

一、 The HK-808 fingerprint module is based on a high-speed DSP processor, combined with a semiconductor fingerprint sensor, an intelligent module with functions such as fingerprint entry, image processing, fingerprint comparison, search and template storage.

1.1 Product Specifications

Electrical parameters

Supply voltage 5V or 3.3V

Touch current 8uA (average voltage is 5V)

Module working current 31mA (average voltage is 5V)

Fingerprint image entry time <0.45 seconds

Working temperature -35 °C — + 80 °C

Storage temperature -35 °C — + 80 °C

Working humidity 20% -90%

Storage humidity 16% -95%

Performance parameter

Fingerprint collector semiconductor sensor

Acquisition window size 20.4MM * 33.4MM

Effective image size 12MM * 15MM

Image size 192 * 192pixel (effective 192 * 192pixel)

Image resolution 508DPI

Matching method Comparison method (1: 1)

Search method (1: N) (when 500 full registration) <1 second

Is there self-learning? Yes

Fingerprint features 498 bytes (extraction time <0.45 seconds)

Acquisition method Capacitive area array semiconductor sensor plane
sintering

500 storage capacity

Security level five (from low to high: 1, 2, 3, 4, 5)

False recognition rate (FAR) <0.001% (security level: 3)

Rejection rate (FRR) <0.1% (security level: 3)

Search time <1.0 second (average)

Communication interface UART (TTL logic is feasible) or USB1.1 / 2.0

compatible

Communication baud rate (UART) parity = NONE, stop bit = 1, baud rate can support:

9600, 19200, 38400, 57600, 115200, 230400, 460800, 921600

Default (115200)

1.2 Factory default settings

Project initial value

Security level Security level (1 ~ 5) 3

Baud rate: 9600BPS-921600BPS can be set to 115200 bps

Fingerprint repeat check enable / disable (repeat check (ON / OFF)) ON

Self-learning enable / disable (automatic learning (ON / OFF)) ON

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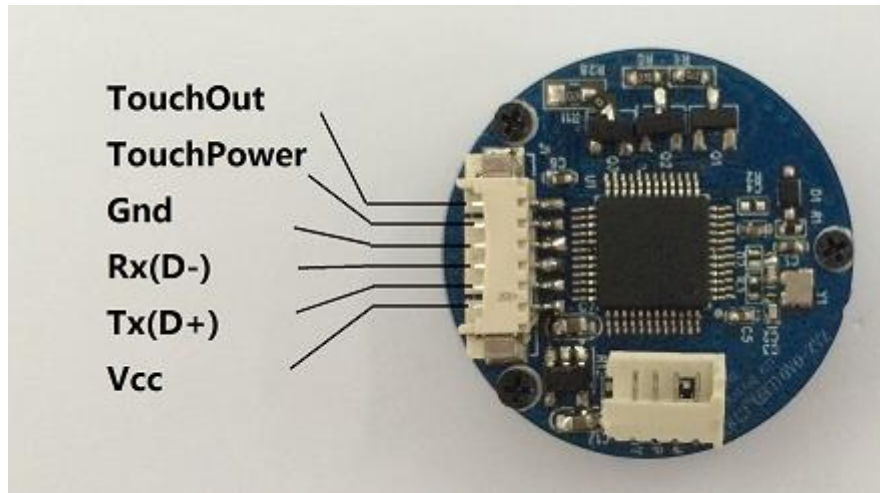
Hardware interface

2.1 Power-on delay time

After the module is powered on, it takes about 200mS to initialize.

During this period, the module cannot respond the commands from the host computer.

2.2 Interface definition



The serial port 6Pin interface serial port is defined as follows:

PIN	NAME	TYPE	Function
1	VCC	in	positive input of the power supply. (5v or 3.3v)
2	TX	In/Outt	module serial port transmitter
3	RX	In/Out	module serial port receiver
4	GND	--	Internally connected to the power ground.
5	TP(Touch Power)		positive input terminal of touch power supply. (5v or 3.3v)
6	TO (Touch Out)		power supply (5v or 3.3v) touch output

The serial port of the USB 4Pin interface is defined as follows:

PIN	NAME	TYPE	Function
1	VCC	in	positive input of the power supply. (5v)
2	D+	In/Out	USB signal cables
3	D-	In/Out	USB signal cable

4	GND	--	Internally connected to the power ground.
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Note: type variable, in means input to the module, out means output from the module