

BCM70 BT modul surport Vdd is 3.3V. it's a multifunctional modul, according to the different built-in software, can be applied to a variety of Bluetooth products, especially suitable for only the data transmission products.

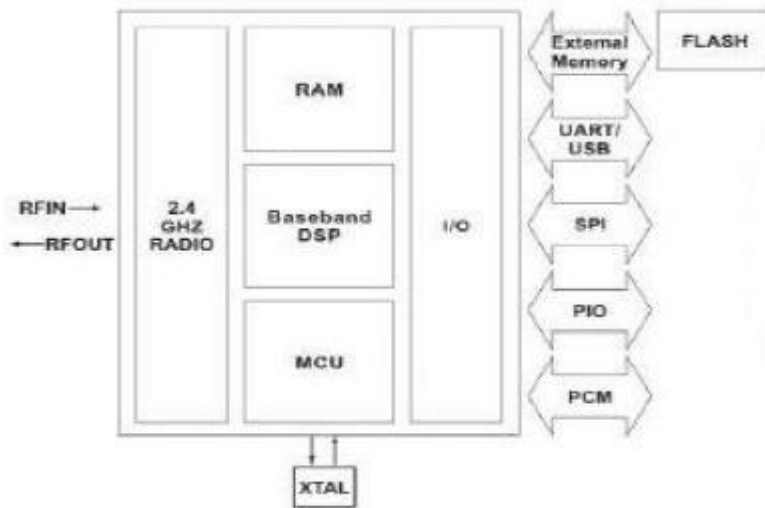
※Technical parameters

- The main chip: BK3231(BlueCore)
- Bluetooth version: V3.0+EDR
- Output power: Class II
- Flash size: 64kbit
- Power supply: 3.3V
- Interface mode: UART
- Size and shape: 27mm*13mm*2.2mm
- RohsStandard: Meet

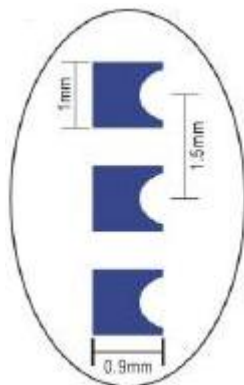
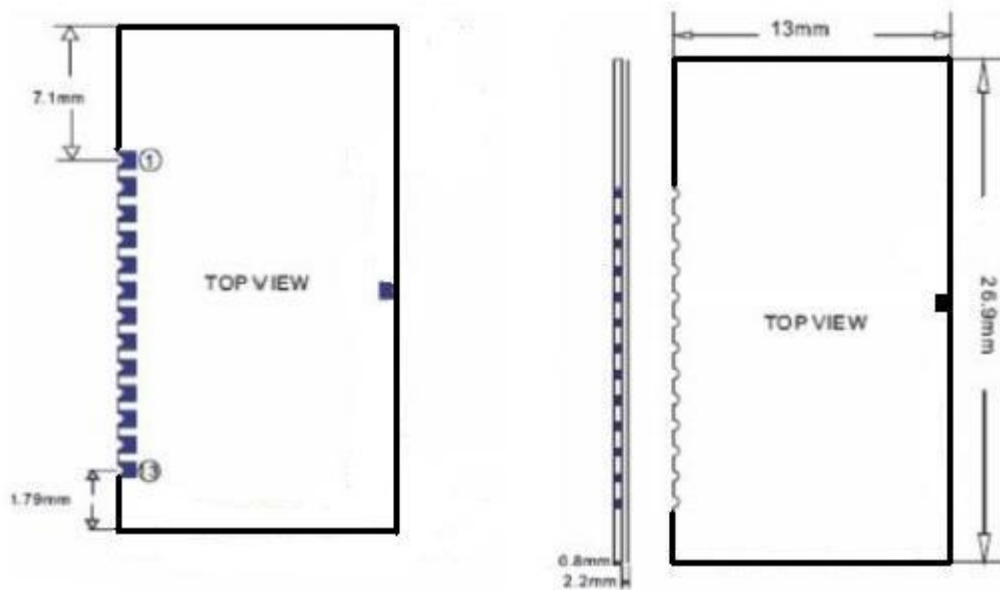
※The scope of application

