RK7130H-Technical Specification

Contents

1.Parameter List ..... 错误！未定义书签。
2.Hardware Interfaces 3
2.1 Appearance ..... 错误！未定义书签。
2.2 OTG 4
2.3 USB HOST 5
2.4 UART TTL/RS485 6
2.5 Extended Interface 6
2.6 RTC 7
2.7 SPEAK (Optional) 8
3.Dimension drawing ..... 错误！未定义书签。

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1.Parameter List

Motherboard Solutions	
Model Description	RK7130H Standard type(DDR1G+EMMC8G) RK7130H-W Standard type and WIFI RK7130H-I Standard type with GPIO*3 RK7130H-WI Standard type and WIFI with GPIO*3 RK7130H High-rated(DDR2G+EMMC8G) RK7130H-W High-rated and WIFI RK7130H High-rated with GPIO*3 RK7130H-W High-rated and WIFI with GPIO*3 **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	Quad-core ARM Cortex A53, 64-bit architecture, 1.8GHz
GPU	High-performance multi-core GPU Mali-T720
Memory	1GB or 2GB DDR3; (optional)
Local Storage	EMMC Flash Standard 8GB
Supported Operating Systems	Android 7.1
Multimedia	Support 4K VP9 and 4K 10bits H265/H264 video decoding, up to 60fps 1080P multi-format video decoding (WMV, MPEG-1/2/4, VP8) 1080P video encoding, support H.264, VP8 format
Extended memory	TF Card
Ethernet	Wired 10/100M
WIFI	WIFI 802.11 a/b/g/n (optional)
Bluetooth	Bluetooth 4.0 (optional)
USB	USB2.0 HOSTx2，USB3.0 HOSTx1，MICRO USB x1
Headphones	x1
LINE OUT	x1
SPEAK	8Ω 1W (optional)
VGA	x1，output
HDMI	x1，output

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UART	UART TTL x 3(RS485x1)
RS485	x1(optional)
RTC	External battery
EXT GPIO	GPIOx3
4G	x1 (optional)，full network
Power	8~24V ; Standard 12V, Max 1A
Operating temperature	-30-75℃
Product Size	133.5x80mm

