User Guide

Bluetooth 3.0/2.1+EDR Embedded Module

Federal Communication Commission Interference Statement

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.

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.

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.

IMPORTANT NOTE:
FCC Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure compliance requirements, please follow operation instruction as documented in this manual.

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

CastleNet BTC08R800 User Guide

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

1) 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 (for example, digital device emissions, PC peripheral requirements, etc.).

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

The final end product must be labeled in a visible area with the following: "Contains TX FCC ID: **RK9-BTC08R800**".

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 users manual for OEM integrators must include the following information in a prominent location "IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements. The antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

Canada-Industry Canada (IC)

Operation is subject to the following two conditions:

this device may not cause interference and

this device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTANT NOTE:

IC Radiation Exposure Statement:

This equipment with IC radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with IC RF exposure compliance requirements, please follow operation instruction as documented in this manual.

1. INTRODUCTION

The **BTC08R800** series is a embedded Bluetooth module, smallest form factor for Notebook and handheld PC.   The Bluetooth function is based on CSR BlueCore8 PC-ROM single chip, which is fully compliant with Bluetooth 2.1 specification plus EDR. It has good RF performance. Lowest power consumption, piconet and scatternet capability. The interface is HCI USB compliant with USB fully speed (12Mbits).

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.
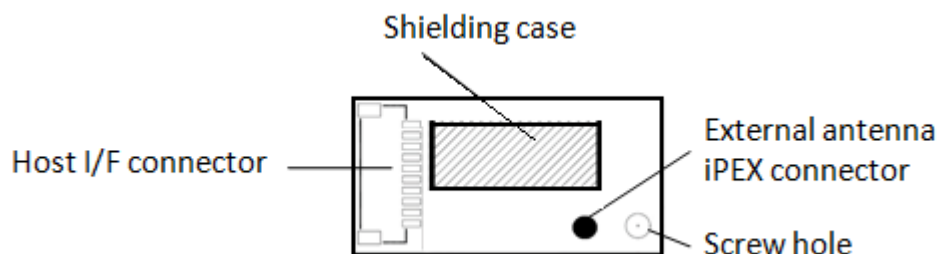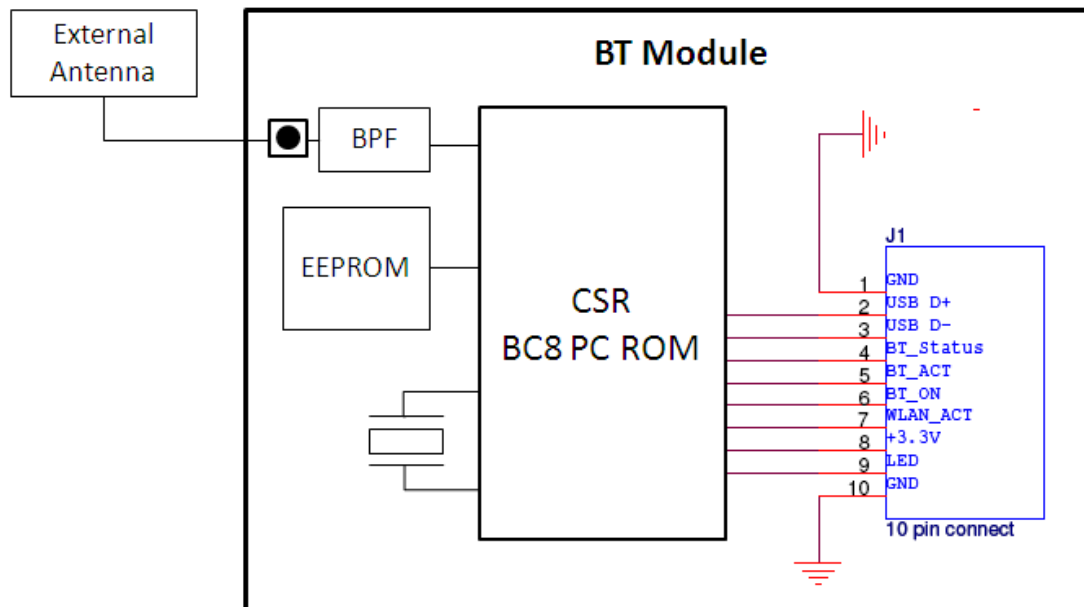

2. PIN Define (Host I/F connector)

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	

## 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.

PC ⟺ USB Testing board ⟺ BT module

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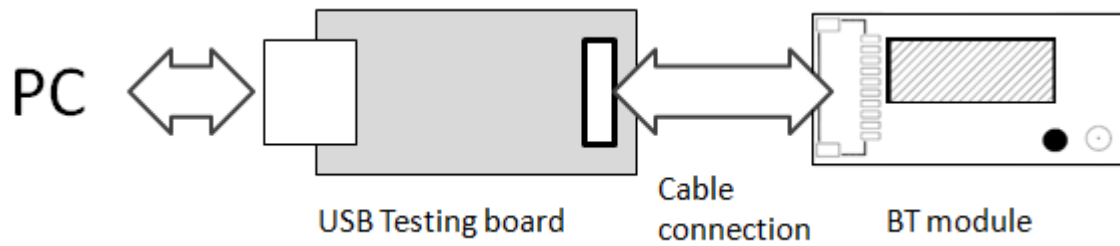
After Hardware installation, when system find the new hardware, please install the driver / software correctly.