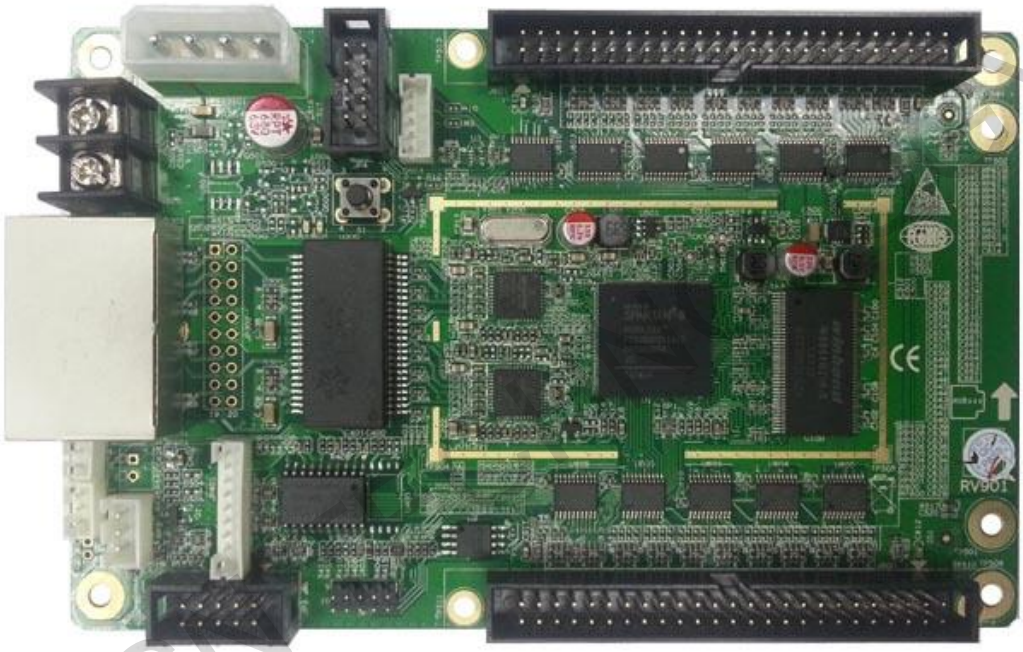
Linsn Technology

Receiver
RV901H

V1.1
Jan 2018

1. Function



1) Single card can output 16 groups RGBR' data;
2) Single card can output 20 groups RGB data;
3) Single card can output 32 groups serial data;
4) Single card maximum supports 1024X256 pixels（Please note that there are recommended values depending on the design

of LED screen）；

5) Support temperature detection;

6) Support the cabinet-door (open/close) monitoring;

7) Two lines fan-speed monitoring;

8) Humidity monitoring (humidity sensor sold separately) ;

9) Smoke monitoring(smoke module sold separately) ;

10) Three lines voltage monitoring: one for the system, two for cabinet power;

11) Support pixel-by-pixel brightness calibration; single-card color space conversion;

12) Support network cable BER test;

13) Support hot backup with dual receiver cards for demanding performances screen;

14) High refresh rate and high grey level with most of the driver ICs;

15) In line with EU standards RoHS;

16) In line with EU standards CE-EMC class B.

2. RV901H PINOUT

1) Normal mode (default mode)

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Support full-color screen, virtual full-color screen and double-color screen, each 50-pin interface has 8 groups of full-color / virtual screen data or 16 groups of two-color screen data.

In normal mode, 50pin is defined as follows.

RGBR'					Double color			
GND	1	2	VCC		GND	1	2	VCC
GND	3	4	VCC		GND	3	4	VCC
GND	5	6	SR		GND	5	6	SR
R8'	7	8	U8		G16	7	8	R16
G8	9	10	R8		G15	9	10	R15
R7'	11	12	U7		G14	11	12	R14
G7	13	14	R7		G13	13	14	R13
R6'	15	16	U6		G12	15	16	R12
G6	17	18	R6		G11	17	18	R11
R5'	19	20	U5		G10	19	20	R10
G5	21	22	R5		G9	21	22	R9
R4'	23	24	U4		G8	23	24	R8
G4	25	26	R4		G7	25	26	R7
R3'	27	28	U3		G6	27	28	R6
G3	29	30	R3		G5	29	30	R5
R2'	31	32	U2		G4	31	32	R4
G2	33	34	R2		G3	33	34	R3
R1'	35	36	U1		G2	35	36	R2
G1	37	38	R1		G1	37	38	R1
D	39	40	C		D	39	40	C
B	41	42	A		B	41	42	A
LAT	43	44	CLK		LAT	43	44	CLK
OE	45	46	GND		OE	45	46	GND
VCC	47	48	GND		VCC	47	48	GND
VCC	49	50	GND		VCC	49	50	GND

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2) 20 groups parallel data mode (20 data for RV901 in LedSet/LEDStudioV12.60 or earlier)

Only for full-color screen

In this mode, 50pin is defined as follows.

