
RK7631A-Technical Specification

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1.Parameter List

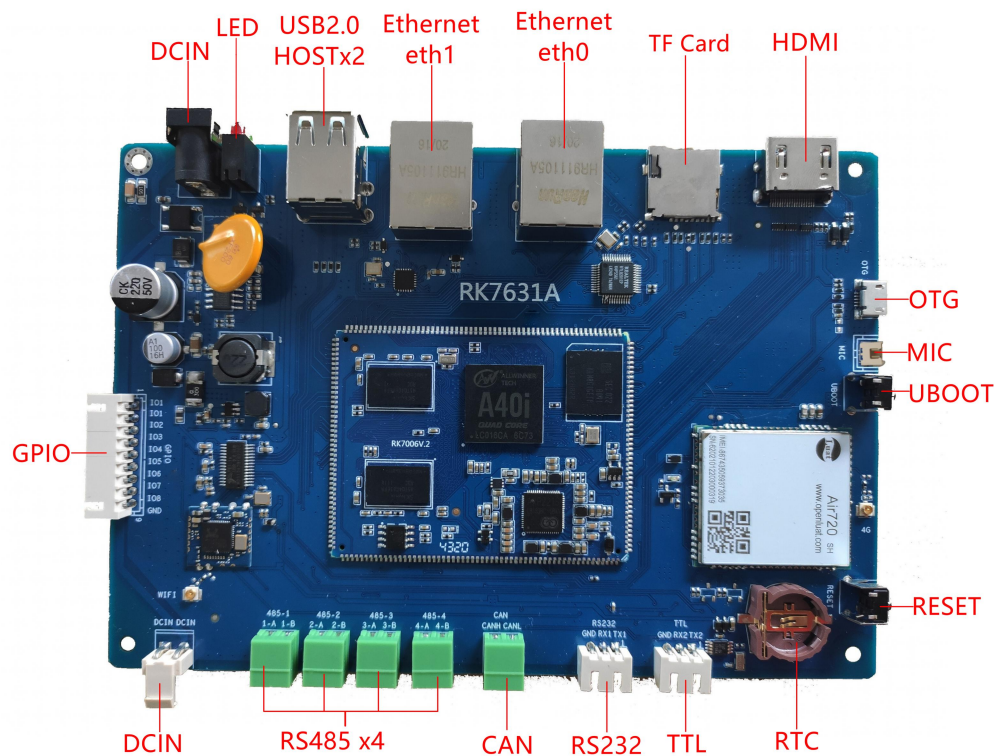
Motherboard Solutions	
Model Description	RK7631A Standard type(DDR1G+EMMC8G) RK7631A-W Standard type and WIFI RK7631A-WB Standard type and WIFI、 Bluetooth RK7631A Standard type with CAN2.0 RK7631A-W Standard type and WIFI with CAN2.0 RK7631A-WB Standard type and WIFI、 Bluetooth with CAN2.0 Note: This product also supports 4G function, such as the need to practice customer service to ask the detailed configuration and the corresponding price
CPU	Allwinner A40i 1.5GHz quad-core processor
GPU	3D (Mail 400 MP2) + 2D
Memory	DDR3 Standard 1GB
Local Storage	EMMC Flash Standard 8GB
Supported Operating Systems	Ubuntu 18.04 / Android 7.1
Extended memory	TF Card
Ethernet	Wiredx2 10/100M
WIFI	WIFI 802.11 a/b/g/n (optional)
Bluetooth	Bluetooth 4.0 (optional)
USB	USB2.0 x2, USB Micro x1
HDMI Output	x1
UART	UART TTL x 1 RS232 x 1 RS485 x 4 CAN x 1
MIC	x1
RTC	Real time clock
4G	x1(optional)
Extended Port	bi-directionalx1 I/O; +/- 15KV ESD
Power	8~40V ; <12W

