云智科技
YDEACHN.COM

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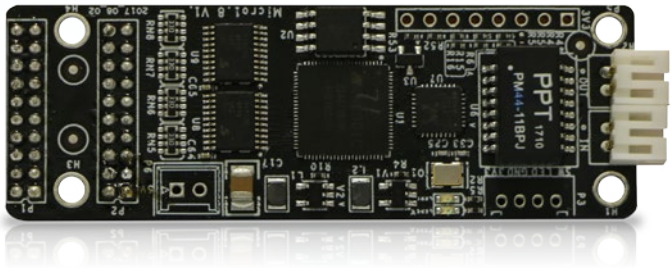


Scan board Specification

Micro-1.8

Version: V01 Date: 2018-04-12

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),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.

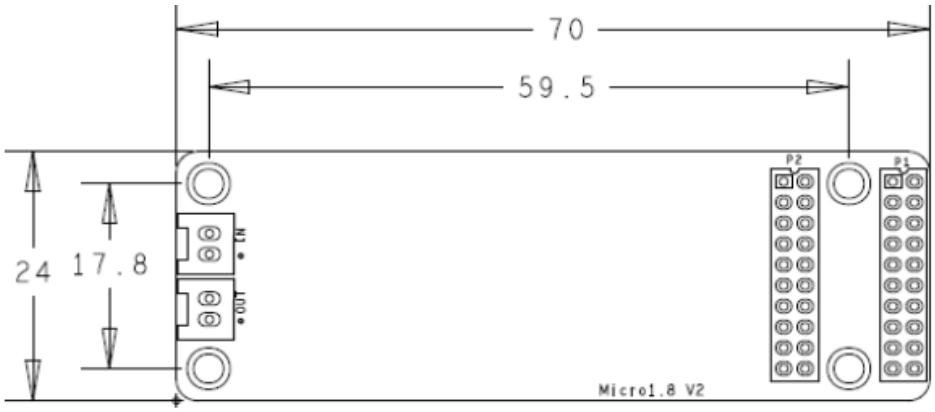
Product Feature

- Operating voltage: 3.6-5V DC.
- Largest single block scanning plate with a load of 8192 pixels.
- Single block scan output serial RGB data 24 groups, parallel 8 groups, supported 4 clock extensions.
- Single block of scan board support 32 I / O port.
- Ultra-small size design (70mm x 24 mm), designed to solve the space problem.
- Support within the 8192 point, intelligent tracing point set.
- Supports chromaticity correction within 4096 points, 8192 points within a brightness correction.
- Support receiving card security upgrade.
- Configuration parameters to read and, receiving card state detection.
- 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	8192 pixels
Refresh rate	Static screen up to 5500Hz over
Interface Type	2 * P2.0, optional pin output
Scanning mode	Static －8 scanning
Gray levels	4096—65536
Chip supports	Conventional chip, PWM chips, lighting chip,MY9868
Number of outputs RGB data set	24 serial RGB data, parallel 8 groups, four clock extension
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 256, the maximum value of 512
Loss of brightness	5%-20%
Operating voltage	3.6-5V DC
Operating temperature	-40℃-75℃
Dimensions	Length70 * width24 (mm)
Random mapping	Support
Brightness correction	8192
Color corretion	4096

