

Ct-BT02

Bluetooth Module

Specifications Sheet V0.4



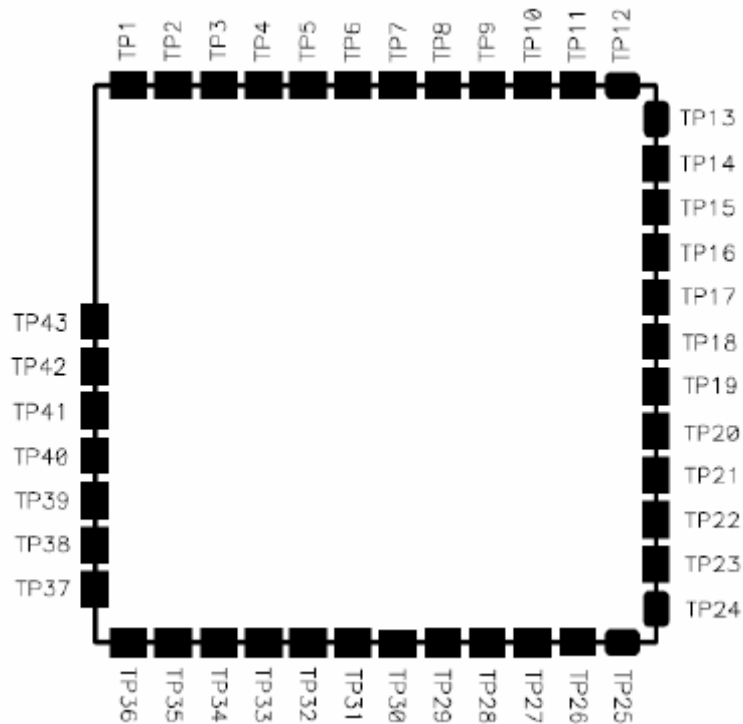
Part No.: 1-1S61-271R002

Description: Bluetooth v2.1 Class 2 BT Stereo Module

Dimension : 12.49 x 12.5 x 2.12 mm

1. Hardware & Technical Information

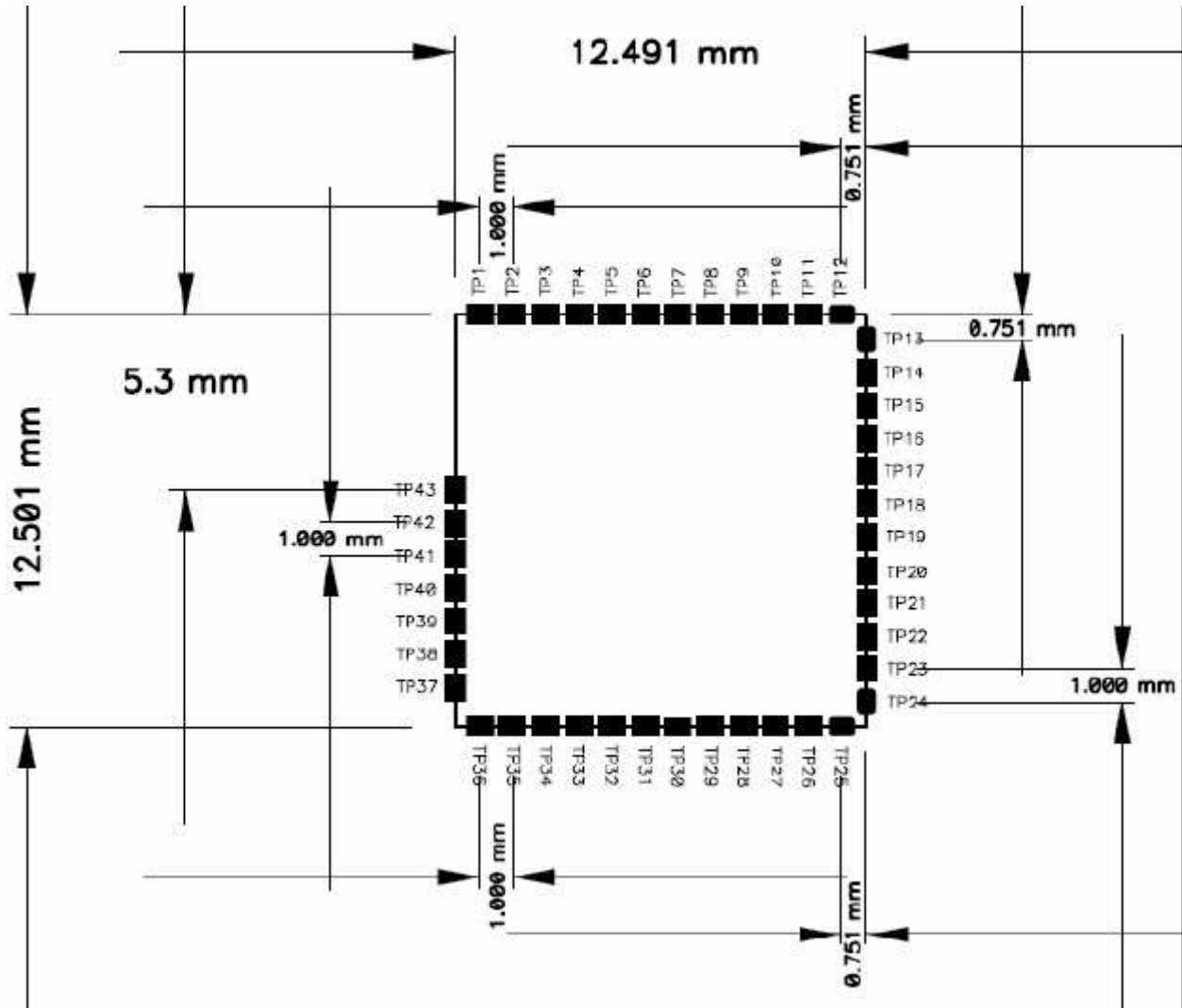
1.1 Pin definition (Top view)



