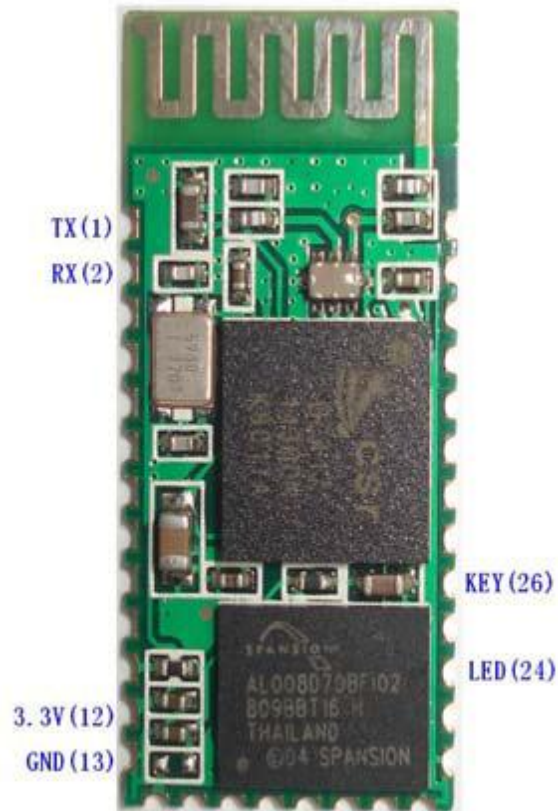


## Bluetooth Module ZT6

- Master and slave mode can't be switched
- Bluetooth name: linvor
- Password: 1234
- Master role: have paired memory to remember last slave device and only make pair with that device unless KEY (PIN26) is triggered by high level. The default connected PIN26 is low level.
- Pairing: Master device search and make pair with the slave device automatically. Typical method: On some specific conditions master and slave device can make pair with each other automatically.
- Multi-device communication: There is only point to point communication for modules, but the adapter can communicate with multi-modules.
- AT Mode: Before paired, it is at the AT mode After paired it's at transparent communication
- During the communication mode, the module can't enter to the AT mode.
- Default communication baud rate: 9600, 1200-1.3M are settable.
- KEY: PIN26, for master abandons memory
- LED: The flicker frequency of slave device is 102ms. If master device already has the memory of slave device, the flicker frequency during the pairing is 110ms/s. If not, or master has emptied the memory, then the flicker frequency is 750m/s. After pairing, no matter it's a master or slave device, the LED PIN is at high level Notice: The LED PIN connects to LED+ PIN.
- Consumption: During the pairing, the current is fluctuant in the range of 30-40 m. The mean current is about 25mA. After pairing, no matter processing communication or not, the current is 8mA. There is no sleep mode. This parameter is same for all the Bluetooth modules.
- Reset: PIN11, active if it's input low level. It can be suspended in using.
- Level: Civil



### **AT command set(ZT6)**

The way to the AT command mode: supply power to the module, it will enter to the AT mode if it needn't pair. The interval of command is about 1 second. Default parameter: Baud rate:9600N81, ID: linvor, Password:1234

- **Test communication**

Send: AT (please send it every second)

Back: OK

- **Reset the Bluetooth serial baud rate**

Send: AT+BAUD1

Back: OK1200

Send: AT+BAUD2

Back: OK2400

.....

1-----1200

2-----2400

3-----4800

4-----9600 (Default)

5-----19200  
6-----38400  
7-----57600  
8-----115200  
9-----230400  
A-----460800  
B-----921600  
C-----1382400

PC can't support the baud rate larger than 115200. The solution is: make the MCU have higher baud rate (larger than 115200) through programming, and reset the baud rate to low level through the AT command. The baud rate reset by the AT command can be kept for the next time even though the power is cut off.

- **Reset the Bluetooth name**

Send: AT+NAMEname

Back: OKname

Parameter name: Name needed to be set (20 characters limited)

Example:

Send: AT+NAMEbill\_gates

Back: OKname

Now, the Bluetooth name is reset to be "bill\_gates" The parameter can be kept even though the power is cut off. User can see the new Bluetooth name in PDA refresh service. (Note: The name is limited in 20 characters.)

- **change the Bluetooth pair password**

Send: AT+PINxxxx

Back: OKsetpin

Parameter xxxx: The pair password needed to be set, is a 4-bits number. This command can be used in the master and slave module. At some occasions, the master module may be asked to enter the password when the master module tries to connect the slave module (adapter or cell-phone). Only if the password is entered, the successful connection can be built. At the other occasions, the pair can be finish automatically if the master module can search the

proper slave module and the password is correct. Besides the paired slave module, the master can connect the other devices who have slave module, such as Bluetooth digital camera, Bluetooth GPS, Bluetooth serial printer etc.

