ABBTM-2.4GHz-33-T Compliant to MSL level 3





FEATURES:

- Bluetooth Spec v1.2 Compliant
- Class 2, up to 10-meter range
- Complete 2.4GHz Bluetooth® System
- Power management: low power 1.8V operation for Bluetooth® core
- Compact size: 29.0mm (L) x 25.5 (W) mm x 2.8 (H) mm
- Bluetooth® Profile Supported: HSP, HFP, A2DP, AVRCP
- Built-in stereo codec
- Internal antenna
- Built-in audio amplifier
- Built-in power manager
- On-board flash memory (8Mbits)
- Echo cancellation software library
- Several firmware options
- Rewritable flash memory for easy upgrade route

GENERAL DESCRIPTION

Abracon's ABBTM-2.4GHz-33-T module is a complete Bluetooth® solution built on CSR BC03 MultiMedia External Core, supported by 8Mbit on-board Flash Memory. ABBTM-2.4GHz-33-T is a short range, compact, cost effective solution designed to facilitate Bluetooth® connectivity for applications including Car & Home Audio and other Handsfree solutions.

ABBTM-2.4GHz-33-T module is a Power Class-2 Bluetooth® device, compliant with version 1.2 specification. The overall architecture comprises of built-in antenna and supporting circuitry for software protocols including L2CAP, SDP, GAP, HSP, HFP, A2DP and AVRCP, resident in the on-board Flash Memory.

ELECTRICAL SPECIFICATIONS:

Operating Frequency Band	2.4GHz ~ 2.48GHz Unlicensed ISM Band
Bluetooth Specification	V1.2
Output Power Class	Class 2
Operating Voltage	+3.3V and +5.0V
Host Interface	UART
Flash Memory Size	8 MB

Α	bsolute Maximum Ratings	
	Minimum	Maximum
Storage temperature	-40°C	+150°C
Supply voltage: VBAT	-0.30V	3.6V

Recommended	Operating Conditions	
	Minimum	Maximum
Operating temperature range	-40°C	+85°C
Supply voltage: Vcc	+3.0V	+3.6V
Supply voltage: Vdd	+1.7V	+1.9V



> APPLICATIONS:

- Automotive car kit applications
- PDAs and other portable terminals
- Car radio/Car DVD

ABBTM-2.4GHz-33-T



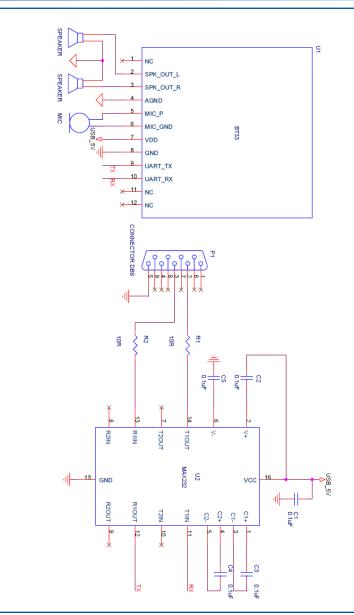
RoHS

Compliant

Firmware Configuration

- a) UART Baud: 115200, N, 8, 1
- BlueTooth Name: BlueAudio b)
- c) Pin Code:
- 0000
- **Software Description**
- 1. After Power on 3V3, the module is connectable and Pairing
- 2. ABBTM-2.4GHz-33-T can be found with the name "BlueAudio" via any Bluetooth device
- 3. Input the Pincode "0000", you can pair with the module named "BlueAudio"
- 4. Then the BlueAudio can be connected
- 5. Data can be transferred between the BlueAudio and any other Bluetooth device

APPLICATION SCHEMATIC



Downloaded from Elco



Revised: 07.17.12 Visit www.abracon.com for Terms & Conditions of Sale 30332 Esperanza, Rancho Santa Margarita, California 92688 tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

