# MCS-BTD-001 [MCS\_Bluetooth\_Device] Manual This module is limited to OEM Installation only.

## 1. General

MCS-BTD-001 product is a Module for use in connection with MCS-IR-001 and the data is sent and received by Bluetooth.

For using this product, you need to use PC application that is provided by the HQ.

MCS-BTD-001 is attached inside of MCS, it can be used with MCS-IR-001 and it should not be used alone.

#### **Bluetooth**

Fully qualified with Bluetooth v2.0 Receive sensitivity: -90dBm (0.1% BER)

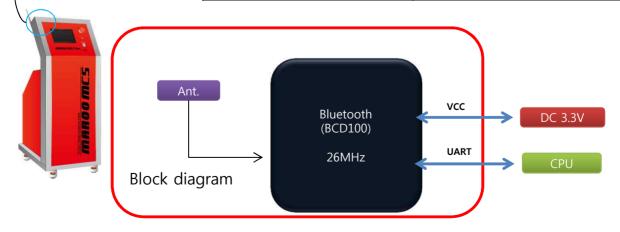
**Integrated 8Mbit Flash Memory** 

**Dual UART interfaces** 

## 2. Product Specification



| Model Name               |           | MCS-BTD-001          |
|--------------------------|-----------|----------------------|
| INPUT POWER(V DC)        |           | 3.3V                 |
| Current Consumption (mA) |           | Max 100              |
| Communication            | Bluetooth | BCD100               |
|                          | Interface | UART                 |
| Antenna                  |           | 3 dBi Dipole Antenna |
| Connector                |           | SMW200-07            |
| Dimension(W, D, H)       |           | 65*50*21mm           |
| Usage Temperature(℃)     |           | -20 ~ 60°C           |



Caution: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

NOTE: 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 occurring 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 or more 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.

WARNING: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

This device complies with Part 15 of the FCC rules. Operation is subject to 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 of this device.

The changes or modifications not expressly approved by the party responsible for Compliance could void the user's authority to operate the equipment.

To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating to conjunction with any other antenna or transmitter, except if installed in compliance with FCC Multi Transmitter procedures.

To inherit the modular approval, the antennas for this transmitter must be installed to provide a separation distance of 20cm from all persons and must not be co-located or operating in Conjunction with any other antenna or transmitter.

Note: 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 or more 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

To **OEM** Installer

1. FCC ID on the final system must be labeled with

"Contains FCC ID: 2ADECMCS-BTD-001" and

"Contains transmitter Module FCC ID: 2ADECMCS-BTD-001 "

- 2. In the user manual, final system integrator must ensure that there is no instruction provided in the user Manual to install or remove the transmitter module.
- 3. Transmitter module must be installed used in strict accordance with the Manufacturer's instructions as described in the user documentation that comes with the product. The user manual of the final host system must contain the following statements: This device complies with Part 15 of the FCC rules. Operation is subject to 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 of this device.

The changes or modifications not expressly approved by the party responsible for Compliance could void the user's authority to operate the equipment.

To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating to conjunction with any other antenna or transmitter, except if installed In compliance with FCC Multi Transmitter procedures.

To inherit the modular approval, the antennas for this transmitter must be installed to provide a Separation distance of at least 20cm from all persons and must not be co-located or operating in Conjunction with any other antenna or transmitter.

Note:

The buyer of the module who will incorporate this module into his host must submit the final product to the Manufacturer of the module and the MANUFACTURER OF THE MODULE WILL VERIFY that the product is incorporated in host equipment in a way that is represented by the testing as shown in the test report.

Note:

The module is used MCS System.

### **FCC RF Radiation Exposure Statement**

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-locateor operating in conjunction with any other antenna or transmitter.

"To comply with FCC RF exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

#### 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. Note:

- 1. The module is limited to OEM installation ONLY.
- 2. The module is limited to installation in mobile or fixed applications.
- 3. Separate approval is required for all other operating configurations, including portable configuration with respect to Part 2.1093 and different antenna configuration.

A host product is required to comply with all applicable FCC equipment authorizations regulations, requirements and equipment functions not associated with the transmitter module portion. For example, compliance must be demonstrated to regulations for other transmitter components within the host product; to requirements for unintentional radiators (Part 15B), such as digital devices, computer peripherals, radio receivers, etc.; and to additional authorization requirements for the non-transmitter functions on the transmitter module (i.e., Verification, or Declaration of Conformity) (e.g., Bluetooth and WiFi transmitter modules may also contain digital logic functions) as appropriate.

To ensure compliance with all non-transmitter functions the host manufacturer is responsible for ensuring compliance with the module(s) installed and is fully operational. For example, if a host was previously authorized as an unintentional radiator under the Declaration of Conformity procedure without a transmitter certified module and a module is added, the host manufacturer is responsible for ensuring that after the module is installed and operational the host continues to be compliant with the Part 15B unintentional radiator requirements. Since this may depend on the details of how the module is integrated with the host, the grantee (the party responsible for the module grant) shall provide guidance to the host manufacturer for compliance with the Part 15B requirements.

Single or limited-single modules and the RF front-end section of a split or limited split-module must be a separate physical assembly that can be installed into (or attached to) a host as a separate sub-assembly (daughter-board sub-assembly). The method used for input and output electrical connections to the host can be soldered, cabled, wired, or use plug-in connectors. A module cannot be solely the implementation of a design specification. Only the control-element section of a split-module device may comprise software certified as companion code to a specific RF front-end (section).

A host using a component that has been authorized as a module may, subject to the requirements described below and the conditions of the grant, (1) be marketed and sold with the module built inside that does not have to be end-user accessible/replaceable, or (2) be marketed with the module being end-user plug-and-play replaceable.