


# SPECIFICATIONS FOR LCD MODULE

<b>CUSTOMER</b>	
<b>MODEL</b>	<b>SCT050010-V20</b>
<b>CUSTOMER APPROVED</b>	

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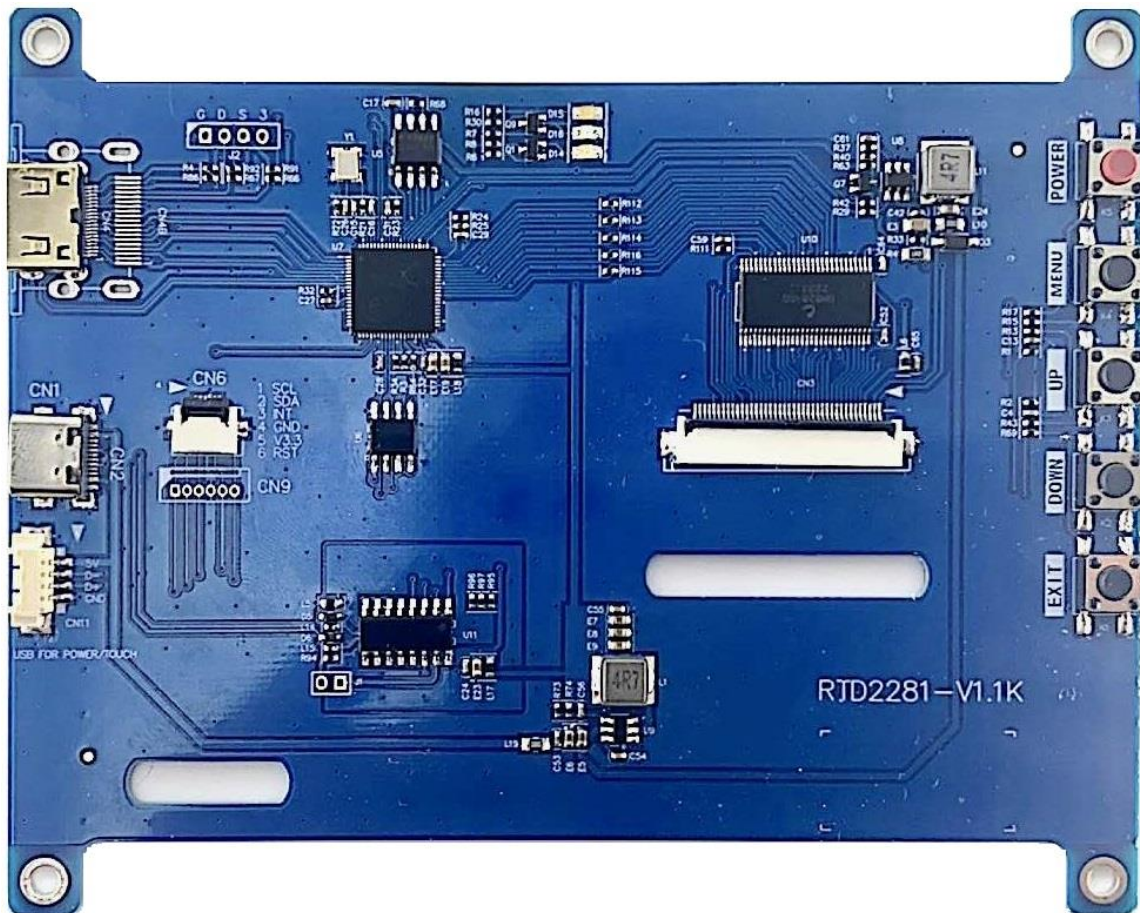
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## 1. GENERAL DESCRIPTION ( 整体概述 )

RTD2281-V1.1K is a 5.0inch LCD display driver board; supports HDMI input; support capacitive touch panel.

