BT04A

承 认 书

SPECIFICATION FOR APPROVAL

Bluetooth module/蓝牙模块

客　　户：
CUSTOMER：_____
产品描绘：
ESCRIPTION：_____
机种型号：
OUR MODEL NO：_____
样品编号：
SAMPLE NO：_____
日期：
DATE：_____

APPROVAL SIGNATURE/客户确认		
APPROVED BY/核准	CHECKED BY/审核	TESTED BY/检测

Manufacturer/制造商		
SALES/业务	APPROVED BY/核准	Quality/品质

BT04A

Bluetooth Module Datasheet

Contents

BT04A

1. Device Features

- **Bluetooth Spec v2.0+EDR Compliant**
- **Enhanced Data Rate (EDR) compliant with V2.0.E.2 of specification for both 2Mbps and 3Mbps modulation modes**
- **Class 2 type Output Power**
- **Full Speed Bluetooth Operation with Full Piconet Support Support**
- **3.3V operation**
- **Minimum External Components**
- **USB,UART,SPI,PCM interface**
- **Support for 8Mbit External Flash Onboard**
- **Support for 802.11Co-Existence**
- **RoHS Compliant**

2. Applications

- **Bluetooth carkit**
- **PCs**
- **Personal Digital Assistants (PDAs)**
- **Computer Accessories (compact Flash Cards, PCMCIA Cards, SD Cards and USB Dongles)**
- **Acess Points**
- **Digital Cameras**

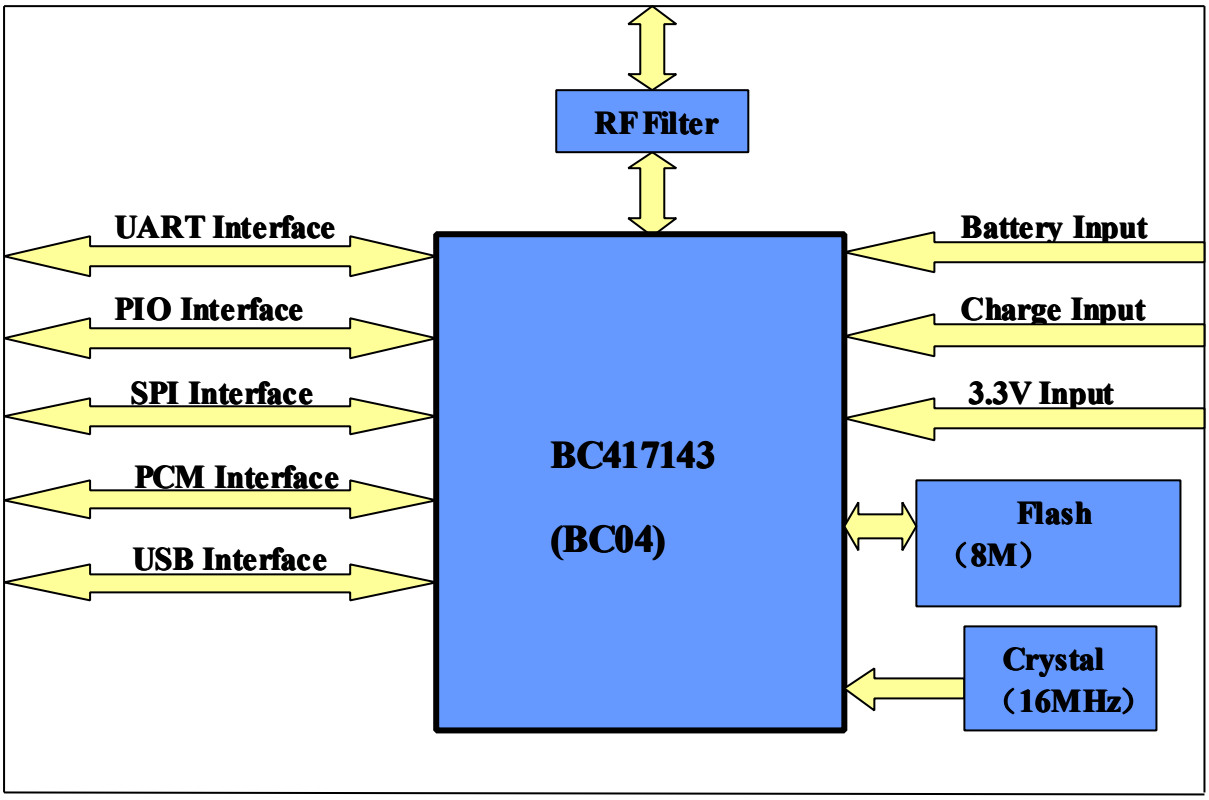
3. General Description

BT04A interfaces up to 8Mbit of 16-bit external Flash memory.When used with the CSR Bluetooth software stack, it provides a Bluetooth specification V2.0+EDR fully compliant system for data and voice communications .

