

SPECIFICATION

产品规格书

product model	产品型号:	GRTD2660-V1.0N
product type	产品类型:	多功能 LCD-PC 驱动板
		Multi-function LCD-PC AD board
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RECORD OF REVISIONS (修改记录)

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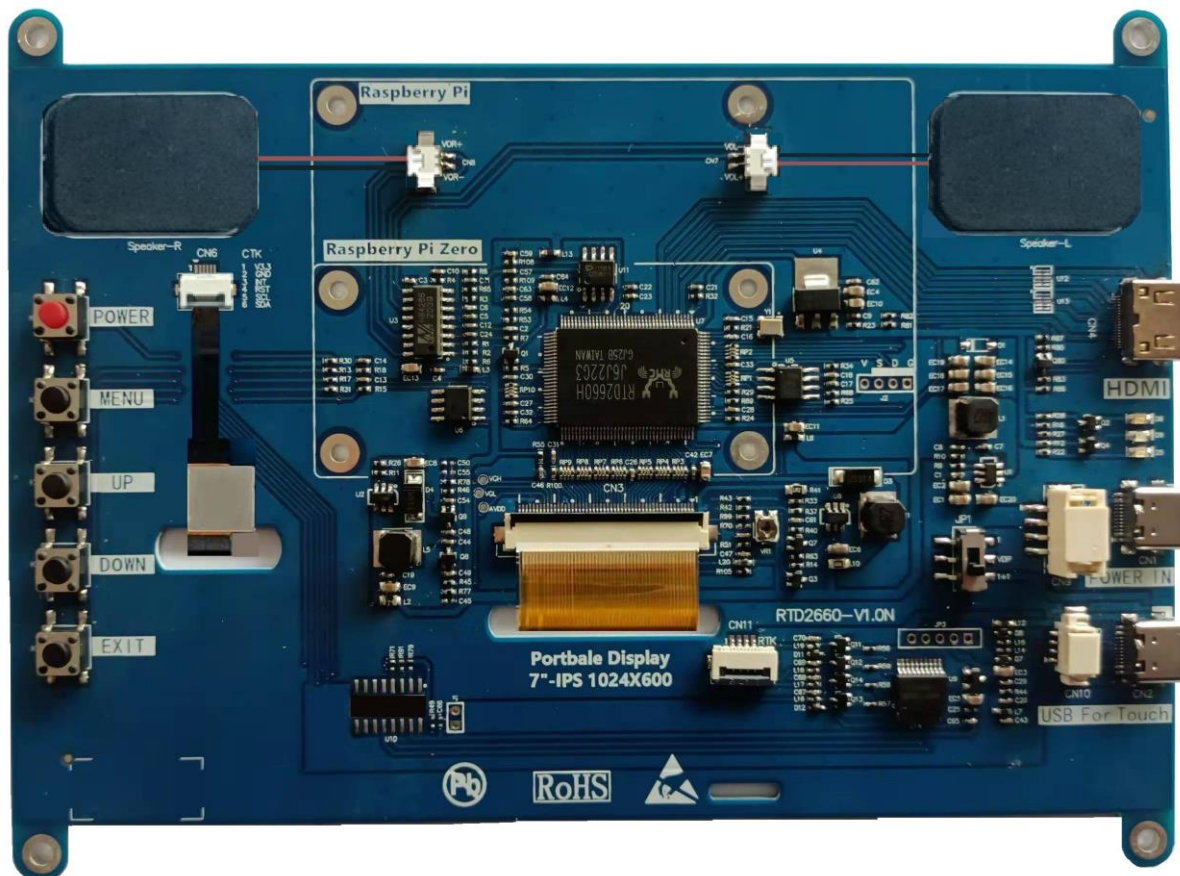
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1. GENERAL DESCRIPTION (整体概述)

GRTD2660-V1.0N is a 7.0inch LCD display driver board; supports HDMI input; supports I2S digital audio signal input and speaker output; Support 4-wire resistive touch panel or 6-wire capacitive touch panel. (This function can only be selected from two)

GRTD2660-V1.0N 是一个 7.0 寸 LCD 显示驱动板；支持 HDMI 输入；支持 I2S 数字音频信号输入以及扬声器输出；支持 4 线电阻触摸屏或 6 线电容触摸屏（此功能只能二选一）

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	RTD2660H		
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	PC-RGB	Format	Up to 1920*1080@50HZ
		Color	16bit, 24bit, 32bit
	HDMI	Format	Up to 1920*1080@50HZ
		Operating Speed	155MHz
AUDIO OUTPUT 音频输出	Frequency response	217Hz-20KHz @±3dB (1KHz 0dB reference signal)	
	Output power	2×1.2W (4Ω) THD+N<10%1KHz (Audio Input: 0.5V _{RMS})	
TOUCH	Interface	USB	
	Touch Panel	4-wire resistance touch panel (二选一)	
		6-wire capacitive touch panel (二选一)	
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		