- Bluetooth GPS
- Auto diagnosis instrument OBDII
- Bluetooth printer
- Bluetooth digital camera
- Bluetooth mouse, Bluetooth Keyboard
- PDAS,PND,PCS
- Game handle
- Bluetooth serial products

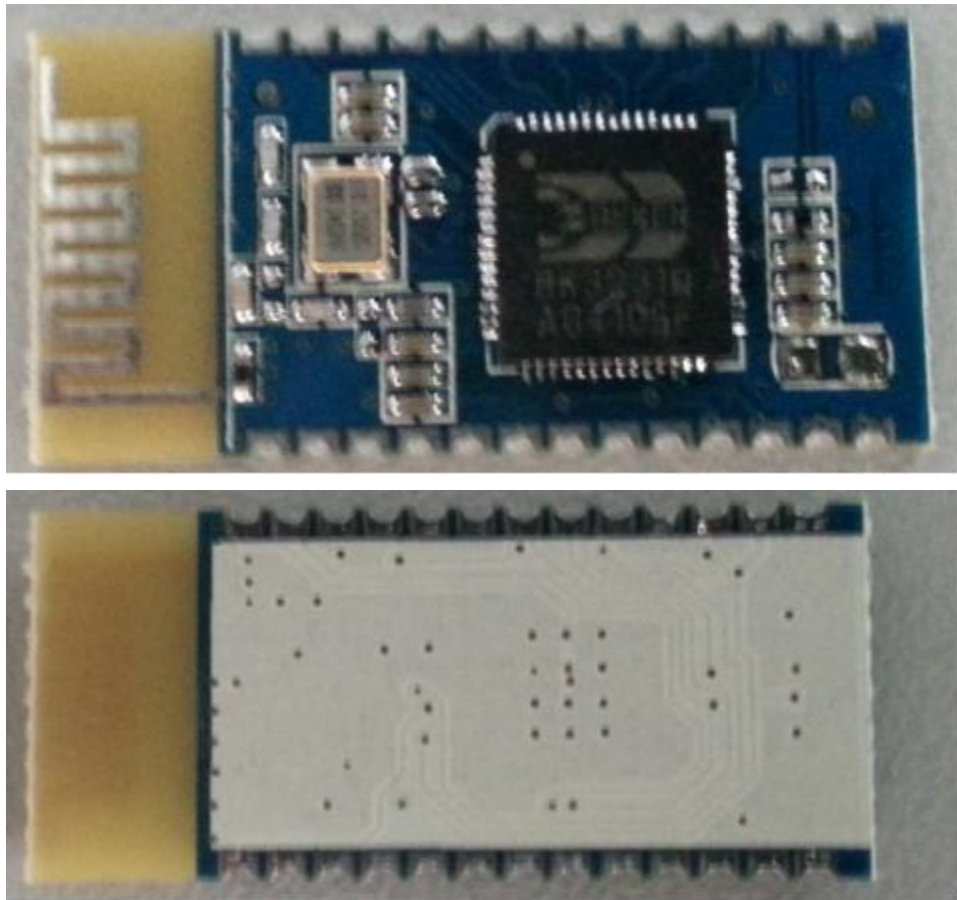
※Principle diagram



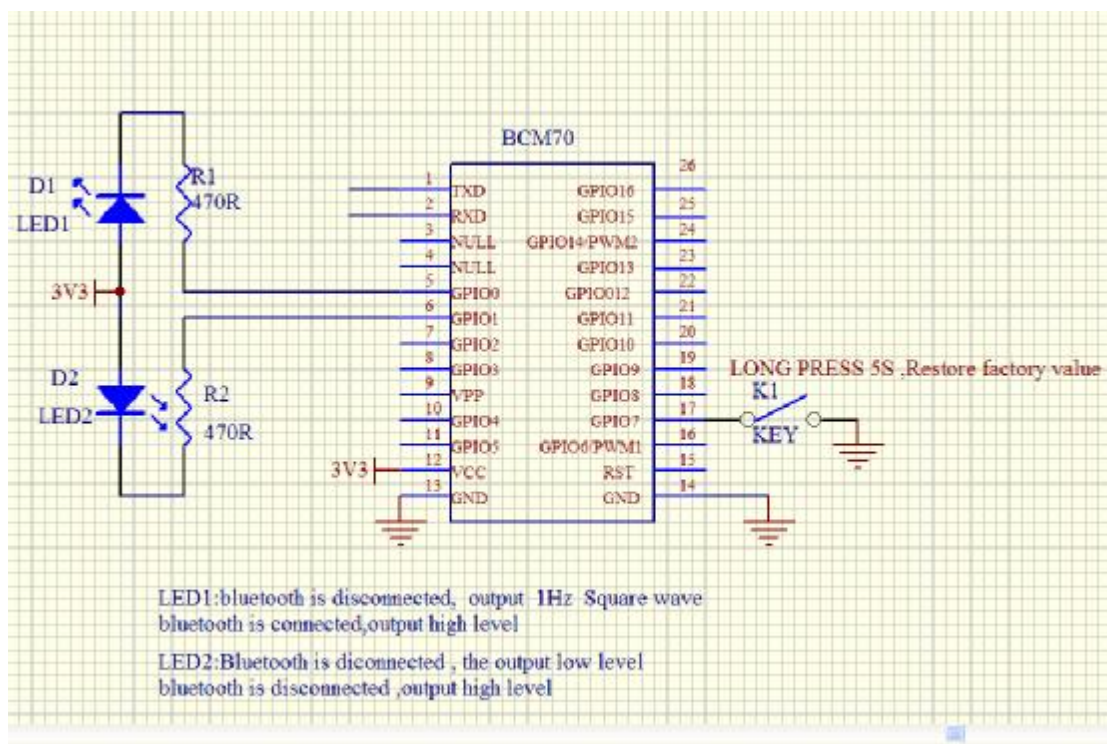
※Outline dimension drawing



※Beautiful picture



※Reference principle diagram



※Pin definition

NO	Function description	NO	Function description
1	UART TXD	14	GND
2	UART RXD	15	RST
3	NULL	16	GPIO 6
4	NULL	17	GPIO7
5	GPIO0	18	GPIO8
6	GPIO1	19	GPIO9
7	GPIO2	20	GPIO10
8	GPIO3	21	GPIO11
9	VPP	22	GPIO12
10	GPIO4	23	GPIO13
11	GPIO5	24	GPIO14
12	3.3V	25	GPIO15
13	GND	26	GPIO16

※Command list

NO	Command	Notes
1	%S:CMDSET:n\$	Enter command set mode
2	%N:xxxx,,,\$	Modification of the Bluetooth name
3	%P:XXXX\$,	Modify the module pairing password
4	%B:X ,Y\$,	Modify the baud rate, parity bit
5	%D:XyXyXyXyXyXy\$,	Modification of the Bluetooth MAC address code
6	%R:RST\$,	Restore factory value
7	%G:GET \$,	Read the current configuration
8	%O:Pxx,Y\$,	The output state is set to IO
9	%I:Pxx\$,	Reads the specified IO state