GND	1	2	VCC
GND	3	4	VCC
GND	5	6	SR
NC	7	8	NC
U10	9	10	G10
R10	11	12	U9
G9	13	14	R9
U8	15	16	G8
R8	17	18	U7
G7	19	20	R7
U6	21	22	G6
R6	23	24	U5
G5	25	26	R5
U4	27	28	G4
R4	29	30	U3
G3	31	32	R3
U2	33	34	G2
R2	35	36	U1
G1	37	38	R1
D	39	40	C
B	41	42	A
LAT	43	44	CLK
OE	45	46	GND
VCC	47	48	GND
VCC	49	50	GND

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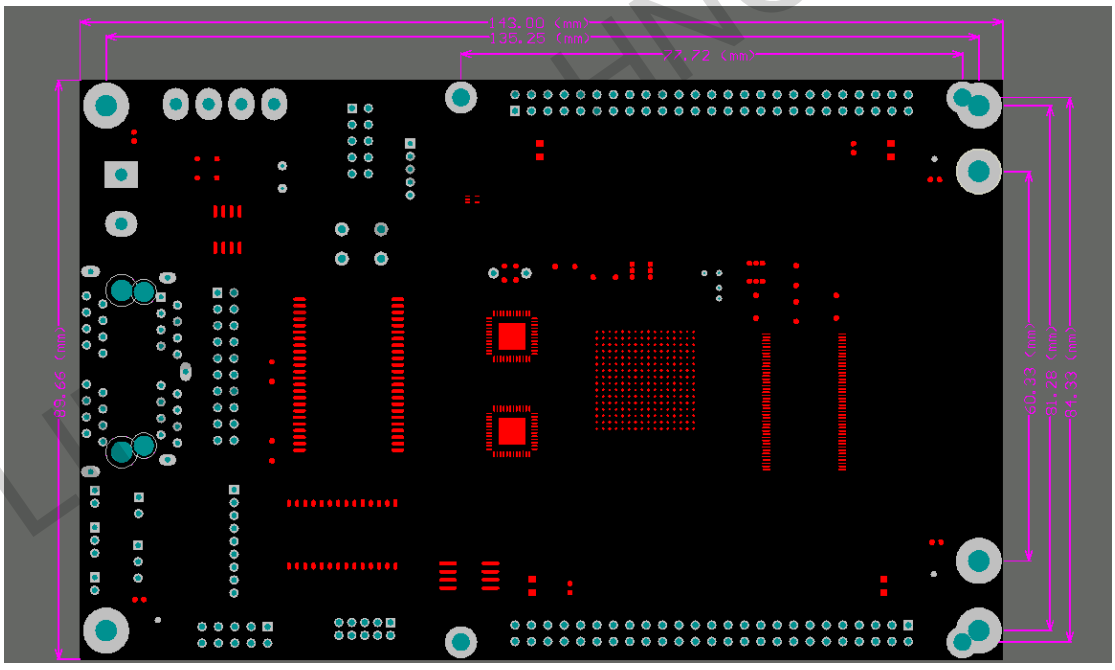
3.RV901H on-board monitoring

Interface on Receiving card(see the silk-screen)	Function	Usage
FAN	2 lines fan speed monitoring	Fan with Control Line
DOOR	cabinet door open/close monitoring	To form Open/close circle
VOLT	voltage monitoring	Connect to VCC
SMOKE	smoke monitoring	Smoke monitoring module SK901 is sold separately
HUM	humidity monitoring	Humidity monitoring module is sold separately
LCD	LCD module for displaying real-time monitoring information	LCD monitoring module is sold separately

4. Dimensions



5. Model table

RV901H and RV921H are in stock. RV911H and RV931H need make to order.

Model	RJ45 Direction	output interface type
RV901H	90 Degree	interface in front side
RV911H	180 Degree	interface in front side
RV921H	90 Degree	interface at the back side
RV931H	180 Degree	interface at the back side

6. Working Conditions

Rated voltage（V）	5	maximum value	5.5	Minimum value	4.5
Rated current（A）	0.80	maximum value	0.87	Minimum value	0.73
Rated power consumption（W）	4.0	maximum value	4.8	Minimum value	3.3
Working temperature（℃）	-20℃ ~ 70℃				
Working humidity（%）	0% ~ 95%				

END

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