ABBTM-2.4GHz-33-T

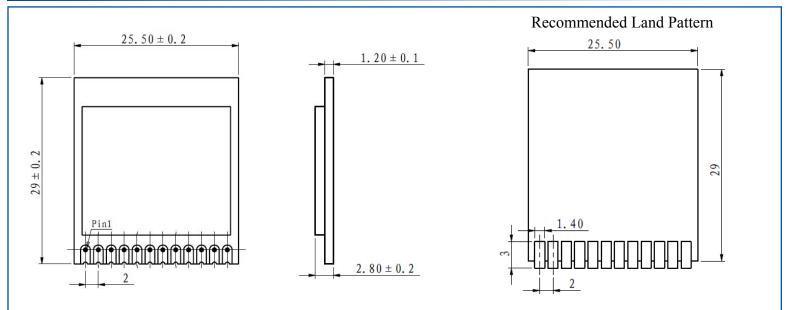
29.0 x 25.5 x 2.8 mm SMT

RoHS

Compliant

Pb

MECHANICAL DIMENSIONS



Note: Specified dimensions without tolerance are listed for reference purposes only.

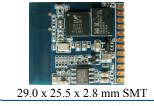
Dimensions: mm.

PIN DESCRIPTION

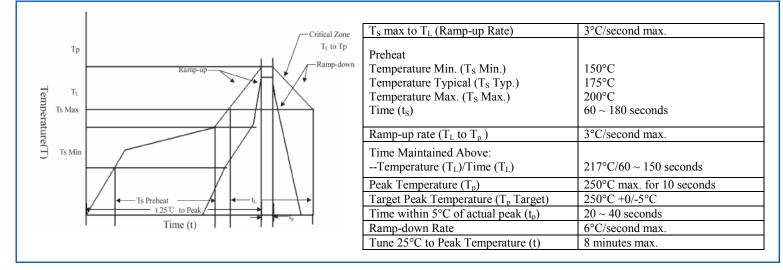
Pin No.	Name	Туре	Function
1	NC	Input / Output	Not used currently
2	SPK_OUT_L	Output	Left channel audio out
3	SPK_OUT_R	Output	Right channel audio out
4	AGND	Ground	Analog ground
5	MIC_P	Input	Microphone positive pole input, internal power
		_	supply
6	MIC_GND	Ground	Microphone ground
7	VDD	Input	Power supply, $+3.3V \sim +5V$
8	GND	Ground	Power ground
9	UART_TX	Output	UART data output
10	UART)RX	Input	UART data input
11	NC	Input / Output	Not used currently
12	NC	Input / Output	Not used currently



ABBTM-2.4GHz-33-T

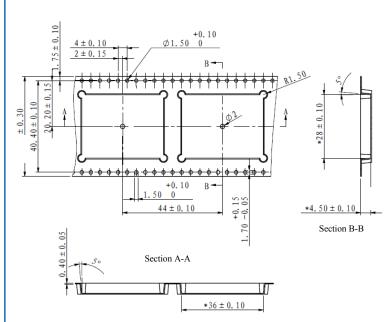


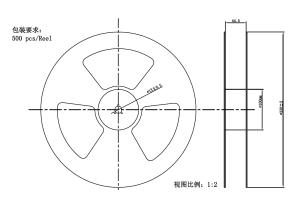
REFLOW PROFILE



PACKAGING:







RoHS

Compliant

a) Unless otherwise specified, the tolerance is ± 0.1 mm

b) The carrier tape material thickness is 0.4mm

c) Unless otherwise specified, the round corner is R0.3; the peeling angle is no greater than 5°

d) The finished products has no rough edges and no damage; cover tape should is sealed

e) Material is ROHS compliant

Packaging:

ABBTM-2.4GHz-33-T devices will be packaged per MSL level-3 requirements; Labeled as MSL 3, Tape- Packed + Vacuum-Packed with Antistatic bag, Desiccant, Humidity Indicator Card (HIC). Ref: IPC/JEDEC J-STD-033B.1

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.



Visit www.abracon.com for Terms & Conditions of Sale **Revised: 07.17.12** 30332 Esperanza, Rancho Santa Margarita, California 92688 tel 949-546-8000 | fax 949-546-8001 | www.abracon.com