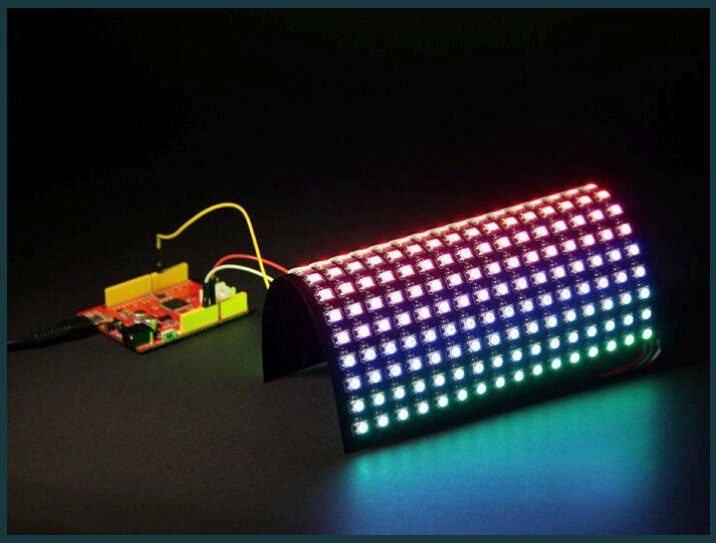
seeed studio

INDUSTRIAL PRODUCT DATASHEET

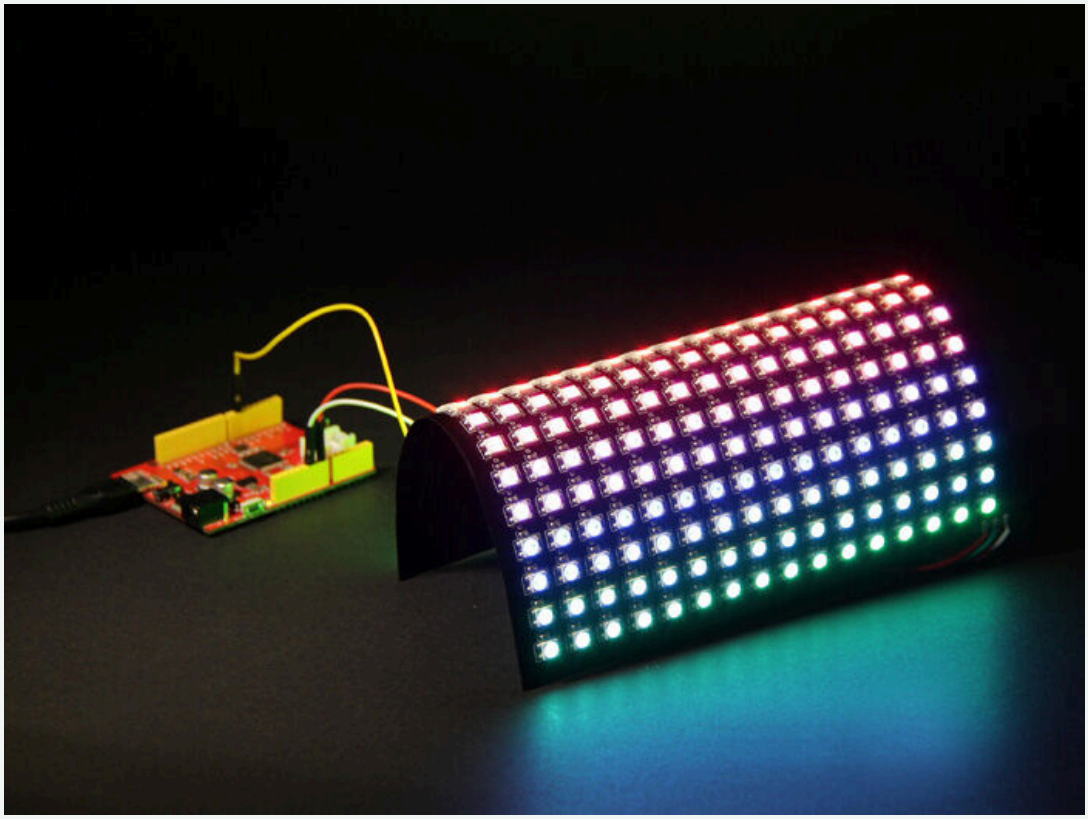
16x16 RGB LED Matrix w& WS2812B - DC 5V

16x16 digital RGB LED matrix panel with WS2812B 5050 LEDs, 1cm pitch, and 5V DC operation.