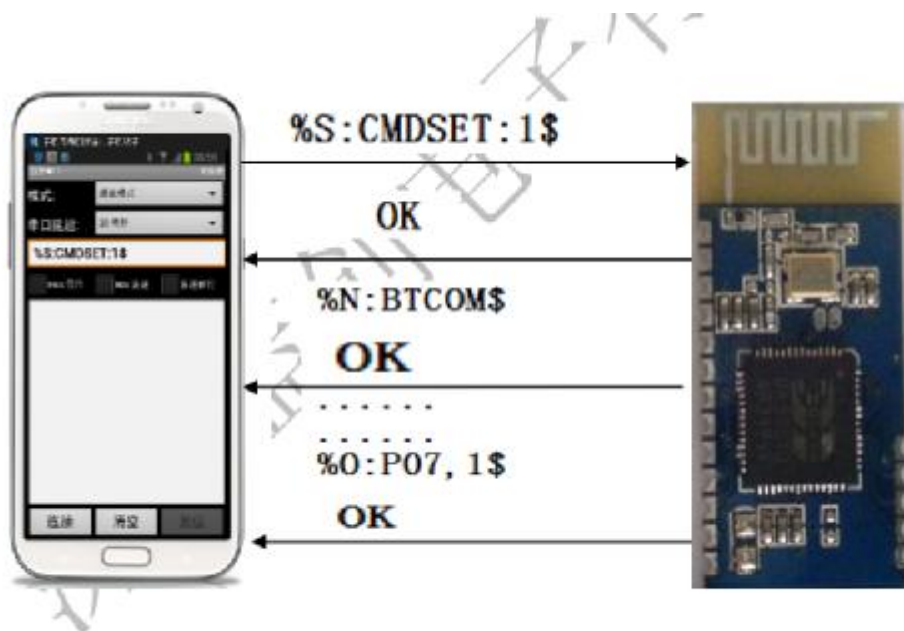
This module provides 9 commands to modify the corresponding configuration module:

Leading character: % End character: \$

Command transmission method 1 (Bluetooth cloud modification):

The Bluetooth module after power on, mobile phone or computer operation a Bluetooth connection, and then use the mobile phone or computer issued relevant commands to the module, module will automatically identify the command, do the relevant changes.

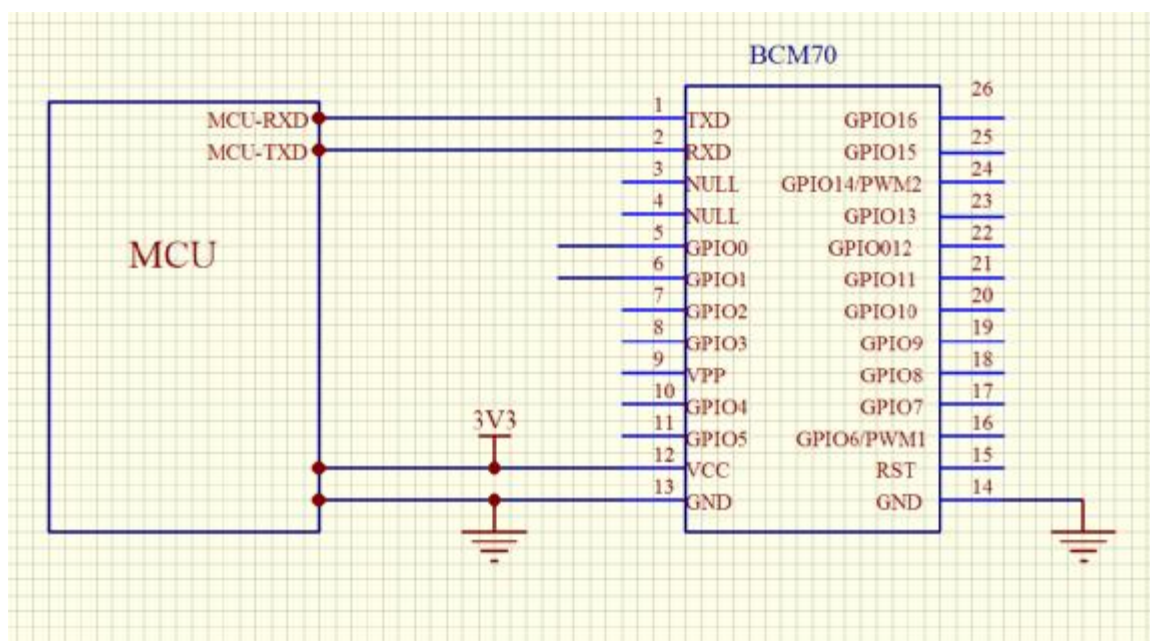
All commands to modify a success, in the next time after power on, will automatically take effect. If there are multiple commands at the same time issued, suggested order between the insertion point delay.



Command transmission method 2 (hardware interface):

The Bluetooth module after power on, no connection, through the computer COM port or MCU issued relevant commands to the module, module will automatically identify the command, do the relevant changes.

