Directory

- 1.Product Overview
- 2. The circuit interface
- 3. The main performance
- 4. The module of basic instructions (voltage, protocol, size, baud rate, etc. description)
- 5. The state description (such as matching state and how to abandon the memory address of re-paired memory, etc.)
- 6.AT command set (the user can modify the baud rate, user name, etc.)

1. Product Overview

HC-04 Bluetooth Serial core modules: This design uses CSR's Bluetooth chips, V2.0 protocol standards, industry-standard: 28mm x 15 mm x 2.35mm, the volume size of a compact, self-efficient on-board antenna, transparent serial port with a variety of Bluetooth adapter, paired Bluetooth mobile phone use, but also the use of a pair of master and slave.

HC-04-D Bluetooth serial module with a backplane: This design is a HC-04 module, coupled with external circuit based on the floor, the working voltage is from 3.3V to 5V, leads to TTL, and 232, matching the success of the signal LED pin, the host module also leads to re-search for new slaves pin (default master and slave memory matching addresses will be down, if the next time there are multiple simultaneous Bluetooth, the host will automatically find previously paired off from the machine, if the high electrical pulse to this pin is to give up memory).

The software contains the factory default AT command set, as detailed in point 6 of the instructions.



2. The circuit interface:

RS232 serial port (TTL level), (also equipped with a floor-level serial port 232), matching the success of the signal I (pair of flashing), the host module containing the words "give up the original memory module address from the machine and re-search Module "signal pins.

3. The main properties:

- Band: 2.40GHz—2.48GHz, ISM Band
- Bluetooth protocol: Bluetooth V2.0 protocol standard
- Power Level: Class2 (+6dBm)

- Receiver sensitivity: -85dBm
- Operating Voltage: 3.3V (Threshold voltage: 3.0V~4.2V) With a floor voltage is:3.3V~5V;
- Temperature: -40°C ~~ +105°C
- Reference energy: Waiting for a search is 35 mA Connect on-line is about 8 mA

4. THE Module of basic instructions:

- Use of CSR as a mainstream Bluetooth chip, Protocol standard is Bluetooth V2.0
- The Bluetooth serial port core module is HC-04; working voltage is: 2.7-3.3 V.
- Serial port module backplane HC-04-D with an RS232 interface and TTL interfaces optional use of an interface, use 3.3 to 5V power supply. Serial port is transparent to the users.
- Bluetooth chip is forward error-correcting codes, communication more efficient, automatic frequency-hopping anti-jamming ability.
- Baud rate is 1200,2400,4800,9600,19200,38400,57600,115200,230400,460800,921600, 1382400 Users can set it.
- Size of the core module: 28mm x 15 mm x 2.35mm, Power Supply is 3.3V.
- Size of bottom: 27mm * 47mm (10 of the above can be customized size).
- Reference Current: 35mA/8mA
- Reference Sleep Current: <1mA.
- For the GPS navigation system, utility meter reading systems, industrial control systems on-site
 mining, Bluetooth printer, Bluetooth mobile phones and other wireless modules medical monitoring
 applications.
- With Bluetooth laptop computer to a Bluetooth adapter, PDA and other devices to
- Connect seamlessly.

5. THE Status Description:

- The module is to use points in two ways:
 - In pairs, a master-slave, respectively, then serial port (when shipped with a good right, power to individual modules, Flash slowly for the host, the slave flash for faster). Master and slave does not require drivers when used in pairs, two modules will be able to transmit power.
 - 2 The slave plane is used with the Bluetooth adapter, Bluetooth adapter need driver. This module can be used with notebook, PDA, Bluetooth mobile phones and other equipment directly, matching the password is "1234."
- Module of the LED lights flicker state means that are paired
- Module on the bright LED lights that match long-finished, this time serial feature has already started.
- A master-slave pairs normal use LED lights will not die out. If the master and slave cannot connect caused by far away, then the master and slave flash the lamps have been; when the master and slave near again to the appropriate location, it will return to normal function, this time, the host will automatically and the original from the machine matched pair. If you need to re-pair from the plane, it would take to host module backplane 1, 2 feet short circuit a few seconds (or in between the legs plus keys), this time the host would be to abandon the original allocation from the machine, re-search of new slave.

Note: This description is mainly directed against the Bluetooth serial port module with a

backplane, if it is the core module, the LED lights on the module PIO3 the corresponding pin.

Interface Drawings: (8 PIN interface, from the bottom floor of view, square pad for the first leg).

