Product Specifications

LCD Motherboard

HD-40B

V1.0

Contents

Chapter I Product Description....3
I. Overview....3
II. Features....3
Chapter 2 Product Specifications....4
I. Basic Parameters....4
1. Hardware Parameters....4
2. Software Parameters....4
II. Product Size Specifications....6
III. Product Interface Diagram....6
IV. Interface parameter description....7
1. PWR / DC (power input) Interface....7
2. HDMI Output....7
3. LAN Port....7
4. Audio Interface and Reset Control....7
5. TF Card Slot....8
6. SIM Card Slot (Optional)....8
7. OTG Interface....8
8. USB Interface....9
9. 4G Antenna Port（Optional）....9
10. Wi-Fi Antenna Port....9
11. IR Receiver Port....10
Chapter 3 Communication Methods....10
I. Update Programs by Wi-Fi....10
II. Update Program with U-disk....11
III. Update Program by TF Card....12
IV. Update Programs with LAN....12
V. Update Programs by the Internet....13
Chapter 4 Product Appearance....13

Chapter I Product Description

I. Overview

HD-40B is a well-built LCD digital signage motherboard, using A40i quad-core chip solution, equipped with Android 7.1.2 system, the highest frequency is 1.2GHz, and Mail-400MP2 GPU is adopted, which can be compatible with most video formats and decoding capabilities. And it comes with WIFI module, support mobile APP point-to-point wireless messaging； RJ45 interface can be connected to the Internet or LAN to realize network cluster management. HD-40B is widely used in the control of LCD display screens in security, medical, transportation, finance, industrial control and other fields.

II. Features

- High stability. The A40i Android integrated board adds its own unique technology to the hardware and software to ensure the stability of the product, which can make the final product reach 7*24 hours unattended.
- High integration. integrates functions such as Ethernet, Wi-Fi, power amplifier, TF expansion card, USB expansion port, HDMI, etc., which greatly simplifies the installation of the whole machine
- Cluster management. Support the unified management of multiple LCD screens in the local area network and the Internet.
- High definition. Supports LCD display screens with HDMI interface, and supports cropping screens of various sizes and resolutions.

Chapter 2 Product Specifications

I. Basic Parameters

1. Hardware Parameters

Hardware Parameters	
CPU	A40i, Quad-core， Dominant Frequency up to 1.2GHz， Android7.1.1
GPU	Mail-T764 GPU MP4 Quad-core GPU Support OpenGL ES1.1/2.0,OpenVG1.1,OpenCL
Memory	DDR3, 1GB
Built-in ROM	eMMC 8GB TF Card Extend(Extendable SSD)
Network	Support RJ45 R/A 100M Support 2.4G Wi-Fi, support Wi-Fi 802.11b/g/n protocol.
Image Rotation	Support 0 degree, 90 degree, 180 degree, 270 degree manual rotation
Display Interface	1 HDMI, 1.4 support 4K@30Hz output
Audio	Support standard left & right channel line output
RTC	Built-in real-time clock function
USB	1USB-2.0 HOST, 1 USB2.0 or OTG
LED	1*power status LED(green),1*system LED(green blinking in default)
Button	1 * Recovery button
Power Adapter	Input: AC100-240V.50-60Hz, output: DC12V 1.5A (Requires that the surge voltage is less than 18V and the ripple voltage is less than 100mV)