All commands to modify a success, in the next time after power on, will automatically take effect. If there are multiple commands at the same time issued, suggested order between the insertion point delay.



////////////////////////////////////

1: Enter command mode

The command format: %S:CMDSET:n\$

S: Is the signature

n: 1, Enter the command set

0, Exit command set

The command to make the module into the command mode, if the 5S is not received within the right set of commands or received the wrong command, it will automatically exit the module. Then enter the command mode, need to repeat the command

Note: the command two to command seven effective acceptance, only when the command one is enabled

The right to accept the return OK

2: Modify name

The command format: %N:xxxx,,,\$

Longest name number is 32, N: is the characteristic code

For example: %N:BTCOM\$

this command is sent to the module, the module name will be modified to BTCOM

The right to accept the return OK

3: Modify Pincode

The command format: %P:XXXX\$,

Password length is 4 bytes, P: is the characteristic code

For example: %P:1234\$

this command is sent to the module, pairing password module changes into 1234.

The right to accept the return OK

4: Modify the baud rate, the module maximum baud rate is 256000

Baud rate does not recommend the use of highest do not exceed 115200, the minimum of not less than 2400, may be relatively large errors

The command format: %B:X ,Y\$,

The range of X 0-B, Y, 0-2

X:

0---300

1---600

2---1200

3---2400

4---4800

5---9600

6---19200

7---38400

8---57600

9---115200

A---128000

B---256000

Y:

0 No parity

1 Odd parity

2 Even parity

For example:%B:7, 0\$

this command is sent to the module, module of the baud rate to 38400, no parity bit (That is:38400,8,n,1)

The right to accept the return OK

5: Modification of the Bluetooth MAC address code

The command format: %D:XyXyXyXyXyXy\$,

D: is the characteristic code

Xy Combined into a 8bit byte, 6 bytes of Bluetooth MAC address code, X: High 4 bits byte, y: The low 4 bits

For example:%D:112233AABBCC\$

this command is sent to the module, Bluetooth MAC address module is modified into 11,22,33, AA, BB, CC, if you use a computer or mobile phone search MAC address code will be displayed.

note: The 12 bit MAC codes are corresponding to the ASCII code, such as 1 ASCII code is 0x31, the command to electric effect! The user terminal re search will find new address codes.

The right to accept the return OK

6: Restore factory configuration

The command format: %R:RST\$,

RST restore factory orders, R: is the characteristic code

For example:%R:RST\$

this command is sent to the module, and then re power, module factory configuration are modified into the following parameters (Factory default configuration parameters)

Baud rate: 19200

Bluetooth name: BTCOM

Pairing password: 1234

Bluetooth address code: 00 0D 18 000001

The right to accept the return OK

7: Get the current module configuration

The command format: %G:GET \$,

G: is the characteristic code

For example, the current configuration:

name: BTCOM

MAC address: 00:0D:18:00:00:01

pincode: 1234

baud rate: 19200,

Parity bit: No Parity

Module return data:

N:BTCOM

MAC:00:0D:18:00:00:01

P:1234

UART:19200,9, No₂,1

The data is returned to the mobile phone or computer virtual serial port.

The right to accept the return OK

8: Write the IO state by the command

The command format: %O:Pxx,Y\$,

O: is the characteristic code

Pxx:The PIN pin

Y: 0 Set low

1 Set high

If the PIN7 pin is high, the command format:%O:P07,1\$,

If the PIN7 pin is low, the command format:%O:P07,0\$,T

he right to accept the return OK

Note: This module is only PIN7,8,16,17, 18,19,20,21,22,23,24,25,26

these feet IO can command control, these are the default is low.

9: Read the IO state by the command

The command format:%I:Pxx\$,

I: is the characteristic code

Pxx: the PIN

This module supports PIO10, PIO11 as the state reading entrance

If you read the PIN10 state, the command format:%I:P10\$,

Return to the state if it is high level,:%I:P10,1\$,

Return status if it is a low level,:%I:P10,0\$,

If you read the PIN11 state, the command format:%I:P11\$,

Return to the state if it is high level,:%I:P11,1\$,

Return status if it is a low level,:%I:P11,0\$,

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