SMART DISPLAY MODULE SPECIFICATION

7.0 Inch Smart Display with TOUCH	
Model:	DX10600070-HMD-RB-A
Version:	V1.1
Date:	2024-11-04

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Customer Confirmation

Approved by	Notes

REVISION HISTORY

Revision	Date	Contents of Revision Change	Remark
V1.0	20240526	Preliminary release	
V1.1	20241104	Convert to English version	

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1. Introduction

1.1 Features

1) The LCD screen has an ultra - clear resolution of 1024×600.
2) Capacitive touch screen, supporting 5 - point touch.
3) Supports independent backlight control, and the backlight can be turned off to save power consumption.
4) Supports standard HDMI interface input, and is compatible with and can be directly inserted into (3rd generation, 2nd generation, 1st generation).
5) Can be used as a general - purpose HDMI display, such as connecting to a computer's HDMI as a secondary display (the resolution output should be adjustable to 1024X600).
6) When used as a display, it supports Raspbian, Ubuntu, Kodi, win7, win8, win10 IOT, with single - point touch and is driver - free.
7) This product has passed CE and RoHS certifications.
8) main control chip：RTD2660H
   a) Embedded 3 DDC with DDC1/2B/CI
   b) Zoom scaling up and down
   c) Embedded one MCU with SPI flash controller.
   d) It contains 8 ADCs in D-connector,LED backlight,and key pad application
   e) It supports infrared remote function
   f) Require only one crystal to generate all timing.
   g) Programmable internal low-voltage-reset (LVR)

