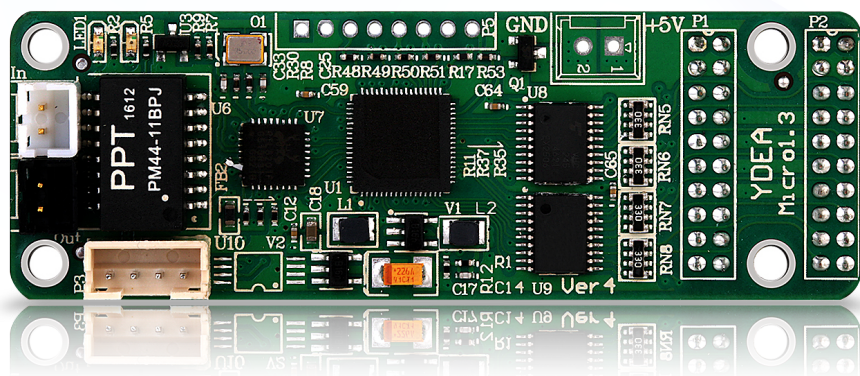




云智科技  
YDEACHN.COM

Service Hotline: 400-666-9216



## Scan board Specification

### Micro-1.3

Version: V03 Date: 2017-07-10

## Product Summary

Micro is segment LED display for the launch of a new low-cost miniaturized innovative LED systems designed by YDEA-TECH, mainly for the light of the screen, mesh screen display, spot light, shaped screen.

Micro size only (70 mm x 24 mm), which is able to achieve the industry's smallest form factor, the design can save space and reduce external cable Screen, Screen to simplify design and reduce design complexity, while the highly price competitive force. With this system, you can help customers achieve unprecedented innovative design. It solved the Screen space is limited, Screen protection problems, service problems, and the price puzzle, will further differentiate products designed to provide a competitive advantage.

## Product Feature

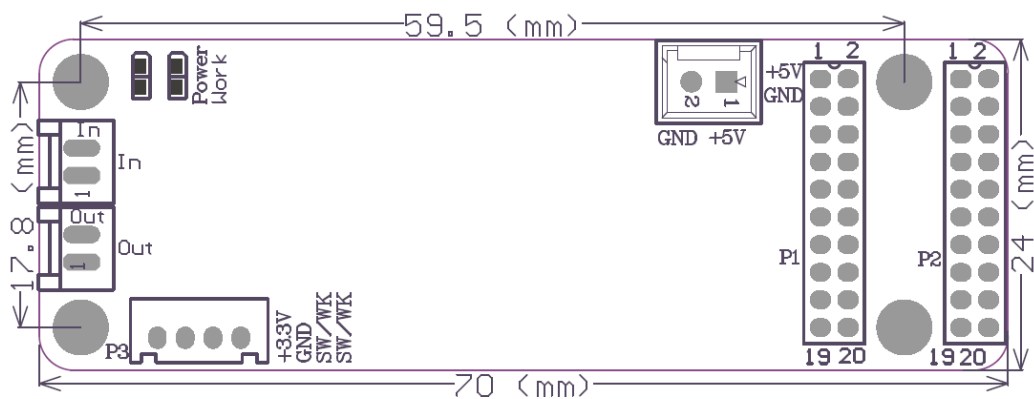
- Operating voltage: 3.6-5V DC.
- Largest single block scanning plate with a load of 2048 pixels.
- Signal block of scan board RGB output serial data clock 16 groups of four extensions.
- Single block of scan board Support eight bidirectional I / O port signal readback.
- Ultra-small size design (70 mm x 24 mm), designed to solve the space problem.
- Support single-card position any offset single card display rotation to achieve shaped screen.
- Reduce the number of cables and connectors, simplifying design LED display. Signal transmission requires only two core UTP twisted pair, allowing the display signal and power wiring into one design, peripherals cascade connection line from the traditional binary two into one into one.
- Display light board can be integrated with the scanning plate modular design, faulty only when the module is individually removable replacement, let Repairs easier, reduce maintenance costs later.
- Fully enclosed design, effectively shielding, allowing the display to easily pass EMI testing, reduce waterproof design challenges.

## Technical Specifications

The maximum load capacity	Within 64*32、32*64 ( Unilateral points must be less than 32 )
Refresh rate	Static screen up to 5500Hz over
Interface Type	2 * P2.0, optional pin output
Scanning mode	static - 32 scanning
Gray levels	4096—65536
Chip supports	Conventional chip, PWM chips, lighting chip

Number of outputs RGB data set	16 serial RGB data set four clock extension
bi-directional I/O port	8 bidirectional I/O port signal readback
Shaped show	Any offset single card position
Single card rotation	0° ,90° ,180° ,270°
Online Upgrade	Support
Cascading number of cards	In general value of 128, the maximum value of 256
Loss of brightness	5%-20%
Operating voltage	3.6-5V DC
Operating temperature	-40℃-70℃
Dimensions	Length70 * width24 (mm)

#### Board Card Size



**NOTE:** 1. P3 interface of 1 and 2 pin interface definition: SW/WK, can be used as an external buttons or light is used;  
2. P3 interface, if an external buttons and indicator lights when used at the same time, the need to do reuse circuit on the adapter plate to use;

## Interface Definition

### 1) Serial data : (16 groups)

P1				P2			
+5V	1	2	+5V	+5V	1	2	+5V
GND	3	4	GND	GND	3	4	GND
Data1	5	6	Data2	Data9	5	6	Data10
Data3	7	8	Data4	Data11	7	8	Data12
Data5	9	10	Data6	Data13	9	10	Data14
Data7	11	12	Data8	Data15	11	12	Data16
CLK1	13	14	CLK2	I/O1	13	14	I/O2
CLK3	15	16	CLK4	I/O3	15	16	I/O4
LE	17	18	OE	I/O5	17	18	I/O6
A(Data17)	19	20	B(Data18)	I/O7	19	20	I/O8

**NOTE:** Data1~Data16, CLK1~CLK4, OE, LE, A, B data unidirectional signal output port, level 5V; I / O1~I / O8 bidirectional I / O port operating voltage of 3.3V. (8 I / O ports can simultaneously use as inputs or outputs, ie when the output when the input can not; as an output signal on the screen, please add "NXP74HC245" drive.).

### 2) Parallel Data: (8 groups)

P1				P2			
+5V	1	2	+5V	+5V	1	2	+5V
GND	3	4	GND	GND	3	4	GND
DT_R1	5	6	DT_G1	E	5	6	LCK
DT_B1	7	8	DT_R2	LE	7	8	OE
DT_G2	9	10	DT_B2	DT_R5	9	10	DT_G5
DT_R3	11	12	DT_G3	DT_B5	11	12	DT_R6
DT_B3	13	14	DT_R4	DT_G6	13	14	DT_B6
DT_G4	15	16	DT_B4	DT_R7	15	16	DT_G7
A	17	18	B	DT_B7	17	18	DT_R8
C	19	20	D	DT_G8	19	20	DT_B8

Header 10X2                      Header 10X2

### 3) Parallel Data

