C I N D U E L
承 典 工 控

CDHX-RB66 V1.2 Embedded Development Board

Hardware specification

Version number: V1.0

July 2019

Statement

Please read the instruction manual carefully before using the motherboard, and then operate the motherboard.

We are not responsible for direct, indirect, intentional or unintentional serious damage and hidden dangers caused by improper installation and use.

For products under any of the following circumstances, free warranty is not implemented:

● Exceeding the warranty service period;

● No valid purchase documents;

● Liquid, damp or moldy;

● Failures and damages caused by non-product quality reasons such as falling after purchase, strong vibration, unauthorized modification and misoperation;

● Damage caused by force majeure.

Before ordering the product, please ask the dealer in detail whether the product performance meets your needs, so as to avoid unnecessary troubles for both parties.

The company reserves the right to modify the instructions without notice.

Suggestions on the use of motherboard

- Before using the product, be sure to read the product manual carefully.

- Unused boards should be kept in antistatic protective bags as far as possible.

- Before taking the card from the packaging bag, you should put your hand on a grounded metal object for a while to discharge the static electricity in your body and hands.

- When holding a board, you should also get into the habit of touching only its edge.

- When the motherboard is connected to the power supply, please confirm the power supply voltage.

- In order to avoid electric shock to human body or damage to products, the AC power supply must be turned off or the AC power cord must be unplugged from the power socket every time the motherboard and board are plugged or reconfigured.

- Please disconnect the power supply before moving the board.

- Please disconnect the power supply before connecting or unplugging any equipment.

- In order to avoid unnecessary damage to the product caused by frequent switching on and off, after switching off, you should wait for at least a moment before switching on.

- If the equipment is abnormal during use, please find a professional to deal with it.

This product may cause radio interference. Users may be required to take practical measures against their interference.

imprint

Model:	CDHX-RB66		PCBA No:	CDHX-RB66-V1.0.0		
Compilation:			Audit:	electron		
				software		
Version change record						
version	date	page number	annotate			check
V1.0	2021-02-28					

Catalogue

一、 **Product overview**

| CPU and storage unit	CPU description	Quad-core Cortex-A55 up to 1.8GHz	
	Video decoder (GPU)	Mali-G52 GPU	Support OpenGL ES 1.1/2.0/3.2, OpenCL 2.0 and Vulkan 1.1, and embed high-performance 2D acceleration hardware.
	internal storage	2GByte of 64-bit wide LPDDR4 @ 1866MHz	
	save	EMMC/NAND FLASH 16GB	
	system	Android 11	
Data transmission interface	1 X TF	TF card multimedia storage device (Micro SD connector) (TF)	
	3 X USB2.0 HOST	High-speed, 480Mbps(PH2.0x4pin pitch socket) (JEUSB)	
	1 x USB2.0 OTG	High-speed, 480Mbps(MiNI USB connector) (OTG)	
	1 1000M Ethernet port	RTL8211F 1000MHZ adaptive network port equipment (10M/100M/1000M) (Lan1)	
	1 x serial port	1 TTL(COMDB defaults to system debugging port); 1 TTL serial port (3v);	
	Power amplifier output	Power amplifier output (impedance 5-8Ω)	
	AUDIO OUT	HP left and right channel output	
Audio and video signal input/output	LVDS interface	Single/dual 34-bit-LVDS output (LVDS)	PH2.0MM-4P socket
	Power management	Normal working mode, system standby low power consumption mode	Left and right channels 2X6W output (JSPK)
	EDP interface	Dupont head 2.0mm	
	12V power interface	DC12V/2A(6PIN/2.54MM socket) (JDC)	
	JLVDS backlight voltage	JLVDS backlight drives 12V.	
	LVDS signal power interface	LVDS signal voltage default voltage 5V	
Power supply and joggle/interface	LVDS backlight interface	12V voltage interface for LCD screen backlight driving, backlight enabling and brightness PWM control (JLVDS).	
	OSD language	Optional in Chinese, English, etc.	
	UBOOT KEY	System upgrade RECOVERY button (K1)	

二、 **structure**
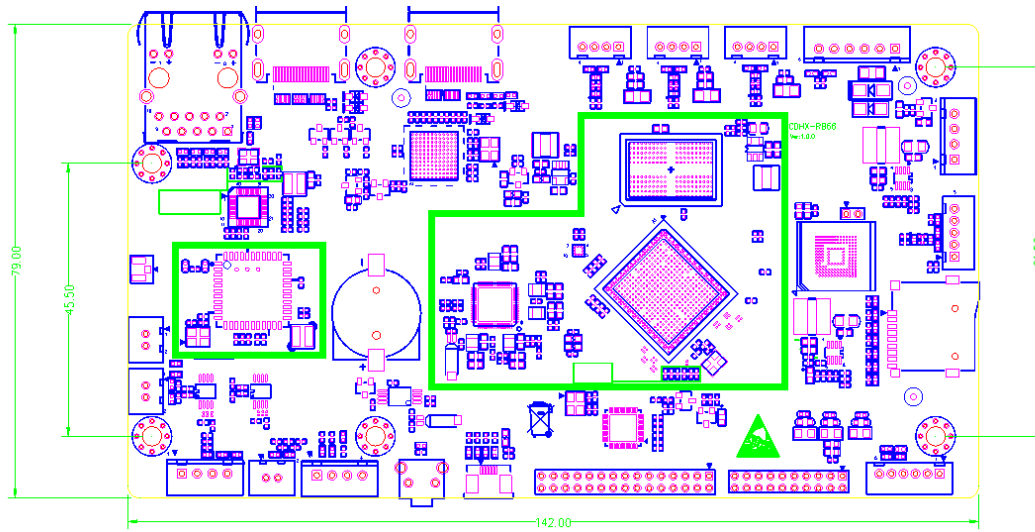
Figure 5 (Plane Structure Size)

三、 **Conditions of transportation, storage and use**

1. Preservation environment: anti-static, moisture-proof and anti-backlog.
2. Input voltage: 12V
3. RTC button battery: 3.3V (lithium)
4. Working environment temperature: 0 ~ 60℃
5. Relative humidity: 20% ~ 70%
6. Storage environment temperature: -20~ 60℃

This SPEC may not fully reflect all the latest changes of PCBA, and the actual product shall prevail.