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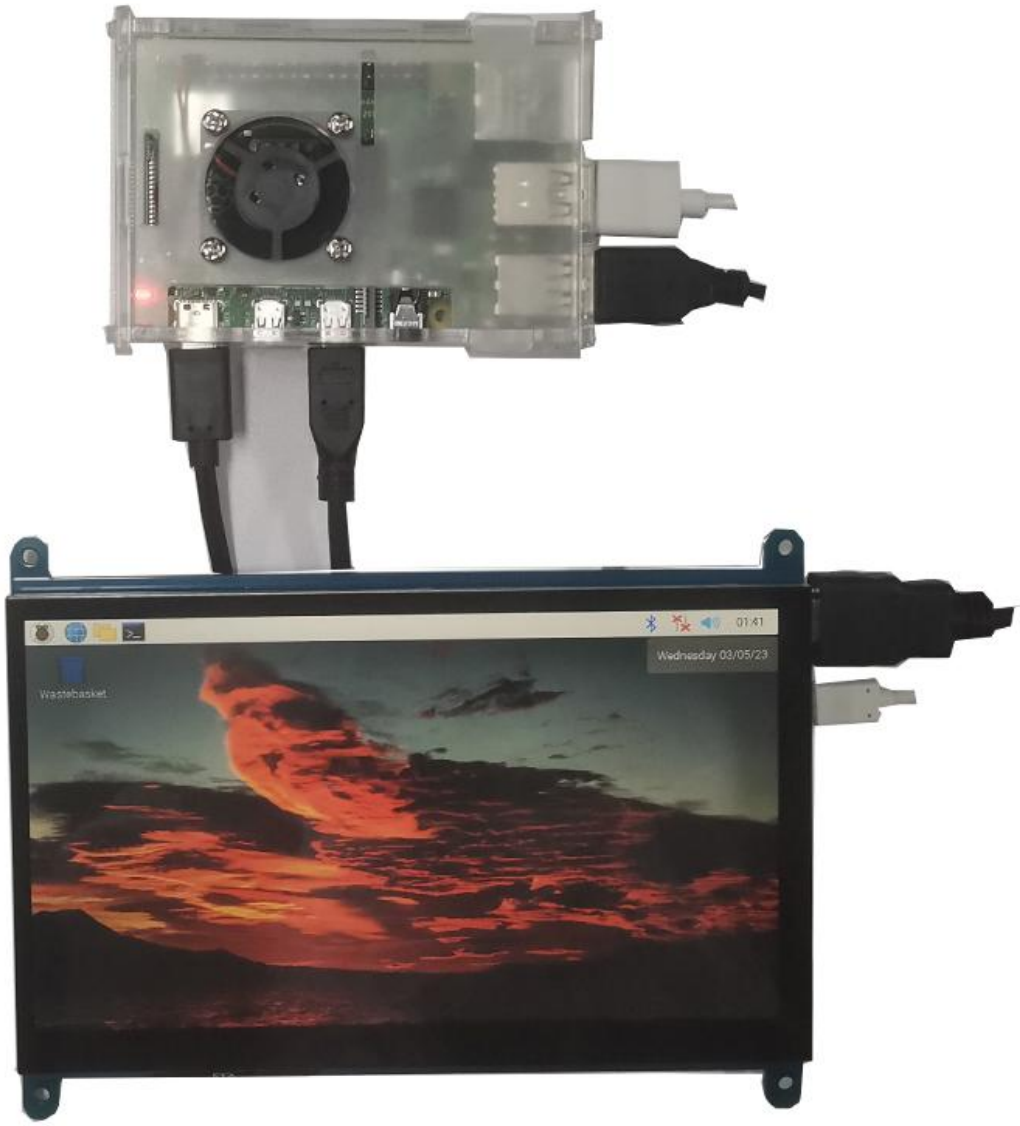
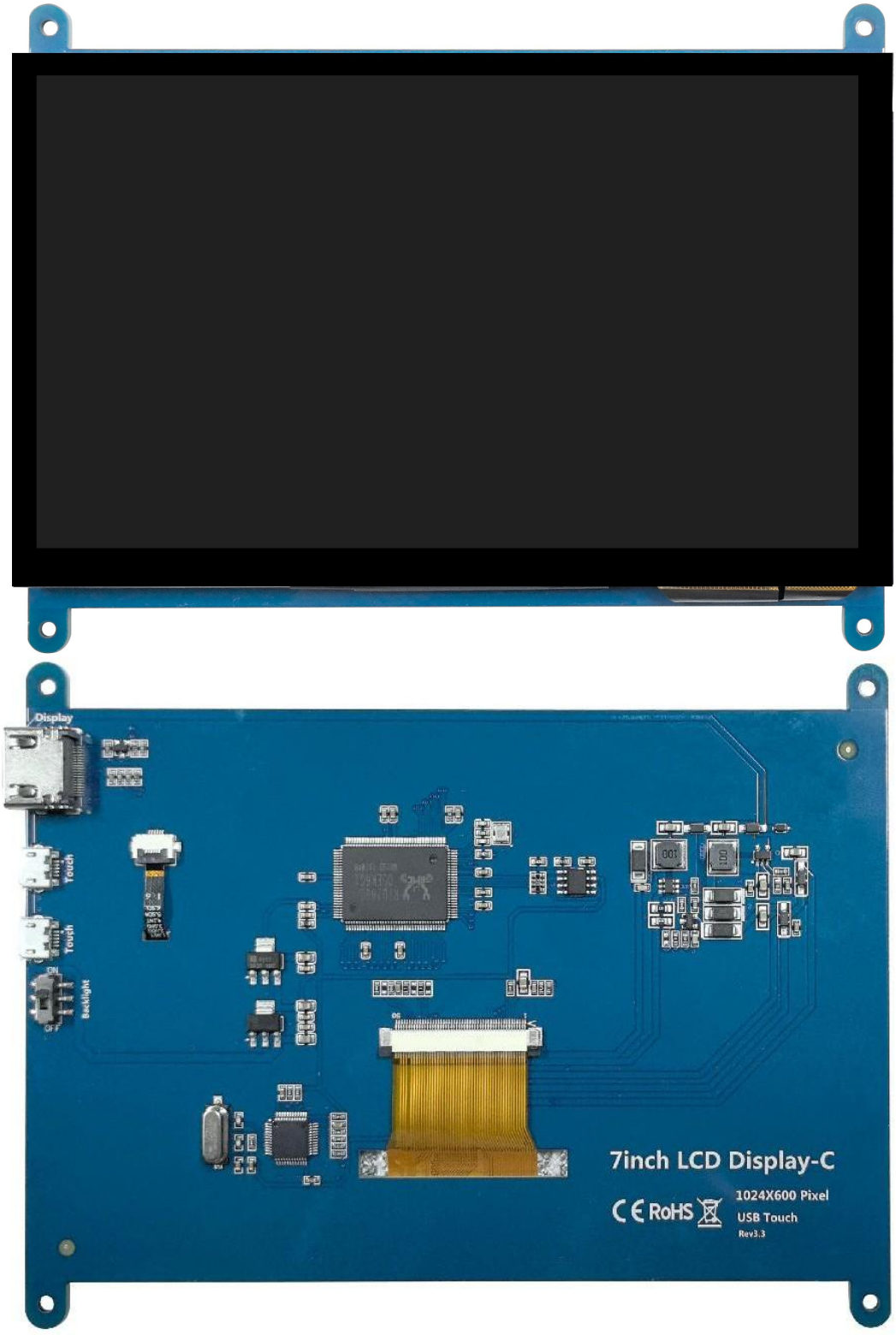
h) High resolution 6 channels PWM output, and wide range selectable PWM frequency.