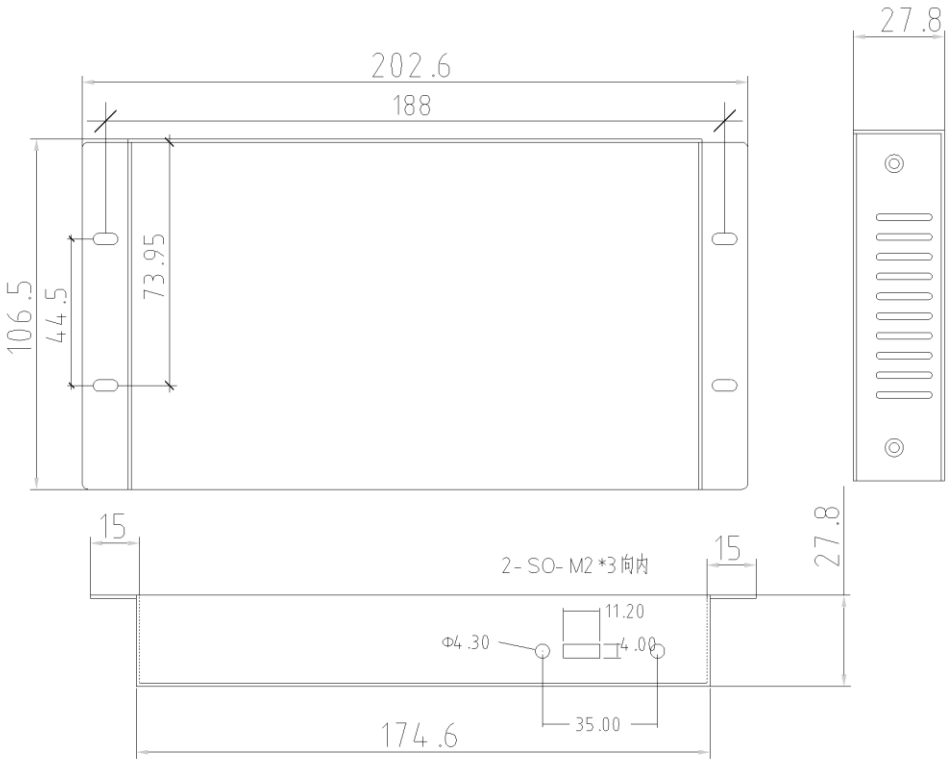
2. Software Parameters

Software Parameters	
Operating System	Android 7.1.1
Audio	MP3,WMA,WAV, APE, FLAC, AAC, OGG,M4A,3GPP, etc.
Video	Support AVI，rm，rmvb， MKV，WMV，MOV，MP4，DAT，PMP，MPEG，MPG， FLV，ASF ，TS， TP，3GP，MPG and other video

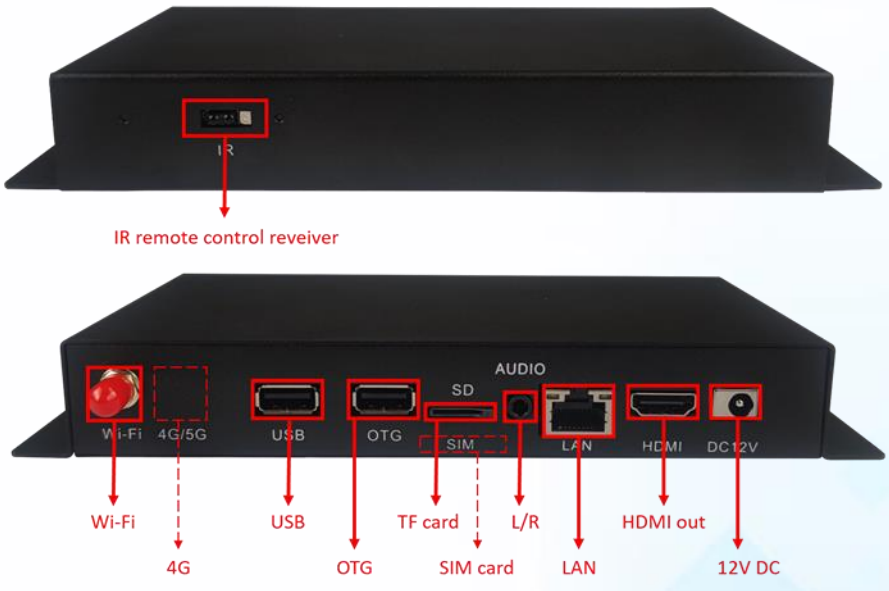
	formats
Image	Support JPG、BMP、PNG and other image formats
System comes with Application Software	APK installer, email, calculator, browser, recorder, calendar, settings, clock, Video player, search, contacts, gallery, download, camera, music, explorer, etc.
Language	Support multi-language
Typewriting	Standard Android keyboard, optional third-party input method
System Management	The original ecological Android system, open root permissions, can be customized product development
	Real-time remote monitoring, self-recovery of system crash, 7 * 24 hours unattended
	Support OTA remote upgrade; support U-disk upgrade
	Support boot animation definition
	Support server / standalone mode switch
	Support Wi-Fi hotspot
System Watchdog	Support software watchdog
Storage Humid	10%～90％ RH
Storage Temp	-40℃~70℃
Work Temp	-20℃~70℃

II. Product Size Specifications

Side interface size (boxed)



III. Product Interface Diagram



IV. Interface parameter description

1. PWR / DC (power input) Interface

12V DC power supply is used to supply power to the board subsystem only from the DC socket and power Socket.

2. HDMI Output

Connect to the LCD screen for program display.

3. LAN Port

Connect to the Internet/LAN to realize Internet remote cluster management and LAN cluster management.

4. Audio Interface and Reset Control

1. Standard 3.5mm dual-channel audio interface, which can be directly connected to low-

power speakers or amplifiers.

