

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## sparkfun

## SparkFun Spectrum Shield

DEV-13116 ROHS ✔ 🎋

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3D Download: Sketchup, STL, Blender

**Description:** The Spectrum Shield enables your Arduino with the capability of splitting a stereo audio input into 7-bands per channel. You can then read the amplitude of each channel using the ADC on your Arduino allowing you to control everything from LEDs to motors, pumps to relays, or even fire, all with sound. With this shield you will be able to have almost any project be able to react to music or sound!

The Spectrum Shield features the MSGEQ7 graphic equalizer display filter. Two of these ICs allow you to split a stereo audio input into 7-bands (per channel) and read the amplitude of each using the ADC on your Arduino. The shield is populated with two 1/8" stereo jacks (like you would find on a pair of headphones). One serves as a stereo input and the other is a pass-through output which allows you to connect the Spectrum Shield in-line between your audio source and your stereo system without interruption. This revision of the Spectrum Shield has been updated to the Arduino R3 layout but still requires you to solder on your own headers (check the *Recommended Products* section below). This shield can be used to create sound visualizers, detect patterns in music or add sound activation to your microcontroller projects.

**Note:** This product is a collaboration with Ben Moyes of Bliptronics. A portion of each sales goes back to them for product support and continued development.