
- Switchable of communication with FTDI-USB or Arduino with HardwareSerial or SoftwareSerial

\*RSSI: Receiver Signal Strength Indication

ASS : Association

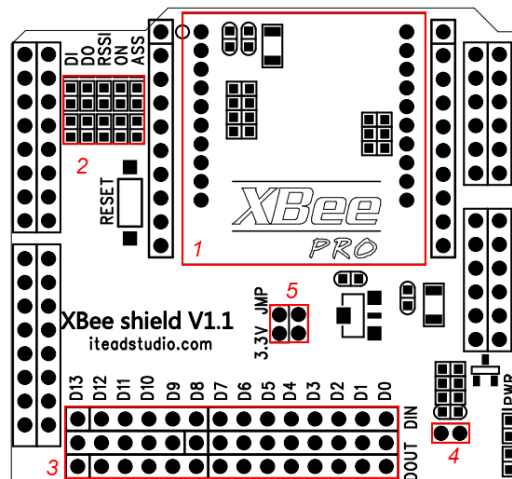
## Specifications

PCB size	54.9mm X 58.8mm X 1.6mm
Indicators	PWR State, DI, DO, RSSI, ON, ASS
Power supply	5V DC
Communication Protocol	UART/XBee
RoSH	Yes

## Electrical Characteristics

Specification	Min	Type	Max	Unit
Power Voltage	4.5	5	5.5	VDC
Input Voltage VH:	4.5	5	5.5	V
Input Voltage VL:	-0.3	0	0.5	V
Current Consumption	-	20	40	mA

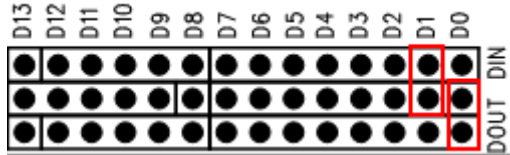
## Hardware



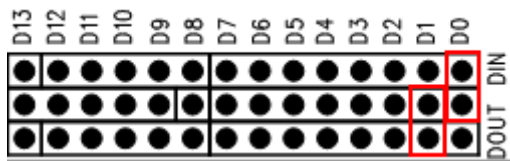
Zone	Description
1	XBee Socket
2	Indication LED
3	Serial communication pin select
4	Wireless program Arduino jumper
5	3.3V operation voltage jumper (When operated in 3.3V, install the jumper)

## Installation

In zone 3, two jumpers are set to connect XBee\_DIN, XBee\_DOUT to Digital pin of Arduino. When XBee communicate to Arduino hardware serial ports, set the jumper connect DIN to D1, DOUT to D0.



When XBee communicate to FTDI-232 hardware serial ports, set the jumper connect DIN to D0, DOUT to D1.



When XBee communicate to Arduino software serial ports, set the jumper connect DIN to D2~D13, DOUT to D2~D13 by the setting from the code.

The SoftwareSerial of Arduino link: <http://arduino.cc/en/Reference/SoftwareSerial>

## Wireless Arduino program upload by XBee

XBee shield support program Arduino platform by wireless. Only XB24 series support wireless Arduino program.

- 1) Set the jumper connecting
- 2) Configure the Transmitter and the receiver as the Ladyada website  
<http://ladyada.net/make/xbec/arduino.html>
- 3) After configuration plug the receive XBee module into XBee shield socket
- 4) Plug the Transmit XBee shield into Foca 2.0  
[http://iteadstudio.com/store/index.php?main\\_page=product\\_info&cPath=18&products\\_id=94](http://iteadstudio.com/store/index.php?main_page=product_info&cPath=18&products_id=94)
- 5) Upload the program to transmitter XBee and wireless programming will begin

## Revision History

Rev.	Description	Release date
V1.0	Initial version	2011-3-17
V1.1	Update for Xbee shield v1.1 version	2011-8-15