# NORDIC NRF51822 BLE4.0



# Low power Bluetooth BLE4.0 main module TTL serial port transparent transmission Nordic igyro nRF51822

#### **Characteristics:**

- 1.Transparent transmission mode, using standard UART (TTL) interface, the module only performs data transfer, two-way data transmission and reception, without any agreement
- 2. Support serial to order, user can change module serial port baud rate (default 115200bps), bluetooth name, bluetooth MAC address and other basic parameters;
- 3. Serial port hardware allows control, open on demand, very suitable for low power control applications;
- 4. Supports any serial port data packet length, unlimited, free to transfer any product data
- 5.Can be used as ibeacon product application, can change the thrust content by serial port

6.Long communication distance: 30 meters

7. High communication rate: up to 6 Kbyte / s

8. Wide supply voltage: 1.8 ~ 3.6V

9.Low power consumption: minimum less than 1uA

10.Module size: 15.2 \* 15.7mm

11. Working temperature: -20 ° C ~ 75 ° C

## **Product Application**

1.sensor data acquisition application

2. control and monitoring of industrial machines

3. Position machine data transmission

4. wireless keyboard, wireless mouse, gamepad;

5. light control system;

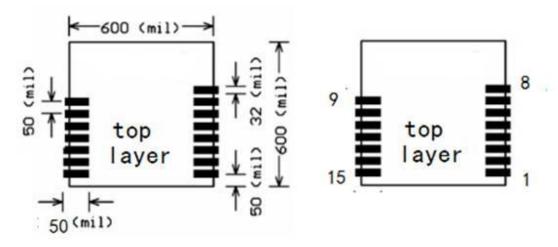
6. intelligent home control system;

7. Anti-lost device;

8.ibeacon application

9. Related cell phone accessories

## Definition of size and spindle



#### **Arrangements**

管	1/0 口号	输入/输	定义	功能说明
脚		出		
1	PO. 08	输出	UART_TX	串口数据输出管脚
2	PO. 09	输入	UART_RX	串口数据接收管脚
3	PO. 12	輸出	BLE_SATE	蓝牙状态指示管脚,如果接led请串联
				电阻,否则容易由于电流过大造成模块
				损坏。
				配对搜索模式:蓝牙状态指示管脚以大
				约100ms 周期电平取反输出;可通过
				START_PAIRING 管脚控制进入此模式,
				在此模式下主模块会去搜索一定范围
				内的从模块(故可以把一个从模块靠近
				主模块,进行靠近配对),当搜索到从
				模块之后就会去配对连接,并且绑定记
				录从模块的 <sub>现象。</sub> 地址。
				绑定搜索模式(已经配对): 蓝牙状态
				│指示管脚以大约100ms周期电平取反输
				出;当主模块已经配对连接时,如果断
				开连接或者重新上电,就会进入此模
				式,会自动去连接绑定记录的从模块。
				这两种搜索模式连接上之后,蓝牙状态
				指示管脚都为高电平
4	SWDIO(RESET)			烧录数据管脚,非烧录时是复位脚
5	SWCLK			<b>烧录时钟管脚</b>

6	PO.17	输入(弱	START_PAIRING	启动进入配对搜索模式管脚,低电平有
		上拉)		效,可接按键,检测到按键按下超过
				200ოs,且按键放开后,不管模块处于
				何种状态,都开始配对搜索
7	PO.18			
8	PO. 19			
9	GND			电源地
10	VCC			供电管脚(1.8Y~3.6V)
11	PO. 25			
12	PO. 26			
13	PO.27			
14	PO. 28	输入	UART_BAUD_SELO	串口波特率选择管脚(两个管脚都悬空
				默认波特率为115200)
				UART_BAUD_SEL1 : UART_BAUD_SEL0
				00:9600
				01:19200
				10:38400
				11:115200