

User Guide

Bluetooth 4.0 dual mode Embedded Module

CastleNet BTC08R800 User Guide

Federal Communication Commission Interference Statement

This device complies with Part 15 of the 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses 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 the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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This device is intended only for OEM integrators under the following conditions:

The antenna must be installed such that 20 cm is maintained between the antenna and users, and
The transmitter module may not be co-located with any other transmitter or antenna.

As long as 2 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains FCC ID: RK9-BTC08R800BLE". The grantee's FCC ID can be used only when all FCC compliance requirements are met.

Manual Information To the End User

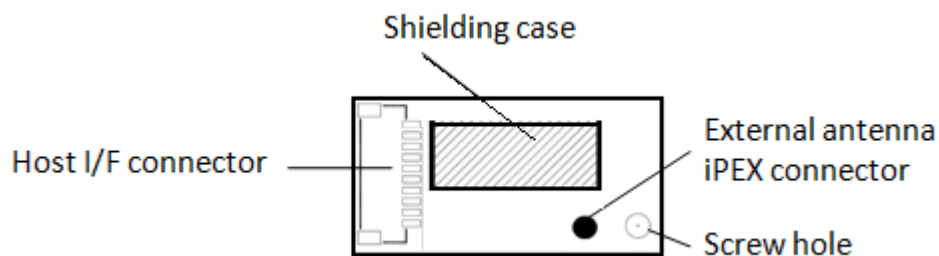
The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.
The end user manual shall include all required regulatory information/warning as show in this manual.

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1. INTRODUCTION

The BTC08R800 series is the new generation of Bluetooth 4.0 module. It is composed of the latest CSR 8510 PC-ROM chip. The external antenna connection is via IPEX connector. It is compatible with all BT software in the market, and Microsoft Win7 BT utility. The bundled software will enrich more Bluetooth application in the Notebook / Tablet PC etc.

The cable connection and PIN define of “Host I/F connector” from BT module (BTC08R800 series) to PC system is specially customized by OEM Laptop PC.

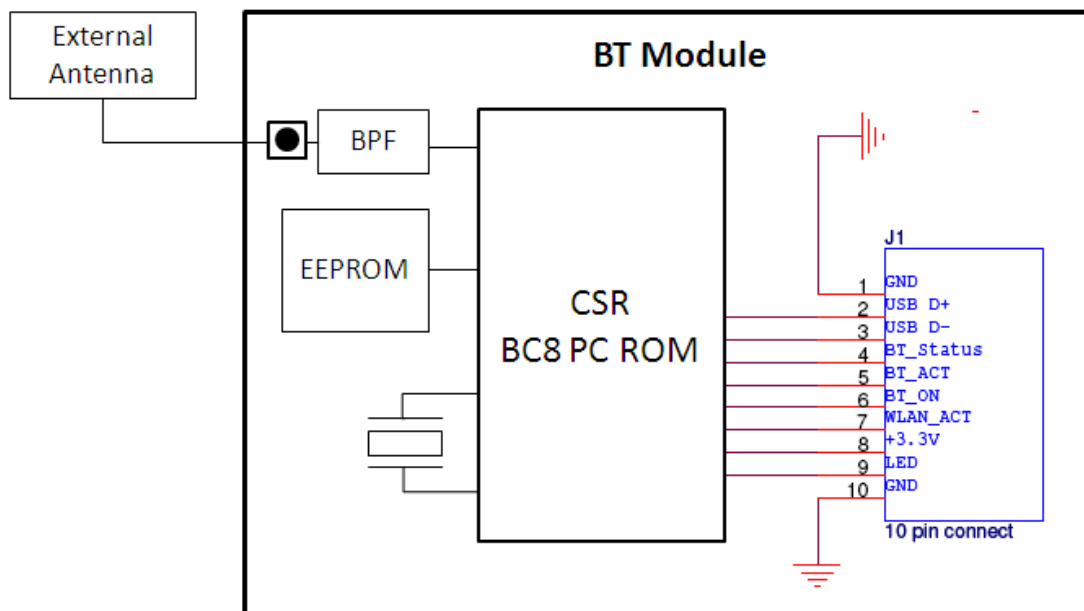


2. PIN Define (Host I/F connector)

PIN#	Define	Description
1	GND	
2	USB D+	
3	USB D-	
4	BT_STATUS	Connected when 3-wired BT-WiFi coexistence.
5	BT_ACT	WLAN and BT Co-existence
6	BT_ON	Active High to enable BT Radio.. Low to disable BT Radio.
7	WLAN_ACT	WLAN and BT Co-existence
8	+3.3V	Power supply for module
9	LED	LED indicator for BT activity. / Reserved.
10	GND	

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3. Block Diagram



4. INSTALLATION

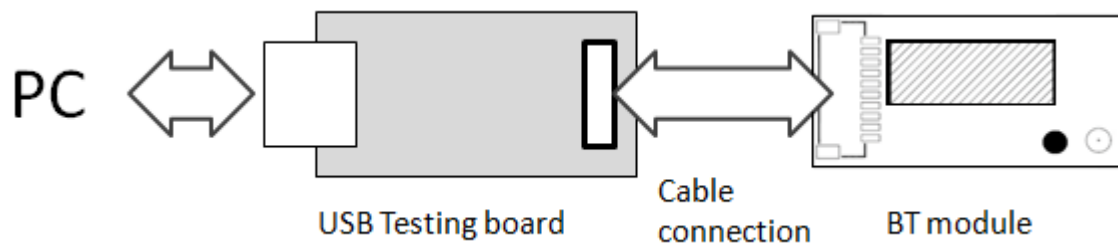
4.1 Installed in Laptop PC

The Mainboard of the system should provide a Host connector and Cable connection for BT module. Please follow the SOP to install & assemble it step by step.

4.2 Testing in Lab

The module is embedded inside Notebook. If for testing purpose, we provide the “USB Testing Board” in order to let tester connect BTC08R800 via the special cable connection to PC externally. The USB Testing Board provides +5V/3.3V conversion from PC Host. Please plug into any USB port on your PC.

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After Hardware installation, when system find the new hardware, please install the driver / software correctly.