Pin No.	Name	Type	Note
1	VCC3.3V	(I)	
2	AIO0	(I)	
3	PIO6	(I)	Volume Down
4	PIO5	(I)	Volume Up
5	PIO4	(I)	Forward
6	PIO3	(I)	Backward
7	PIO2	(I/O)	Reserve
8	PIO1	(I)	Answer / Hand off / Pairing (5 sec "Hi" for Pairing mode)
9	PIO0	(I)	Play / Pause / Stop (2 sec "Hi" for stop)
10	GND		
11	RF_OUT		
12	GND		
13	MIC_BIAS		

14	MIC_A_N		
15	MIC_A_P		
16	MIC_B_N		
17	MIC_B_P		
18	VDD_AUDIO_1.5V		
19	PCM_CLK		
20	PCM_SYNC		
21	PCM_IN		
22	PCM_OUT		
23	BAT_CHARGE_IN		
24	VDD_BAT		
25	RESET		
26	LED0	(Out)	Power LED Power On(Hi) Pairing mode (Lo : 450, Hi :50)
27	LED1	(Out)	Bluetooth LED Connected(Lo:965, Hi:35), Disconnected(Lo:2965, Hi:35), Pairing mode(Lo:450, Hi:50)
28	SPI_MISO		
29	SPI_CSB		
30	SPI_CLK		
31	SPI_MOSI		
32	UART_RX		
33	UART_TX		
34	UART_CTS		
35	UART_RTS		
36	USB_D+		
37	USB_D-		
38	SPKR_B_N		
39	SPKR_B_P		
40	SPKR_A_N		
41	SPKR_A_P		
42	GND		
43	VEGENABLE_H		

