

SPECIFICATION
产品规格书

product model	产品型号:	GRTD2281-V1.0JI
product type	产品类型:	多功能 LCD-PC 驱动板
		Multi-function LCD-PC AD board
Document NO	文档编码:	24032201

RECORD OF REVISIONS (修改记录)

REVISION NO. 版本	DESCRIPTION 描述	REVISION DATE 修改日期
VER1.0JI	ISSUE / 发布	2024-03-22

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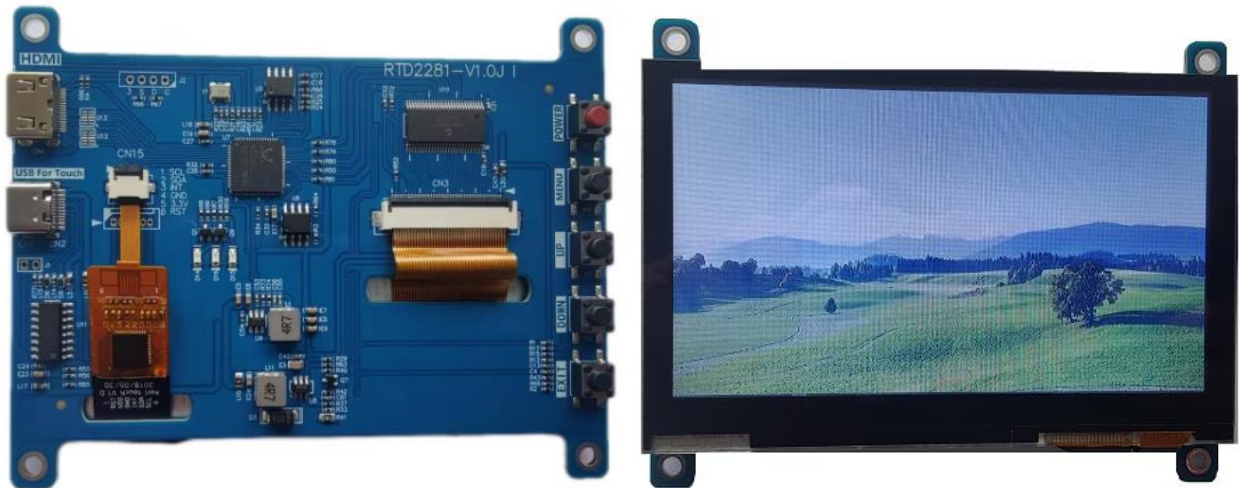
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1. GENERAL DESCRIPTION (整体概述)

GRTD2281-V1.0JI is a 4.3inch LCD display driver board; Supports MINI HDMI input; Support capacitive touch panel.

GRTD2281-V1.0JI 是一个 4.3 寸 LCD 显示驱动板；支持 MINI HDMI 输入；支持电容屏触摸。

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.

MAIN CHIPSET 主芯片	GRTD2281		
OSD LANGUAGE OSD 语言	Chinese, English, (French, Spanish, Italian, German, Portuguese, Dutch, Korean) (Option) 中文, 英语（法语, 西班牙语, 德语, 日语）		
VIDEO INPUT 视频输入			
	HDMI	Format	Up to 800*480@50HZ
		Operating Speed	155MHz
AUDIO OUTPUT 音频输出	Frequency response		
	Output power		
TOUCH	Interface	USB	
	Touch Panel	6-wire capacitive touch panel	
POWER TO PANEL 驱屏电压	3.3V		
Management 电源管理	Standby Power Consumption < 0.2W (Board Only) 待机功耗< 0.2W（仅主板）		
KEY FUNCTIONS 按键功能	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 USB IN CONNECTOR (外接 USB 输入) CN2 (TYPE-C) /CN1 (MICRO-USB5P2J) 备选

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	No connection (保留)
7,9	D-	USB bus signal (USB 总线信号)
8,10	D+	USB bus signal (USB 总线信号)

NO. (管脚)	SYMBOL	DESCRIPTION (描述)
CN1	板上丝印	
1	5V	+5V power from host USB (+5V USB 电源)
2	D-	USB bus signal (USB 总线信号)
3	D+	USB bus signal (USB 总线信号)
4	NC	No connection (保留)
5	GND	Ground (地)

4.2 HDMI IN CONNECTOR (HDMI 信号输入) CN4 (MINI-HDMI)

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

4.3 CAPACITIVE TOUCH SCREEN CONNECTOR(电容触摸屏连接器)
CN15(FPC6PIN0.5)/J3(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)
CN15	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)
J3	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)

