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# RK2639C-Technical Specification

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# 1.Parameter List

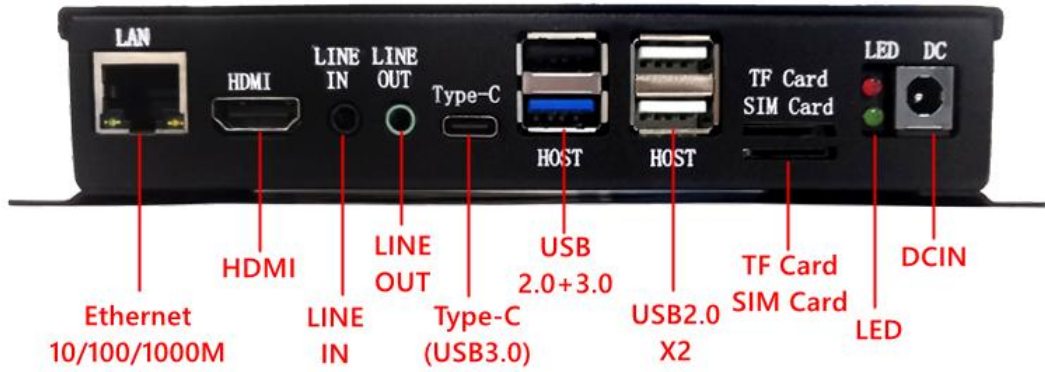
Motherboard Solutions	
Model Description	RK2616H-WB Standard type(DDR2G+EMMC8G) and WIFI、 Bluetooth RK2616H-WB Standard type and WIFI、 Bluetooth with power RK2616H-WB High-rated(DDR2G+EMMC8G) and WIFI、 Bluetooth RK2616H-WB High-rated and WIFI、 Bluetooth with power <b>Note: This product also supports 4G and GPS BeiDou function, such as the need to practice customer service to ask the detailed configuration and the corresponding price</b>
CPU	Rockchip RK3399 6-core 64-bit processor
GPU	ARM Mali-T860 MP4 Quad-core GPU
Memory	2GB or 4GB DDR3; standard2GB
Local Storage	EMMC Flash standard 16GB
Supported Operating Systems	Android and Ubuntu
Multimedia	Support 4K VP9 and 4K 10bits H265/H264 video decoding up to 60fps 1080P multi-format video decoding (VC-1, MPEG-1/2/4, VP8) 1080P video encoding, support H.264, VP8 format
Extended memory	TF Card
Ethernet	Wired 10/100/1000M
WIFI	2.4GHz/5.8GHz Dual-band WiFi with 802.11a/b/g/n/ac protocol support 、 2x2 MIMO Technology (Optional)
Bluetooth	Bluetooth 4.2 (Optional)
USB	USB2.0 x3, USB Type C x1, USB 3.0 x1
LINE IN	x1
LINE OUT	x1
HDMI Output	x1
UART	RS232 x 2 UART x 2 RS485 x 2
RTC	Real Time Clock
4G	x1(Optional)

GPS	x1(Optional)
Extended Port	bi-directionalx 4 I/O; +/- 15KV ESD
Power	8~40V ; <10W
Operating temperature	-30-75°C
Product Size	128.5x176.9mm

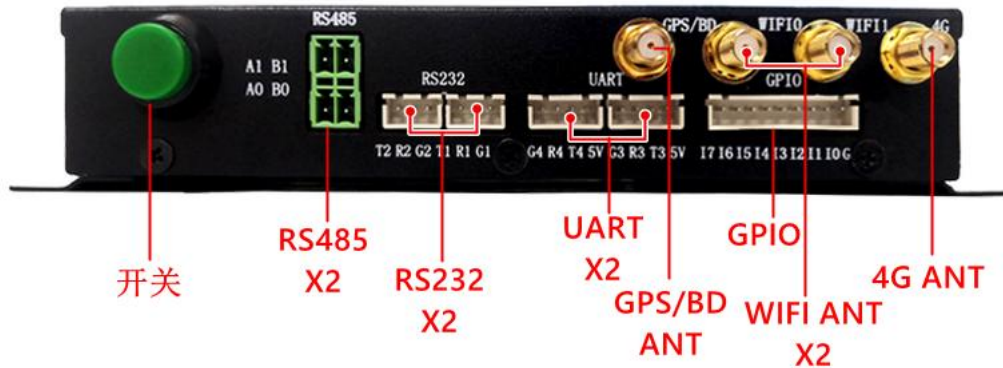
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## 2. Hardware Interfaces