1.2 Mechanical Specification



1.3 Block Diagram

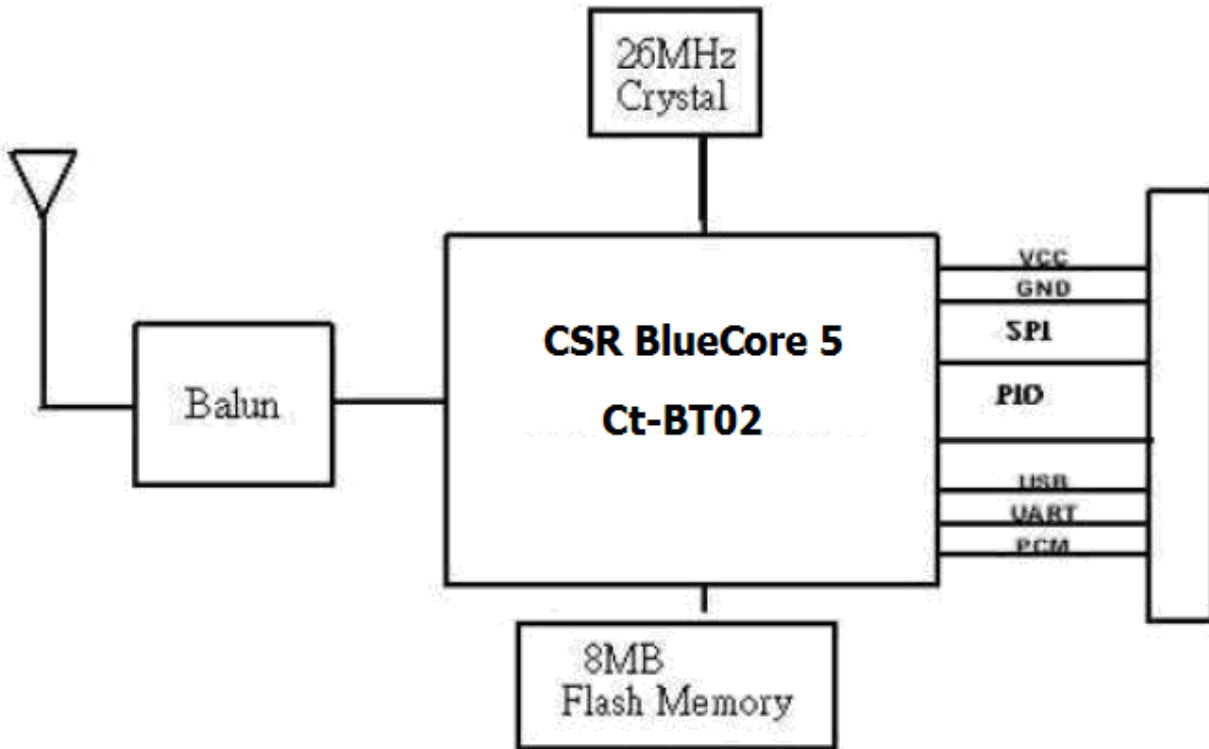


Fig. 1.3.1 BT-Class2 Module Block Diagram

1.4 Electrical Characteristics

■ Voltage Input

	MIN	Typ.	Max	Unit
Supply Voltage	3.0	3.3	3.6	V

■ Power Consumption

Mode	Avg.
Standby	1mA
Transmit	30mA
Receive	28mA
Pairing	26mA

■ Operating Conditions

Voltage Range	3.3V±0.3V
Operating Temperature Range	-20°C ~ 60°C
Storage Temperature Range	-20°C ~ 80°C
Relative Humidity (Operating)	≤ 90%
Relative Humidity (Storage)	≤ 90%

1.5 Radio Characteristics

	Frequency (GHz)	MIN	TYP	MAX	BT Spec	Unit
Sensitivity at 0.1%BER	2.402	≤-84	-80	-	≤ -70	dBm
	2.441	≤-84	-80	-		dBm
	2.480	≤-84	-80	-		dBm
RF Transmit Power	2.402	-2	0	4	≤ 4	dBm
	2.441	-2	0	4		dBm
	2.480	-2	0	4		dBm
Initial Carrier Frequency Tolerance	2.402	-	5	75	75	kHz
	2.441	-	5	75		kHz
	2.480	-	5	75		kHz
20dB bandwidth for modulated carrier		-	900	1000	≤1000	kHz
Drift (Five slots packet)		-	15	-	40	kHz
Drift Rate		-	13	-	20	kHz
$\Delta f1_{avg}$ "Maximum Modulation"	2.402	140	165	175	$140 < \Delta f1_{avg}$	kHz
	2.441	140	165	175		kHz
	2.480	140	165	175		kHz
$\Delta f2_{max}$ "Minimum Modulation"	2.402	115	190	-	115	kHz
	2.441	115	190	-		kHz
	2.480	115	190	-		kHz

2. Software / Profile

Stack / Profile	Ct-BT02 (Class 2 BT2.1 Module)
A2DP	V
HSP	V
HFP	V
AVRCP	V

3. Standard Setup Information

	Parameter	Value
1	Baud Rate	
2	Pin Code Prompt	0000
3	Local Name	Ct-BT02
4	PIO6	Volume Down
	PIO5	Volume Up
	PIO4	Forward
	PIO3	Backward
	PIO2	Reserve
	PIO1	Answer/Hand off/ Pairing (5 sec "Hi" for Pairing mode)
	PIO0	Play/Pause/Stop (2 sec "Hi" for Stop)
	LED0 Power LED.	Power On(Hi) Pairing mode (Lo:450, Hi:50)
LED1 Bluetooth LED	Connected(Lo:965, Hi:35), Disconnected(Lo:2965, Hi:35), Pairing mode(Lo:450, Hi:50)	

4. Customization Information

	Parameter	Value
1	Baud Rate	
2	Pin Code Prompt	
3	Local Name	
4	LED PIN24(PIO 7)	Connected
		Disconnected