



QY-J10101A Android Tablet

Product specification

Version: V2.0
Aug. 2021



ZHEJIANG QIYANG INTELLIGENT TECHNOLOGY Co., Ltd
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Information update and access

1、 Information Updating

Product-related information will be constantly improved and updated. When you use these contents, please make sure that it is up to date.

2、 Update Notification

Qiyang product information updates will be notified via WeChat public account, so stay tuned!



3、 How to obtain information

After purchasing, please contact the relevant sales staff of our company to obtain it.

Version Records

| Version | Hardware | Description | Date | Reviser |
|---------|------------|------------------|---------|---------|
| 1.0 | QY-J10101A | Internal version | 2021-06 | wwx |
| 2.0 | QY-J10101A | Update picture | 2021-08 | wwx |

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Notice: This manual introduces the hardware interface of the mainboard.

I. Preface

1.1 Company Profile

Zhejiang Qiyang Intelligent Technology Co., Ltd., established in 2007, which locates in Hangzhou, Zhejiang, PRC. It is a high-end technological enterprise that specializes in exploitation, fabrication, and selling embedded computer mainboards . With 10 years of experiences, Qiyang has established the completed service chain from the design concept to mass production successfully.

The R&D team is organized by 30 more technical engineers. Qiyang focus on providing functional embedded hardware, software tool and customization solutions. It has been applied to Industrial Control, Internet of Things, New Retail, Smart Medical, Electricity Device, Environmental Surveillance, Charging Pile etc.

With the growth of the business, Qiyang has set up an SMT factory in Zhuji, Zhejiang province, which is 5000m², with a 2xSMT production line. The SMT factory performs the ISO9001 Quality Management System strictly. Relying on the solid production ability, the SMT factory's annual capacity is about a million sets, which totally guarantee the delivery date.

Qiyang has a thorough sales marketing network, professional sales ,and after-sales team to provide full technical support and service. The business has spread over 120 countries and areas, it helps the clients to introduce the products into the market efficiently and successfully. The combination and extension of research and development, production capacity, and market, that provide a solid foundation for Qiyang to provide specialized, globalized embedded hardware and software.

1.2. QY-J10101A Android Tablet Use Suggestion:

1. Please read the instructions first before using the development board;
2. Please check the packing list and see whether there is a missing file before using the development board;
3. Please understand the basic structure and composition of board, including the allocation of hardware resource, etc.
4. QY-J10101A tablet accept batch order.

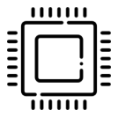


QY-J10101A Tablet

- Based on RK3288 quad-core processor, ultra-high performance
- Mali-T764 GPU, support Open GL ES1.1/2.0/3.0, OpenVG1.1, OpenCL, Directx11
- Support 4G, Wi-Fi, Bluetooth, Ethernet communication
- HD display, resolution up to 1280*800
- 2 RS232 serial ports, 1 RS485 serial port (*optional)
- Metal shell, flat design

| | | | | |
|----------------------|-----------------|----------|-----------------------|------------------|
| Quad core 1.8GHz | 2G DDR3 | 8GB eMMC | 4-ch USB2.0 | 3-ch serial port |
| Audio/speaker output | MIC input | Wi-Fi/BT | 1-ch 100Mbps Ethernet | 1-ch Camera |
| 1-ch SIM Card | Android 5.1/7.1 | | | |

II. Product Introduction



Smart chip, powerful core

Based on Rockchip RK3288 quad-core processor, clocked at 1.8GHz, integrated Mali T764 GPU, can realize 4K*2K H.264 and H.265 video hard decoding



Rich peripheral interface

Integrated with the interfaces, such as USB, serial port, MIPI, MINI PCI-E, Ethernet, audio, camera, SIM, etc.



Strong communication and transmission capabilities

Onboard BT/Wi-Fi module, itself is with 3 serial ports, 1-ch 100M Ethernet port, reserved MINI PCI-E, 4G module can be connected (*optional)



IPS screen HD display

10.1 inch full-fit IPS high-definition screen with 1280*800 resolution, full-view high-definition display, vivid color reproduction, clear and smooth picture, support for multi-touch, sensitive and stable touch

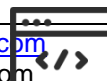


Metal plate housing

38 steps process, frosted surface treatment, fanless design, efficient thermal conductivity

Easily use and develop

Provide all source code, technical information and development tools, easy and convenient to develop