4. Key Features

Operating Frequency Band	2.402GHz -2.480GHz ISM band
Bluetooth Specification	V2.1+EDR
Theoretical range in open field	Bluetooth Class II
Transmitter Power	+4dBm (Typical)
Host Interface	USB 1.1/2.0 or UART
Audio Interface	PCM and Analog interface
Power Supply	3.3V
Dimension	26.9mm (L) x 13 (W) mm x 2.2mm (H)
Specifications are subject to change without prior notice	

5. Block Diagram



6. Electrical Characteristic

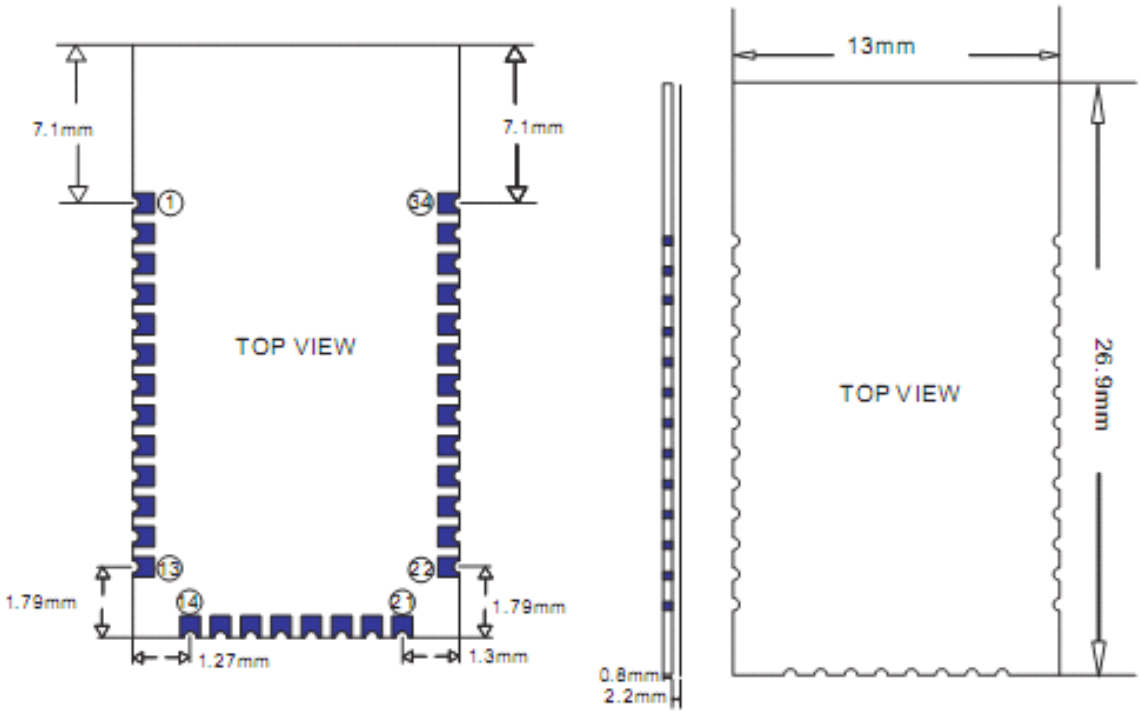
6.1 Absolute Maximum Ratings

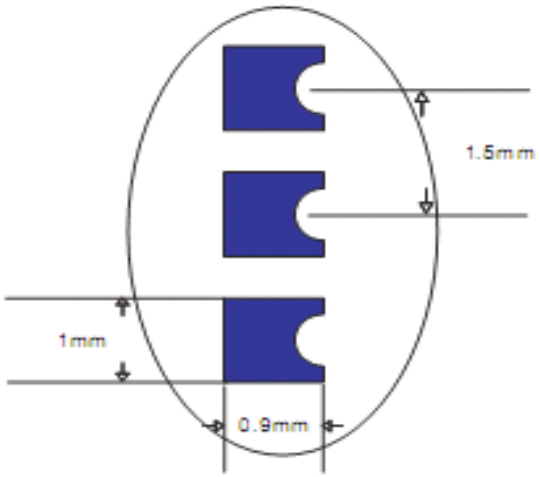
Rating	Min	Max
Storage temperature	-40℃	+150℃
Supply voltage: VBAT	-0.4V	5.6V
Other terminal voltages	VSS-0.4V	VDD+0.4V

6.2 Recommend operation conditions

Operating Condition	Min	Max
Operating temperature range	-40℃	+150℃
Guaranteed RF performance range	-40℃	+150℃
Supply voltage: VBAT	2.2V	4.2V

