



Multi-Purpose LCD TV  
Control Board Specification  
Model: RTD2556 V1.0

Prepared by : 林可杰

Checked by : 黄烁硬

Approved by :

Published date :

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Sinotronics Inc.  
思诺泰科创电子

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RECORD OF REVISIONS ( 修改记录 )

REVISION NO. ( 修订号 )	PAGE ( 页码 )	Modify content ( 修改内容 )	Amendments ( 修订者 )	DATE ( 日期 )
A1	ALL	First edition	林少杰	2017.07.14



## GENERAL DESCRIPTION(整体概述)

RTD2556 V1.0 is a multi-purpose LCD/LED monitor board, is designed to support EDP Panel and LVDS Panel. It can support HDMI port input.

RTD2556 V1.0 是一个多功能的 LCD/LED 驱动板, 支持 EDP 和 LVDS 面板。支持 VGA 端口输入。

## PRODUCTS FEATURES(产品特性)

Below you will find the detailed feature. ( 以下是详细特性 )

Signal input 信号输入	HDMI	Format	Up to 1920 * 1080 @60HZ
		Color	6bit, 8bit, 10bit, 12bit
Power 功率	DC INPUT ( 直流输入 )	12V	
	To panel ( 驱屏电压 )	3.3V, 5V, 12V	
	Management (电源管理)	Low power consumable mode: standby<0.3w	
OSD Language OSD 语言	Chinese, English,( French ,Spanish ,German, Japanese)(Option )中文·英语 ( 法语·西班牙语·德语·日语 )		
Key Functions 按键功能	AUTO,MENU,LEFT,RIGHT,EXIT,ON/OFF 自动·菜单·左·右·退出·电源		



## INTERFACE DEFINITION(接口定义)

Below ,please see the symbol and description from left to right pin

### TP7( 6PIN/2.0 ) INVERTER INTERFACE

NO 管脚	SYMBOL 板上丝印	DESCRIPTION ( 描述 )
1	GND	Ground ( 地 )
2	GND	
3	ADJ	Brightness adjustment ( 亮度调节 )
4	BK	Back-light ON/OFF control ( 背光开关控制 )
5	12V	+12V DC Power supply ( +12v 直流供电 )
6	12V	

### CN10(10PIN/2.0)KEY BOARD

NO 管脚	SYMBOL 板上丝印	DESCRIPTION 描述
1	EXIT	EXIT key ( 退出键 )
2	MENU	NENU key ( 菜单键 )
3	AUTO	AUTO key ( 自动键 )
4	LEFT	LEFT key ( 左键 )
5	RIGHT	RIGHT key ( 右键 )
6	GND	Ground ( 地 )
7	LED_G	Green led ( 绿色指示器 )
8	LED_R	Red led ( 红色指示器 )
9	ON/OFF	ON/OFF key ( 开/关键 )
10	NC	NC



CN4(2\*15PIN/2.0)LVDS PANEL INTERFACE

NO 管脚	SYMBOL 板上丝印	DESCRIPTION 描述
1	LCD_PWR	Power for panel ( 屏电压 )
2	LCD_PWR	
3	LCD_PWR	
4	GND	Ground ( 地 )
5	GND	
6	GND	
7	ATX0-	LVDS 0DD 0- Signal ( LVDS 奇数 0-信号 )
8	ATX0+	LVDS 0DD 0+ Signal ( LVDS 奇数 0+信号 )
9	ATX1-	LVDS 0DD 1- Signal ( LVDS 奇数 1-信号 )
10	ATX1+	LVDS 0DD 1+ Signal ( LVDS 奇数 1+信号 )
11	ATX2-	LVDS 0DD 2- Signal ( LVDS 奇数 2-信号 )
12	ATX2+	LVDS 0DD 2+ Signal ( LVDS 奇数 2+信号 )
13	GND	Ground ( 地 )
14	GND	
15	ATCK-	LVDS 0DD Clock- Signal ( LVDS 奇数时钟-信号 )
16	ATCK+	LVDS 0DD Clock+ Signal ( LVDS 奇数时钟+信号 )
17	ATX3-	LVDS 0DD 3- Signal ( LVDS 奇数 3-信号 )
18	ATX3+	LVDS 0DD 3+ Signal ( LVDS 奇数 3+信号 )
19	BTX0-	LVDS EVEN 0- Signal ( LVDS 偶数 0-信号 )
20	BTX0+	LVDS EVEN 0+ Signal ( LVDS 偶数 0+信号 )