4. INTERFACE DEFINITION（接口定义）

4.1 DC IN CONNECTOR(外接 DC 电源输入) CN1/CN9 (TYPE-C/4PIN2.0 备选)

NO. (管脚)		SYMBOL 板上丝印	DESCRIPTION（描述）
CN1	CN9		
A4, A9, B4, B9	1, 2	5V	+5V DC Power supply (+5V 直流供电)
A1, A12, B1, B12	3, 4	GND	Ground (地)
OTHER		NC	No connection

4.2 USB IN CONNECTOR(外接 USB 输入) CN2/CN10 (TYPE-C /4PIN1.25 备选)

此部件备选 This part is optional

此插座为触摸控制的电脑接口 (This socket is a computer interface of touch controlled)

NO. (管脚)		SYMBOL 板上丝印	DESCRIPTION（描述）
CN2	CN10		
A4, A9, B4, B9	1	5V	+5V power from host USB (+5V USB 电源)
A7, B7	2	D-	USB bus signal (USB 总线信号)
A6, B6	3	D+	USB bus signal (USB 总线信号)
A1, A12, B1, B12	4	GND	signal ground (信号地)
OTHER		NC	No connection

4.3 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-19	MINI HDMI standard interface (MINI HDMI 标准接口)

4.4 SPEAKER INTERFACE（喇叭接口）CN7/CN8 (2PIN1.25)

此部件备选 This part is optional

NO. (管脚)		SYMBOL 板上丝印		DESCRIPTION（描述）
CN7	CN8			
1	1	VOL-	VOR+	Negative audio channel out (音频通道输出-)
2	2	VOL+	VOR-	Positive audio channel out (音频通道输出+)

4.5 CAPACITIVE TOUCH SCREEN CONNECTOR(电容触摸屏连接器) CN6(FPC6PIN0.5)

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		V3.3	+3.3V power output (电容触摸屏+3.3V 电源)
2		GND	signal ground(信号地)
3		INT	Capacitive touch panel INT(电容触摸屏 INT)
4		RST	Capacitive touch panel SDA(电容触摸屏 RST)
5		SCL	Capacitive touch panel SDA(电容触摸屏 SCL)
6		SDA	Capacitive touch panel SDA(电容触摸屏 SDA)

4.6 TOUCH PANEL CONNECTOR (触摸屏连接器) CN11(FPC4PIN1.0)

此部件备选 This part is optional

NO. (管脚)		SYMBOL	DESCRIPTION (描述)
CN13	CN11	板上丝印	
1	1	Y+	Connect to 4 Wire touchscreen Y+(4 线电阻触摸屏+)
2	2	X+	Connect to 4 Wire touchscreen X+(4 线电阻触摸屏+)
3	3	Y-	Connect to 4 Wire touchscreen Y-(4 线电阻触摸屏-)
4	4	X-	Connect to 4 Wire touchscreen X-(4 线电阻触摸屏-)