2. The reset hole is hidden in the audio port. Long press with a long reset needle to restore the factory settings.

5. TF Card Slot

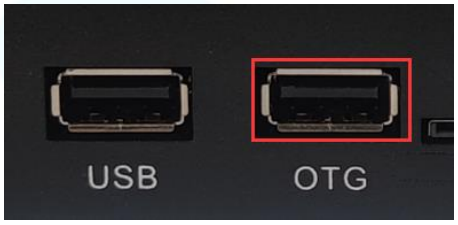
Insert the TF card to update the program content.

6. SIM Card Slot (Optional)

Install the 4G mobile phone card interface, and realize remote cluster management after connecting to the Internet (4G module needs to be installed, 4G module is not standard configuration, according to user needs to install before leaving the factory).

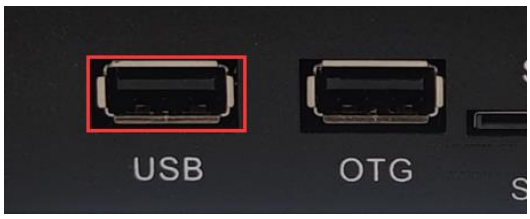
7. OTG Interface

Upgrade firmware and other functions, the box can be customized as a USB interface through jumpers before assembly.



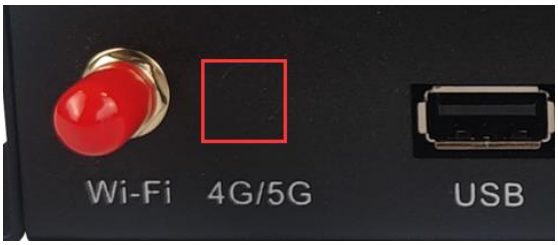
8. USB Interface

Insert the U disk to update the program of the display screen. One of the USB interfaces can be switched to OTG or USB interface through jumpers (OTG and USB need to be set before the factory).



9. 4G Antenna Port（Optional）

Connect 4G antenna to enhance 4G signal. （Non-standard interface, closed by default）



10. Wi-Fi Antenna Port

Connect Wi-Fi antenna to enhance Wi-Fi signal.

11. IR Receiver Port

Receiving remote control signal, setting and programs switching.

Chapter 3 Communication Methods

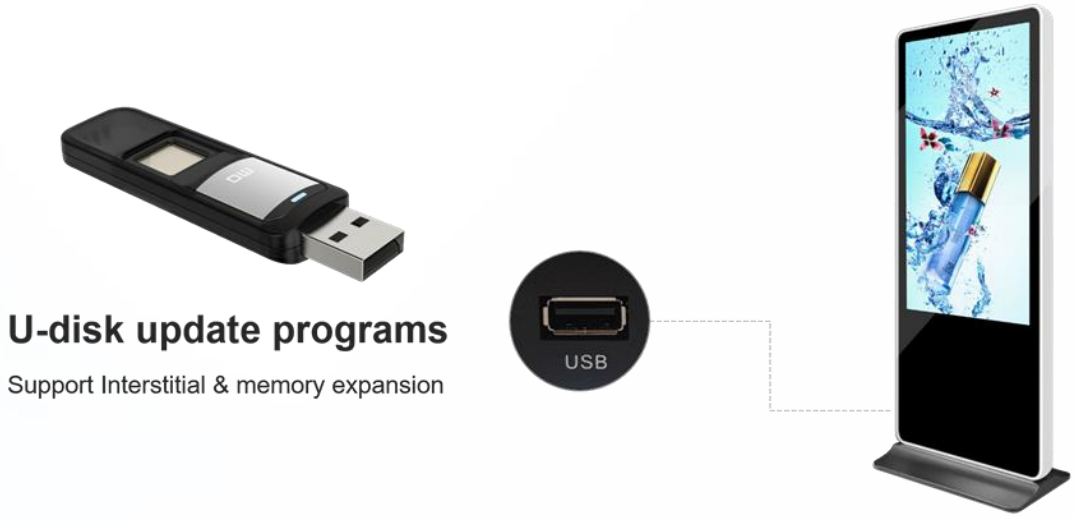
I. Update Programs by Wi-Fi

Mobile APP-"LedArt" download

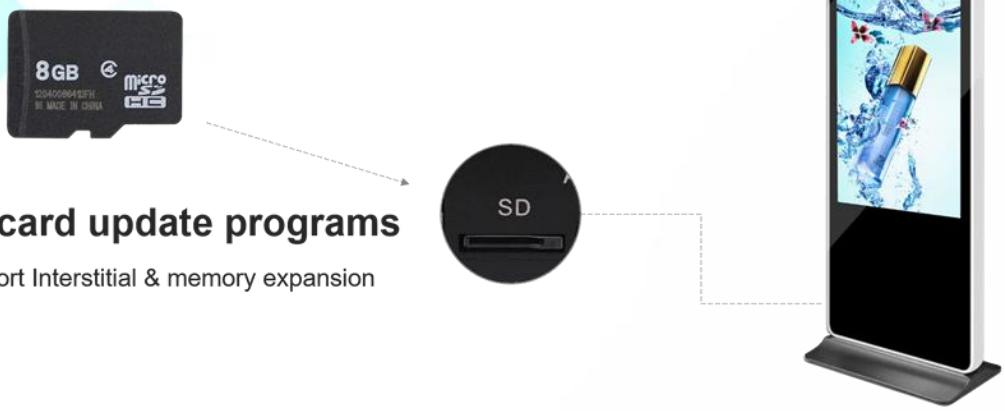
Search and download "LedArt" in major mobile phone application markets, or scan the following QR code to download and install