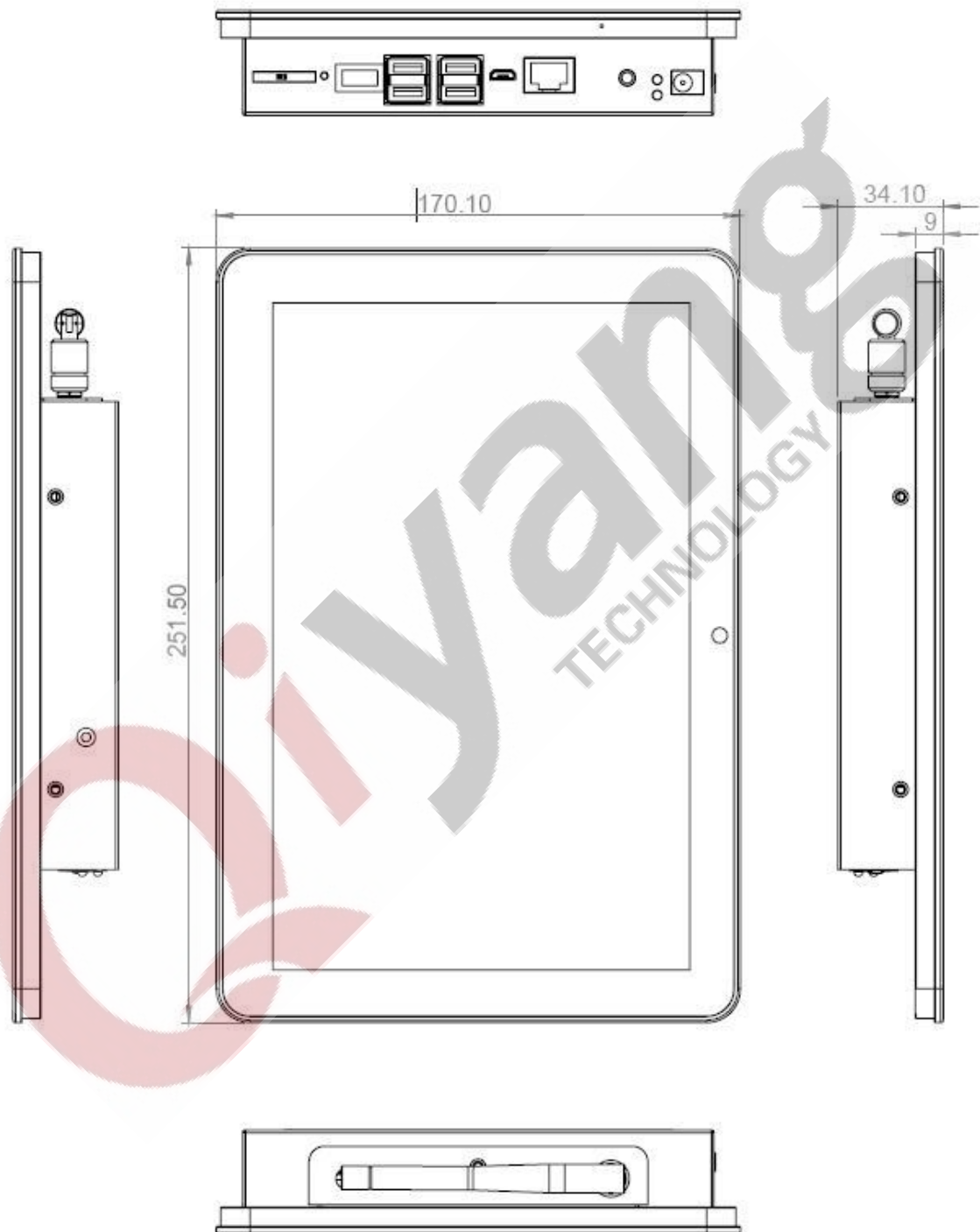
III. Specifications

| | | |
|-----------------------------------|-------------------------|--|
| Screen | Size | 10.1 inches, full viewing angle |
| | Resolution | 800*1280 HD resolution |
| | Brightness | 450 CD/M ² |
| | Touch | Capacitive touch screen |
| Performance Parameter | SOC | Rock Chip RK3288 |
| | CPU | Quad-core Cortex-A17 processor, clocked at 1.8GHz |
| | GPU | Mali-T764 GPU, support AFBC (frame buffer compression) Support OpenGL ES1.1/2.0/3.0, OpenCL, Directx9.3 Embedded high-performance 2D acceleration hardware |
| | VPU | Support 4K 10bits H265/H264 video decoding 1080P multi-format video decoding (VC-1, MPEG-1/2/4, VP8) 1080P video encoding, support H.264, VP8 format |
| | RAM | 2GB DDR3 |
| | ROM | 8GB eMMC, compatible with 16GB eMMC/32GB eMMC |
| | Wireless Network | 2.4GHz Wi-Fi, support 802.11 b/g/n protocol Support BT4.2 4G LTE network (optional) |
| | Network | 10/100Mbps adaptive Ethernet |
| | Speaker | 8Ω2W speaker |
| | MIC | Digital audio microphone (optional) |
| | Camera | 2 million pixel camera (optional) |
| | 4GLTE module (Optional) | Support 4G LTE full Netcom |
| | Communication Interface | Baud rate support 9600bps~115200bps |
| | | RS232 serial port x2 (optional), baud rate supports 9600bps~115200bps |
| | | RS485x1 (optional), baud rate supports 9600bps~115200bps |
| Hardware interface | Power connector | DC 5.5mm*2.5mm (DC12V Input) |
| | Headphone jack | 3.5mm headphone jack |
| | Ethernet interface | RJ45 10/100Mbps Ethernet |
| | US Interface | USB 2.0 Hostx4、USB 2.0 OTGx1 |
| | UART | UART-TTLx1 |
| | SIM card slot | SIM card slot |
| | Indicator | Power indicator x1, system operation indicator x1 |
| System Software | Operation System | Support 支持Android5.1/Android7.1 |
| | OTA Upgrade | Support OTA upgrade |
| Electrical Characteristics | Power Input | DC12V-2.5A |
| | Operational Temperature | -10℃ ~ +60℃ |
| | Storage Temperature | -20℃ ~ +70℃ |
| | Humidity | 5%~95%, Non-condensing |
| | Power consumption | About 12W |