### 2.1 Appearance



Front view



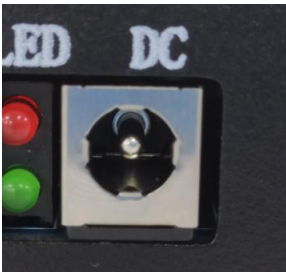
Back view



Side view

### 3.2 Power connector

- DC-005 horizontal power supply holder is provided for power supply interface. Outer diameter 5.5mm inner diameter 2.1mm, connect to 8V~40V DC power supply.



### 3.3 RS232

Two RS232 channels are provided, each connected via a 3PIN 2.54mm pitch terminal.



Terminal: XH2.54-3PIN					
Pin	Description	Pin	Description	Pin	Description
1	GND	2	RXD(RS232A)	3	TXD(RS232A)
4	GND	5	RXD(RS232B)	6	TXD(RS232B)

Correspondence between RS232 and device number

Serial port identification	Equipment number
RS232A	/dev/ttysWK0
RS232B	/dev/ttysWK1

### 3.4 UART

Provides 2 UART (TTL level) interfaces. Connected via 4PIN 2.54mm pitch terminal block.



Terminal: XH2.54-4PIN					
Pin	Description	Pin	Description	Pin	Description
1	5V	2	TXC(UART_C)	3	RXC(UART_C)
4	GND	5	5V	6	TXD(UART_D)
7	RXD(UART_D)	8	GND		

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**Note: UART\_C serial port is multiplexed with GPS, when using GPS function serial port C is invalid**

UART and device number correspondence

Serial port identification	Equipment number
UART_C	/dev/ttysWK2
UART_D	/dev/ttysWK3

### 3.5 RS485

Two RS485 channels are provided, connected via 4PIN 3.5mm pitch double-layer Phoenix terminals.



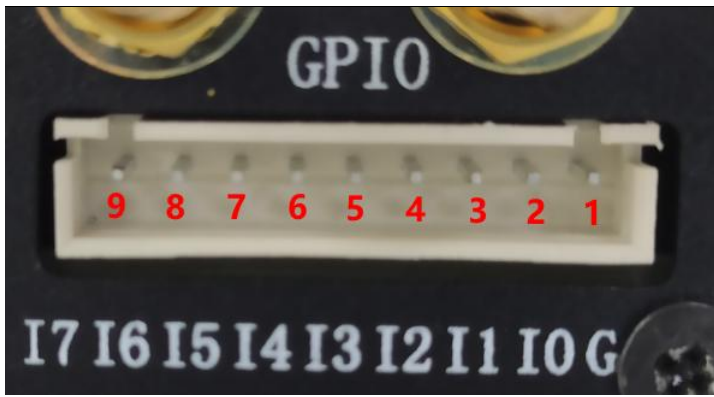
Terminal: 15EDGRHB-THR-3.5			
Pin	Description	Pin	Description
1	RS485_0A	2	RS485_0B
3	RS485_1A	4	RS485_1B

RS485 and device number correspondence

Serial port identification	Equipment number
RS485_0	/dev/ttyS2
RS485_1	/dev/ttyS4

