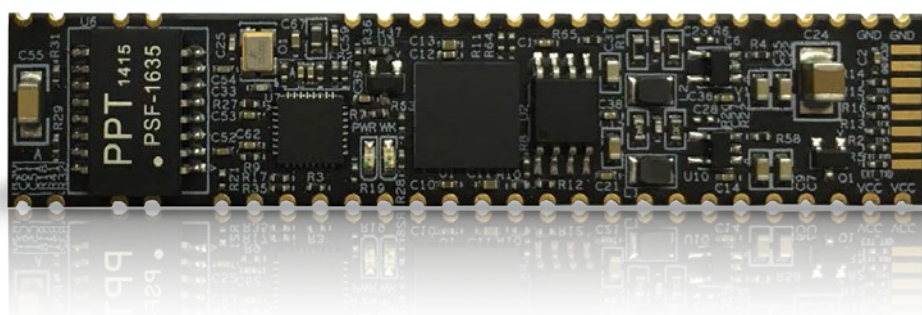




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Scan board Specification

Micro-2.2

Version: V01 Date: 2018-04-12

Product Summary

Micro2.2 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.

Micro2.2 size only (72 mm x 15 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

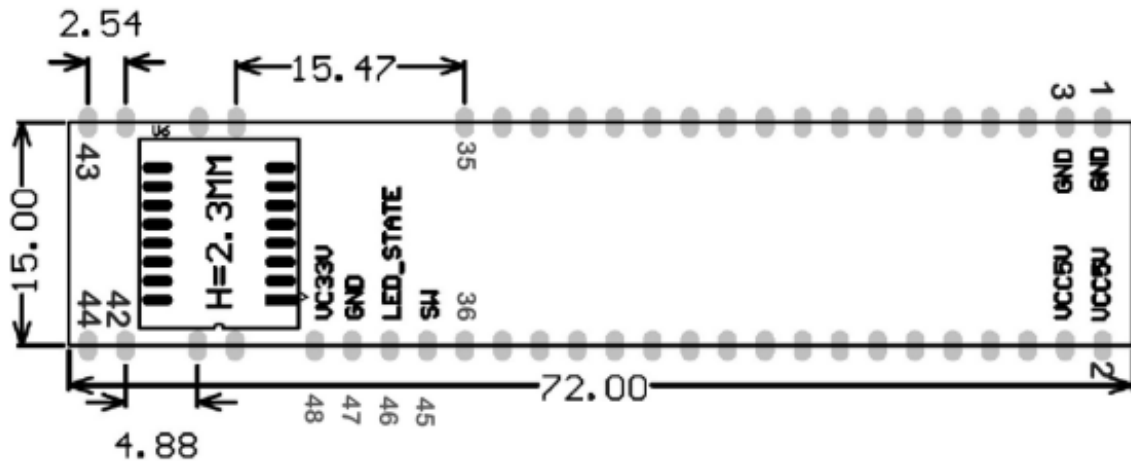
- Operating voltage: 3.6–5V DC.
- Largest single block scanning plate with a load of 4096 pixels.
- Signal block of scan board RGB output serial data clock 16 groups, 4 clk extensions.
- Ultra-small size design (72mm x 15 mm), designed to solve the space problem.
- Support within the 4096 -point, intelligent tracing point set.
- Supports chromaticity correction within 2048 points, 4096 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	4096 pixels
Refresh rate	Static screen up to 5500Hz over

Interface Type	2.54mm, Stamp hole interface
Scanning mode	Static - 32 scanning
Gray levels	4096—65536
Chip supports	Conventional chip, PWM chips, lighting chip
Number of outputs RGB data set	8 parallel RGB data
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	Length72 * width15 (mm)
Random mapping	Support
Brightness correction	4096
Color correction	2048

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) 8-group RGB serial data mode, static drive, define as follows:

P1		
GND	1	2
GND	3	4
D0	5	6
D1	7	8
D2	9	10
D3	11	12
D4	13	14
D5	15	16
D6	17	18
D7	19	20
DCLK	21	22
	23	24
	25	26
	27	28
LAT	29	30
OE	31	32
	33	34
	35	36
EARTH	37	38
EARTH	39	40
RX_P	41	42
RX_N	43	44
SW	45	46
GND	47	48

Header 24X2

- 2) 8-group RGB serial data mode, static drive, four group clock extension, define as follows:

