
Shenzhen Zhanhui Photoelectric Technology Co., Ltd.

Product Specification

产品规格书

Part NO./产品型号: ZH21-2660 HDMI board_V2.1

Product Code/产品编码: A00485

Update time/更新时间: 2022.12.15

PREPARED / 制定	CHECKED / 审核	APPROVED / 核准
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1.General Description / 概述.

ZH21-2660 use for HDMI signal input display on the 40pin TTL LCD.

ZH21-2660 是一款显示器方案驱动板, 1 HDMI 输入, 40pin TTL 输出。

2.Features / 特性.

In the following table you will find the detailed features/如下表.

Signal Input /信号输入	1 HDMI / 1 HDMI 输入
Signal Output /信号输出	18BIT TTL output / 18BIT TTL 输出
Power /功率	5V input, standby power: <0.5W / 5V 输入, 待机功率 < 0.5W
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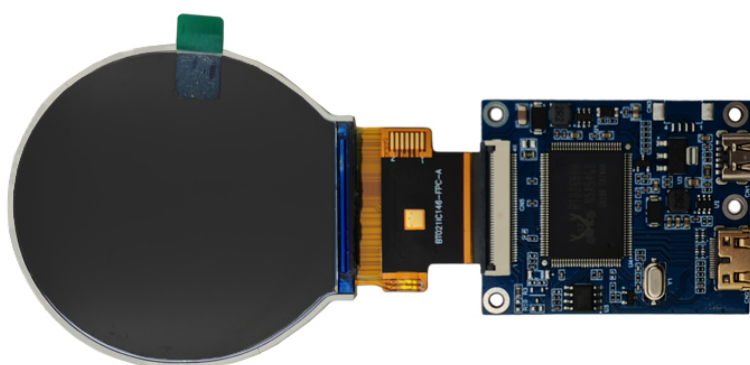
3.Interface Function Description Diagram / 接口功能描述.

NO./编号	Description/描述
CN2	External HDMI input interface /外置 HDMI 输入接口
CN1	TYPEC power input /TYPEC 供电接口
CN5	TTL LCD interface/屏输出接口



mini HDMI port

usb-c port



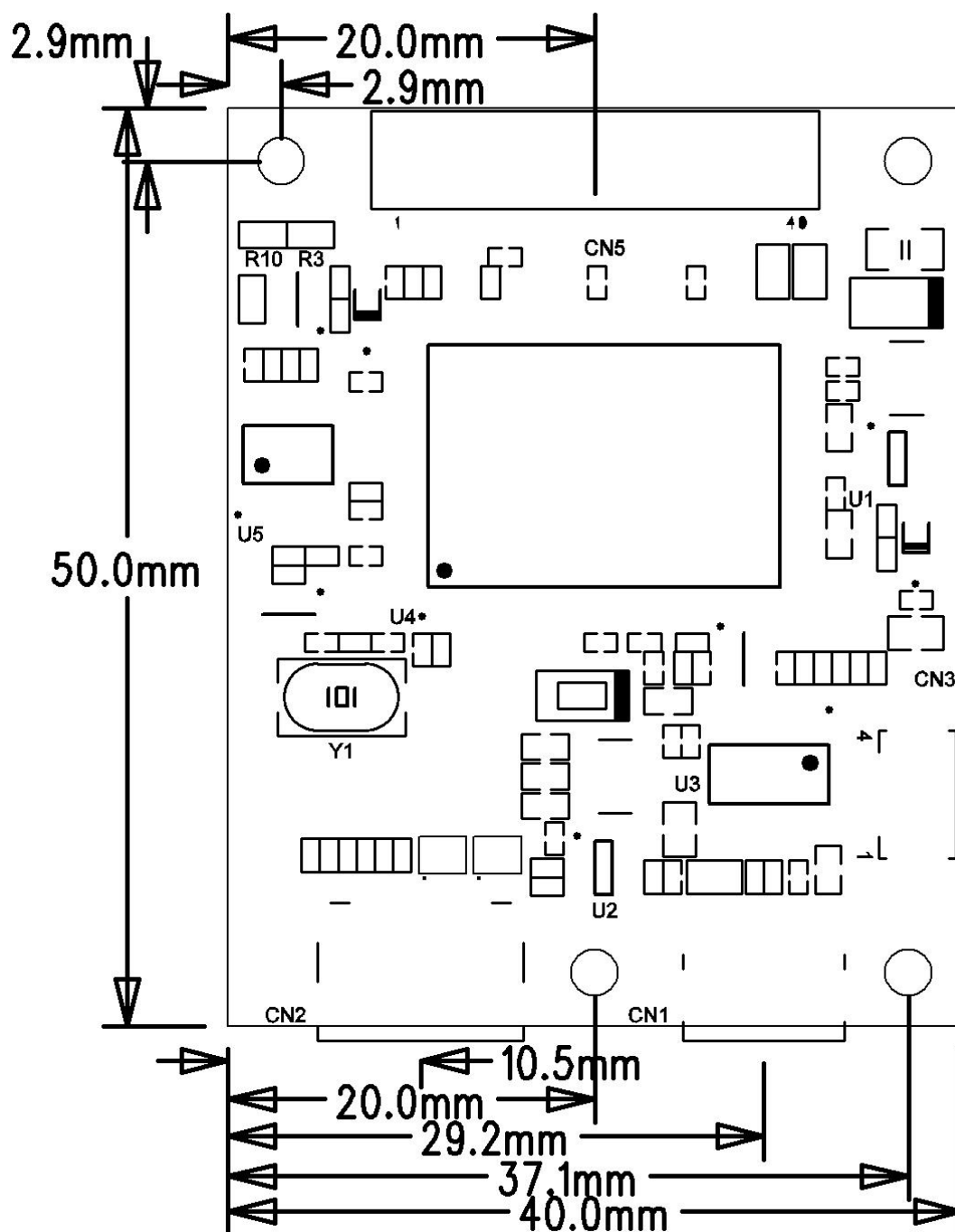
Picture example:

2.1 inch 480x480 round display
with 1000nits
SPI+RBG interface

4. Structural Dimension Diagram / 结构尺寸.

Unit/单位: mm

Tolerance/公差: $\pm 0.3\text{mm}$



5.Interface Definition / 接口定义

1. CN2: MINI HDMI input interface /外置 HDMI 输入接口

Pin NO.	Pin Name	Description
1	DATA2 SHIELD	HDMI Differential Signal Data 2 Shield
2	DATA2+	HDMI Differential Signal Data 2+
3	DATA2-	HDMI Differential Signal Data 2-
4	DATA1 SHIELD	HDMI Differential Signal Data 1 Shield
5	DATA1+	HDMI Differential Signal Data 1+
6	DATA1-	HDMI Differential Signal Data 1-
7	DATA0 SHIELD	HDMI Differential Signal Data 0 Shield
8	DATA0+	HDMI Differential Signal Data 0+
9	DATA0-	HDMI Differential Signal Data 0-
10	CLK SHIELD	HDMI Differential Signal Data Clock Shield
11	CLK+	HDMI Different al Signal Data Clock+
12	CLK -	HDMI Differential Signal Data Clock-
13	GND	Ground
14	NC	NO Connect
15	SCL	Serial Clock Line for Display Data Channel
16	SDA	Serial Data Line for Display Data Channel
17	NC	NO Connect
18	+5V POWER	+5V Power Line
19	HOT PLUG	Hot Plug Detect

2. CN5: LCD interface /LCD 输出接口

Pin NO.	Pin Name	Description
1	LED+	LED backlight anode
2	LED-	LED backlight cathode
3	LED-	LED backlight cathode
4	GND	Ground
5	VCC_LCD	LCD VCC 3.3V

6	RESET	Backlight Clock Line
7	NC	NO Connect
8	NC	NO Connect
9	SDA	Backlight Enable
10	SCK	Ground
11	CS	Ground
12	PCLK	Pixel clock signal in RGB interface
13	DE	Data enable signal in RGB mode
14	VSYNC	Vertical synchronizing signal input pin
15	HSYNC	Horizontal synchronizing signal input pin
16	R0	DATA
17	R1	DATA
18	R2	DATA
19	R3	DATA
20	R4	DATA
21	R5	DATA
22	G0	DATA
23	G1	DATA
24	G2	DATA
25	G3	DATA
26	G4	DATA
27	G5	DATA
28	B0	DATA
29	B1	DATA
30	B2	DATA
31	B3	DATA
32	B4	DATA
33	B5	DATA
34	GND	Ground
35	NC	NO Connect

36	NC	NO Connect
37	NC	NO Connect
38	NC	NO Connect
39	NC	NO Connect
40	NC	NO Connect

3. CN5: TYPEC Power interface /TYPEC 5V 输入接口

Pin NO.	Pin Name	Description
1	GND	Ground
2	5V	5V DC Power Input
3	CC2	CC2
4	CC1	CC1
5	5V	5V DC Power Input
6	GND	

6.Operation Requirements / 使用环境.

- Relative humidity/湿度: $\leq 80\%$
- Storage temperature/存储温度: $0 \sim +40^{\circ}\text{C}$
- Operation temperature/工作温度: $0 \sim +40^{\circ}\text{C}$

7.General Precautions / 注意事项.

- Keep the board away from strong electrostatic.保持电路板远离强静电。
- Disconnect main power if power of panel is incorrect, otherwise you would destroyed the LCD module.如果面板电源不正确，请断开主电源，否则会损坏 LCD 模块。
- Avoid dropping metal in the board while it is working.在电路板工作时，避免金属掉落在电路板中。
- Do not push or pull the connector while the board is working.请勿在电路板工作时推拉连接器。
- Do not disassemble the module.请勿拆解模块。
- If the surface of the main board is dirty, clean it with soft (not wet) cloth.如果主板表面很脏，请用软布（非湿布）清洁。

8.Revision History / 版本更新

Rev./版本号	Date/日期	Note/备注
V1.0	2022/12/15	
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