

Specification

BX-3568B android motherboard

Version: V1.0 Date: 2024.3.13

CATALOG

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Instruction

Thank you for purchasing our LCD display motherboard. I hope you can enjoy the excellent performance of this product. The design of the motherboard complies with international and industry standards, but it can still cause personal injury and property damage if not properly operated. In order to avoid possible hazards and maximize the benefits from your equipment, please follow the instructions in this manual when installing and operating the product.

About software

It is illegal to change, decompile, disassemble, decrypt or reverse engineer the software installed on this Product.

Features

- ◆ Play various formats of 2K HD, 4K UHD video, can handle complex interactive operations;
- ◆ Integrates Ethernet, Wi-Fi, TF expansion card, USB expansion port, HDMI2.0 output, audio output and other functions to simplify the overall design.
- ◆ Support various sizes, various resolutions cropping screen;
- ◆ Support flexible selection of 4G/5G;
- ◆ Support program playback screenshot monitoring function;
- ◆ Supports SSL/TLS encryption protocol to ensure communication security;
- ◆ Supports digital signature authentication technology to ensure correct and secure transmission of materials;
- ◆ Supports the iLEDCloud/iLEDsys information release cloud platform (national Level 3 certification), and has a strict program audit and control system;
- ◆ Support server/single-machine mode switching, support iLEDCloud wechat mini program, support mobile devices to conveniently complete information editing and publishing, while ensuring information security;
- ◆ Supports log recording, including communication logs and program playback logs;
- ◆ Custom development: Support database connection function, support to connect to MySQL, SQL server format database, automatic data acquisition and display;
- ◆ Custom development: Support network data partition function, specify fields through the server URL, dynamically obtain JSON file data and JSON field values, support 32 dynamic areas, support information refresh in real time;

- ◆ Communication is stable and does not drop line, all communication interfaces and input and output interfaces are strictly anti-static and anti-surge design;
- ◆ -40°C ~ 70°C ambient temperature, 7*24 hours of continuous power, ≤0.3% failure rate.

Functions

BX-3568B motherboard adopts Ruixin RK3568 solution, the chip integrates quad-core Cortex-A55CPU and Mali-G52 high-performance GPU, the main frequency is up to 2GHz, equipped with Android11 has super video processing capability,Support 4Kx2K@60fps H.265/H.264/VP9 decoding,1080P/60fps H.265/H.264 video coding, with a rich expansion interface,It is widely used in digital signage, touch interaction, security, medical, transportation, finance, industrial control, consumer electronics, entertainment systems and other intelligent business display control fields.

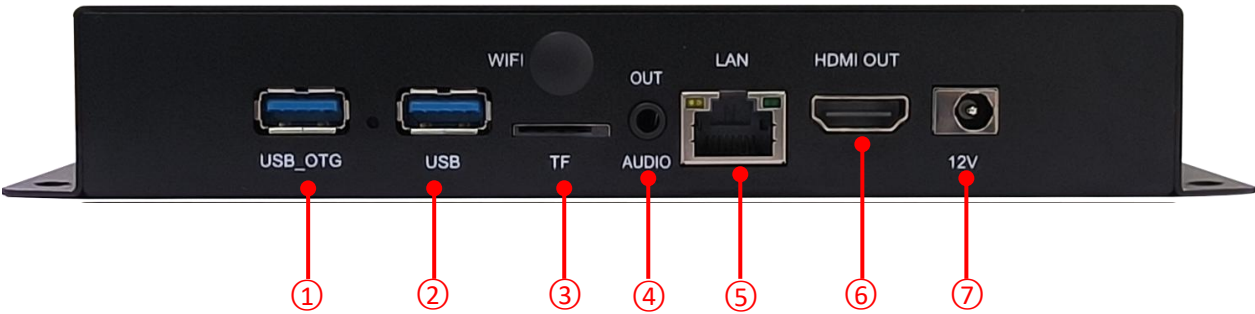
Technology parameters

Hardware specification	
CPU	Mali-G52 GPU, Cortex-A55 quad core, Maximum main frequency 2GHz, support OpenCL 2.0, Vulkan1.1 OpenGL ES 1.1/2.0/3.2
DDR	DDR4 standard match with 2GB, ,4GB is optional
Storage	Standard match with16GB EMMC NAND chip by default, expandable up to 128GB, TF card: used to extend SSD
Display interface	HDMI output interface: HDMI 2.0 standard display interface, support 4K output;
Headphones	Support standard left and right channel line output;Supports 3.5mm audio output interface
USB interface	One OTG and one USB2.0
TF card	Self-ejecting TF card socket, support 128GB TF card
RJ45	100M network
WiFi	Built-in high performance SDIO interface WiFi/ Bluetooth module, support IEEE 802.11b /g/n
Working temperature	-20~70 °C
Storage temperature	-40~70°C; 10%~90%
Power	DC12V

