

IoTBOX-3288I

Industrial control

Digital Signage Player

Specification

Doc. Modification History

Version	Description	Date
V1.0	Creation	2018-4-13
V1.2	Update	20180928
V2.1	Update	2019-05-21

Catalogue

Chapter 1 Production General Description	错误! 未定义书签。
1.1 Scope of application.....	错误! 未定义书签。
1.2 General Description.....	错误! 未定义书签。
1.3 Features.....	错误! 未定义书签。
1.4 Appearance And Interface Sketch.....	错误! 未定义书签。
Chapter 2 Basic Function List	错误! 未定义书签。
Chapter 3 PCB Measurement And Interface Layout	错误! 未定义书签。
Chapter 4 Electric Performance	错误! 未定义书签。
Chapter 5 Assembly Using Notice	错误! 未定义书签。

Chapter 1 Production General Description

1.1 IoTBox-3288I Scope of Application

IoTBox-3288I belongs to Android industrial control box, which is generally applicable to smart display terminal products, video terminal products, industrial automation terminal products, such as: interactive advertising machine, interactive digital signage, intelligent self-service terminal, intelligent retail terminal, O2O intelligent device, industrial control host , robot equipment, etc.

1.2 General Description

IoTBox-3288I adopts Rockchip RK3288 Cortex-A17 quad-core processor, equipped with Android7.1 system, the maximum frequency is up to 1.8 GHz, super performance. With Mali-T764 GPU, it supports 4K, H.265 hard decoding. Multi-channel video output and input, rich interface, support for a variety of peripheral expansion, is your best choice in human-computer interaction, industrial control projects.

1.3 Features

- ◆ Support 12V power input
- ◆ Support HDMI 1080P output, support HDMI 4K dot screen.
- ◆ Built-in PCI-E 3G/4G interface. Supports Huawei, ZTE,

Longshang and other PCI-E 3G/4G modules to support Internet access and calls.

- ◆ Rich expansion interface, 4 USB interfaces (1 USB OTG, 3 USB HOST); 2 RS232 serial ports; one TTL serial port.
- ◆ Support 3 segments of headphones, support stereo output and MIC input.
- ◆ Support Android system customization, provide system call interface API reference code, perfect support for client upper application APP development.
- ◆ Perfect support for infrared, optical, capacitive, resistive, touch film and other mainstream touch screens, support mainstream peripheral drivers, no need to debug.

1.4 Appearance and Interface Sketch

Front



Back



Size: 153*108*30mm

Chapter 2 Basic Function List

Main Hardware Index	
size	153*108*30mm
CPU	RK3288, quad core, clocked up to 1.8GHz, Android 7.1
RAM/Storage	Standard 2G (4G optional) / Standard 16G (8/32/64G optional)
Built-in ROM	2KB EEPROM (not included by default, optional)
HDMI in	1 support 1080P@120Hz, 4kx2k@60Hz output
video	Support wmv, avi, flv, rm, rmvb, mpeg, ts, mp4, etc.
image	Support BMP, JPEG, PNG, GIF
Headphone output	Support one way three-segment headset insertion
Audio input	Support one way three-segment headphones MIC1
USB2.0 interface	4 USB HOST
Serial port	2 standard DB9 interfaces, one 4PIN 2.0 carrier TTL
Ethernet	1 , 10/100M adaptive Ethernet
WIFI, BT	Built-in WIFI, BT4.0
3G/4G	Support PCI-E interface 3G/4G Internet access and call
SD card	Support TF card

RTC	support
Timer switch	support
System Upgrade	Support local TF, USB upgrade
Relative humidity	≤80%
Operating temperature	0°C~+60°C
storage temperature	-20°C~+70°C

Chapter 3 Power and Product Maintenance

1. Power adapter

For your personal safety and the normal use of this product, please make sure that the AC power supply you provide meets the input information marked on the back of the product's power adapter; use a three-prong power socket with a reliable grounding terminal.

It is recommended to use the original power adapter of this machine. When the original power supply cannot be used under special circumstances, be sure to use the power adapter of the same specification.

2. Input characteristics

Input voltage range: from 90Vac-264Vac, one-way input.

	min	Rating	max
Input voltage	90Vac	100Vac-240Vac	264Vac
Input frequency	47Hz	60Hz/50Hz	63Hz

3. Output characteristics

Static Output Characteristics <Output & Ripple + Noise>

Output	specified load		Output voltage range	Ripple and noise	Remarks
	Min.	Max.			
+12.0V	0A	2A	+/-5%	50mVp-p	

Chapter 4 Assembly and Use Precautions

Please read the instructions and safety instructions of this guide carefully and strictly follow them during use. This will help prevent damage to the computer mainframe, extend the life, ensure your normal use and computer maintenance, and ensure your life is safe.

1. Please read the relevant documents attached directly, if you have a folder, please be sure to read it first.
2. Follow all safety warnings and signs on this product.
3. Please use the original power adapter or only use the product according to the type of power supply indicated in this product.
4. In thunderstorms, please do not plug or unplug the network cable, power cord and other electrical conductors that may be connected to the outside world.
5. Unplug the power before cleaning the product. Do not use liquid, spray or wet cloth to clean.
6. Please do not disassemble the machine. Do not attempt to repair the product yourself. Please have this work done by an authorized professional.
7. Don't put your computer near a heat source.
8. Pay attention to moisture. Never spill water or other liquid on the computer. If the following conditions occur, immediately unplug the main unit. The following special circumstances need to be repaired by professional maintenance personnel.
 - a. The power cord or plug is damaged.

- b. A conductive liquid is splashed into the product.
- c. The product has been dropped or the product casing has been severely damaged.
- d. Unexplained errors or significant performance changes in the product cannot be ruled out after regular failure guidelines.

Chapter 5 Common Troubleshooting

The IoTBOX-3288I commercial box products have been rigorously tested before leaving the factory. The products are durable and the problems encountered during use may be caused by the settings and operations encountered during your use. Or I have encountered some problems with device compatibility. This common troubleshooting information can help you resolve some simple operational issues or identify the cause of a repair failure.

1	The computer did not respond after booting	Please confirm that the host and monitor are powered normally and the host adapter is powered.
2	The host automatically shuts down for no reason	Please check if the power is off and the power adapter is loose.
3	The host automatically restarts without cause	Please check if the host is overheated and the system is normal.
4	Display image but no sound when playing video	Check if the audio output device is normal, mute, and whether the sound card driver is installed properly.
5	Network cannot connect	Check whether the network connection or routing device is normal, the network card driver is normal, the network parameter settings are normal, and confirm whether your ISP service is out of date.
6	External USB device is not recognized	Check if the function of the device is normal and the driver is installed normally.

Note: 1) If the host accidentally enters water or infiltrates conductive liquid, please cut off the power immediately, wipe the liquid with a paper towel, and do not blow it with a hot air blower. If the situation is extremely serious, it is recommended to contact the after-sales service immediately for consultation or inspection.

2) If the main unit is damaged due to the accidental sliding of the main unit, the main board is damaged. Please contact the after-sales service immediately for repair.