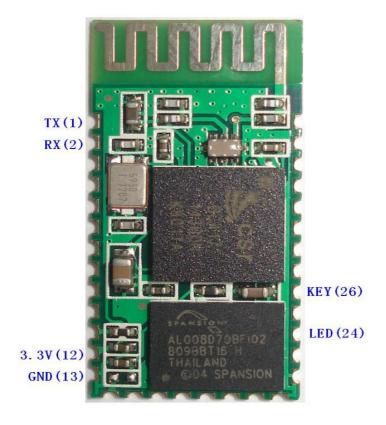
# Bluetooth to serial HC-06 wireless module

## **Product Description:**

- 1, Mainstream CSR Bluetooth chip, Bluetooth V2.0 protocol standards
- 2, serial module operating voltage 3.3V.
- 3, the baud rate for 1200, 2400, 4800, 9600, 19200, 38400 and users can be set
- 4, core module size: 28mm x 15 mm x 2.35mm.
- 5, the working current: 40mA
- 6, Sleep current: <1mA
- 7, for the GPS navigation system, utility meter reading system, the industrial field, collecting and controlling system.
- 8, with a Bluetooth laptop computer to the Bluetooth adapter, PDA and other devices to seamlessly connect

The module's host and slave, the host and slave pairing communication from the machine and from the machine or between the host and the host can not communicate, communication function and computers, mobile phones and other Bluetooth pairing purchase default slave, requires that the host needs to be indicated]

Main distinction: 1, if the chip is not specified on, the lights flash slow main fast from; September 2,2009, all manufactured host will be playing in the IC a hook or paste There are the "main" characters, there is no hook or not affixed to the word "master" is the slave. The date of manufacture can be obtained from the Bluetooth address]



## The factory default parameters:

Slave, baud rate: 9600, n, 8,1. Passkey: 1234; need host mode, indicate when the orders.

Second, AT command set as follows:

1, test communications

Send: AT (return OK, one second left and right)

Back: OK

2, change the Bluetooth serial communication baud rate

Send: AT + BAUD1 Back to: OK1200 Send: AT + BAUD2 Back to: OK2400

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1 ----- 1200

2 ----- 2400

3 ----- 4800

4 ----- 9600

5 ----- 19200

6 ----- 38400

7 ----- 57600

8 ----- 115200

9 ----- 230400 A ----- 460800

B ----- 921600

C ----- 1382400

Not recommended to use more than 115200 baud rate, signal interference causes the system to instability.

The settings over 115,200 with a computer is not available, use microcontroller programming in higher than 115200 to use this baud rate and re-issue the AT command set low baud rate

AT command set baud rate, the next power do not need to set up and can be powered down to save the baud rate.

3, change the Bluetooth name

Send: AT + NAMEname

Back to: OKname

Parameter name: To set the current name, the name of the Bluetooth search. 20 characters or less.

Example: Sending AT + NAMEbill gates

Back OKname

The Bluetooth name changed to bill gates

The parameters can be powered down to save, simply modify the time. PDA the end refresh can see the Bluetooth name changed.

4, change the Bluetooth pairing password

Send: AT + PINxxxx Returns: OKsetpin Parameter xxxx: To set a passcode, 4 bytes, this command can be used from the machine or host. The slave adapter or mobile phone pops up to enter when pairing the password window, manually enter this parameter can be connected from the machine. Host in the main Bluetooth module connected digital camera, digital camera from the machine, find the camera pairing password, and then set up the White Bluetooth module, the main Bluetooth module can automatically connect the camera.