Software specification	
OS	Android 11
Audio	MP3,WMA,WAV, APE, FLAC, AAC, OGG,M4A,3GPP etc.
Video	Support H.265, H.264, VP8, MAV , WMV , AVS , H.263 , MPEG4 etc.
Image	Support JPG、BMP、PNG etc.
Language	Support multiple language
System management	Original Android system, open root permission, can be customized product development Real-time remote monitoring, system crash recovery, 7*24 hours unattended Support OTA remote upgrade; Support USB flash drive upgradeSupports startup animation definition Supports server/single-machine mode switching Wi-Fi hotspots are supported Support for software watchdog

Interface definition

Front panel



Instruction:

Item	USB OTG socket
1	Standard TypeA horizontal socket, this interface is the default firmware burning port when powered on, and can be connected to a PC for software burning;After entering Android, you can set it to USB ADB debugging port or common USB Host port through the software

Item	USB 2.0 socket
2	USB2.0Horizontal socket standard, TypeA standard socket

Item	TF
3	TF card insert port

Item	AUDIO
4	Analog audio output port

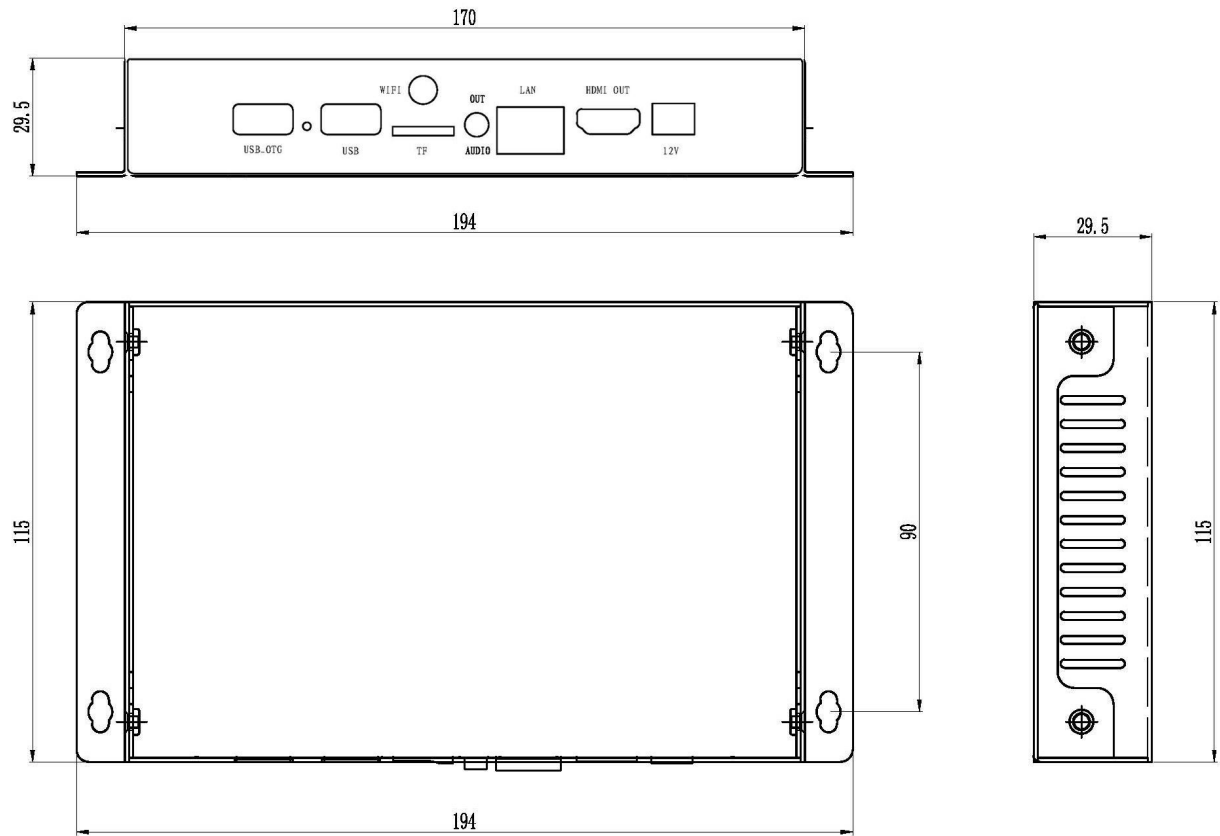
Item	LAN
5	network control interface

Item	HDMI
6	HDMI2.0 , VESA standard : 3840x2160@60Hz backward compatibility, HDMI 2.0

Item	12V
7	12V, DY30W-12V power adapter is standard matched

Size

单位: mm



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