QR code download

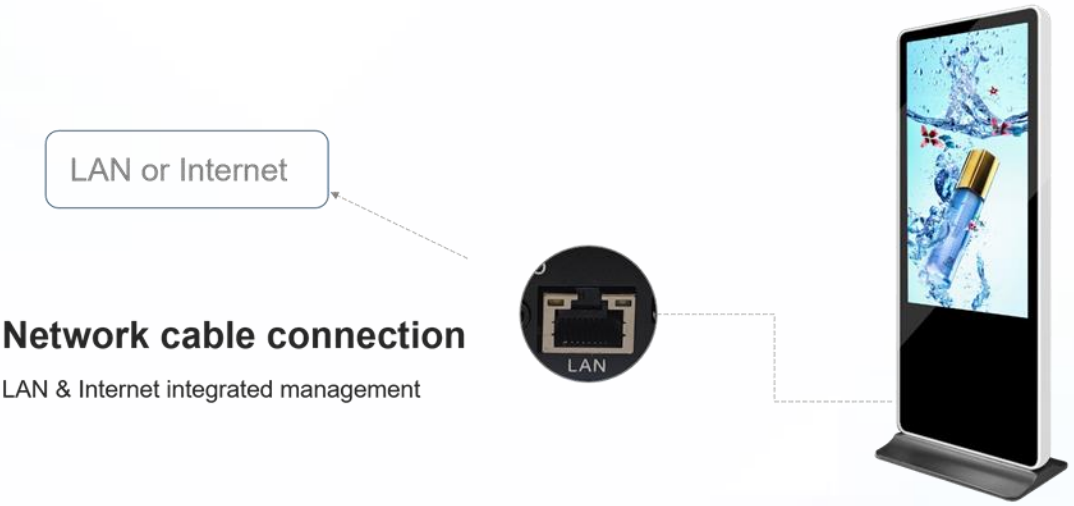
II. Update Program with U-disk



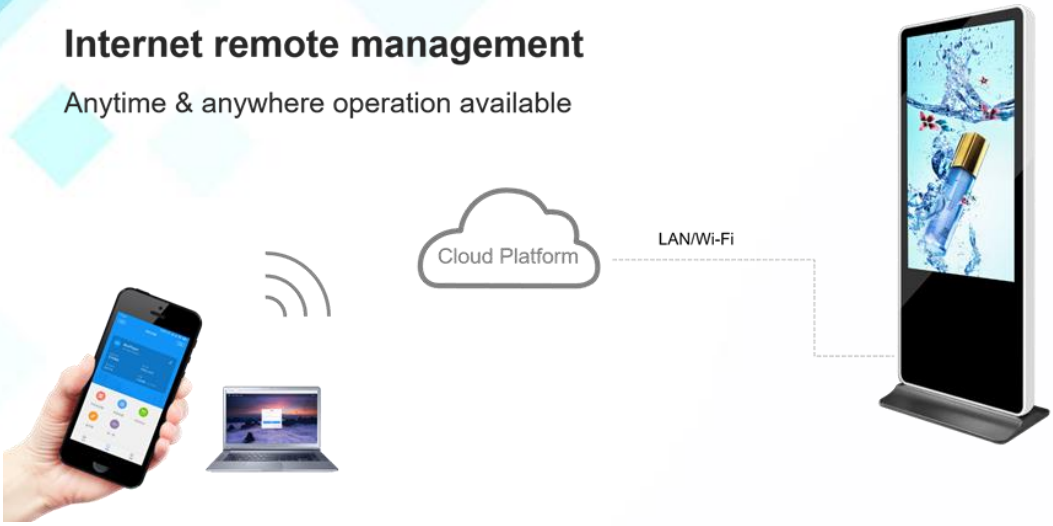
III. Update Program by TF Card



IV. Update Programs with LAN



V. Update Programs by the Internet



Chapter 4 Product Appearance

Note:

1. Non-standard features, the picture of the specification may be slightly different from the actual product, if you have any questions, please contact Huidu Technology for confirmation;