4.4 KEY (按键) K1, K2, K3, K4, K5 (SMD4J6*6)

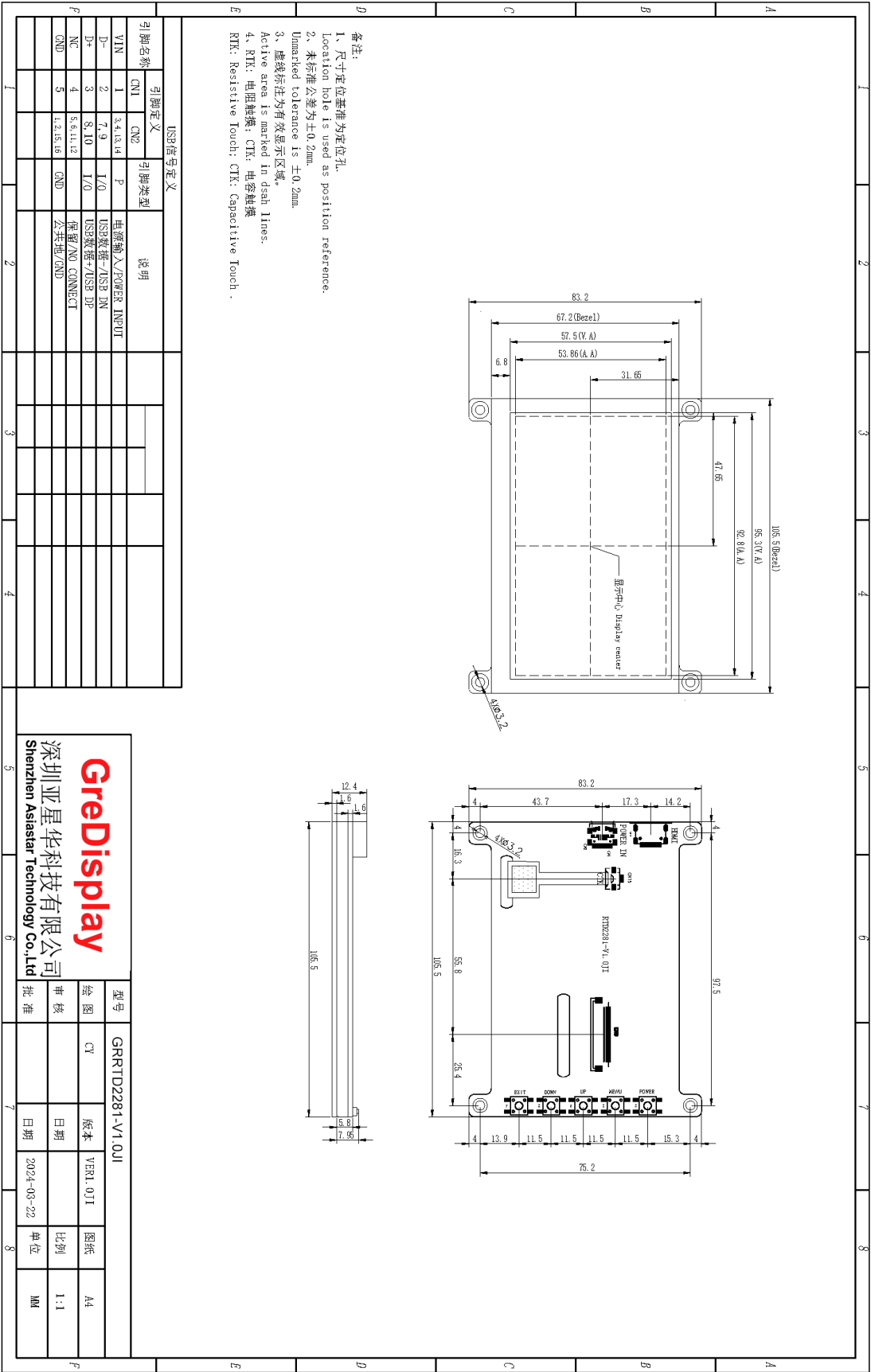
NO. (管脚)	SYMBOL 板上丝印	DESCRIPTION (描述)
K1	EXIT	EXIT Key (退出键)
K2	DOWN	DOWN Key (减小键)
K3	UP	UP Key (增加键)
K4	MENU	MENU Key (菜单键)
K5	POWER	POWER Key (关机键)

4.5 LCD PANEL INTERFACE (液晶屏接口) CN3(FPC-40PIN-0.5)

NO. (管脚)	SYMBOL 板上丝印	Function
1	VLED-	LED backlight Cathode (LED 背光阴极)
2	VLED+	LED backlight Anode (LED 背光阳极)
3	GND	Ground (地)
4	DVDD	Power for panel (屏电压)
5	R0	Red data/LSB (红色信号/低位)
6	R1	Red data (红色信号)
7	R2	Red data (红色信号)
8	R3	Red data (红色信号)
9	R4	Red data (红色信号)
10	R5	Red data (红色信号)
11	R6	Red data (红色信号)
12	R7	Red data/MSB (红色信号/高位)
13	G0	Green data/LSB (绿色信号/低位)
14	G1	Green data (绿色信号)
15	G2	Green data (绿色信号)
16	G3	Green data (绿色信号)
17	G4	Green data (绿色信号)
18	G5	Green data (绿色信号)
19	G6	Green data (绿色信号)
20	G7	Green data/MSB (绿色信号/高位)
21	B0	Blue data/LSB (蓝色信号/低位)
22	B1	Blue data (蓝色信号)
23	B2	Blue data (蓝色信号)
24	B3	Blue data (蓝色信号)
25	B4	Blue data (蓝色信号)
26	B5	Blue data (蓝色信号)
27	B6	Blue data (蓝色信号)
28	B7	Blue data/MSB (蓝色信号/高位)
29	GND	Ground (地)
30	DCLK	Sample clock (点时钟)
31	DISP	Display on/off (显示打开/关闭)
32	HS	Horizontal Sync Input (水平同步)
33	VS	Vertical Sync Input (垂直同步)
34	DE	Data Input Enable (数据使能)
35	NC	No connection (保留)

36	GND	Ground (地)
37	X1	Right electrode – differential analog (右电极-差分模拟)
38	Y1	Bottom electrode – differential analog (底部电极-差分模拟)
39	X2	Left electrode – differential analog (左电极-差分模拟)
40	Y2	Top electrode – differential analog (顶部电极-差分模拟)

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: $0\sim+60^{\circ}\text{C}$ | 使用温度: $0\sim+60^{\circ}\text{C}$ |