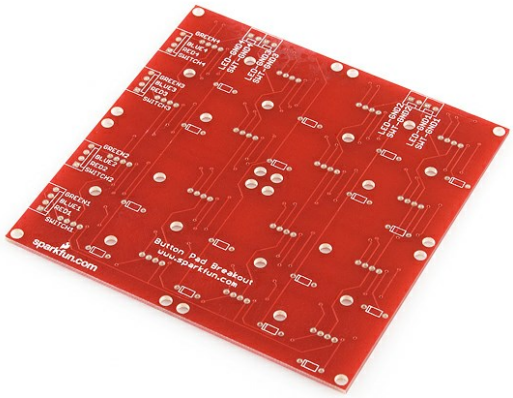

Button Pad 4x4 - Breakout PCB

COM-08033 ROHS ✔

★★★☆☆ 2

DESCRIPTION DOCUMENTS

This a simple breakout board for the button pads. Each LED and button is brought out to the side connectors. The connectors are soldered to the back side of the PCB. We recommend trimming the connector leads on the button side as short as possible to reduce the deflection of the pad.

Now with footprints for diodes! Use the super cheap 1N4148 through-hole diodes. These can be used to isolate the switches to make for a bit easier decoding.




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3D Download: Sketchup, STL, Blender

Button Pad 4x4 - Breakout PCB Product Help and Resources

TUTORIALS SKILLS NEEDED

Button Pad Hookup Guide

JANUARY 7, 2016

An introduction to matrix scanning, using the SparkFun 4x4 Button Pad.

COMMENTS 62 REVIEWS ★★★☆☆ 2

Customer Reviews

★★★☆☆ 3 out of 5

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5 star 1

0

3 star		0
2 star		0
1 star		1

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1 of 1 found this helpful:

★☆☆☆☆ Poorly Designed

about 6 months ago by Member #430122 ✔ verified purchaser

This breakout board uses a matrix type control system for the LEDs and switches. It's a good way to deal with a lot of I/O, but the board has very poor scaling for LED brightness.

Also note that with this configuration, some lighting combinations are not possible, and the method used in this link will have to be used: http://www.learnerswings.com/2014/08/theory-of-controlling-diagonal-leds-of.html .

Current is shared between each row of LEDs, and that is a really bad thing when picking current-limiting resistors. Either the current will be too high and blow an LED, or the current will be too low when more LEDs are lit. This board will never be able to control the LED colors well, nor will it look good at all (which is what this button layout is for, anyway).

I'm sure that the idea behind this board was that current-limiting resistors would not be needed with internal pull-ups, but running 16 RGB LEDs (48 total LEDs) from GPIO power without some kind of driver is a really, really dumb thing to do.

If this board had resistor footprints for each LED anode, it would be worth it, but in this state, it's a waste of money. Just go and have another PCB printed, rather than find that this doesn't work, and have to print one anyway. is a very high asking price for something this poorly thought out. I would only ever recommend this for projects that will always have a set number of LEDs on at a time.

★★★★★ Perfect for my application.

about a year ago by Member #160590 ✔ verified purchaser

I wanted a soft button and light thing I could turn into a toy for a friend's child. The adafruit version of this is too small and only supports single color LEDs. This gives me many more options. I'm very happy with it.

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