

# XBee Shield V2.0



The new version of XBee Shield is a standardized and stackable shield compatible with Arduino. You can easily stack any modules from the Bee series onto it, and build a wireless network for your project. In spite of that, it is also equipped with function of level conversion, which enables a double-way conversion between high& low IO levels. The reserved digital pins facilitate users to select TX/RX port using jumper caps.

### Feature

- Standardized shape design
- Can be configured by connecting UartSBee module to USB
- The DIN and DOUT pins can be connected with both UART and other digital pins (D2~D12)
- Enlarged space for your own development
- LED indicators

We have produced a lot of extension boards that can make your platform board more powerful, however not every extension board is compatible with all the platform board, here we use a table to illustrate how are those boards compatible with platform boards.

#### Note

Please note that "Not recommended" means that it might have chance to work with the platform board however requires extra work such as jump wires or rewriting the code. If you are interested in digging more, welcome to contact with techsupport@seeed.cc.

#### Click to see full picture

1		Arduino Uno Seeeduino v4.2	Arduino Mega Seeeduino Mega	Zero(m0) Lora\an	Arduino Leonardo Seeeduino Lite	Arduino 101	Arduino Due 3.3v	Intel Edison 5v	Linkit One
2	2.8'' TFT Touch Shield V2.0	bmp nonsupport	bmp nonsupport	Not recommended	bmp nonsupport	Not recommended	Not recommended	Not recommended	Not recommended
3	Base Shield V2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	Camera Shield	Only Pin234567	Hardware Serial OK	Not recommended	Not recommended	Yes	Hardware Serial OK	No	No
5	EL Shield	Yes	Yes	No	Yes	No	No	No	No
6	Energy Shield	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
7	GPRS Shield	Not recommended	Not recommended	Yes	Yes	Yes	Not recommended	Yes	No need
8	Motor Shield V2.0	Yes	Stepper motor only	No	Yes	Stepper motor only	Stepper motor only	No	No
9	Music Shield V2.0	Yes	Yes	Not recommended	Yes	Yes	Yes	Yes	Yes
10	NFC Shield V2.0	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
11	Protoshield Kit for Arduino	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	RS232 Shield	Yes	Yes	No	Yes	No	No	No	No
13	Relay Shield V3.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14	SD Card Shield ¥4.0	Yes	Yes	Not recommended	Yes	Yes	Yes	No	No
15	Seeed BLE Shield V1	Yes	Not recommended	Not recommended	Yes	No need	Not recommended	Not recommended	No need
16	W5500 Ethernet Shield	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
17	Wifi Shield(Fi250) V1.1	Not recommended	Not recommended	Not recommended	Yes	Yes	Not recommended	No need	No need
18	₩ifi Shield V2	Yes	Not recommended	Not recommended	Yes	Yes	Not recommended	No need	No need
19	XBee Shield V2	Yes	Not recommended	Not recommended	Yes	Yes	Not recommended	Not recommended	Not recommended

## Hardware Overview

- U2 : CJT1117 IC, provides 3.3V voltage for XBee modules.
- U3 : SN74LVC1G125 IC, achieves Logic-level translator function.

## **Getting Started**

Here we will show you how this XBee Shield V2.0 works with RF Bee. We also can use Bluetooth Bee or other modules.



• Plug RF Bee into Xbee Sheild V2.0.



Use a jumper cap to connect XB\_TX and Digital 4. Also, Use a jumper cap to connect XB\_RX and Digital 5. Of course you can change the digital port as you like. But don't forget to change the port number in the definition of the demo code at the same time.

#### Note

The followings are its known limitations: 1. If you are using multiple software serial ports, only one can receive data at a time. 2. Not all pins on the Mega and Mega 2560 support change interrupts, so only the following can be used for RX: 10, 11, 12, 13, 50, 51, 52, 53, 62, 63, 64, 65, 66, 67, 68, 69 3. Not all pins on the Leonardo support change interrupts, so only the following can be used for RX: 8, 9, 10, 11, 14 (MISO), 15 (SCK), 16 (MOSI).

If you need further information about how to communicate, please refer to WIKI pages of relevant modules.

## Resource

- [Eagle] XBee Shield V2.0 Eagle File
- [PDF] XBee Shield V2.0b Schematics File
- [PDF] XBee Shield V2.0b PCB File
- [Datasheet]CJT1117 Datasheet
- [Datasheet]SN74LVC1G125 Datasheet

## Tech Support

Please submit any technical issue into our forum or drop mail to techsupport@seeed.cc.