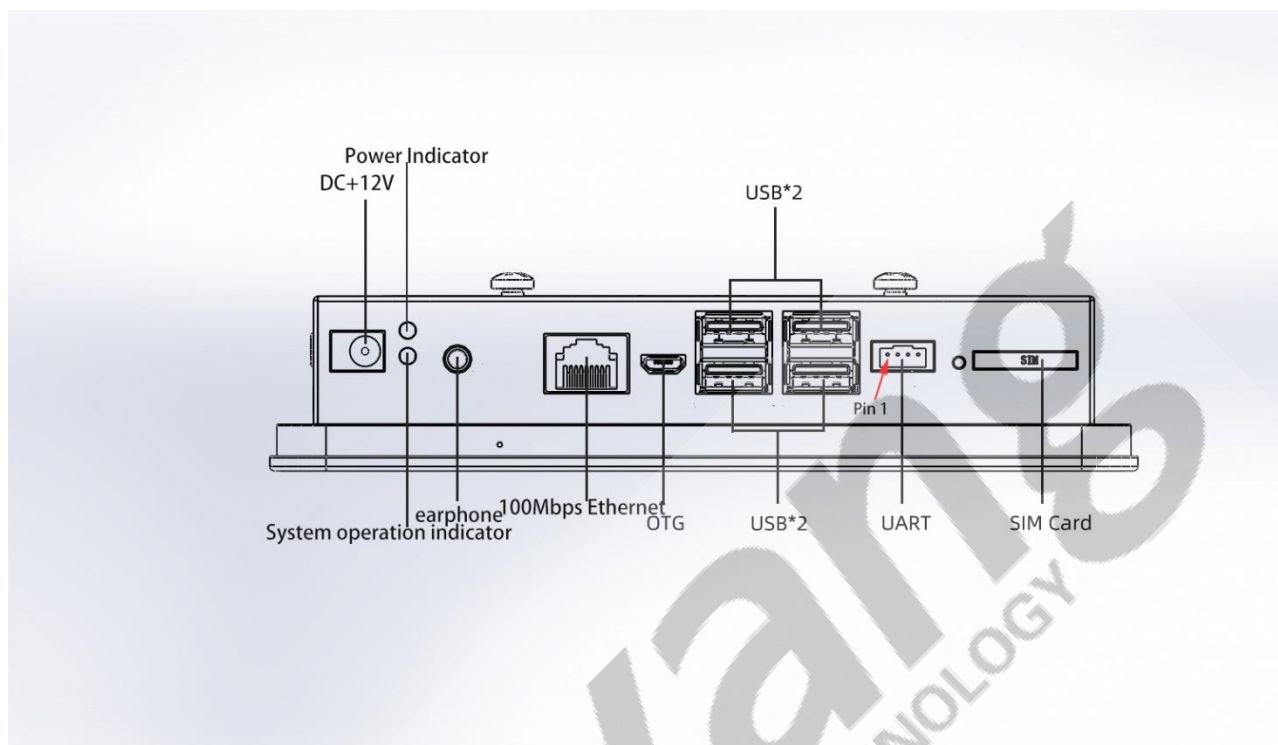
| | | |
|--------|-------------------|---|
| Others | Size | 251.50mm*170.10mm*34.10mm |
| | Weight | 1.2Kg |
| | Material | Galvanized sheet + aluminum profile |
| | Protection Level | IP50 protection design of the whole machine |
| | Installation Mode | Flush installation, wall installation, bracket installation |