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

此部件备选 This part is optional

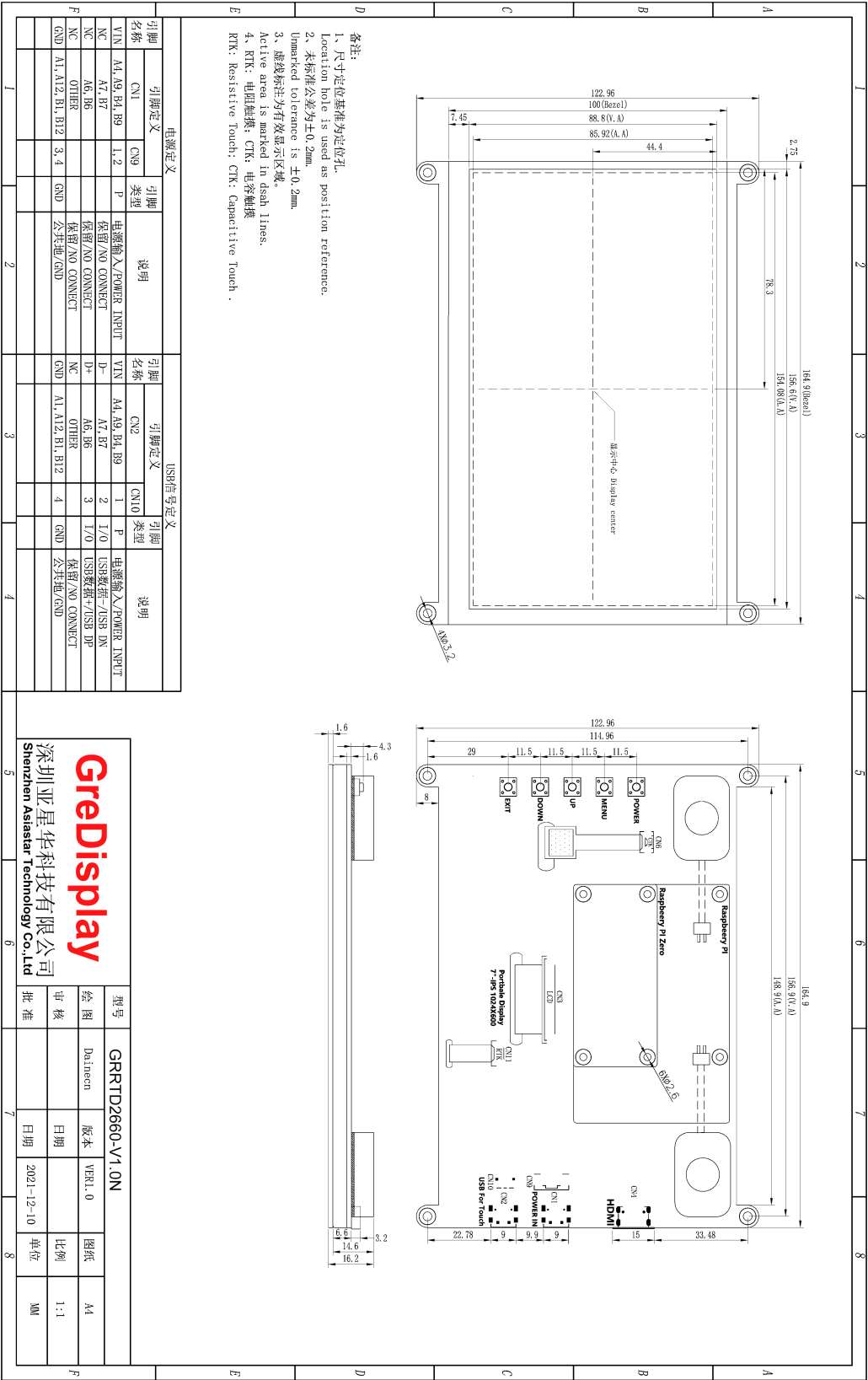
NO. 管脚	SYMBOL 板上丝印	DESCRIPTION 描述
K1	EXIT	EXIT Key (退出键)
K2	DOWN	DOWN Key (DOWN 键)
K3	UP	UP Key (UP 键)
K4	MENU	MENU Key (菜单键)
K5	POWER	POWER Key (关机键)

4.8 LCD PANEL INTERFACE (液晶屏接口) CN3 (FPC-50PIN-0.5)

NO. 管脚	SYMBOL 板上丝印	I/O	Function	Remark
1	VLED+	P	Power for LED backlight (Anode)	
2	VLED+	P	Power for LED backlight (Anode)	
3	VLED	P	Power for LED backlight (Cathode)	
4	VLED	P	Power for LED backlight (Cathode)	
5	GND	P	Power ground	
6	VCOM	I	Common voltage	
7	DVDD	P	Power for Panel	
8	MODE	I	DE/SYNC mode select	Note 1
9	DE	I	Data Input Enable	
10	VS	I	Vertical Sync Input	
11	HS	I	Horizontal Sync Input	
12	B7	I	Blue data (MSB)	
13	B6	I	Blue data	
14	B5	I	Blue data	
15	B4	I	Blue data	
16	B3	I	Blue data	
17	B2	I	Blue data	
18	B1	I	Blue data	Note 2
19	B0	I	Blue data (LSB)	Note 2
20	G7	I	Green data (MSB)	
21	G6	I	Green data	
22	G5	I	Green data	
23	G4	I	Green data	
24	G3	I	Green data	
25	G2	I	Green data	
26	G1	I	Green data	Note 2
27	G0	I	Green data (LSB)	Note 2
28	R7	I	Red data (MSB)	
29	R6	I	Red data	
30	R5	I	Red data	
31	R4	I	Red data	
32	R3	I	Red data	
33	R2	I	Red data	
34	R1	I	Red data	Note 2
35	R0	I	Red data (LSB)	Note 2
36	GND	P	Power Ground	

37	DCLK	I	Sample clock	Note 3
38	GND	P	Power Ground	
39	L/R	I	Left /right selection	Note 45
40	U/D	I	Up/down selection	Note 45
41	VGH	P	Gale ON Voltage	
42	VGL	p	Gate OFF Voltage	
43	AVDD	P	Power for Analog circuit	
44	RESET	I	Global reset pin.	Note6
45	NC	-	No connection	
46	VCOM	I	Common Voltage	
47	DITHB	I	Dithering function	Note 7
48	GND	P	Power Ground	
49	NC	-	No connection	
50	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: $-0\sim+40^{\circ}\text{C}$ 使用温度: $-0\sim+40^{\circ}\text{C}$