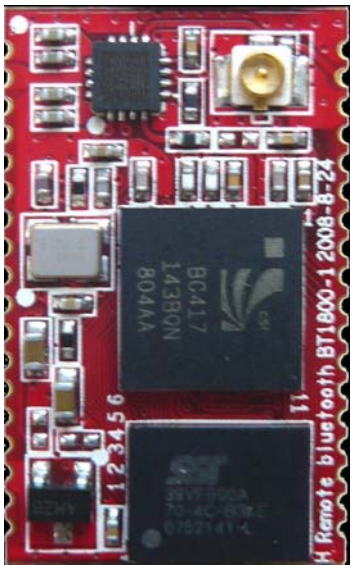
BT1800-1 蓝牙模块

描述



采用世界领先的蓝牙芯片供应商CSR的BlueCore4-Ext（BC417143B-IQN-E4）芯片，完全兼容蓝牙2.0规范，支持数据和语音传输，最高可支持3M数据传输，语音接口支持PCM协议。超性能BC04 Class1蓝牙模块，高收、发灵敏度，低功耗，尺寸小。空旷、无遮挡、对等条件下传输距离可达1800米，内置微型天线接口，可直接外接2.4GHz天线。

特征

- 工作频段： 2.40 GHz～2.48GHz
- 蓝牙规范： v2.0 Compliant + EDR
- EDR V2.0，最高可支持3M数据传输
- 支持USB或SPI接口软件升级
- 支持7 个 从设备
- USB和UART外部接口接口
- PCM 音频接口
- 低电压电源，2.7V to 3.6V
- 正常供给电压：3.3±0.1V
- 内置 8Mbit Flash
- 支持低耗模式: Park, Sniff, Hold 和 Deep Sleep
- 工业级设计
- 尺寸: 25.2 x 15.5 x 3 mm

应用

- 电脑, PDAs
- 电脑部件 (CF 卡, USB 适配器，PCMCIA, RS232适配器等)
- 鼠标，键盘
- 蓝牙话筒、蓝牙音响、蓝牙音频发送与接收
- 传真，打印机适配器
- 数码照相机
- 远距离蓝牙仿真串口
- 车载免提、车载GPS蓝牙接口

管脚描述

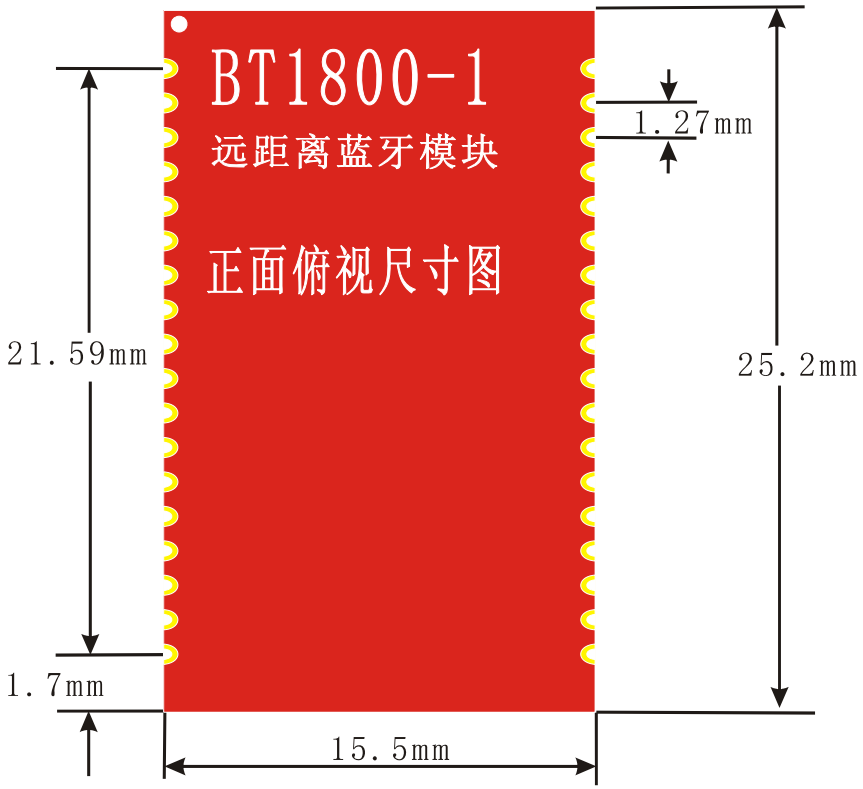
管脚	名称	类型	描述
1	AGND	GND	Ground
2	VPA	Power Supply	3V3 for power amplifier
3	PIO11	Bi-directional with programmable strength internal pull-up/down	Programmable Input/Output Line
4	AIO0	Bi-directional	Programmable Input/Output line
5	AIO1	Bi-directional	Programmable Input/Output line
6	RESET	CMOS input with weak internal pull-up	internal pull-up Reset if low. Input debounced so must be low for >5ms to cause a reset
7	SPI_MISO	CMOS output, tri-state, with weak internal pull-down	Synchronous Serial Interface Data Input
8	SPI_CSB	CMOS input with weak internal pull-up	Chip select for Synchronous Serial Interface
9	SPI_CLK	CMOS input with weak internal pull-down	Synchronous Serial Interface Clock
10	SPI_MOSI	CMOS input with weak internal pull-down	Synchronous Serial Interface Data Input
11	UART_CTS	CMOS input with weak internal pull-down	UART clear to send
12	UART_TX	CMOS output, tri-state,	Asynchronous Serial Data

