

# Digital led Matrix unit

#### Picture

Model No.: GEMA2812B256P1

#### **Features**

This is a easy 16Pixel\*16pixel DIY digital led matrix unit, designing with slide fastener, they locate at four edge of led martrix. You can pull the edge'slide fastener to enlarge led matrix at four direction. Example: you can use 2pcs led matrix unit to make a 16pixel\*32pixel led matrix. or use 4pcs led matrix unit make a 16pixel\*64pixel led martrix. and stick gelatin sponge at the back of units, you only need peel it to stick anywhere.

#### Technical Parameter

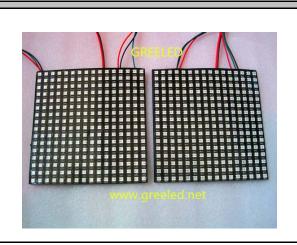
Working Voltage: DC5V Size: 16cm(6.3")\*16cm(6.3")\*0.5cm(0.2") LED QTY: 256 Pcs (16Pixel\*16Pixel) Pitch distance: 1cm(0.397")

IC Type: WS2812B Chip built in SMD5050

PCB materil: FPC Waterproof: Non-waterproof/ IP65 Emiting color: RGB, Input Signal: SPI/TTL signal

Power: Max 70Watt G.W: 90g/pc (Non-waterproof), 200g/pc(IP65)

## How to enlarge led matrix



Two separated units



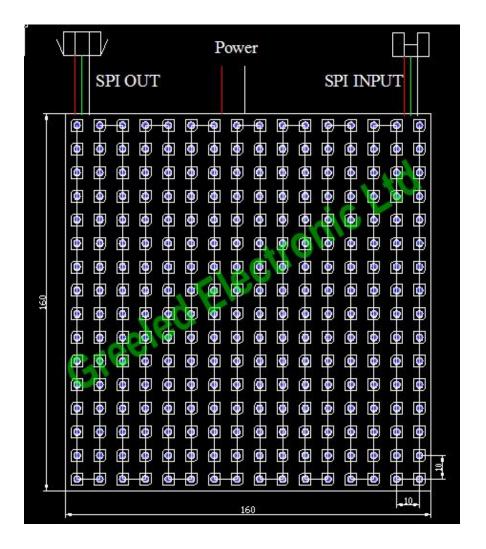
Pull slide fastener of edge



Pull slide fastener of edge

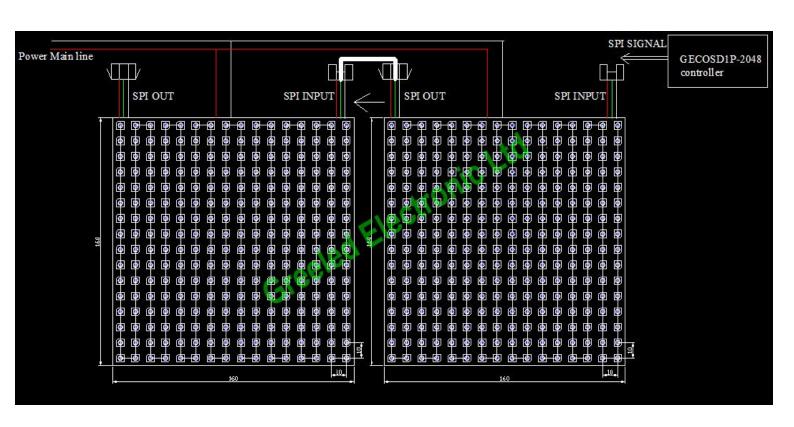


finish! BTW, you can refer above step to DIY other size matrix.

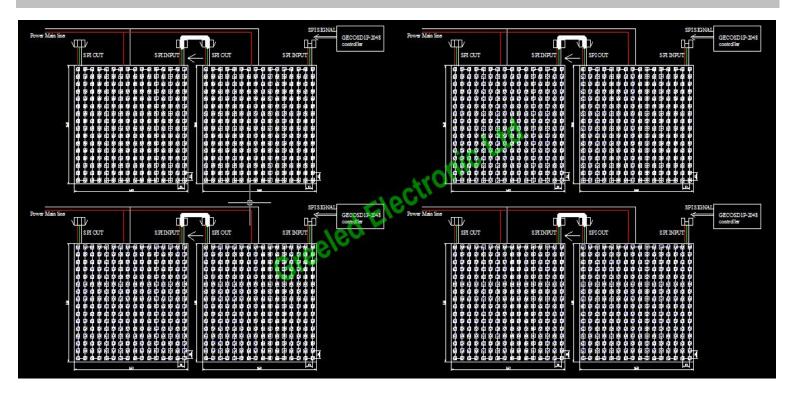


Unit:mm

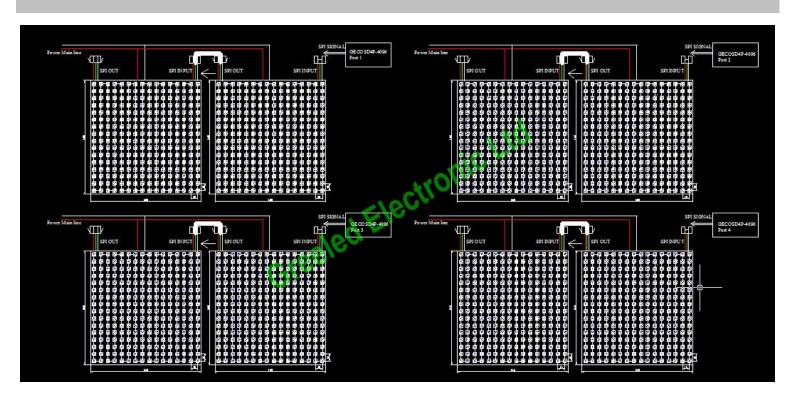
Wiring drawing (two units), work with 1pc GECOSD1P-2048 Controller



# Wiring drawing (Eight units), work with 4pcs GECOSD1P-2048 Controller



# Wiring drawing (Eight units), work with 1pc GECOSD4P-4096 Controller



Of course, you can refer above wiring to drive sixteen led matrix units with our GECOSD8P-8192 controller or GECOSDT200K PC-online controller. We here advice 1 Group SPI signal to drive Max 512Pixel to ensure the excellent refresh rate.

# How to choose power main line

RVV Dia (mm²)	DC5V power supplier, loading security current (A)			
	less 1M	1-2M	2-5M	5-10M
0.5	7	4	<2	
0.75	10	6	2	1.6
1	12	8	4	2
1.5	16	12	6	3
2	20	16	8	4
2.5	24	20	10	6
4	40	32	16	10
6	60	48	24	14

# Refer Picture (Two led matrix unit)





### Note:

- 1. Please make CAD layout or LEDEDIT layout after finish to enlarge led matrix. It will save you more valuable time
- 2. Using the correct voltage and choose the proper main wire
- 3. Please double-check wiring before you feed power, all adjustment should be done after cutting off power.
- 4. Don't bent the led matrix hardly when you install them
- 5. if you don't use them long time, please keep them in dry place
- 6. Greeled can supply OEM and ODM service.