

embedded adventures

Device: SMRT-MX0507

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Matches Hardware Version: 1

Description: 5 x 7 WS2812B SMRT pixel LED matrix display

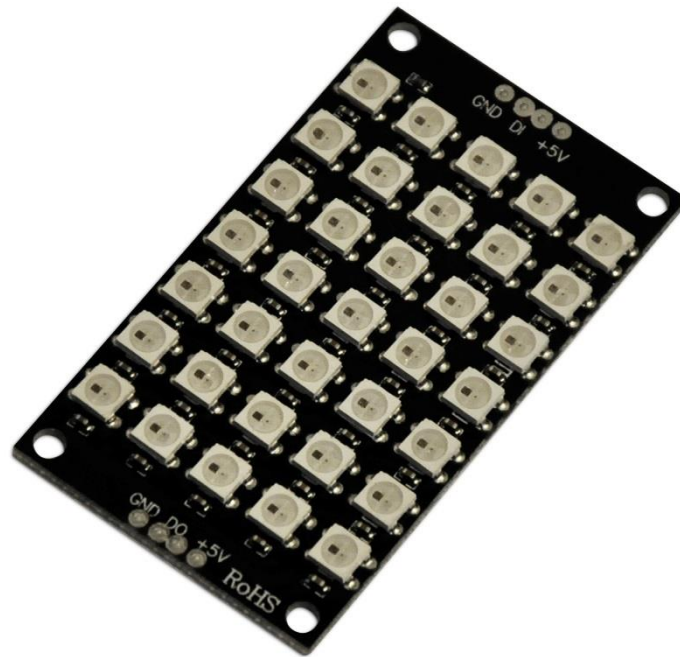


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Introduction

The SMRT-MX0507 is an RGB 5 pixel by 7 pixel LED matrix display based on the WS2812B LED with embedded controller.

The SMRT-MX0507 does not require dynamic scanning, it will hold the value sent to each LED until it is updated.

Connections

The SMRT-MX0507 has two data connections on the back panel.

J1	Input data port (top)
J2	Output data port (bottom)

J1 and J2 are 0.1" headers, designed to hold the header in place for easy soldering. A large (10uF+) capacitor is recommended across the power supply. Displays can be daisy chained to create a larger display.

Power

This panel runs at strictly 5v (+/- 0.5v). The LEDs themselves are extremely bright and require a good 20mA per colour per pixel.

Precautions

Really. The LEDs are super bright. You are recommended to wear sun glasses or similar, or cover the display with paper if working on it at close proximity, or use reduced RGB values (overall brightness).

LED arrangement

The LEDs are arranged from left to right and top to bottom. So the first LED is at the top left of the display. The fifth LED is the top right of the display. The sixth LED is the left-most LED one row from the top. And so on.