		with weak internal pull-up	Output
13	UART_RTS	CMOS output, tri-state, with weak internal pull-up	UART ready to send
14	UART_RX	CMOS input with weak internal pull-down	Asynchronous Serial Data
15	PIO10	Bi-directional with programmable strength internal pull-up/down	Programmable Input/Output Line
16	3.3V	Power Supply	3V3 for RF circuit
17	GND	GND	Ground
18	PIO0	Bi-directional with programmable strength internal pull-up/down	Programmable Input/Output Line
19	PIO1	Bi-directional with programmable strength internal pull-up/down	Programmable Input/Output Line
20	PCM_OUT	CMOS output, tri-state, with weak internal pull-down	Synchronous Data Output
21	PCM_SYNC	Bi-directional with weak internal pull-down	Synchronous Data Strobe
22	PCM_IN	CMOS input, with weak internal pull-down	Synchronous 8kss data out
23	PCM_CLK	Bi-directional with weak internal pull-down	Synchronous Data Clock
24	USB_DP	Bi-directional	USB Data+
25	USB_DN	Bi-directional	USB Data-
26	PIO7	Bi-directional with programmable strength internal pull-up/down	Programmable Input/output line
27	PIO6	Bi-directional with programmable strength internal pull-up/down	Programmable input/output line
28	PIO5	Bi-directional with programmable strength internal pull-up/down	Programmable input/output line
29	PIO4	Bi-directional with programmable strength internal pull-up/down	Programmable input/output line
30	PIO3	Bi-directional with programmable strength internal pull-up/down	Programmable Input/Output Line
31	PIO2	Bi-directional with programmable strength internal pull-up/down	Programmable Input/Output Line
32	PIO9	Bi-directional with programmable strength internal pull-up/down	Programmable Input/Output Line
33	PIO8	Bi-directional with programmable strength internal pull-up/down	Programmable Input/Output Line
34	GND	GND	Ground

35	ANT	I/O	Transmitter out and receiver input
36	GND	GND	Ground

模块特征

- 外形尺寸



- 电气特征

输入/输出特性

数值端	最小	种类	最大	单位
Input Voltage Levels				
VIL input logic level low 2.7V ≤ VDD ≤ 3.0V	-0.4	-	+0.8	V
VIH input logic level high	0.7VDD	-	VDD+0.4	V
Output Voltage Levels				

VOL output logic level low (Io = 4.0mA), 2.7V ≤ VDD ≤ 3.0V	-	-	0.2	V
VOH output logic level high (Io = -4.0mA), 2.7V ≤ VDD ≤ 3.0V	VDD-0.2	-	-	V
Input and Tri-state Current with				
Strong pull-up	-100	-40	-10	μA
Strong pull-down	+10	+40	+100	μA
Weak pull-up	-5.0	-1.0	-0.2	μA
Weak pull-down	+0.2	+1.0	+5.0	μA
I/O pad leakage current	-1	0	+1	μA
CI Input Capacitance	1.0	-	5.0	pF

输入/输出端特性（延续的）

USB 端	**最小**	**种类**	**最大**	**单位**
VDD_USB for correct USB operation（1）	3.1	-	3.6	V
Input threshold				
VIL input logic level low	-	-	0.3VDD_USB	V
VIH input logic level high	0.7VDD_USB	-	-	V
Input leakage current				
VSS_PADS < VIN < VDD_USB(1)	-1	1	5	μA
CI Input capacitance	2. 5	-	10.0	pF
Output Voltage levels To correctly terminated USB Cable				
VOL output logic level low	0.0	-	0.2	V
VOH output logic level high	2.8	-	VDD_USB	V

● 最大绝对额定值

关于供电电压和各数字、模拟针脚的电压下表已经列出，超出这些值将损坏模块。

参数	**最小**	**最大**	**单位**
Peak current of power supply	0	75	mA
Voltage at digital pins	-0.3	3.6	V
Voltage at POWER pin	2.7	3.6	V

联系方式：

- **深圳蓝色飞舞科技有限责任公司**

  电话：0755-29739852

  传真：0755-86017852

  邮箱：lanxunlanya@163.com　　xiaowuyeah@163.com(技术)

  业务 QQ：282697574

  Http://www.lanwind.com