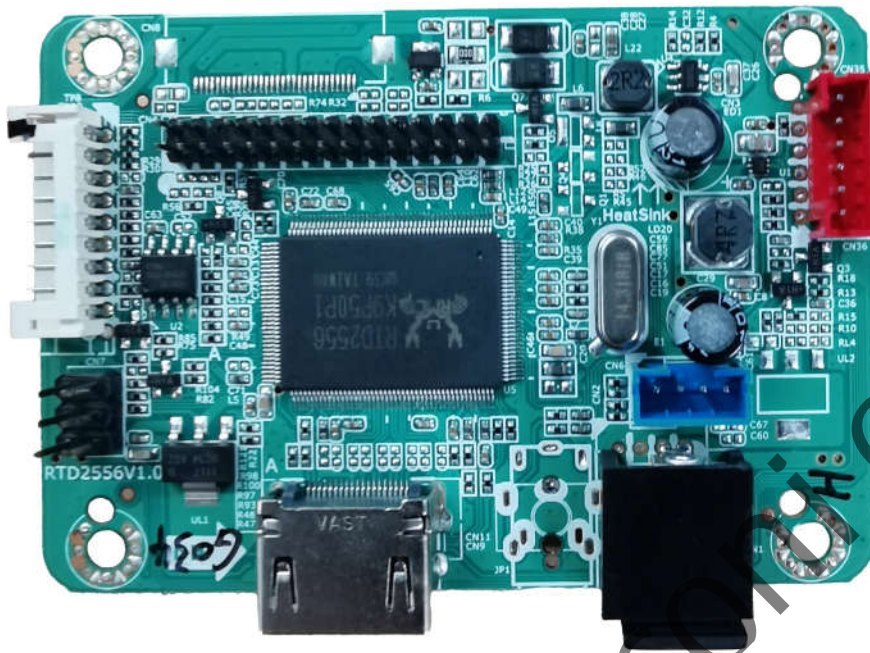


21	BTX1-	LVDS EVEN 1- Signal ( LVDS 偶数 1-信号 )
22	BTX1+	LVDS EVEN 1+ Signal ( LVDS 偶数 1+信号 )
23	BTX2-	LVDS EVEN 2- Signal ( LVDS 偶数 2-信号 )
24	BTX2+	LVDS EVEN 2+ Signal ( LVDS 偶数 2+信号 )
25	GND	Ground ( 地 )
26	GND	
27	BTCK-	LVDS EVEN Clock- Signal ( LVDS 偶数时钟-信号 )
28	BTCK+	LVDS EVEN Clock+ Signal ( LVDS 偶数时钟+信号 )
29	BTX3-	LVDS EVEN 3- Signal ( LVDS 偶数 3-信号 )
30	BTX3+	LVDS EVEN 3+ Signal ( LVDS 偶数 3+信号 )



FUNCTION LAYOUT(产品外观图)

Side insert (侧出式)