### 3.6 GPIO interface

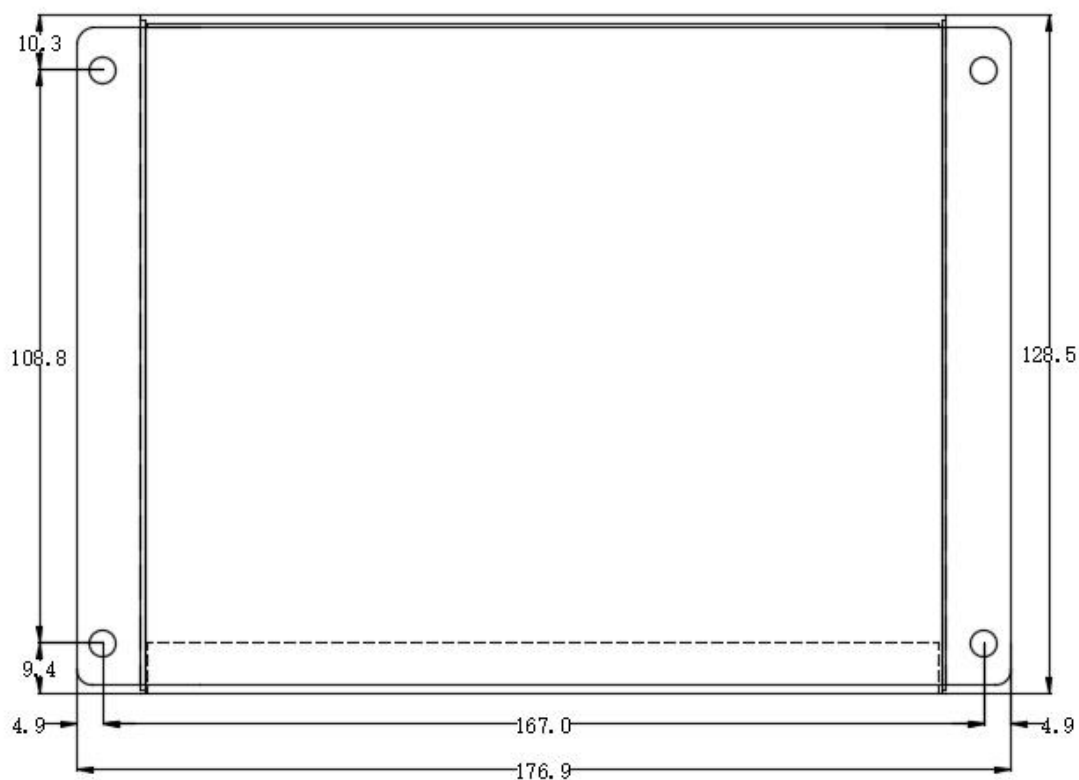
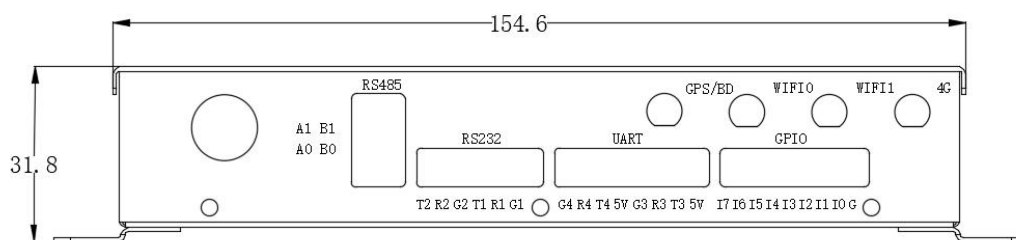
- Connected via a 9PIN 2.54mm pitch terminal block.



Terminal: XH2.54-9PIN			
Terminal:	Terminal:	Terminal:	Terminal:
1	GND	2	IO0
3	IO1	4	IO2
5	IO3	6	IO4
7	IO5	8	IO6
9	IO5		



### 3. Dimensional drawings



注：未标注公差为±0.3mm