Operating temperature	-30-70℃
Product Size	160.0mm*110.0mm

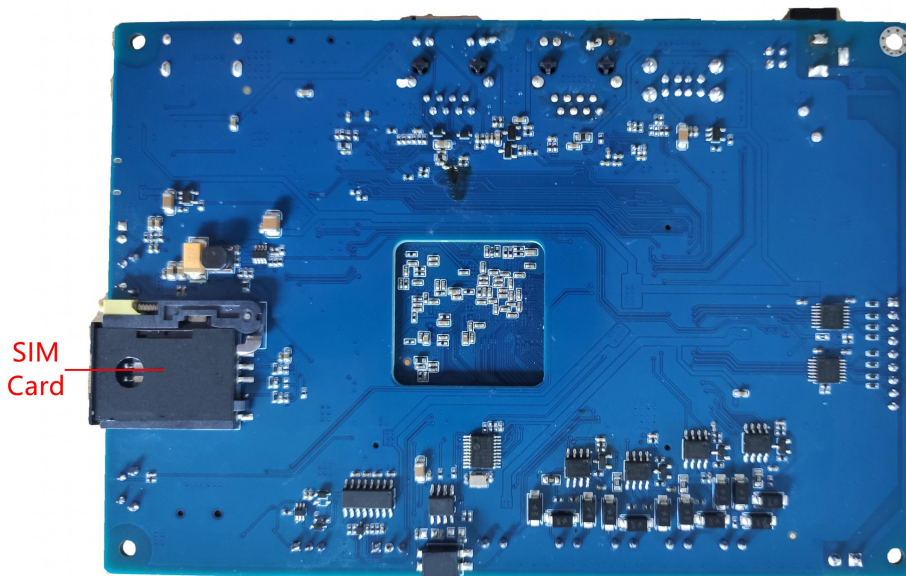
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2. Hardware interface

2.1 Appearance



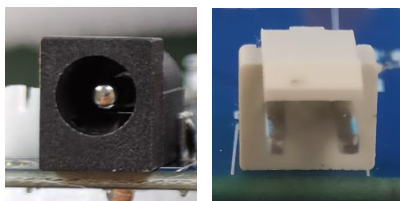
Front view



Back view

2.2 Power connector

- Provide 2 kinds of power supply interface. A 5.5mm OD and 2.5mm ID DC holder and a VH3.96-2P holder that can be connected to 8V~40V DC power supply.



Note: The power supply holder can not be divided into positive and negative

2.3 LED

- Uses an upper red and lower green power indicator set, controlled through the GPIO port.



Pin	Description	Equipment name
1	Green Light	PH27
2	Red Light	PH26

2.4 RS232

- Provides 1 RS232 connection via 3PIN 2.54mm pitch terminal block.



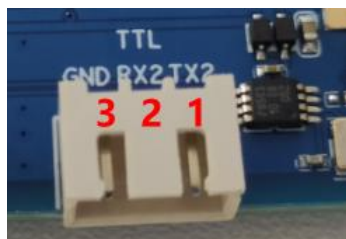
Terminal: XH2.54-3PIN

2.5

Pin	Description	Equipment name
1	TX	/dev/ttyS3
2	RX	
3	GND	

TTL

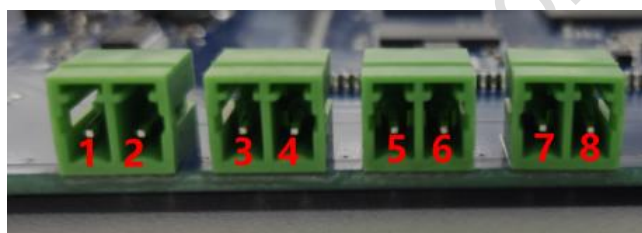
- One TTL level interface is provided, connected via 3PIN 2.54mm pitch terminal block.



Terminal: XH2.54-3PIN		
Pin	Description	Equipment name
1	TX	/dev/ttyS0
2	RX	
3	GND	

2.6 RS485

- Four RS485 channels are provided, connected via 2PIN 3.5mm pitch single layer Phoenix terminals.

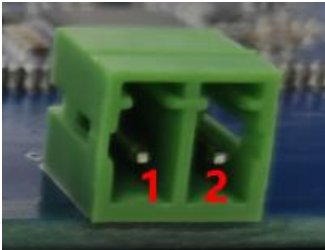


Terminal: KF2EDGK-3.5		
Pin	Description	Equipment name
1	RS485_1A	/dev/ttyS4
2	RS485_1B	
3	RS485_2A	/dev/ttyS5
4	RS485_2B	
5	RS485_3A	/dev/ttyS7
6	RS485_3B	
7	RS485_4A	/dev/ttyS6

8	RS485_4B	
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2.7 CAN

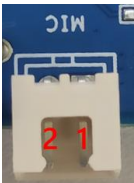
- Provides 1 channel of CAN, connected via 2PIN 3.5mm pitch single layer Phoenix terminals.



Terminal: KF2EDGK-3.5		
Pin	Description	Equipment name
1	CAN_H	can0
2	CAN_L	

2.8 MIC Interface

- The MIC interface is connected via a 2PIN 2.54mm pitch terminal block.



Terminal: XH2.54-2PIN			
Pin	Description	Pin	Description
1	MIC+	2	MIC-

2.9 GPIO Interface

- Connected via a 9PIN 2.54mm pitch terminal block.



Terminal: XH2.54-9PIN		
Pin	Description	Equipment name
1	IO1	PH12
2	IO2	PH13
3	IO3	PH14
4	IO4	PH15
5	IO5	PH16
6	IO6	PH17
7	IO7	PH19
8	IO8	PH25
9	GND	

3.Dimension drawing