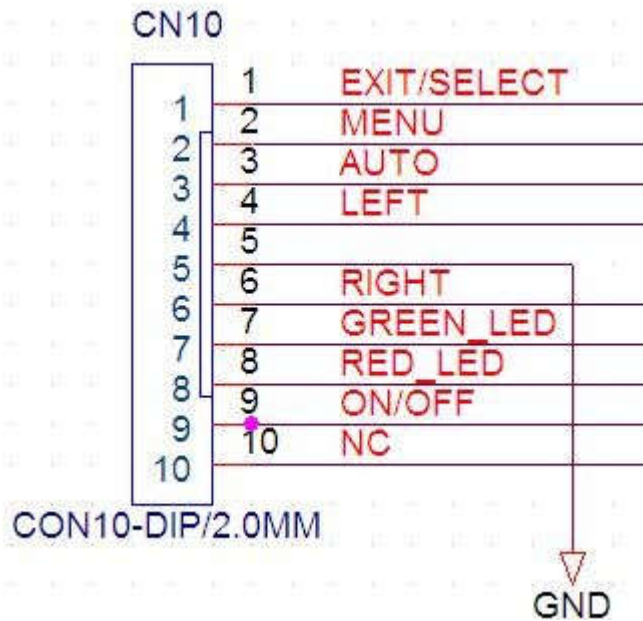


(The color of actual item may vary and the image is only for reference.)

实物颜色可能与此图有出入，此图仅供参考。



## KEY & IR BOARD SYSTEM SCHEMATIC(按键和遥控系统原理图)



## INTERNATIONAL STANDARDS(国际标准)

### \*Safety (安全)

The power supply shall compliance with following Criterion:

(电源安全性满足下列标准)

- 1) UL60950/UL60065
- 2) EN60950/EN60065
- 3) GB4943-2011/GB8898-2011

### \*Isolation (隔离)

- 1) HI-POT (耐压测试)

Input to Output: 3000Vac 50Hz 1minute $\leq$ 10mA

- 2) Isolation Resistance (隔离电阻)

Input to Output: DC 500V 50M $\Omega$  min (at room temperature)



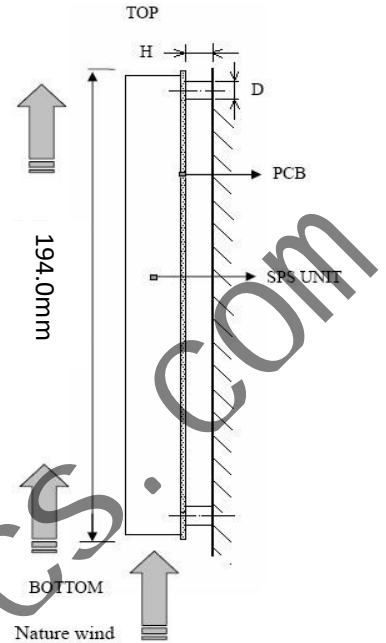
MOUNT PRECAUTIONS(装配注意事项)

D	$\leq 5.5\text{mm}$
H	$\geq 7.0\text{mm}$

Note:

1\* Mount the TV board to the mounting board using M3 screw. The maximum value of the tightening torque is 0.4N/M. The insertion depth of the screw should be less 5.5 mm.

2\* If  $H \leq 7.0\text{mm}$  .Add Mylar under PCB bottom.



ENVIRONMENTAL REQUIREMENT & NOTICE(环境要求和注意事项)

1. Do not pressed and distorted. (禁止挤压和弯曲)
2. Keep away from static and water. (远离静电和水)
3. Relative humidity : 10% ~ 90%. (相对湿度 : 10% ~ 90% )
4. Storage humidity : 5% ~ 95%. (储存湿度 : 5% ~ 95% )
5. Storage temperature: -10~ +60°C. (储存温度 : -10~ +60°C )
6. Operation temperature: 0~ +40°C. (操作温度 : 0~ +40°C )
7. Cooling Method: Ventilation cooling. (冷却方式 : 通风)
8. The production shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on it.

(该产品不能遭到水滴或水溅，而且设备上不能放置诸如花瓶一类装满液体的物品)

9. Please use it under the condition of good aeration.

(该产品使用时需有良好通风)