

## 16 EDGE LED TINYSHIELD

ASD2411-R-LR



### DESCRIPTION

The 16 Edge LED TinyShield allows some cool and easy LED indications using only five I/O signals. The 16 LEDs are mounted around the outside of the board, and can easily be seen even when the LED board is in the middle of a TinyShield stackup. 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](https://tinycircuits.com/pages/tinyduino-overview)  
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## TECHNICAL DETAILS

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

### LED Specs

- 16 Side Mounted LEDs around the edge of the board
- Charlieplexed IO on 5 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 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): 5.11mm (0.201 inches)
  - Weight: 1 gram (.04 ounces)
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## NOTES

- If the top connector is not needed, there is also the **Circle LED TinyShield** which has LEDs that circle the entire board.
- The LEDs are hooked up using **Charlieplexing**, a technique for driving