RTD2281-V1.1K 是一个 5.0 寸 LCD 显示驱动板；支持 HDMI 输入；支持电容屏。

## 2. FUNCTION LAYOUT ( 产品外观图 )



(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

### 3. FEATURES ( 产品特征 )

Below you will find the detailed features.

<b>MAIN CHIPSET</b> 主芯片	RTD2281		
<b>OSD LANGUAGE</b>	Chinese,English,(French,Spanish,Italian,German,Portuguese, Dutch,Kore an)(Option ) 中文,英语 ( 法语,西班牙语,德语,日语 )		
<b>VIDEO INPUT</b> 视频输入			
	HDMI	Format	Up to 800*480@50HZ
		Operating Speed	155MHz
<b>AUDIO OUTPUT</b> 音频输出	Frequency response		
	Output power		
<b>TOUCH</b>	Interface	USB	
	Touch Panel	6-wire capacitive touch panel	
<b>POWER TO PANEL</b>	3.3V		
<b>Management</b> 电源管理	Standby Power Consumption < 0.2W(Board Only) 待机功耗< 0.2W ( 仅主板 )		
<b>KEY FUNCTIONS</b>	MENU, UP, DOWN, EXIT, POWER 菜单 · 增加 · 减小 · 退出 · 电源开/关		

## 4. INTERFACE DEFINITION (接口定义)

### 4.1 DC IN CONNECTOR(DC 电源输入) CN1(MICRO)

NO.(管脚)	SYMBOL	DESCRIPTION (描述)
CN1	板上丝印	
1	5V	+5V DC Power supply ( +5V 直流供电 )
2	D-	USB bus signal (USB 总线信号)
3	D+	USB bus signal (USB 总线信号)
4	NC	NC
5	GND	Ground (地)

### 4.2 DC IN CONNECTOR(DC 电源输入) CN2(TYPE-C)

NO.(管脚)	SYMBOL	DESCRIPTION (描述)
CN2	板上丝印	
1 · 2,15,16	GND	Ground (地)
3 · 4,13,14	5V	+5V DC Power supply ( +12V 直流供电 )
5,6,11,12	NC	NC
7,9	D-	USB bus signal (USB 总线信号)
8,10	D+	USB bus signal (USB 总线信号)

Note: USB power supply only support Type-A to Type-C

### 4.3 DC IN CONNECTOR(DC 电源输入) CN11(MX1.25-4PIN)

NO.(管脚)	SYMBOL	DESCRIPTION (描述)
CN1	板上丝印	
1	5V	+5V DC Power supply ( +5V 直流供电 )
2	D-	USB bus signal (USB 总线信号)
3	D+	USB bus signal (USB 总线信号)
4	GND	Ground (地)

### 4.4 HDMI IN CONNECTOR (HDMI 信号输入) CN4B(HDMI-A)

NO. 管脚	SYMBOL 板上丝印	DESCRIPTION (描述)
1-19	HDMI-A	HDMI standard interface ( HDMI 标准接口 )

### 4.5 HDMI IN CONNECTOR (HDMI 信号输入) CN4 (MINI-HDMI)

NO. 管脚	SYMBOL 板上丝印	DESCRIPTION (描述)
1-19	HDMI-MINI	MINI HDMI standard interface ( MINI HDMI 标准接口 )

#### 4.6 CAPACITIVE TOUCH SCREEN CONNECTOR(电容触摸屏连接器) CN6(FPC6PIN0.5)/CN9(SIP6Z125T)

此部件备选 This part is optional  
连接 USB 插座至电脑·触摸控制方可有效。

( Connect USB interface to computer, touch control can be effective. )

NO.(管脚)	SYMBOL	DESCRIPTION ( 描述 )
CN6	板上丝印	
1	SCL	Capacitive touch panel SDA(电容触摸屏 SCL)
2	SDA	Capacitive touch panel SDA(电容触摸屏 SDA)
3	INT	Capacitive touch panel SDA(电容触摸屏 INT)
4	GND	signal ground(信号地)
5	V3.3	+3.3V power supply for capacitor screen port (电容触摸屏+3.3V 电源)
6	RST	Capacitive touch panel SDA(电容触摸屏 RST)

