



STTBTM2BCX 2.4GHz Wireless Module

Features

- Blue tooth V2.1 compliant
- On-Board Antenna
- FCC Certificated (FCC ID: FTOSTBTM2BC3)
- Single power supply
- Built-in 16bit Stereo Codec
- Analog audio port
- USB, UART, PCM port
- PIO & AIO port
- Size: 40mm*24mm*6mm
- Pin header interface

Name Convention

STT BTM C2 BC X

- STT: Brand Name, stands for “Stalmart Technology Limited”
- BTM: Module Type, stands for Blue tooth module
- C2: Output Power Level, stands for Class 2
- BC: Main Chipset used, stands for CSR’s BlueCore chipset
- X: =3, with BC prefixed, means CSR’s chipset BlueCore Multimedia BCMM03
=5, TBD

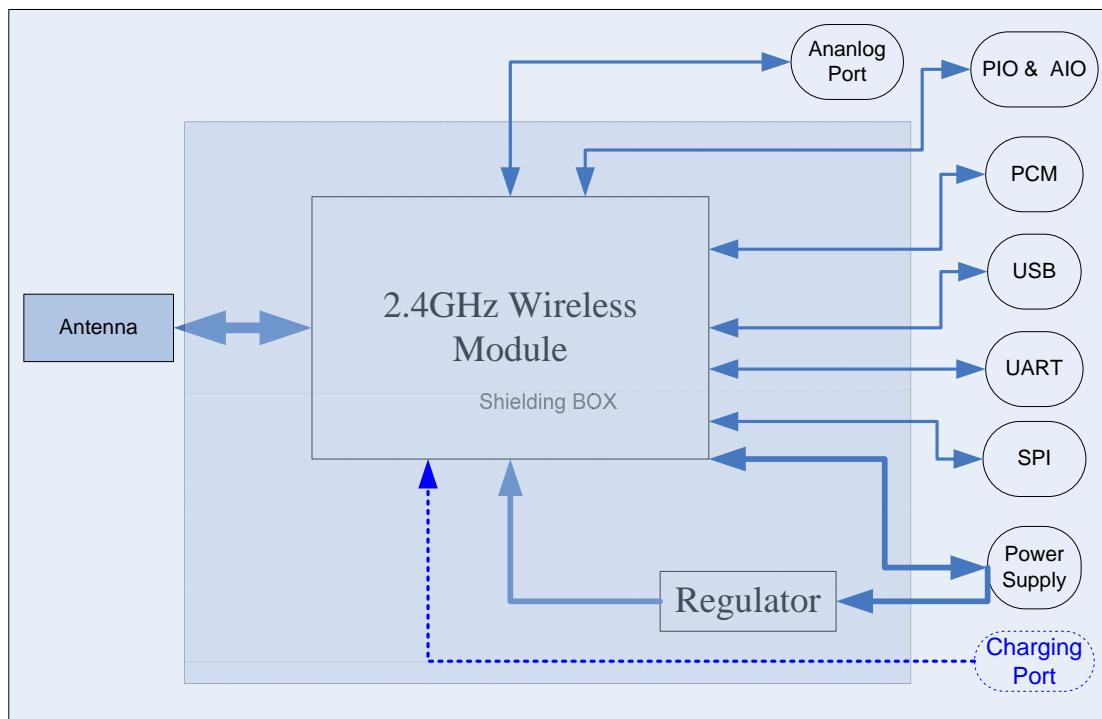
Product Description

STTBTM2BCX is a series of class 2 blue tooth modules with an integrated on-board antenna.

With different firmware embedded, it could be used for different scenarios such as carkits, speakers, instruments, ..., etc.