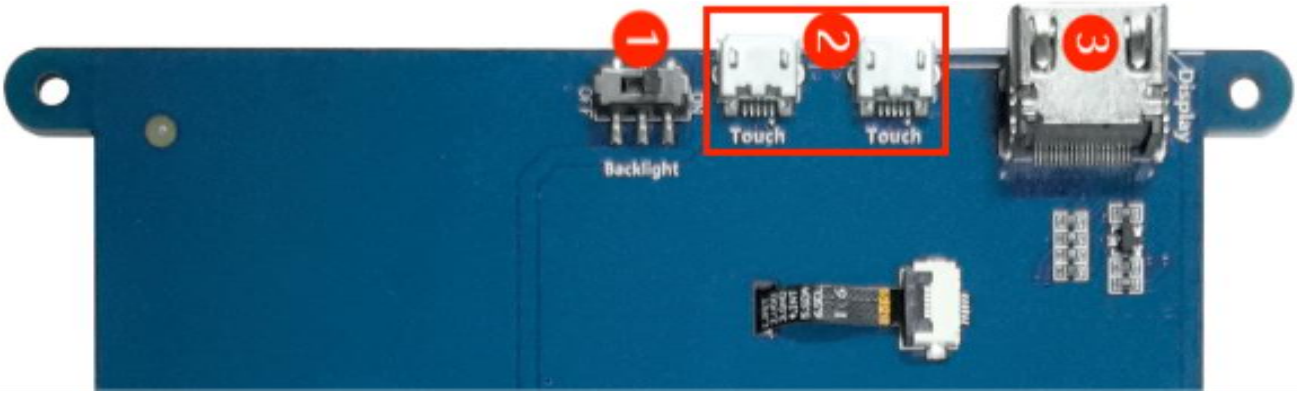
i) Support input format up to 1920(WUXGA)/1440-pixel width(option)



1.2 Appearance picture



1.3 Hardware Description



1) Backlight: Controls the backlight to turn on and off, which can save power consumption..

2) Touch: USB touch/power supply interface, used for power supply and touch output. The two functions are the same, and only one of them needs to be connected.

3) Display: HDMI interface, used to connect the motherboard and LCD display for HDMI transmission.

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2. Operating Instructions

2.1 Using in Raspberry Pi Raspbian/Ubuntu Mate/Win10 IoT Core System

Step 1: Install the official image

A. Download the latest image from the official website.

B. Install the system according to the official tutorial steps.

Step 2: Modify the config.txt configuration file. After the burning in step 1 is completed, open the config.txt file in the root directory of the Micro SD card and add the following code at the end of the file. Save and safely eject the Micro SD card.

```
hdmi_force_edid_audio=1
max_usb_current=1
hdmi_force_hotplug=1
config_hdmi_boost=7
hdmi_group=2
hdmi_mode=1
hdmi_mode=87
hdmi_drive=2
hdmi_cvt 1024 600 60 6 0 0 0
```

Step 3: Insert the Micro SD card into the Raspberry Pi, connect the HDMI cable between the Raspberry Pi and the LCD, connect one of the 4 USB ports of the Raspberry Pi with the USB cable, and connect the other end of the USB cable to the USB port of the LCD. Then power on the Raspberry Pi. If the display and touch are normal, it indicates that the driver is installed successfully.

2.2 How to Use as a Computer Monitor

Step 1: Use an HDMI cable to connect the computer's HDMI output signal to the HDMI interface of the LCD.

Step 2: Connect one end of the MicroUSB cable (either of the two MicroUSB ports can be used) to the USB Touch interface of the LCD and the other end to the USB port of the computer.

If there are multiple monitors, please unplug the interfaces of other monitors first and test this LCD as the only monitor.