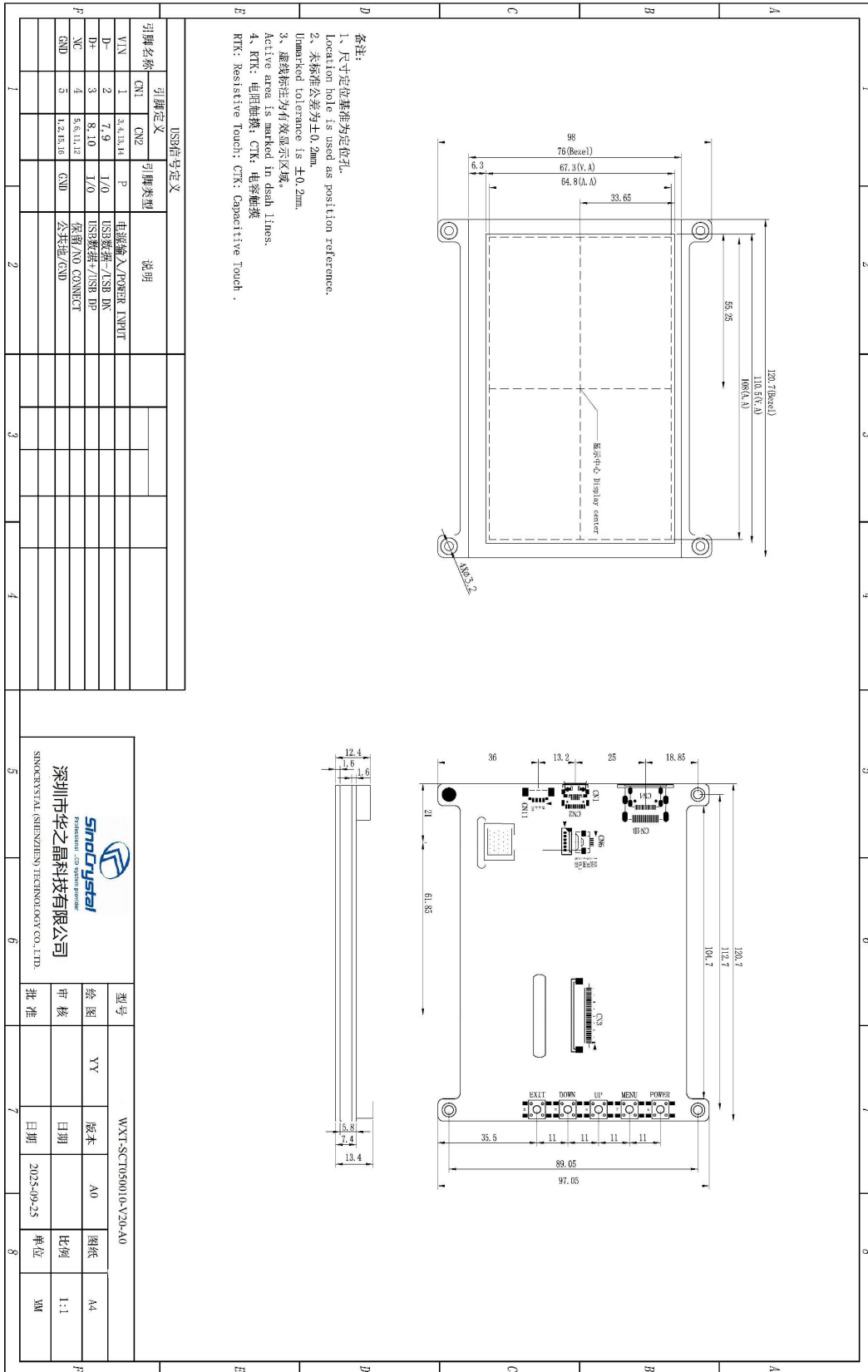
NO.(管脚)	SYMBOL	DESCRIPTION ( 描述 )
CN9	板上丝印	
1	SCL	Capacitive touch panel SDA(电容触摸屏 SCL)
2	SDA	Capacitive touch panel SDA(电容触摸屏 SDA)
3	INT	Capacitive touch panel SDA(电容触摸屏 INT)
4	GND	signal ground(信号地)
5	V3.3	+3.3V power supply for capacitor screen port (电容触摸
6	RST	Capacitive touch panel SDA(电容触摸屏 RST)

