# **User Manual**

# Bluetooth 4.0 Dongle (BT4D01)

FCC ID:MG3-2023

## 1. Description

Product Type: BT4D01

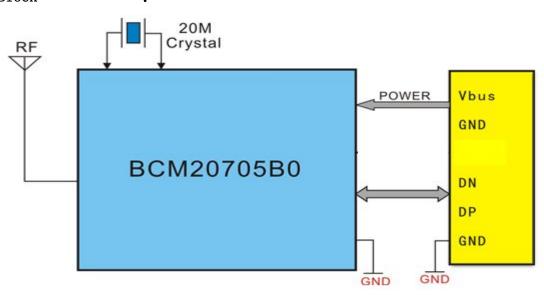
This documentation describes the engineering requirements specification of BCM20705 BT Module. This module is designed with Standard USB2.0 interface.

#### 2. Characteristics

#### 2.1 Features:

- --Bluetooth 4.0 compliant.
- --Programmable output power control meets Class1, Class2, or Class3 requirements.
- --Use supply voltages up to 5V.
- --Supports Broadcom SmartAudio<sup>™</sup>, wide-band speech, SBC codec, and packet lose concealment.
- --Ultra-low power consumption.
- --ARMTDMI-S $^{\text{TM}}$ -based microprocessor with integrated ROM and RAM.
- --Supports mobile and PC applications without external memory.

#### 2.2 Block



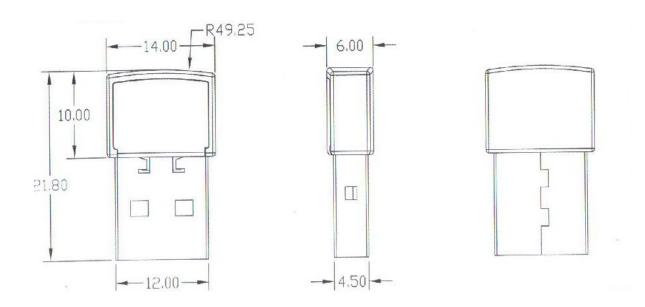
#### 3.1 Technical

- 1) (Supply voltage): DC5V (Standard USB2.0).
- 2) Receive current(1Mbps): 31mA (Average current).
- 3) Transmit current(1Mbps): 44mA (Average current).
- 4) Receive current(EDR): 32mA (Average current).
- 5) Transmit current(EDR): 41mA (Average current).
- 6) (Frequency range): 2402~2480MHz
- 7) Space : 1MHz/2MHz
- 8) Channel 79 (0 ~78) /40
- 9) (Sensitivity):  $\leq$ -80dBm.
- 10) (Carrier Frequency Stablility ):  $\pm 24$ kHz.
- 11) (RF input impedance): 50 ohm.
- 12) (Baseband crystal OSC): 20MHz.

#### 3.2 Environment

- 1) (Operation temperature range):  $-10^{\circ}$ C  $\sim$ 50  $^{\circ}$ C
- 2) (Storage temperature range):  $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$

#### 4.1 Size



# 4.2 Photos

Top Bottom





# 5. BT4D01

### 5. 1 CON

BT4D01 Use USB2.0





### 5.2 Definition

PIN NO.	Pin	Description
1	+5V	USB5V
2	Data-	USB D—
3	Data+	USB D+
4	GND	Ground

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.
- —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.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.