P1		
GND	1	2
GND	3	4
D0	5	6
D1	7	8
D2	9	10
D3	11	12
D4	13	14
D5	15	16
D6	17	18
D7	19	20
DCLK	21	22
DCLK1	23	24
DCLK2	25	26
DCLK3	27	28
LAT	29	30
OE	31	32
	33	34
	35	36
EARTH	37	38
EARTH	39	40
RX_P	41	42
RX_N	43	44
SW	45	46
GND	47	48

Header 24X2

- 3) 8-group RGB serial data mode, scan drive (directly decoding, 138 decoding, 5958 decoding) define as follows:

P1		
GND	1	2
GND	3	4
D0	5	6
D1	7	8
D2	9	10
D3	11	12
D4	13	14
D5	15	16
D6	17	18
D7	19	20
DCLK	21	22
C/BK	23	24
D	25	26
	27	28
LAT	29	30
OE	31	32
A/DIN	33	34
B/LCK	35	36
EARTH	37	38
EARTH	39	40
RX_P	41	42
RX_N	43	44
SW	45	46
GND	47	48

Header 24X2

- 4) 8-group RGB parallel data mode, static drive, define as follows:

P1		
GND	1	2
GND	3	4
R0	5	6
G0	7	8
B0	9	10
R1	11	12
G1	13	14
B1	15	16
R2	17	18
G2	19	20
B2	21	22
R3	23	24
G3	25	26
B3	27	28
DCLK	29	30
LAT	31	32
OE	33	34
	35	36
EARTH	37	38
EARTH	39	40
RX_P	41	42
RX_N	43	44
SW	45	46
GND	47	48

Header 24X2

- 5) 8-group RGB parallel data mode, static drive, four group clock extension, define as follows:

P1		
GND	1	2
GND	3	4
R0	5	6
G0	7	8
B0	9	10
R1	11	12
G1	13	14
B1	15	16
R2	17	18
G2	19	20
B2	21	22
R3	23	24
G3	25	26
B3	27	28
DCLK	29	30
LAT	31	32
OE	33	34
	35	36
EARTH	37	38
EARTH	39	40
RX_P	41	42
RX_N	43	44
SW	45	46
GND	47	48

Header 24X2

- 6) 8-group RGB parallel data mode, scan drive (directly decoding, 138 decoding, 5958 decoding) define as follows:

P1		
GND	1	2
GND	3	4
R0	5	6
G0	7	8
B0	9	10
R1	11	12
G1	13	14
B1	15	16
R2	17	18
G2	19	20
B2	21	22
R3	23	24
G3	25	26
B3	27	28
DCLK	29	30
LAT	31	32
OE	33	34
	35	36
EARTH	37	38
EARTH	39	40
RX_P	41	42
RX_N	43	44
SW	45	46
GND	47	48

Header 24X2

- 7) 16-group RGB serial data mode, static drive, define as follows:

P1		
GND	1	2
GND	3	4
D0	5	6
D1	7	8
D2	9	10
D3	11	12
D4	13	14
D5	15	16
D6	17	18
D7	19	20
DCLK	21	22
	23	24
	25	26
	27	28
LAT	29	30
OE	31	32
	33	34
	35	36
EARTH	37	38
EARTH	39	40
RX_P	41	42
RX_N	43	44
SW	45	46
GND	47	48

Header 24X2

- 8) 16-group RGB serial data mode, scan drive (directly decoding, 138 decoding, 5958 decoding) , define as follows:

P1		
GND	1	2
GND	3	4
D0	5	6
D1	7	8
D2	9	10
D3	11	12
D4	13	14
D5	15	16
D6	17	18
D7	19	20
DCLK	21	22
C/BK	23	24
D	25	26
	27	28
LAT	29	30
OE	31	32
A/DIN	33	34
B/LCK	35	36
EARTH	37	38
EARTH	39	40
RX_P	41	42
RX_N	43	44
SW	45	46
GND	47	48

Header 24X2

- 9) 24-group RGB serial data mode, static drive, define as follows:

P1			
GND	1	2	VCC_IN
GND	3	4	VCC_IN
D0	5	6	D8
D1	7	8	D9
D2	9	10	D10
D3	11	12	D11
D4	13	14	D12
D5	15	16	D13
D6	17	18	D14
D7	19	20	D15
DCLK	21	22	D16
	23	24	D17
	25	26	D18
	27	28	D19
LAT	29	30	D20
OE	31	32	D21
A/DIN	33	34	D22
B/LCK	35	36	D23
EARTH	37	38	EARTH
EARTH	39	40	EARTH
RX_P	41	42	TX_N
RX_N	43	44	TX_P
SW	45	46	LED_STATE-
GND	47	48	LED_STATE+

Header 24X2