

样品承认书

APPOVAL SHEET

产品型号(Product Type): _____

客户名称 (Customer) : _____

客户料号 (Part No) : _____

发布日期 (Date Issued): _____

Confirmed/确认	Approved/批准	Signature/签章

客户确认

Confirmed/确认	Approved/批准	Signature/签章

Driver Board sheet

Model No: HH-070A-1024600

Function: HDMI+TOUCH

Support Panel: 1024*600 Standard

Product level: Module

Prepared by : _____

Review : _____

Approve : _____

Date: 2021/12/15

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1.Product Description

HH-070A-1024600 is a new type of integrated LCD control module integrating (LCD screen, touch screen, driver board). It perfectly presents the HDMI digital signal output from the PC on the 1024*600 LCD screen。

Support HDMI1.3、HDMI1.4、HDCP1.4、HDCP2.2 standard。

HDMI signal source is compatible with mainstream mini PCs such as Raspberry Pi, BB Black, and Banana Pi.

TOUCH is I2C to USB, no need to install the driver

The design is mainly used on the Raspberry Pi display, and can also be used on other HDMI industrial control small-screen touch devices.

When used as a Raspberry Pi display, it supports Raspbian, Ubuntu, WIN10 IOT and other systems, multi-touch, and when used as a computer display, it supports Windows 7/8/10, multi-touch, free of drivers.

2.Features

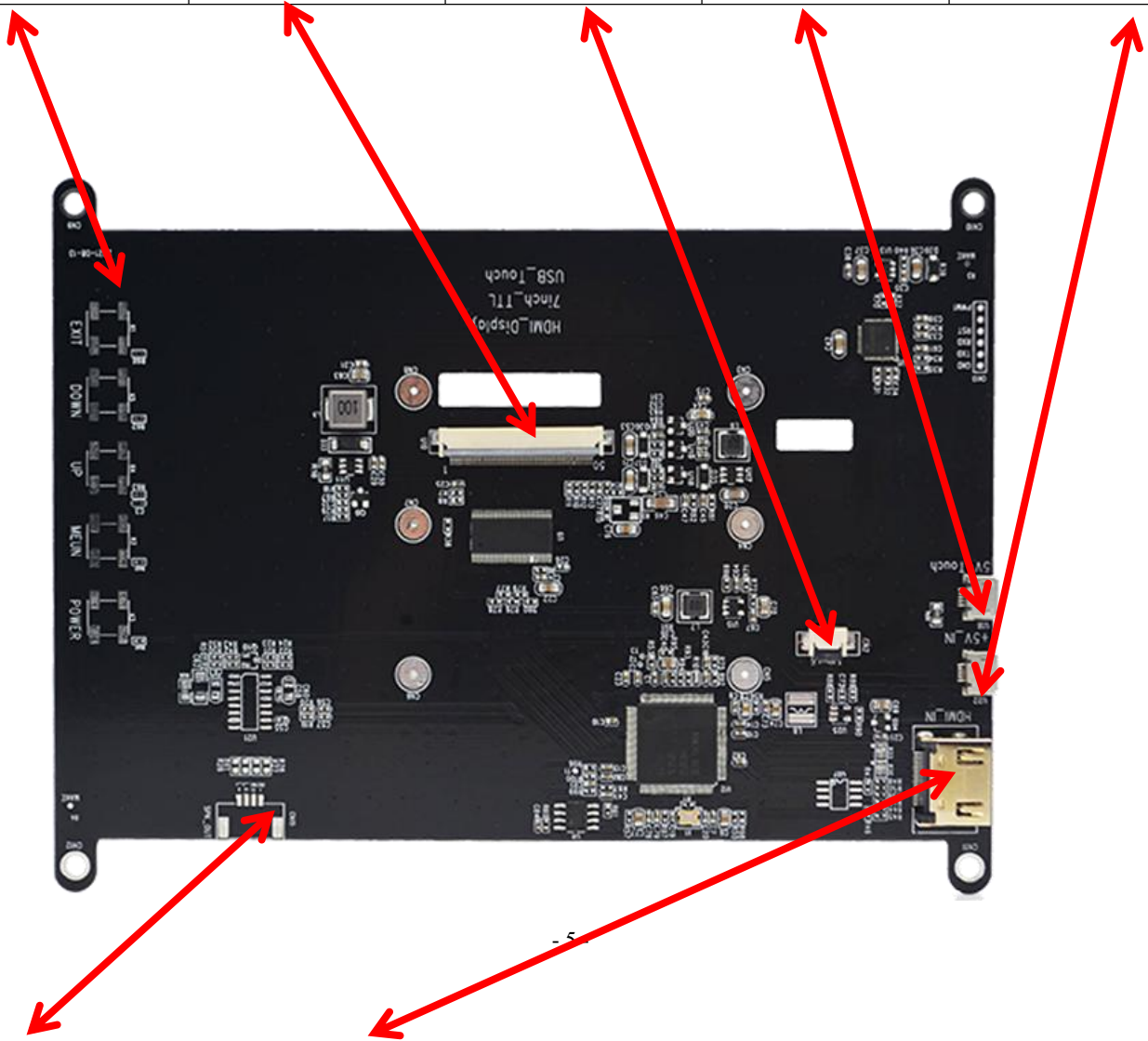
Product Characteristics:

Version NO			
support signal	HDMI	480i,480p,576i,576p,720p,1080i,1080p	
	TOUCH	USB Standard	
	VGA	NO Support	
motherboard interface	Enter	HDMI	Type A HDMI SMD Female 19Pin SMD (Horizontal)
		USB	MICRO 5P USB female seat B type 5.9MM (horizontal)
		headphone jack	NC
	touch screen interface	Custom 6P pin	FPC-0.5-6PIN rear lock (horizontal)
	LCD interface	Standard RGB 50P	FPC-0.5-50PIN rear lock (horizontal)
audio	Audio output	8Ω1.5W	4PIN-1.25 H1.8 ultra-thin female seat (horizontal)

power supply	input power	USB input 5V (+/-0.5V)
	Drive screen voltage	3.3V
	Power operation	Power on display
	Motherboard standby power consumption	<0.25W
OSD Menu	menu (reserved)	Brightness, contrast, automatic correction, phase, clock, line and field position, function setting, reset, etc.
	language(reserved)	Chinese, English, French, German, Italian, Spanish, Russian, Korean, Japanese, etc.
	Button (reserved)	POWER、MENU、UP、DOWN、EXIT 5 key

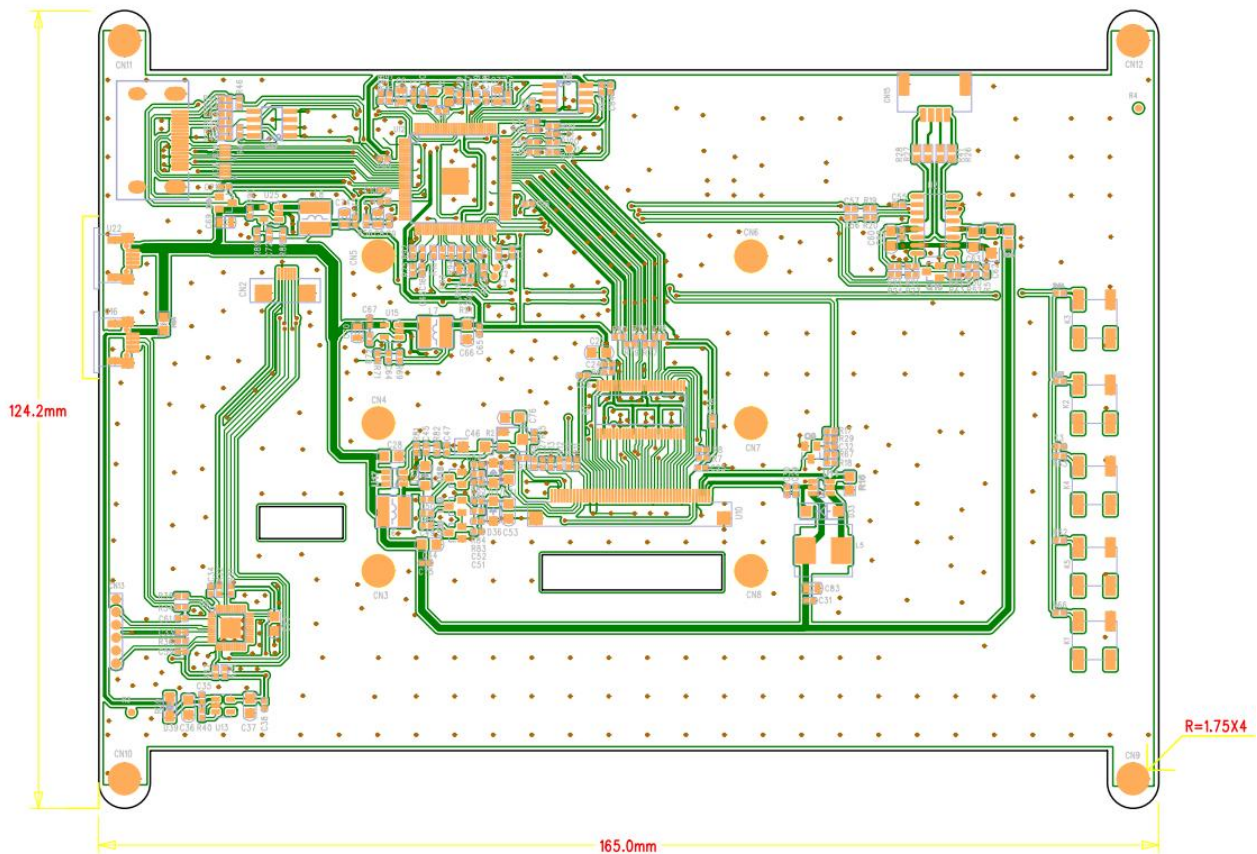
3.A/D Driver Board Appearance

Reserved button OSD	LCD Interface	TOUCH Interface	USB-TP IN	USB +5V
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SPK interface	Speaker	HDMI interface	Signal input			
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4.Motherboard Structure and Dimensions (unit: mm)