Block Diagram



Note: No Charging Port on STTBTM2BC3

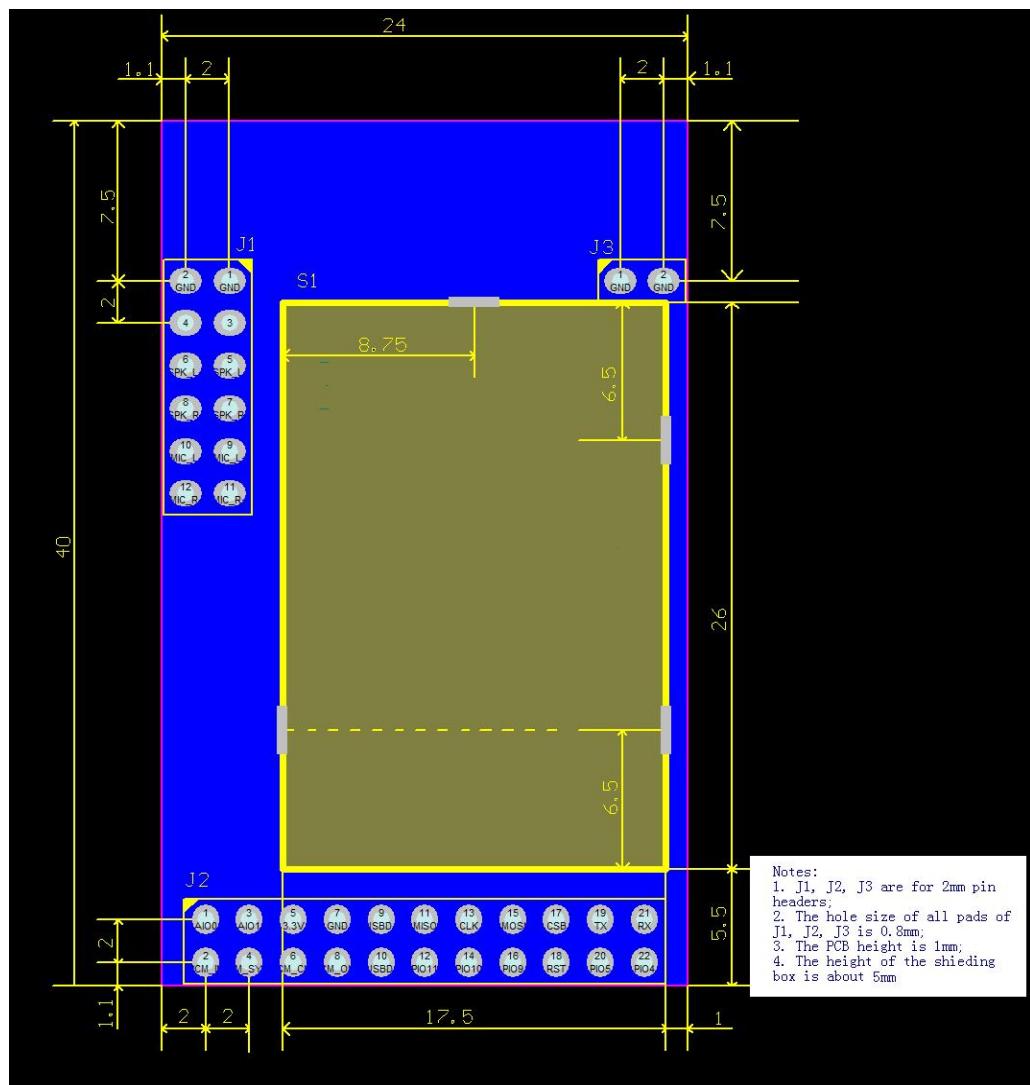
Applications

- Carkits
- Speakers
- Instruments



Dimensions

Top View (Unit:mm)



Electrical Characteristics for STTBTMC2BC3

Absolute Maximum Rating	Min	Max
Storage Temperature	-40°C	80 °C
Supply Voltage	-0.3V	+3.6V

Recommended Operating Conditions	Min	Max
Operating Temperature Range	-10°C	50 °C
Supply Voltage	-3.2V	+3.4V



Pin Definitions for STTBMC2BC3

Pin No	Name	Type	Function	Remark
J1-1	GND	GND	Ground	
J1-2	GND	GND	Ground	
J1-3	VDD_CHR	NC	No Connected	
J1-4	VREG_H	NC	No Connected	
J1-5	SPK_L-	Analog	Speaker output negative(left side)	
J1-6	SPK_L+	Analog	Speaker output positive(left side)	
J1-7	SPK_R-	Analog	Speaker output negative(right side)	
J1-8	SPK_R+	Analog	Speaker output positive(right side)	
J1-9	MIC_L+	Analog	Microphone input positive(left side)	
J1-10	MIC_L-	Analog	Microphone input negative(left side)	
J1-11	MIC_R+	Analog	Microphone input positive(right side)	
J1-12	MIC_R-	Analog	Microphone input negative(right side)	
J2-1	AIO0	Bi-Directional	Programmable input/output	
J2-2	PCM_IN	CMOS input	Synchronous data input	
J2-3	AIO1	Bi-Directional	Programmable input/output	
J2-4	PCM_SYN C	Bi-Directional	Synchronous data sync	
J2-5	VCC	POWER	Power Supply, 3.3V	
J2-6	PCM_CLK	Bi-Directional	Synchronous data clock	
J2-7	GND	GND	Ground	
J2-8	PCM_OUT	CMOS output	Synchronous data output	
J2-9	USBD+	Bi-Directional	USB data plus	
J2-10	USBD-	Bi-Directional	USB data minus	
J2-11	MISO	CMOS output	SPI data output	
J2-12	PIO11	Bi-Directional	Programmable input/output	
J2-13	CLK	CMOS input	SPI clock	
J2-14	PIO10	Bi-Directional	Programmable input/output	
J2-15	MOSI	CMOS input	SPI data input	



J2-16	PIO9	Bi-Directional	Programmable input/output	
J2-17	CSB	CMOS input		
J2-18	RST	CMOS input	High RESET	An RC network is on-boarded, let it un-connected
J2-19	TX	CMOS output	UART data output	
J2-20	PIO5	Bi-Directional	Programmable input/output	
J2-21	RX	CMOS input	UART data input	
J2-22	PIO4	Bi-Directional	Programmable input/output	
J3-1	GND	GND	Ground	
J3-2	GND	GND	Ground	

FCC Statement for STTBMC2BC3

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct.

This device complies with Part 15 of FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Note: Changes or modifications to this unit not expressly approved by the



party responsible for compliance could void the user's authority to operate the equipment.

When the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: FTOSTTBMC2BC3" or "Contains FCC ID: FTOSTTBMC2BC3".