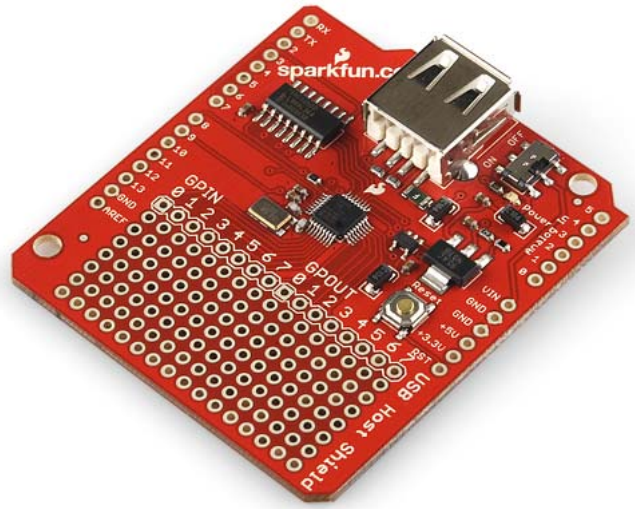
It is that time again! SparkFun Electronics will be closed Friday, January 13th for our annual inventory day. Please keep in mind that any orders placed after 2PM (Mountain Time) on Thursday, January 12th will not ship or be prepared for local pickup until we open for normal operations on Monday, January 16th. In addition, tours will resume on Friday, January 20th. Thank you for your patience!

SparkFun USB Host Shield

DEV-09947 ROHS

★★★★☆ 6



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Description: This new version corrects the pin out for the GPX and RESET pins. The SparkFun USB Host Shield contains all of the digital logic and analog circuitry necessary to implement a full-speed USB peripheral/host controller with your Arduino. This means you could use your Arduino to interface with and control any USB slave device - thumbdrives, digital cameras, bluetooth dongles, and much more!

A four-wire serial interface is used to communicate with the host controller chip, so the shield connects the Arduino's hardware SPI pins (D10-13) to the MAX3421E. A USB type A female connector is wired up to the IC, and it also supplies 5V as any normal USB port would.

The Host Shield takes its power from the 'Vin' pin on your Arduino. Power from that pin is regulated to both 5V and 3.3V on the shield. All SPI signals are sent through a hex converter to step them down to 3.3V.

Documents:

- Schematic
- Eagle Files
- Datasheet (MAX3421E)
- Projects and Code (Thanks Oleg!)
- GitHub

Recommended Products

PAGE 1 OF 6

SPARKFUN RECOMMENDED
Arduino Uno - R3
DEV-11021
$24.95
★★★★½ 85

SPARKFUN RECOMMENDED
Arduino Mega 2560 R3
DEV-11061
$45.95
★★★★½ 37

SPARKFUN RECOMMENDED
SparkFun USB Mini-B Cable - 6 Foot
CAB-11301
$3.95
★★★★½ 2

SPARKFUN RECOMMENDED
USB Mini-B Cable - 6"
CAB-13243
$1.95
★★★★½ 3

COMMENTS **153** | **REVIEWS** ★★★★☆ **6**

Customer Reviews

★★★★☆ 3.8 out of 5

Based on 6 ratings:

5 star	0
4 star	5
3 star	1
2 star	0
1 star	0

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1 of **1** found this helpful:

★★★☆☆ Board is still not up to spec

about 2 years ago by Member #526802 ✔ verified purchaser

The version I got has to have a jumper installed from D7>RST in order to work with the XBOXUSB function from USB2.0.

I don't see anything on the board showing which build version of it I have so I don't know if this was old stock or the redesigned one. It seems to work OK with the jumper in place but that means I have to solder something else in place or not use the stackable headers I put on (easily anyway). When you say it's the same thing (USB host shield) it should be built to match the specs of the Arduino version so that it doesn't have to have this jumper added to work.

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1 of **1** found this helpful:

★★★★☆ Works great with Wii controller when jumper added

about a year ago by Member #537905 ✔ verified purchaser

The working configuration I am using is: Sparkfun RedBoard…. USB Host Shield with jumper from pin D7 to RESET…. Bluetooth USB Module Mini….. Wii library from link below…. https://github.com/felis/USB_Host_Shield_2.0

Currently it pairs with the Wii remote and outputs the buttons pushed in a terminal!!

★★★★☆ Review

about a year ago by Member #710702 ✔ verified purchaser

Review from my technician I'd give it 4/5. This inability to use the Arduino's on-board 5V regulator, and no indication that it isn't present for low-current applications is a definite oversight.

★★★★☆ Works very well

about 3 months ago by Member #769548 ✔ verified purchaser

Works very well. My only qualms: 1) It takes a bit too long for the connection to take place when a usb device is connected. Maybe I need to mess around with the settings more. 2) I wish it worked with the Leonardo out of the box. Had to solder a few jumpers.

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0 of **1** found this helpful:

★★★★☆ not for Lenorado

about 2 years ago by Member #122717 ✔ verified purchaser

spend some time try to figure out how to connect it with Lenorado board which is using the programming header, should have a better instruction to do that.

★★★★☆ Great product, just a little confusing with initial setup

about 8 months ago by Member #524044 ✔ verified purchaser

Like others have mentioned, you need to jumper D7 to RESET and external power seems to be a requirement. After struggling through this and a few other problems that were my own fault this board is now working perfectly!

For anyone interested - I wrote up a quick summary on how to configure this shield. Probably not useful to the Arduino experts, but it's the kind of information I wish I had when I got started with this shield: https://joshcaplin.wordpress.com/2016/06/05/configuring-an-arduino-usb-host-shield-a-beginners-guide/