SKU	UPDATED	PRICE
104990127	2024-08-09 02:28:51	$89.00(Excl. VAT)



Overview



The 16x16 RGB LED Matrix features 256 WS2812B RGB LEDs in a 5050 package with integrated control circuitry. With 16 rows and 16 columns at 1cm pitch, it operates at DC 5V and supports data transfer timing of 1.25μs±600ns.

Key Features

16*16 Digital RGB LED Matrix is consist of WS2812B RGB LED. WS2812B is a 5050 components that integrate control circuit and RGB chip in a package.

The LED Matrix are placed 16 Pixels each line, and there are 16 lines on each panel. The space between each pixel is 1cm.

Feature

PIN Function:

RGB Parameters

Data Transfer (TH+TL=1.25µs±600ns)

Timing Waveforms

Input Code:

Connection Method

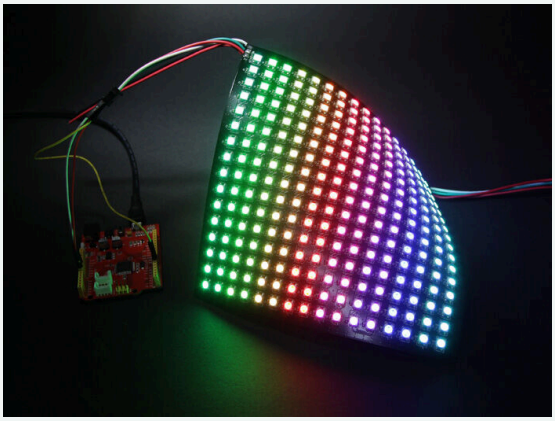
Specification

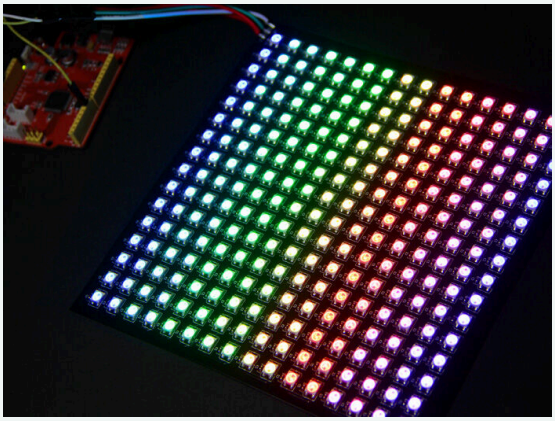
WS2812 Datasheet

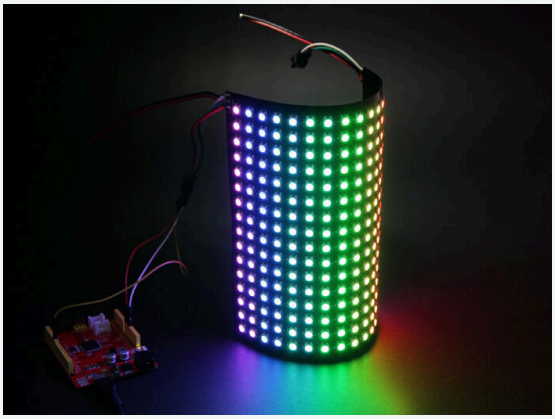
HC-F5V-256 Screen Datasheet(HC-F5V-256 Screen Datasheet.pdf)

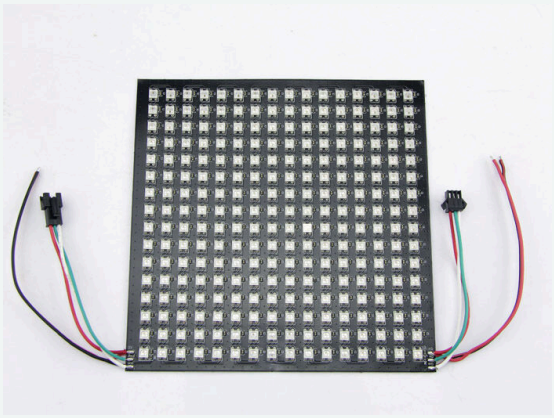
For any technical support or suggestion, please kindly go to our **forum**.