#### 4.7 LCD PANEL INTERFACE ( 液晶屏接口 ) CN3(FPC0.5-40PIN)

NO. 管脚	SYMBOL 板上丝印	I/O	Function	Remark
1	VLED-	P	LED backlight Cathode ( LED 背光阴极 )	
2	VLED+	P	LED backlight Anode ( LED 背光阳极 )	
3	GND	P	Ground ( 地 )	
4	DVDD	P	Power for panel ( 屏电压 )	
5	R0	I	Red data/LSB ( 红色信号/低位 )	
6	R1	I	Red data ( 红色信号 )	
7	R2	I	Red data ( 红色信号 )	
8	R3	I	Red data ( 红色信号 )	
9	R4	I	Red data ( 红色信号 )	
10	R5	I	Red data ( 红色信号 )	
11	R6	I	Red data ( 红色信号 )	

12	R7	I	Red data/MSB (红色信号/高位)	
13	G0	I	Green data/LSB (绿色信号/低位)	
14	G1	I	Green data (绿色信号)	
15	G2	I	Green data (绿色信号)	
16	G3	I	Green data (绿色信号)	
17	G4	I	Green data (绿色信号)	
18	G5	I	Green data (绿色信号)	
19	G6	I	Green data (绿色信号)	
20	G7	I	Green data/MSB (绿色信号/高位)	
21	B0	I	Blue data/LSB (蓝色信号/低位)	
22	B1	I	Blue data (蓝色信号)	
23	B2	I	Blue data (蓝色信号)	
24	B3	I	Blue data (蓝色信号)	
25	B4	I	Blue data (蓝色信号)	
26	B5	I	Blue data (蓝色信号)	
27	B6	I	Blue data (蓝色信号)	
28	B7	I	Blue data/MSB (蓝色信号/高位)	
29	GND	P	Ground (地)	
30	DCLK	I	Sample clock (点时钟)	
31	DISP	I	Display on/off (显示打开/关闭)	
32	HS	I	Horizontal Sync Input (水平同步)	
33	VS	I	Vertical Sync Input (垂直同步)	
34	DE	I	Data Input Enable (数据使能)	
35	NC	-	No connection	
36	GND	P	Ground (地)	
37	NC	-	No connection	
38	NC	-	No connection	
39	NC	-	No connection	
40	NC	-	No connection	

## 5. CONTROLLER DIMENSIONS (板卡结构图)



## 6. OPERATION REQUIREMENT ( 操作要求 )

- |   |                                       |
|---|---------------------------------------|
| ( 1 ) Do not pressed and distorted.                         | 请勿挤压和弯曲。                              |
| ( 2 ) Keep away from static and water.                      | 远离静电和水。                               |
| ( 3 ) Relative humidity : $\leq 80\%$                       | 相对湿度 : $\leq 80\%$                    |
| ( 4 ) Storage temperature: $-20 \sim +60^{\circ}\text{C}$   | 储藏温度 : $-20 \sim +60^{\circ}\text{C}$ |
| ( 5 ) Operation temperature: $-20 \sim +60^{\circ}\text{C}$ | 使用温度 : $-20 \sim +60^{\circ}\text{C}$ |