IV. Structure & Size



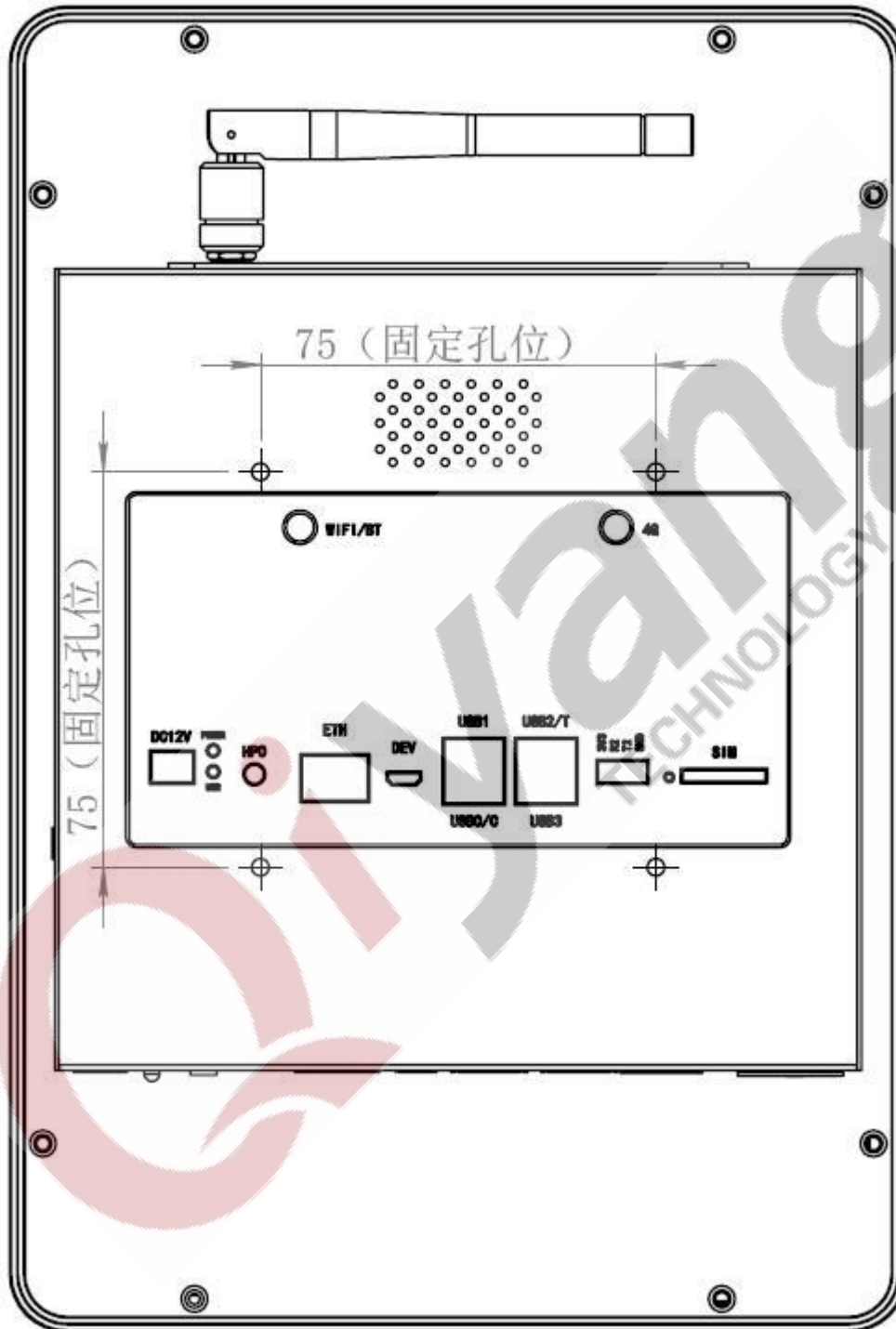
V. Pin Definition



UART-TTL -Pin Definition

| PIN# | PIN Definition | Description |
|------|----------------|----------------|
| 1 | VCC_IO_3V3 | 3.3V |
| 2 | UART1_RXD | UART-TTL level |
| 3 | UART1_TXD | UART-TTL level |
| 4 | GND | |

VI. Installation method



VII. Application area

It is widely used in smart cabinets, new retail, self-service terminals, smart factories, IoT gateways, food safety, smart medical, robotics, power equipment, smart agriculture and other industries.



Smart cabinet



New retail



Self-service Terminals



Smart Factories



IoT Gateways



Food Safety



Smart Medical



Robotics



Power Equipment



Smart Agriculture

VIII. Shipping List



Selection List:

| Nos. | Model No. | Function Description |
|------|------------|----------------------|
| 1 | QY-J10101A | Wi-Fi |
| 2 | QY-J10101B | Wi-Fi+4G |
| 3 | QY-J10101C | Wi-Fi+Camera+MIC |
| 4 | QY-J10101D | Wi-Fi+4G+Camera+MIC |

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