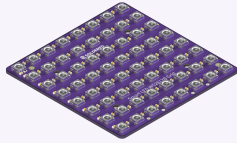


PRODUCT DATASHEET



Soldered Smart LED WS2812B Grid 8x8

333383

An 8×8 grid of 64 WS2812B RGB LEDs on an 80 × 80 mm board, driven from one data pin and chainable into larger panels.

Full product documentation, files and tutorials: solde.red/333383

CORE ATTRIBUTES

SKU 333383

DIMENSIONS 80.0 × 80.0 × — mm

ORIGIN HR

BARCODE 732388640904

DESCRIPTION

The Smart LED WS2812B Grid 8×8 carries 64 individually addressable WS2812B RGB LEDs in an 8 × 8 layout. Each LED has its own driver, so a single data pin from your microcontroller sets the colour of every pixel, and you can show patterns, symbols and animations.

The LEDs sit **10 mm** apart on an **80 × 80 mm** board and run from **5 V**. Every LED has its own **100 nF** decoupling capacitor, and a **100 Ω** resistor sits in series with DIN. Data enters at the top-left LED and runs in a serpentine: the first row left to right, the next right to left, and so on down the grid.

Power and data connect on the DIN, GND, VCC and DOUT header pins. For a bigger panel, connect DOUT of one grid to DIN of the next. Every edge also has VCC, GND and DIN or DOUT solder pads that line up with the neighbouring grid. The Soldered WS2812B Grid Arduino library and the WS2812Grid MicroPython library address pixels by (x, y) across one grid or several. Four 3.2 mm mounting holes let you screw the board down.

TECHNICAL DETAILS

- **LEDs:** 64x WS2812B (5050), 8 × 8, 10 mm pitch
- **Interface:** single-wire data, DIN in, DOUT out
- **Supply:** 5 V on VCC
- **Data input:** 100 Ω series resistor on DIN
- **Decoupling:** 100 nF per LED
- **Header pins:** DIN, GND, VCC, DOUT, unsoldered
- **Chaining pads:** VCC, GND and DIN or DOUT on every edge
- **Mounting holes:** 4× 3.2 mm

- **Dimensions:** 80 × 80 mm

SPECIFICATIONS

INTERFACE	Digital Gpio
QWIIC COMPATIBLE	No
BREADBOARD COMPATIBLE	Yes
IC PART NUMBER	WS2812B
SUPPLY VOLTAGE MIN V	4.5
SUPPLY VOLTAGE MAX V	5.3
LOGIC LEVEL	5V Only
OPERATING CURRENT (mA)	3840 mA

DOCUMENTS

Main IC Datasheet · EN	https://cms.soldered.com/products/333383/documents/ic-datasheet/333383_ic-datasheet_753b58.pdf
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LINKS

mim_package	https://checkmim.com/packages/solderedelectronics+Soldered-WS2812Grid-MicroPython-Library
Arduino Library	https://github.com/SolderedElectronics/Soldered-WS2812B-Grid-Arduino-Library
MicroPython Module	https://github.com/SolderedElectronics/Soldered-WS2812Grid-MicroPython-Library
Pinout	https://cms.soldered.com/products/333383/media/333383_pinout-png_94932c.png

GALLERY