Example:

Send: AT+PIN8888

Back: OKsetpin

Then the password is changed to be 8888, while the default is 1234.

This parameter can be kept even though the power is cut off.

- **No parity check ( The version, higher than V1.5, can use this command )**

Send: AT+PN (This is the default value)

Back: OK NONE

- **Set odd parity check ( The version, higher than V1.5, can use this command )**

Send: AT+PO

Back: OK ODD

- **Set even parity check( The version, higher than V1.5, can use this command )**

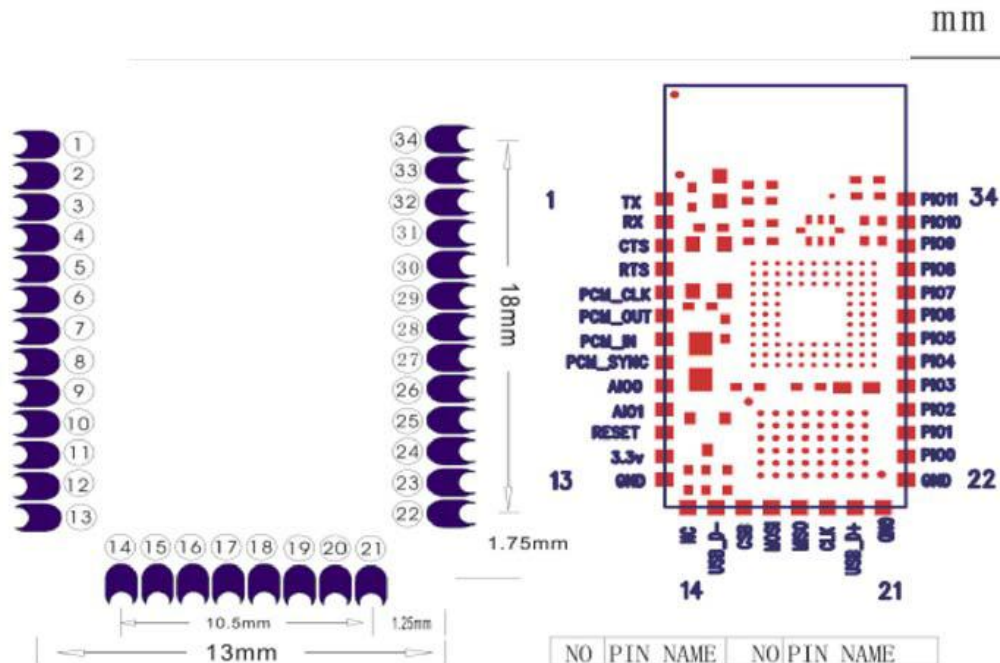
Send: AT+PE

Back: OK EVEN

- **Get the AT version**

Send: AT+VERSIO

Back: LinvorV1.n



NO	PIN NAME	NO	PIN NAME
1	TX	20	USB D+
2	RX	21	GND
3	CTS	22	GND
4	RTS	23	PI00
5	PCM_CLK	24	PI01
6	PCM_OUT	25	PI02
7	PCM_IN	26	PI03
8	PCM_SYNC	27	PI04
9	AI00	28	PI05
10	AI01	29	PI06
11	RESET	30	PI07
12	3.3V	31	PI08
13	GND	32	PI09
14	NC	33	PI010
15	USB D-	34	PI011
16	CSB		
17	MOSI		
18	MISO		
19	CLK		

PCB Layout 请参考实物

#### 4. The Using and Testing Method of ZT6 for the First Time

This chapter will introduce the using method of ZT6 in detail. User can test the module

according to this chapter when he or she uses the module at the first time.

- PIN1 > UART\_TXD , TTL/CMOS level, UART Data output
- PIN2 > UART\_RXD, TTL/COMS level, s UART Data input
- PIN11 > RESET, the reset PIN of module, inputting low level can reset the module when the module is in using, this PIN can connect to air.
- PIN12 > VCC, voltage supply for logic, the standard voltage is 3.3V, and can work at 3.0-4.2V
- PIN13 > GND
- PIN22 > GND
- PIN24 > LED, working mode indicator Slave device: Before paired, this PIN outputs the period of 102ms square wave. After paired, this PIN outputs high level Master device: On the condition of having no memory of pairing with aslave device, this PIN outputs the period of 110ms square wave. On the condition of having the memory of pairing with a slave device, this PIN outputs the period of 750ms square wave. After paired, this PIN outputs high level.
- PIN26 > For master device, this PIN is used for emptying information about pairing. After emptying, master device will search slaver randomly, then remember the address of the new got slave device. In the next power on master device will only search this address.

