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LilyPad Vibe Board

DEV-11008 ROHS ✓



Description: Apply 5V and be shaken by this small, but powerful vibration motor. Works great as an physical indicator without notifying anyone but the wearer. This version uses a surface mount motor which is less likely to be damaged during use.

LilyPad is a wearable technology developed by Leah Buechley and cooperatively designed by Leah and SparkFun. Each LilyPad was creatively designed to have large connecting pads to allow them to be sewn into clothing. Various input, output, power, and sensor boards are available.

Note: A portion of this sale is given back to Dr. Leah Buechley for continued development and education of e-textiles.

Dimensions:

- 20mm outer diameter
- Thin 0.8mm PCB

Documents:

- [Schematic](#)
- [Eagle Files](#)
- [Datasheet](#) (Motor)
- [Vibe Board Sticker Sheet](#) (PDF)
- [All LilyPad Boards Sticker Sheet](#) (PDF)
- [GitHub](#)

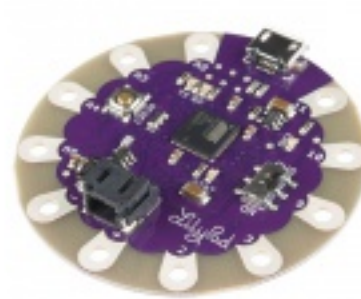

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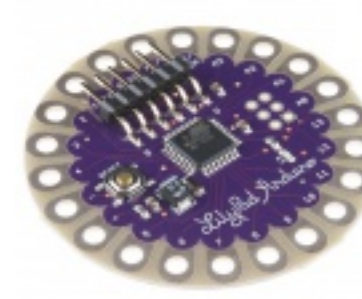
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Customer Comments

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Member #331523 / about 4 years ago / ★ 7

It's so nice that Dr. Leah Buechly is educating these boards. I could never have the patience to sit in a classroom full of these little guys and teach them to read and write.



Tadpole / about 4 years ago / ★ 4

[insert 7th grade sexual innuendo here]



RobertC. / about 4 years ago / ★ 2

you've gotta at least come up with a good one...



gbravetti / about 2 years ago / ★ 2

Hi,

Is there some kind of amplifier/rectifier I can use to drive this Vibe Board using a positive only audio pulse coming from my iPhone headphones output?



Joan Charmant / about 3 years ago / ★ 2

It might be worth mentioning that these should not be connected directly to the board output pins. The motor draws 85mA when starting while Arduino pins are 40mA max.

What is needed is to connect the 5V of the Arduino to the vibe board, and control the motor actuation through an output pin via a transistor. A resistor is also needed between the pin and the transistor to limit current flowing through the pin when active.



VHamMan / about 3 years ago / ★ 2

So I have a project where these are constantly pulsing on and off (a vibrating metronome if you must know) for instance they'll be on for .5 seconds and off for .5 seconds for several minutes. What I'm finding is that at they will cut out for a few seconds or more at semi random intervals. So roughly every 2-3 minutes minute or so they'll stop working for say 5 seconds. I have 4 of these. Some are more susceptible to this problems then others. Any thought's as to what is causing this or how I might diagnose / prevent?

I have a suspicion that contact with skin, which can be mildly conductive, might be a factor. I'm considering making a tin shield around them...



Member #447949 / about a year ago / ★ 1

Can the intensity of the vibration be manipulated? How?



Member #140000 / about 11 months ago / ★ 1

You can control the intensity by changing the voltage between the positive and negative pins of the vibe motor. Just connect the vibe board to a analog pin and GND. Use following code. `analogWrite(vibe, val);` Replace val with 0-255. See the data sheet for Vmin for determine the minimum value for val. Hope this help you.



Member #399713 / about 3 years ago / ★ 1

Can someone explain to me why there is a resistor in series with the motor?



Joan Charmant / about 3 years ago * / ★ 2

It's to limit the current flowing through the motor. The motor is rated 75mA and 3V. (so when sourcing with the +5V, we need a resistor of at least $2/0.075 = 26.6\Omega$).



TeeKayZed / about 3 years ago / ★ 1

Now, if I wanted to make this part of a waterproof e-textile endeavor, could I cover this in epoxy/hot glue in order to waterproof it without damaging its vibration capabilities?



Nicolinux / about 3 years ago / ★ 1

I am confused. The datasheet mentions 3V and the text here 5V.



Xoto18 / about 3 years ago / ★ 1

How waterproof are these? Can you hand-wash them like lilypad boards?



Christ777porto / about 3 years ago / ★ 1

que diodo utiliza ??



Toni_K / about 3 years ago / ★ 2

BAS16 Series 100 V 250 mA



razor_sparks / about 4 years ago / ★ 1

home-made Fukuoku, anyone? Actually with a sensible BT module and a driver circuit, this could be a good way to alert to text messages or e-mails... I can never feel the vibration of my cell phone in my pocket, but I can't have the ringer on at work.



Mysterio / about 4 years ago / ★ 1

No doubt. Boom-chicka-wow-wow.....



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