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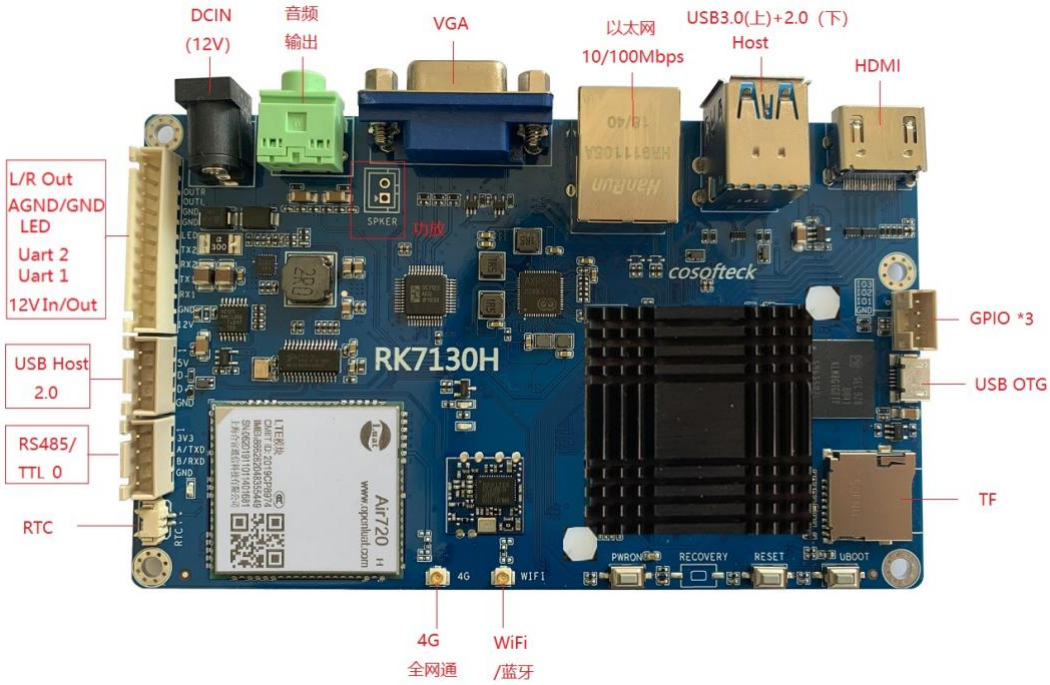
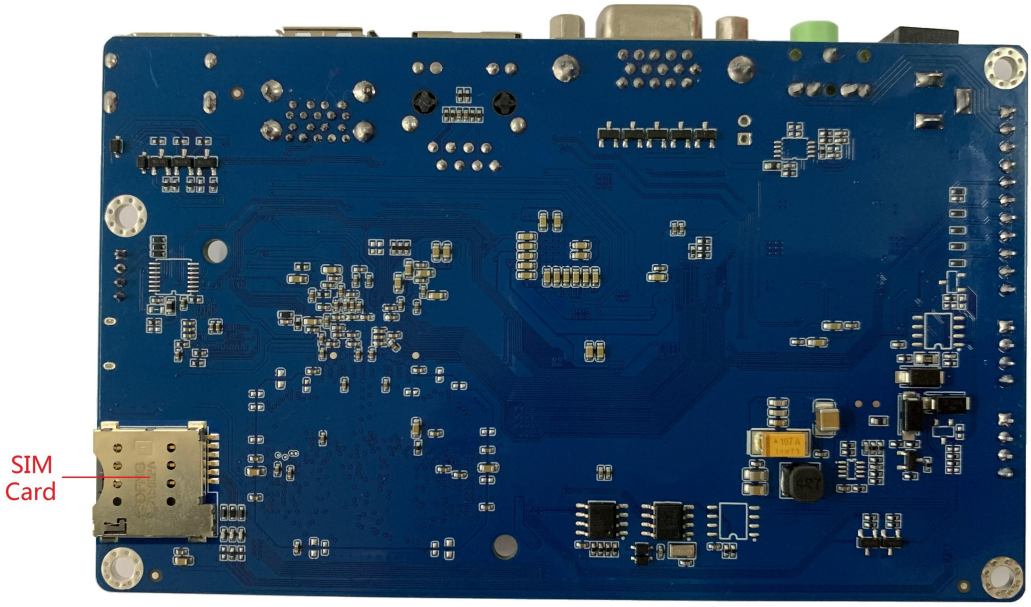
2 .Hardware interface

2.1 Appearance



Front view



Back view

2.2 OTG

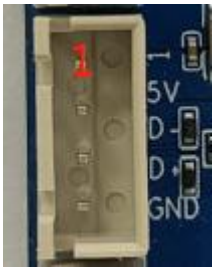
There are 4 USB channels, 1 of which is OTG, connected via MICRO USB cradle.

2.3 USB HOST

The other 3 channels are USB HOST.

- One of the channels is USB 3.0 HOST, which is connected via dual horizontal USB holders.

- The other two are USB 2.0 HOST, one connected via a dual horizontal USB header and the other via a 4 PIN 2.54mm pitch white socket.



Pin	Description	Pin	Description

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1	5V	2	D-
3	D+	4	GND

2.4 UART TTL/RS485

Three UART TTLs are provided, two of which are on the expansion interface and one connected via a 4 PIN 2.54mm pitch white socket. This UART TTL is multiplexed with RS485.

Pin	Description	Pin	Description
1	3V3	2	UART0_TXD/RS485 A
3	UART0_RXD/RS485 B	4	GND

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2.5 Extended Interface

Two expansion interfaces are provided.

- One of them is connected via an 11PIN 2.54mm pitch white socket. It is mainly used as audio output and UART TTL.

Pin	Description	Pin	Description
1	OUT_R	2	OUT_L
3	GND	4	GND
5	LED Out	6	TX2
7	RX2	8	TX1
9	RX1	10	GND
11	DC IN（12V）		

- The other one is connected via a 4PIN 2.0mm pitch white socket. It is mainly used as a GPIO port.

Pin	Description	Pin	Description
1	IO3（PL4）	2	IO2（PM3）
3	IO1（PL8）	4	GND

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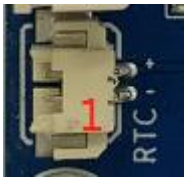
2.6 RTC

The RTC interface is connected via a 2PIN 1.25mm pitch horizontal SMD socket. External

CR2032 battery can be connected.