7.Mechanical Dimensions





8. Pin Definition Descriptions

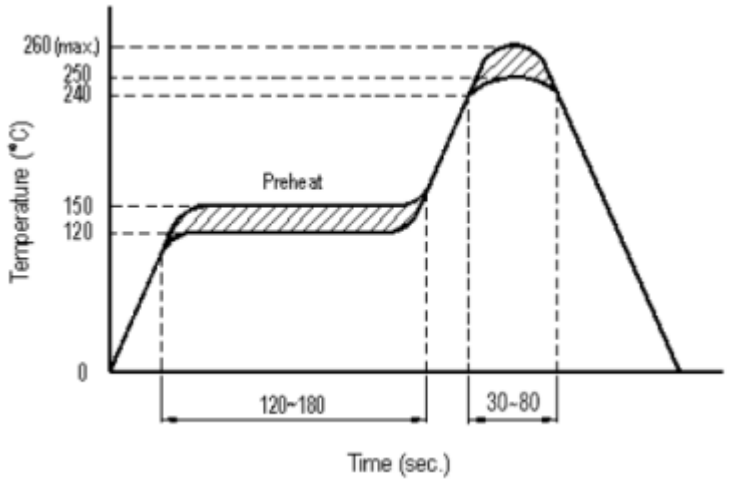
Pin NO.	Pin Name	Pin Descriptions
1	UART _TX	UART data output active High
2	UART _RX	UART data input active High
3	UART _CTS	UART clear to send active low
4	UART _RTS	UART request to send active low
5	PCM_CLK	Synchronous data clock, with weak internal pull-down
6	PCM_OUT	Synchronous data clock, with weak internal pull-down
7	PCM_IN	Synchronous data clock, with weak internal pull-down
8	PCM_SYNC	Synchronous data clock, with weak internal pull-down
9	AIO0	Programmable Input/Output Line
10	AIO1	Programmable Input/Output Line
11	RESETB	Reset if low.Input debounced so must be low for>5ms to cause a reset
12	3.3V	Power supply voltage 3.3V
13	GND	Power Ground
14	GND	Power Ground
15	USB_N	Blue USB data minus
16	SPI_CSB	Chip select for serial peripheral interface, active low
17	SPI_MOSI	Serial peripheral interface data input
18	SPI_MISO	Serial peripheral interface data output
19	SPI_CLK	Serial peripheral interface clock
20	USB_P	Blue USB data plus with selectable internal 1.5KΩ pull-up resistor
21	GND	Power Ground
22	GND	Power Ground
23	PIO0	Control output for external LNA (if fitted)
24	PIO1	Control output for external PA (if fitted)
25	PIO2	Programmable Input/Output Line

26	PIO3	Programmable Input/Output Line
27	PIO4	Programmable Input/Output Line or optional BT_Priority/CH_Clk output for co-
28	PIO5	Programmable Input/Output Line or optional BT_Active output for co-existence
29	PIO6	Programmable Input/Output Line or optional WLAN_Active/Ch_Data input for co-
30	PIO7	Programmable Input/Output Line
31	PIO8	Programmable Input/Output Line
32	PIO9	Programmable Input/Output Line
33	PIO10	Programmable Input/Output Line
34	PIO11	Programmable Input/Output Line

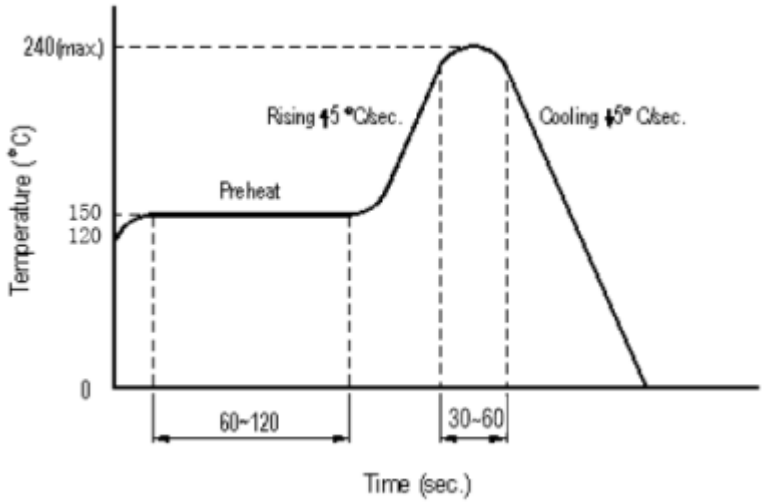
9. Reference Application Schematic

10. SMT Reflow Profile

10.1 Reliability solder temperature chart:



10.2 Reflow temperature chart



11. AT8852B TEST