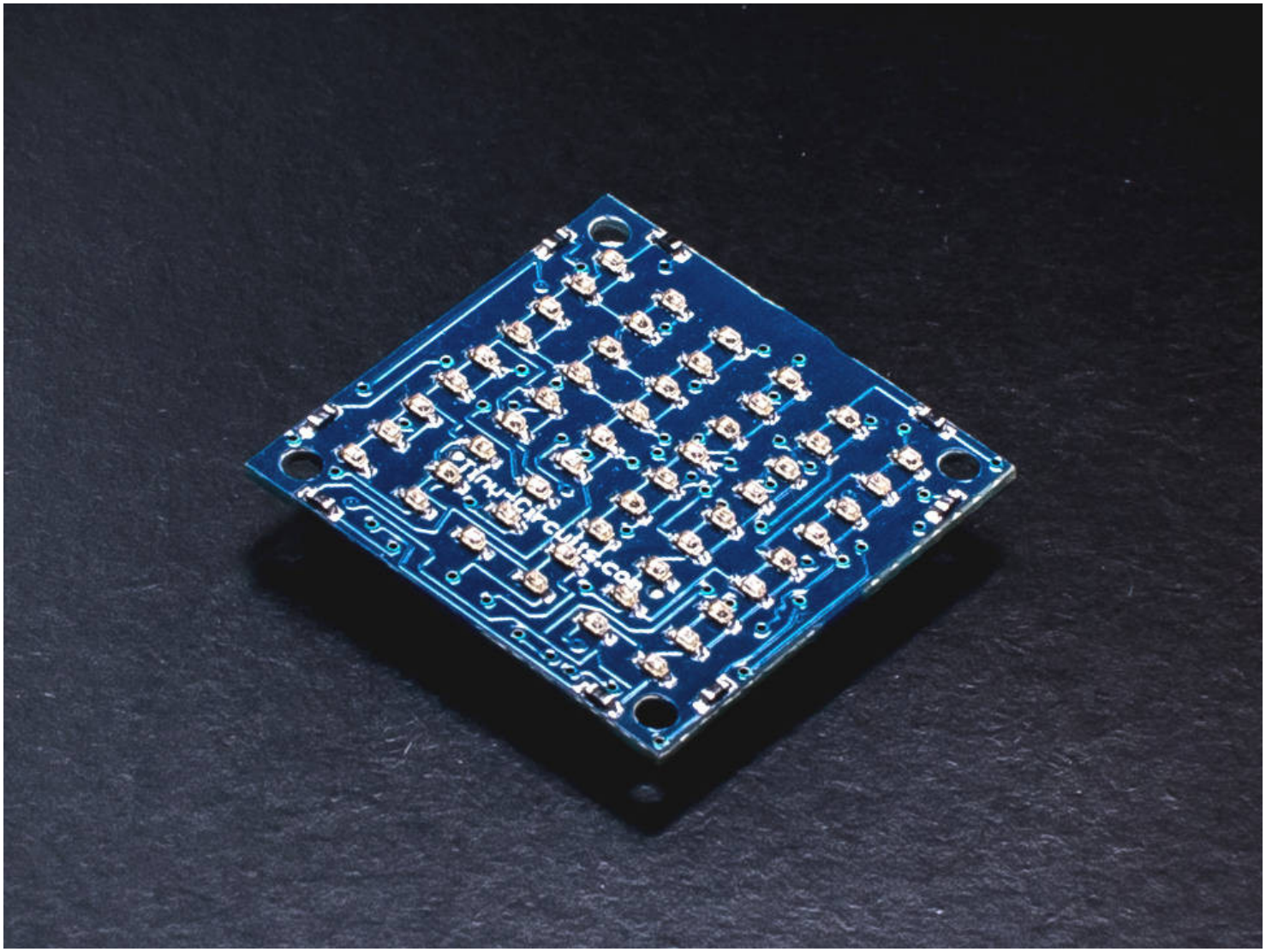
Matrix LED TinyShield - ASD2413-R

tinycircuits.com/collections/leds-displays/products/matrix-led-tinyshield



DESCRIPTION

The Matrix LED TinyShield is a 6 x 9 grid of LEDs (54 total LEDs) that are individually addressable, which lets you scroll text, draw images, and do all sorts of other things. This TinyShield is compatible with the popular **Arduino LoL** (Lots of LEDs) Shield Library created by Jimmie Rodgers.

The LEDs are arranged using Charlieplexing, which is a technique to allow for control of multiple LEDs using fewer I/O signals. Available with Red, Green, and Amber LED color options.

*To learn more about the **TinyDuino Platform,** click **here***

TECHNICAL DETAILS

> *To see what other TinyShields this will work with or conflict with, check out the* ***TinyShield Compatibility Matrix***

LED Specs

- 54 Top Facing LEDs in a 6×9 Matrix
- Charlieplexed IO on 8 signals
- Available in Green, Amber or Red

TinyDuino Power Requirements

- Voltage: 3.0V - 5.5V
- Current:
  - 1.5mA per LED (3.0V)
  - 5.0mA per LED (5.0V)
  - Due to the low current, this board can be run using the TinyDuino coin cell option

Pins Used

- Pins 2, 3, 4, 5, 6, 7, 8, and 9 are used, see schematic or sample code for connections

Dimensions

- 20mm x 20mm (.787 inches x .787 inches)
- Max Height (from lower bottom TinyShield Connector to upper top TinyShield Connector): 3.31mm (0.130 inches)
- Weight: .75 grams (.027 ounces)

Notes

- This TinyShield uses a lot of IO pins and will conflict with many other TinyShields. If you're planning on using other TinyShields with it, be sure to check the **TinyShield Compatibility Matrix** to make sure they can be used at the same time.
- The LEDs are hooked up using **Charlieplexing**, a technique for driving many LEDs with only a few IO signals. See the tutorial to learn more about this and how to use the open source library to control these easily .