Pin	Description
1	RTC-
2	RTC+

2.7 SPEAK(Optional)

The SPEAK interface is connected via a 2PIN 2.54 pitch white socket.

Pin	Description
1	SPK-
2	SPK+

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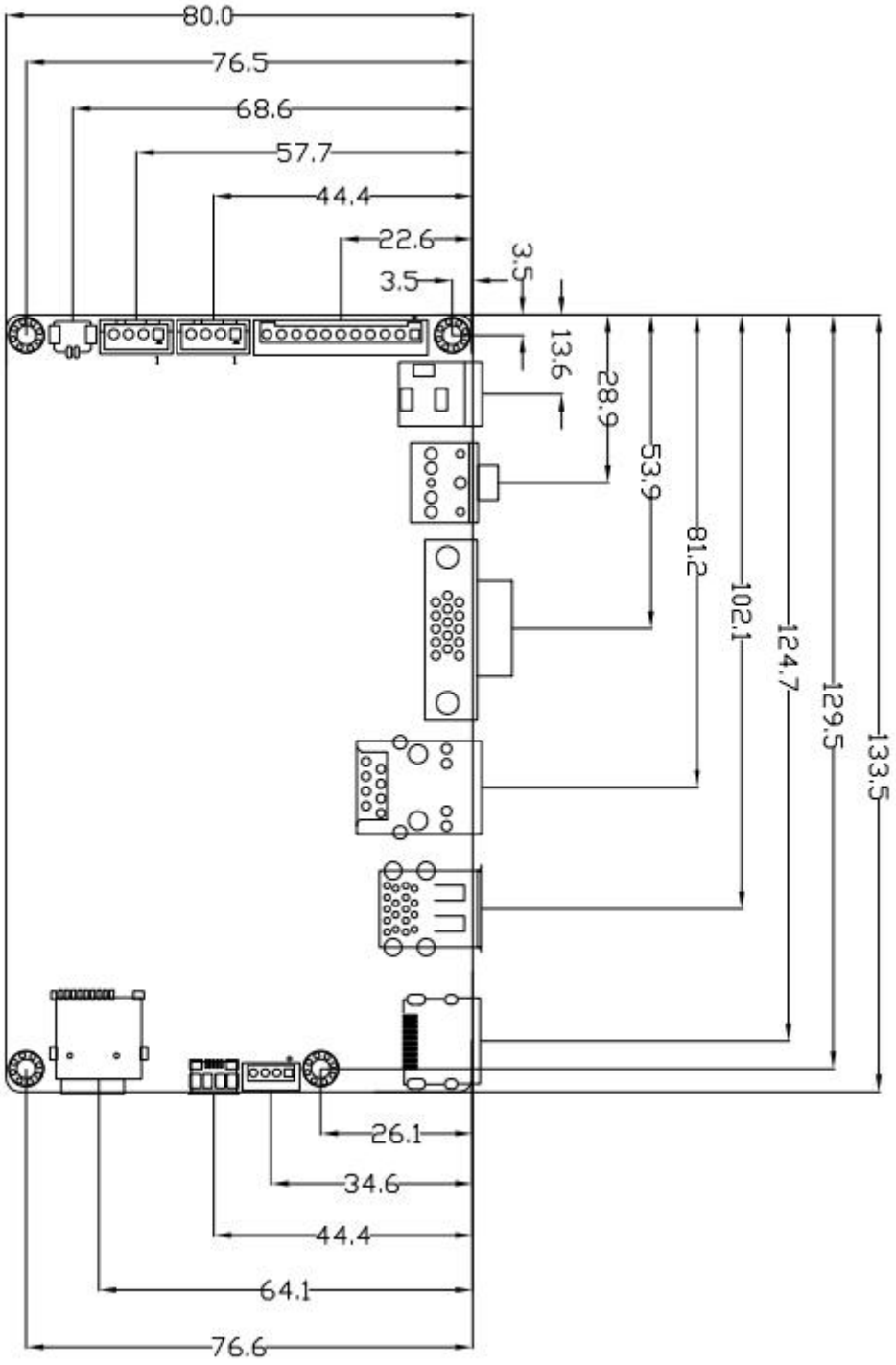
3.Dimension drawing



注：未标注公差为±0.3mm。