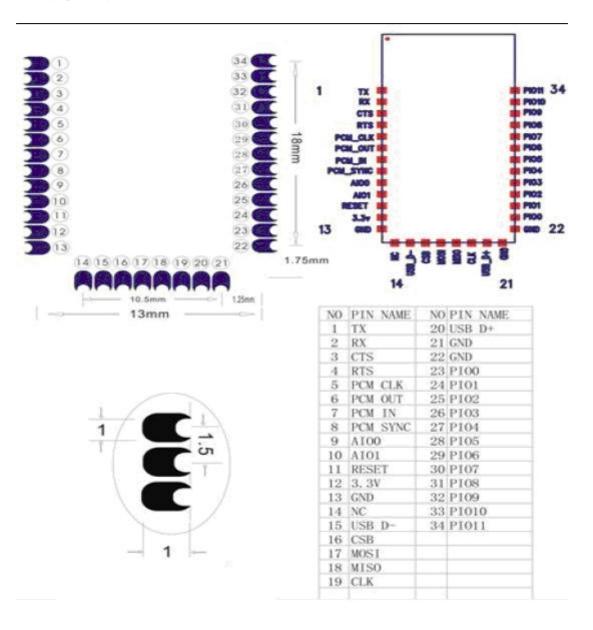
Example: Sending AT + PIN8888

Back OKsetpin

The Bluetooth pairing password to 8888, module paired at the factory default password is 1234.

The parameters can be powered down to save, simply modify the time.

Package pin diagram:



The old customer please refer to (schematics, wiring diagrams, etc.) This module is for upgrade BCM\_LV module version

The figure below shows the core module peripheral circuit schematic diagram of the typical

#### application

If you use the factory default baud rate, do not want to modify the contents of the baud rate below do not need to care about:

The AT command for the master and slave. When used in pairs, the master and slave can be different baud rate can also transfer data, but the host and the device connected to the host baud rate to be the same, but also slave and slave devices connected to the same baud rate.

#### Setting mode:

Initial communication parameters for 9600, N, 8,1, before pairing (pairing indicator flashes) Send to modify the baud rate command

Before sending AT commands to ensure that the hardware is connected as follows:

The eight-pin interface with base plate, the first pin external power supply (3.3 to 5V), the sixth leg connected to the computer COM1 port (DB9 male) pin, pin 7 computer COM1 port pin, the eighth pin is connected to the computer COM1 port 5 feet. Using HyperTerminal or serial debugging assistant to open the COM1 port of the computer, enter the text "AT" to manually send. Special note: master and slave pair can communicate between master and slave baud rate is required to be consistent between master and slave is to take the Bluetooth protocol, rather than serial port protocol.

1, test communications

Send: AT (return OK, one second left and right)

Back: OK

2, change the Bluetooth serial communication baud rate

Send: AT + BAUD1

Back to: OK1200

Send: AT + BAUD2 Back to: OK2400

....

1 ----- 1200

2 ----- 2400

3 ----- 4800

4 ----- 9600

5 ----- 19200

6 ----- 38400

7 ----- 57600

8 ----- 115200

9 ----- 230400

A ----- 460800

B ----- 921600

C ----- 1382400

Not recommended to use more than 115200 baud rate, signal interference causes the system to instability.

The settings over 115,200 with a computer is not available, use microcontroller programming in higher than 115200 to use this baud rate and re-issue the AT command set low baud rate

AT command set baud rate, the next power do not need to set up and can be powered down to save the baud rate.

3, change the Bluetooth name (February 2008 after 24 new features)

Send: AT + NAMEname

Back to: OKname

Parameter name: To set the current name, the name of the Bluetooth search. 20 characters or less.

Example: Sending AT + NAMEbill gates

Back OKname

The Bluetooth name changed to bill\_gates

The parameters can be powered down to save, simply modify the time. PDA the end refresh can see the Bluetooth name changed.

4, change the Bluetooth pairing password

Send: AT + PINxxxx

Returns: OKsetpin

Parameter xxxx: To set a passcode, 4 bytes, this command can be used from the machine or host. The slave adapter or mobile phone pops up to enter the pairing password window, then manually enter this parameter

The number can be connected to the slave. Host in the main Bluetooth module connected digital camera, digital camera from the machine, find the pairing password of the camera, and then set up the White Bluetooth module, the master Bluetooth module can be  $_{\circ}$