Modules Dual Mode Bluetooth (SPP+BLE) Module User Manual

Modules Dual Mode Bluetooth (SPP+BLE) Module User Manual

Dual Mode Bluetooth (SPP+BLE) Module

JDY-32 Bluetooth User Manual

Version

Version	Date	Description
V1.0	2018-05-08	Release version

Contents [hide

1 1. Product introduction:
2 2. Applications:
3 3. Pin function description
4 4. Serial AT instruction set
5 Documents / Resources
6 Related Posts

1. Product introduction:

JDY-32 dual-mode Bluetooth is based on Bluetooth 3.0 SPP + Bluetooth 4.2 BLE design, which can support Windows, Linux, iOS, android data transmission, working frequency 2.4GHZ, modulation mode GFSK, maximum transmission power 5db, maximum transmission distance 40 meters, Support users to modify the device name, baud rate and other commands through the AT command, which is convenient and quick to use.

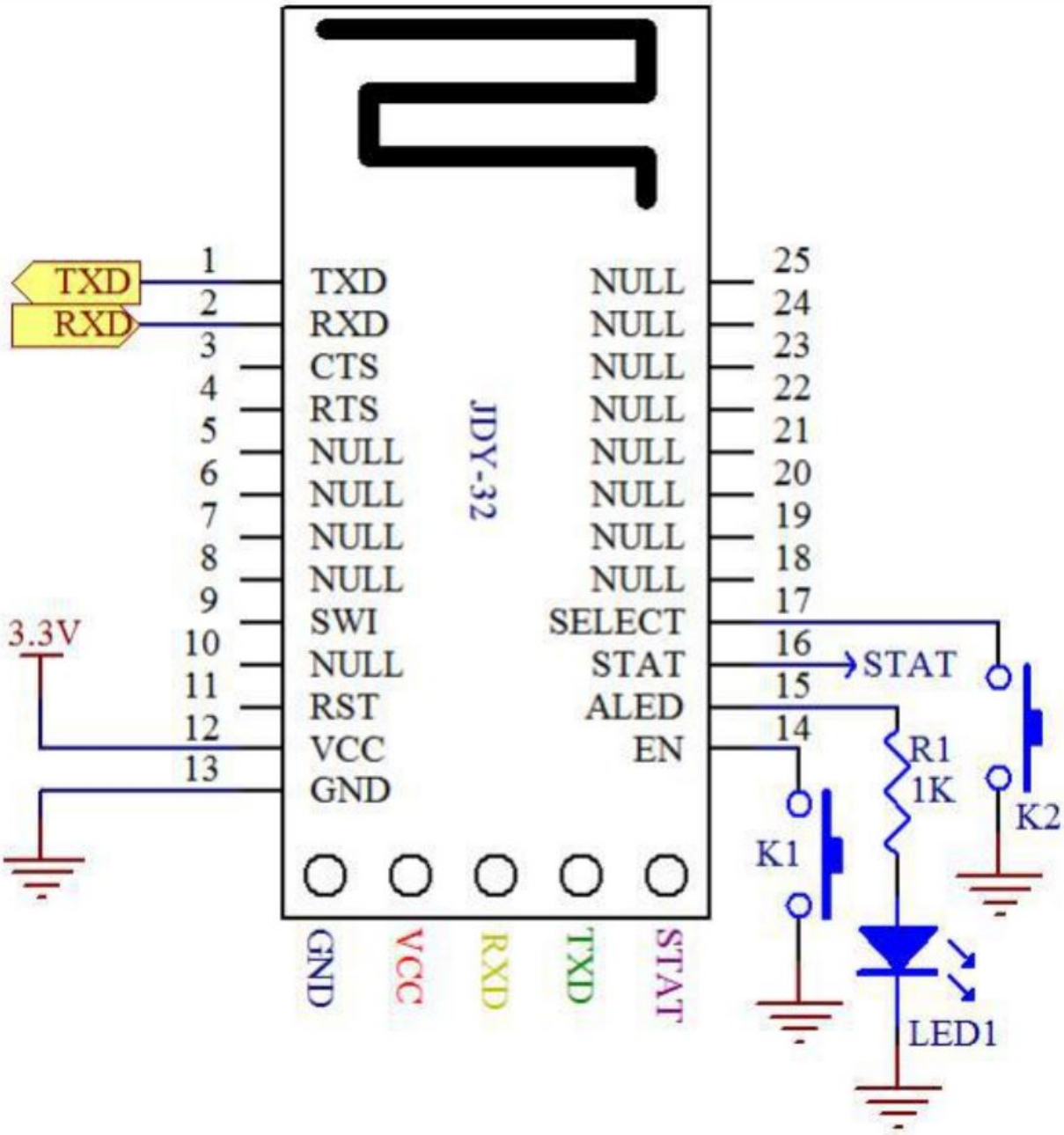
2. Applications:

JDY-32 is a classic Bluetooth protocol that can communicate with Bluetooth-enabled computers (desktops, notebooks) and mobile phones (android). Can be applied

- Windows computer Bluetooth serial port transparent transmission
- Android Bluetooth serial port transparent transmission
- Smart home control
- Automotive ODB testing equipment
- Bluetooth toy
- Share mobile power, share weight
- Medical equipment