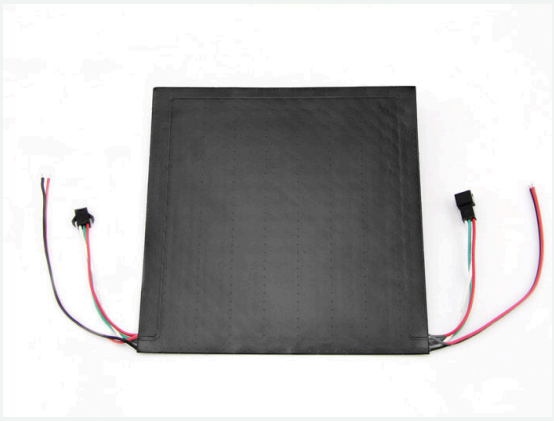
Product Gallery

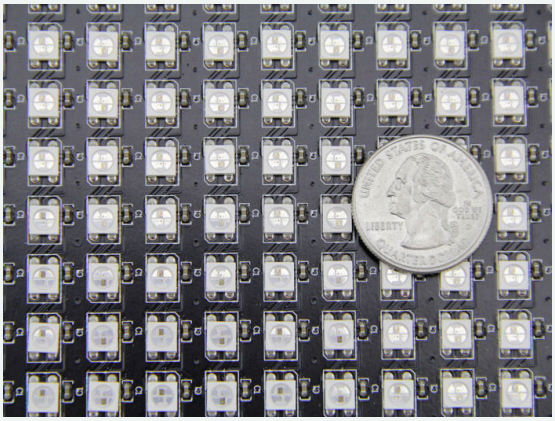


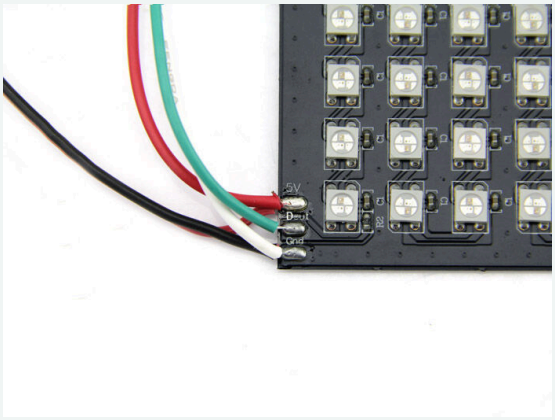












Specification

No.	Symbol	PIN	Function Description
1	+5V	Power	5V power supply
2	DIN	Data Input	Input the control signal
3	GND	Ground	Earthing
4	DOUT	Data Output	Output the control signal, and connect to next panel’s DIN

Color	Model	Wavelength（nm)	luminous intensity（mcd)	operating voltage(V)
Blue	13CBAUP	465-467	180-200	3.0-3.4
Green	13CGAUP	522-525	660-720	3.0-3.4
Red	10R1MUX	620-625	390-420	2.0-2.2

T0H	Code 0, High level	0.4µs	±150ns
T1H	Code 1, High level	0.8 µs	±150ns
T0L	Code 0, Low level	0.85µs	±150ns
T1L	Code 1, Low level	0.45 µs	±150ns
RES	Low level	>50µs	

LED Quantity	256
IC Type	WS2812 (IC Built in LED)
Wattage	78.6W/M
Pixel/m	16*16
PCB Width	16*16cm
Length of cable	100mm
Working Voltage	DC 5V
PCB Color	black
Light Color	Multi-Color, digital RGB,Every LED individual Contro

Compliance & Logistics

HSCODE	8531200000
ROHS	1

Resource Links

- https://www.seeedstudio.com/16x16-RGB-LED-Matrix-w-WS2812B-DC-5V-p-2011.html

Seeed Technology Co.,Ltd.
9F, Building G3, International E City,
Zhongshanyuan Road, Nanshan, Shenzhen, China

Tel: +86 0755-80695676
Web: www.seeed.cc
Shop: www.seeedstudio.com