

## Receiver

### RV905K

V1.1

Jan 2018

#### 1. Function



- 1) Single card can output 16 groups R'GBR' data;
- 2) Single card can output 24 groups RGB data;
- 3) Single card can output 28 groups RGB data;
- 4) Single card maximum supports 512X448 pixels ( **Please note that there are recommended values depending on the design of LED screen** ) ;
- 5) Each interface has VCC pin to get power supply for control system from led module, no need to get extra power supply for control system;
- 6) Support saving calibration data on module;

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- 7) Support temperature detection;
- 8) Support the cabinet-door (open/close) monitoring;
- 9) Two lines fan-speed monitoring;
- 10) Humidity monitoring (humidity sensor sold separately);
- 11) Smoke monitoring (smoke module sold separately);
- 12) Three lines voltage monitoring: one for the system, two for cabinet power;
- 13) Support pixel-by-pixel brightness calibration; single-card color space conversion;
- 14) Support network cable BER test;
- 15) High refresh rate and high grey level with most of the driver ICs;
- 16) In line with EU standards RoHS;
- 17) In line with EU standards CE-EMC.

## **2.RV905K PINOUT**

### **1) Normal mode (default mode)**

Support full-color screen, virtual full-color screen and double-color display, there are 16 groups RGBR' data

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In normal mode, 30pin is defined as follow.

RGBR'PINOUT				DOUBLE COLOR			
C	1	2	A	C	1	2	A
B	3	4	OE	B	3	4	OE
LAT	5	6	CLK	LAT	5	6	CLK
D	7	8	E	D	7	8	E
R1	9	10	G1	R1	9	10	G1
R1'	11	12	U1	R2	11	12	G2
GND	13	14	R2	GND	13	14	R3
G2	15	16	R2'	G3	15	16	R4
U2	17	18	R3	G4	17	18	R5
G3	19	20	GND	G5	19	20	GND
R3'	21	22	U3	R6	21	22	G6
R4	23	24	G4	R7	23	24	G7
R4'	25	26	U4	R8	25	26	G8
NC	27	28	NC	NC	27	29	NC
NC	29	30	VCC	NC	29	30	VCC

## 2) 24 group data mode

Only for full color screen, 30pin is defined as follow

C	1	2	A
B	3	4	OE
LAT	5	6	CLK
D	7	8	E
F/SR	9	10	R1
G1	11	12	U1
GND	13	14	R2
G2	15	16	U2
R3	17	18	G3
U3	19	20	GND

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R4	21	22	G4
U4	23	24	R5
G5	25	26	U5
R6	27	28	G6
U6	29	30	VCC

### 3) 28 group data mode

Only for full color screen, 8 scan mode or up needs serial decodes .As for serial decoding circuit please see Appendix.

30pin is defined as follow

C	1	2	A
B	3	4	OE
LAT	5	6	CLK
R1	7	8	G1
U1	9	10	R2
G2	11	12	U2
GND	13	14	R3
G3	15	16	U3
R4	17	18	G4
U4	19	20	GND
R5	21	22	G5
U5	23	24	R6
G6	25	26	U6
R7	27	28	G7
U7	29	30	VCC

### 4) FLASH PINOUT(contact with Linsn for detailed solution )

GND	1	2	SPI_CS
SPI_CLK	3	4	SPI_MOSI
CODE0	5	6	
CODE1	7	8	

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CODE2	9	10	
	11	12	CODE3
CODE4	13	14	
	15	16	SPI_MISO
	17	18	
	19	20	GND

### 3.RV905Kon-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 SK901 is sold separately
LCD	LCD module for displaying real-time monitoring information	LCD monitoring module SK901 is sold separately

### 4.Model table

**RV905K and RV925K are in stock. RV915K and RV935K need make to order.**

Model	RJ45 Direction	output interface type
<b>RV905K</b>	<b>90 Degree</b>	<b>interface in front side</b>

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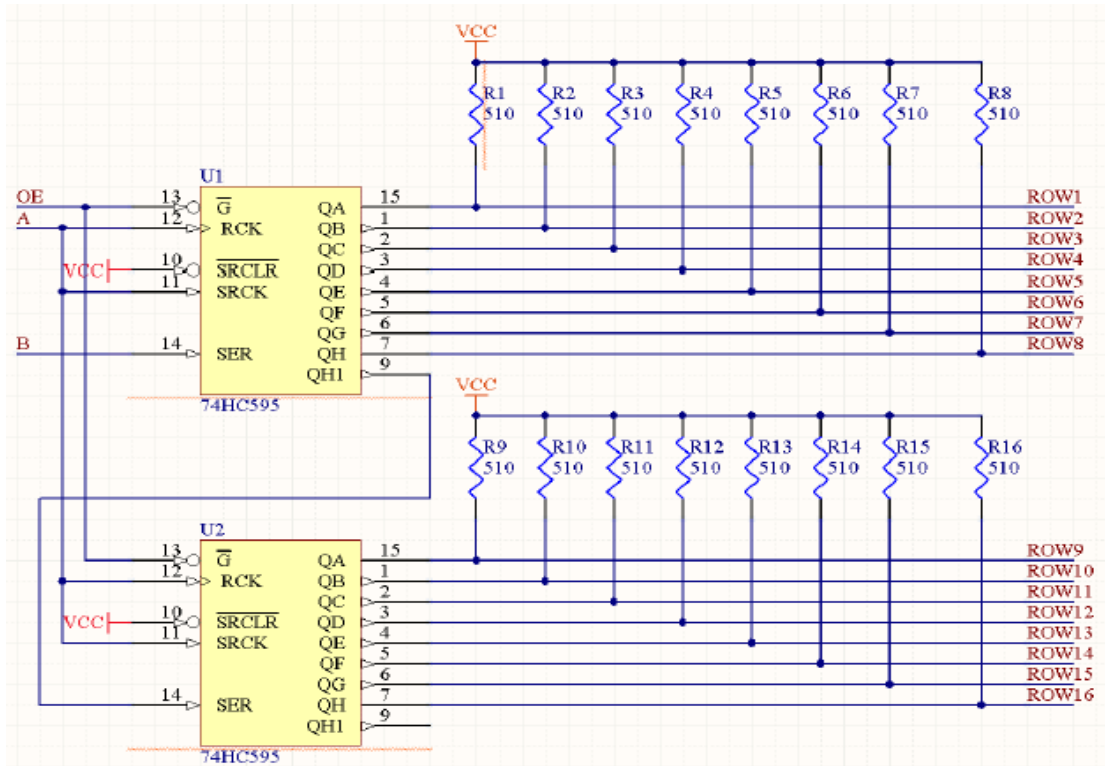
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<b>RV915K</b>	<b>180 Degree</b>	<b>interface in front side</b>
<b>RV925K</b>	<b>90 Degree</b>	<b>interface at the back side</b>
<b>RV935K</b>	<b>180 Degree</b>	<b>interface at the back side</b>

### 5. 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 (°C)	-20°C ~ 70°C				
Working humidity (%)	0% ~ 95%				

### Appendix1. Serial decoding circuit



END

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