◆ Related dimensions and specifications of the control board PCB

1. PCB thickness + height of the highest part ≤ 7.8mm
2. PCB length = 165mm
3. PCB width=124mm
4. PCB board thickness = 1.6mm

◆ Screw hole specifications: 3.5mm diameter screw hole, see the structure diagram for the size and coordinates of the hole

5.Input/Output Interface Definition

HDMI interface Pin Definition

1	T.M.D.S DATA2+
2	T.M.D.S DATA2 shield
3	T.M.D.S DATA2-
4	T.M.D.S DATA1+
5	T.M.D.S DATA1 shield
6	T.M.D.S DATA1-
7	T.M.D.S DATA0+
8	T.M.D.S DATA0 shield
9	T.M.D.S DATA0-
10	T.M.D.S DATA CLOCK+
11	T.M.D.S DATA CLOCK shield
12	T.M.D.S DATA CLOCK-
13	CEC (Consumer Electronics Control Optional Consumer Electronics Controller)
14	Reserved (in cable but N.C. on device)
15	SCL(DDC clock cable)
16	SDA(DDC data cable)
17	DDC/CEC Ground
18	+5V power cable
19	Hot Plug Detection Cable

USB 5V Interface pin definition

1	VCC
2	NC
3	NC
4	NC
5	GND

USB TP Interface pin definition

1	VCC
2	D-
3	D+
4	NC
5	GND

Speaker interface pin definition

1	ROUT+
2	ROUT-
3	LOUT-
4	LOUT+

6.Pin Definition of the LCD

1	VLED+	Power for LED backlight (Anode)
2	VLED+	Power for LED backlight (Anode)
3	VLED-	Power for LED backlight (Cathode)
4	VLED-	Power for LED backlight (Cathode)
5	GND	Power ground
6	VCOM	Common voltage
7	DVDD	Power for Digital Circuit
8	MODE	DE/SYNC mode select
9	DE	Data Input Enable
10	VS	Vertical Sync Input
11	HS	Horizontal Sync Input
12	B7	Blue data(MSB)
13	B6	Blue data
14	B5	Blue data
15	B4	Blue data
16	B3	Blue data
17	B2	Blue data
18	B1	Blue data
19	B0	Blue data(LSB)
20	G7	Green data(MSB)
21	G6	Green data
22	G5	Green data
23	G4	Green data
24	G3	Green data
25	G2	Green data
26	G1	Green data
27	G0	Green data(LSB)
28	R7	Red data(MSB)
29	R6	Red data
30	R5	Red data
31	R4	Red data
32	R3	Red data

33	R2	Red data
34	R1	Red data
35	R0	Red data(LSB)
36	GND	Power Ground
37	DCLK	Sample clock
38	GND	Power Ground
39	L/R	Left / right selection
40	U/D	Up/down selection
41	V _{GH}	Gate ON Voltage
42	V _{GL}	Gate OFF Voltage
43	AV _{DD}	Power for Analog Circuit
44	RESET	Global reset pin.
45	NC	No connection
46	V _{COM}	Common Voltage
47	DITHB	Dithering function
48	GND	Power Ground
49	NC	No connection
50	NC	No connection

Touch screen Interface Pin Definition

1	VDD	
2	GND	
3	TP-INT	
4	TP-RST	
5	TP-SCL	
6	TP-SDA	

7. Transportation, storage, usage requirements

In order to ensure the normal use of this product and prevent accidents such as electric shock or fire, please read and understand all usage requirements and operating procedures before using this product. Strictly abide by the following requirements:

1. The DC power supply required by this product is generated by the AC/DC power adapter, and the AC/DC power adapter should be kept away from heat sources and placed in a well-ventilated place.

2. The AC power socket and AC power cord should be well grounded and able to withstand sufficient current demand.

3. The DC power input voltage required by this product is +5V, the error is not greater than +/-0.5V, and the current depends on the selected LED screen and the power of the whole machine.

4. Pay attention to good ventilation and heat dissipation, and do not place it in a closed non-heat-conducting shell or box, nor let it be baked by direct sunlight or other heat sources.

5. Pay attention to avoid excessive humidity and too much dust, so as not to cause failure due to circuit corrosion.

6. When assembling, pay attention to reserve a certain space to provide air convection and heat dissipation on the surface of the board, and prevent electrical conductors (such as fixed iron plates such as drive boards and high-voltage boards) from contacting and shorting the components on the board.

7. When assembling, take care to prevent the drive plate from warping due to extra pressure.

8. When assembling, pay attention to the correct electrical connection of the driver board, LED screen, key board and other components, select the correct working voltage of the LED screen (too low will cause abnormal display, and too high may burn out the LED screen), and then install it after checking that it is correct. Electricity.

9. The program on the driver board should match the corresponding LED screen.

10. When assembling the board, pay attention to electrostatic protection, and pay attention to avoid short circuit and electrostatic damage to the board.

11. All input and output interfaces need to be operated in the case of power failure (unplug the connector).

12. This product is suitable for general commercial use and household use, ambient temperature: -10~+40°C, relative humidity: ≤80%.

13. Please unplug the power supply when not in use for a long time.