Board Card Size

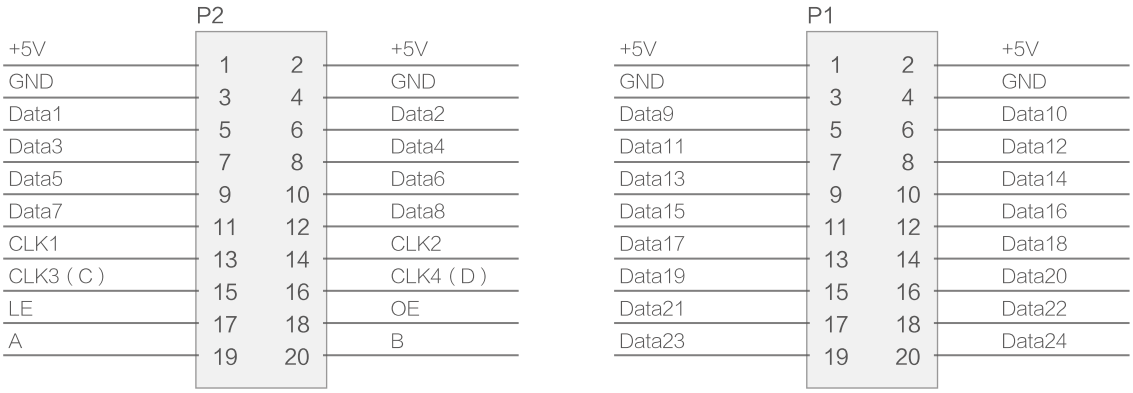


Interface Definition

Under all the many different working modes of it, different working modes can output different data. Interfaces are defined as follows:

- 1） 24 RGB data serial mode, maximum support for 4 sets of clock extensions, scan drive (direct decoding, 138, 5958 decoder mode), defined as follows:

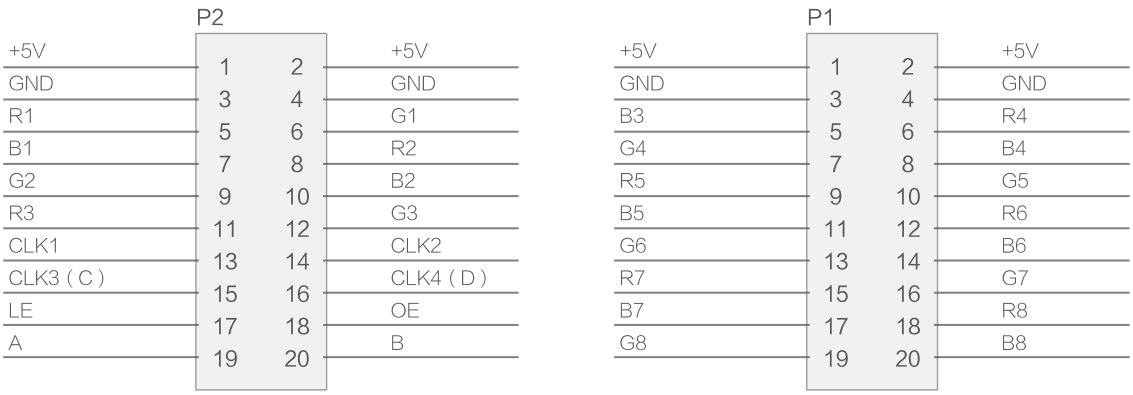
(Support for 138 and 595, the maximum support for eight scans, the maximum support for four sweeps)



138 decoding signal A (the second definition of DCLK ,when it is translated from 5958);
138 decoding signal B (the second definition of DIN ,when it is translated from 5958);
138decoded signal C (the second definition of BK,when it is translated from 5958);

- 2） parallel 8 groups, maximum support for 4 sets of clock extensions, scan drive (direct decoding, 138, 5958 decoder mode), defined as follows:

(Support for 138 and 595, the maximum support for eight scans, the maximum support for four sweeps)



138 decoding signal A (the second definition of DCLK ,when it is translated from 5958);
138decoding signal B (the second definition of DIN ,when it is translated from 5958);
138 decoded signal C (the second definition of BK,when it is translated from 5958);

- 3） When the actual extension after using the four groups of the clock signal, scanning signal can only meet A, B signal, if you use A, B, C, D, scanning signal, the clock can only extend two groups;

- 4）When Micro 1.8's receiving card outputs IO port, when input is used, the input pins of the P1 port need to be taken, when input is unable to be used as output;

P2

+5V	1	2	+5V
GND	3	4	GND
Data1	5	6	Data2
Data3	7	8	Data4
Data5	9	10	Data6
Data7	11	12	Data8
CLK1	13	14	CLK2
CLK3（C）	15	16	CLK4（D）
LE	17	18	OE
A	19	20	B

P1

+5V	1	2	+5V
GND	3	4	GND
Data9	5	6	Data10
Data11	7	8	Data12
Data13	9	10	Data14
Data15	11	12	Data16
I/O1	13	14	I/O2
I/O3	15	16	I/O4
I/O5	17	18	I/O6
I/O7	19	20	I/O8