Model	JDY-32
Working frequency	2.4GHZ
Communication Interface	UART
Operating Voltage	1.8-3.6V (3.3V recommended)
Operating temperature	-40 ° C - 80 ° C
Antenna	Built-in PCB antenna
Transmission distance	40 m
Master-slave support	Slave
Module size	19.6 * 14.94 *1.8 mm (length, width, height)
Bluetooth version	Bluetooth 4.2 BLE/Bluetooth 3.0 SPP
SMT soldering temperature	<260° C
Broadcast current	4.4mA
BLE connected current	3.8mA
SPP connected current	12mA
Transmit power	5db (maximum)
Receiving sensitivity	-97dbm

3. Pin function description


TXD
RXD
3.3V
1
2
3
4
5
6
7
8
9
10
11
12
13
TXD
RXD
CTS
RTS
NULL
NULL
NULL
NULL
SWI
NULL
RST
VCC
GND
JDY-32
25
24
23
22
21
20
19
18
17
16
15
14
NULL
NULL
NULL
NULL
NULL
NULL
NULL
NULL
SELECT
STAT
ALED
EN
STAT
R1
1K
K1
K2
LED1
GND
VCC
RXD
TXD
STAT

12.8778mm
27mm
JDY-32
2.794mm
1.295mm

STATE	Connection status pin (not connected low, high level after connection)
RXD	Serial input pin (TTL level)
TXD	Serial output pin (TTL level)
GND	Power ground
VCC	Power supply (support 3.6-6V)
EN	Vacant

PIN	Pin Function	Pin function description
1	TXD	Serial output pin (TTL level)
2	RXD	Serial input pin (TTL level)
3	CTS	
4	RTS	
5	NULL	
6	NULL	
7	NULL	
8	NULL	
9	SWI	

10	NULL	
11	RST	Reset (active low)
12	VCC	Power supply (1.8-3.6V)
13	GND	Ground
14	EN	
15	ALED	Broadcast status pin (not connected to flash, output high level after connection)
16	STAT	Connection status pin (not connected low level, output high level after connection)
17	SELECT	AT command pin (only valid after connection, low level enters AT command mode after connection, high level is transparent mode), no state of SELECT pin in unconnected state
18	NULL	
19	NULL	
20	NULL	
21	NULL	
22	NULL	
23	NULL	
24	NULL	
25	NULL	

4. Serial AT instruction set

JDY-32 module serial port send AT command must be added run

Num.	Command	Function	Default
1	AT+VERSION	Version number	JDY-32-V1.0
2	AT+RST	Soft reset	
3	AT+DISC	AT command disconnected	
4	AT+MAC	Query the MAC address of BLE	
5	AT+MACS	Query the MAC address of the SPP	
6	AT+BAUD	Baud rate	9600
7	AT+NAME	BLE broadcast name settings and queries	JDY-32-LE
8	AT+NAMES	SPP broadcast name setting and query	JDY-32-SPP
9	AT+TYPE	SPP password connection type	2
10	AT+PIN	SPP connection password	1234
11	AT+DEFAULT	Reset	

1. Query the version number Command

Command	Response	Parameter
AT+VERSION	+VERSION=JDY-19-V1.0	NO

2. Reset

Command	Response	Parameter
AT+RST	OK	NO

3. Disconnect

Command	Response	Parameter
AT+DISC	OK	NO

4. BLE Bluetooth MAC Address

Command	Response	Parameter
AT+MAC	+MAC=1334ab52de8c	NO

5. SPP Bluetooth MAC address

Command	Response	Parameter
AT+MACS	+MAC=1334ab52de8c	NO

6. Baud rate setting / query

Command	Response	Parameter
AT+BAUD<Param>	+OK	Param: (1 to 4)
AT+BAUD		1:9600 2:19200 3:38400 4:57600 5:115200

7. BLE broadcast name setting / query

Command	Response	Parameter
AT+NAME<Param>	OK	Param: BLE broadcast name Longest: 18 bytes Default broadcast name: JDY-32-LE
AT+NAME	+NAME=<Param>	

8. SPP Broadcast name setting / query

Command	Response	Parameter
AT+NAME<Param>	OK	Param: BLE broadcast name Longest: 18 bytes Default broadcast name: JDY-32-SPP
AT+NAME	+NAME=<Param>	

9. SPP password pairing type

Command	Response	Parameter
AT+TYPE<Param>	OK	Param: (0-2) 0: No password is required for connection 1: You need to enter a password for each connection. 2: The first connection requires a password
AT+TYPE	+TYPE=<Param>	

10. SPP connection password

Command	Response	Parameter
AT+PIN<Param>	OK	Param: The password is 4 digits. Default password: 1234
AT+PIN	+PIN=<Param>	

11.Reply to factory configuration

Command	Response	Parameter
AT+DEFAULT	OK	NO

Documents / Resources

	Modules Dual Mode Bluetooth (SPP+BLE) Module [pdf] User Manual Dual Mode Bluetooth SPP BLE, Module, JDY-32 Bluetooth