3. Performance & Parameters

3.1 Voltage & Current

Item	Conditions	Min	Typ	Max	Unit
Power Voltage	Normal temperature		5		V
Operation Current		-	500	-	mA
Recommended Working Power Supply: USB 5V 1A					

3.2 Reliability Test

Item	Conditions	Min	Typ	Max	Unit
Working Temperature	At 5V voltage, humidity 60%	-10	25	65	C
Strage Temperature	-	-40	25	100	C
Working Humidity	25° C	10%	60%	90%	RH

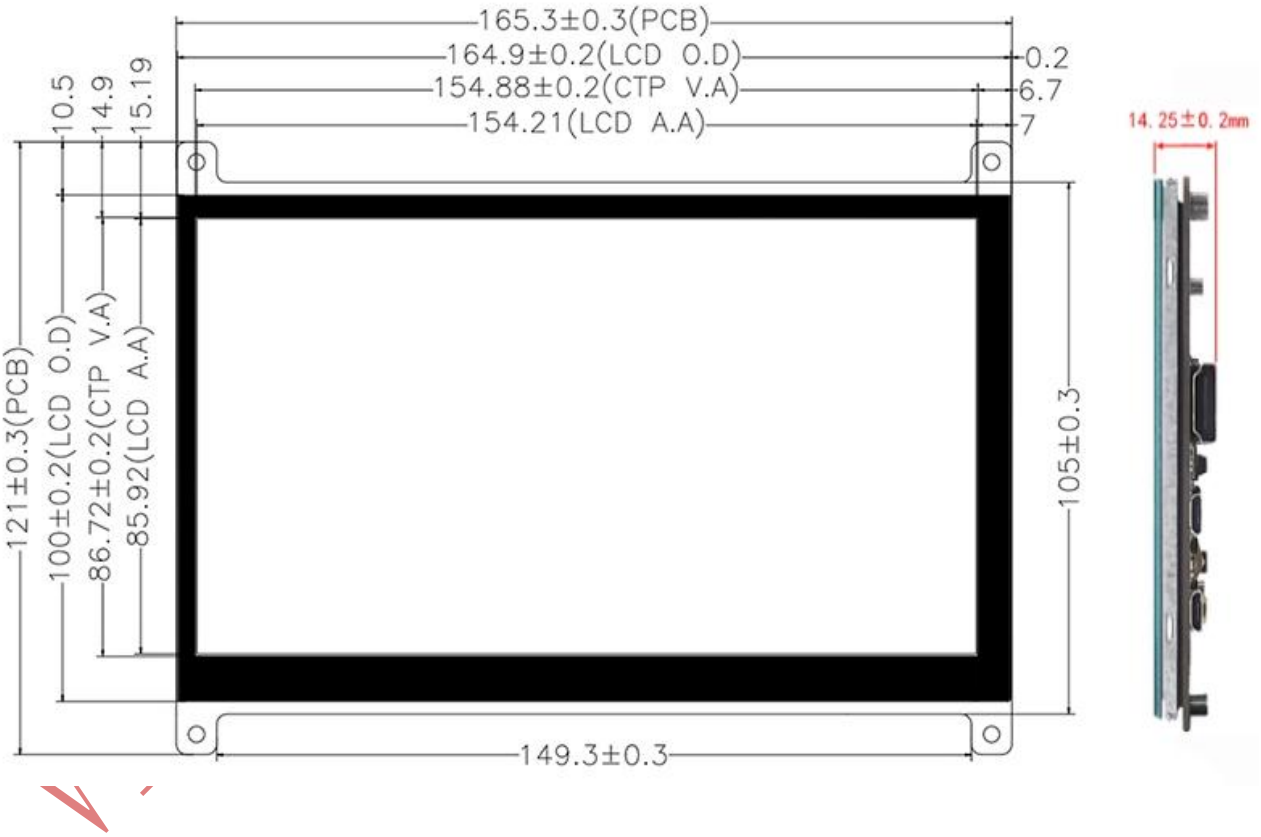
4. Sipping List

1) High - definition 1024×600 7 - inch HDMI Display ×1

2) HDMI cable ×1

3) USB cable×1

4) Copper pillar package (4PCS) ×1

5. Mechanical Drawing

1) The structural dimensions of the product are 165.3mm * 121mm * 14.25mm.