

32951-OP

4X4 LED Development Mini Board using the WS2812B RGB LED driver & RGB LEDs in a 5050 case.

- Read the **WS2812B** Data Sheet Before attempting use.
- Reverse polarity protection, reversing the power supply polarity will not damage the IC.
- 5V Power @ ~60mA/5050 LED Package (all colors on full)
- Internal signal shaping circuit maintains signal integrity from any one LED to the next.
Waveform distortion will not accumulate, allowing at least 5 meters between LED/Modules.
- Built-in power-on reset and brown-out reset circuit.
- Trichromatic color: Each LED has 256 brightness levels for 16777216 full true color display.
- 1 wire (+ Gnd) Serial interface.
- Scanning frequency of not less than 400Hz/s.
- At a refresh rate of 30 frames/sec, the number of LEDs is not less than 1024 units.
- Loads from First LED in string, then the 2nd, then 3rd etc. until the end of the string.
- Data rate of up to 800Kbps.
- Easy connection: There are two 4-connection solder pads. Solder a wire to the Din pad, connect +5V and Gnd. (-) leads to their respective pads, connect a Dout (and Power) lead(s) to the Din & Power on the next board in the string. (The traces on the board have limited current handling, so you may need additional leads from your supply to boards downstream)
Multiple Module supplies are NOT recommended!
Lastly connect the Din lead and Gnd. to your microcontroller

NOTE: The Gnd. connection must also connect to your Microcontroller

The Module & Microcontroller must share a common Gnd. (-) for the Data transfer to work

Information obtained from or supplied by Mpja.com or Marlin P. Jones and Associates inc. is supplied as a service to our customers and accuracy is not guaranteed nor is it definitive of any particular part or manufacturer. Use of information and suitability for any application is at users own discretion and user assumes all risk.

Links, and Code (Software) Supplied or Referenced in this Document is supplied as a service to our customers and accuracy is not guaranteed nor is it an Endorsement of any particular part, supplier or manufacturer. Use of information and suitability for any application is at users own discretion and user assumes all risk.

All rights are retained by the Author/Provider/Copyright holder

HELPFUL WEBSITES

www.world-semi.com

www.adafruit.com

www.arduino.cc

www.instructables.com