

FuzzyScan Bluetooth Module

BM3610

User's Guide

Introduction

You can connect to other Bluetooth wireless devices by integrating the BM3610 module to your device.

Specification

Product Name	Bluetooth Module
Model Number	BM-3610
Standard	Bluetooth v2.1+EDR
Frequency Band	2.402GHz ~ 2.480GHz unlicensed ISM band
Modulation Method	GFSK for 1Mbps; $\Pi/4$ -DQPSK for 2Mbps; 8-DPSK for 3Mbps
Spread Spectrum	FHSS (Frequency Hopping Spread Spectrum)
Transfer rates (Max)	Max UART baud rates of 3Mbps
RF Output Power	Class 1 (under 13 dBm)
Antenna terminal	50 Ohms
DC power	DC 53.3
Dimension	12.5 x 16.6 mm
Operating Temperature	-10 ~ +50
Storage Temperature	-40 ~ +70
Humidity	5 ~ 95% (non-condensing)

Regulatory Information

The Bluetooth radio is designed to be interoperable with any Bluetooth technology product that is based on frequency hopping spread spectrum (FHSS) radio technology and complies with the Bluetooth Specification Version 2.1.

The Bluetooth radio, like other radio devices, emits radio frequency electromagnetic energy. The level of energy emitted by this device, however, is less than the electromagnetic energy emitted by other wireless devices such as mobile phones. The Bluetooth radio device operates within the guidelines found in radio frequency safety standards and recommendations. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature. In some situations or environments, the use of a Bluetooth radio device may be restricted by the proprietor of the building or responsible representatives of the applicable organization. Examples of such situations include the following:

- Using the Bluetooth radio equipment onboard airplanes, or
- Using the Bluetooth radio equipment in any other environment where the risk of interference with other devices or services is perceived or identified as being harmful.

If uncertain of the policy that applies to the use of wireless devices in a specific organization or environment (an airport, for example), ask for authorization to use the Bluetooth radio device before turning it on.

This device has been been certified to the following radio standards:

FCC Part 15 Subpart C, IC Part 15 Subpart C

CE EN300 328, Taiwan LP0002 (NCC)

Japan TELEC T401 (MIC)

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.

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 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 device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

LABEL OF THE END PRODUCT:

The final end product must be labeled in a visible area with the following " Contains TX FCC ID: SBC-BM3610 ". If the size of the end product is larger than 8x10cm, then the following FCC part 15.19 statement has to also be available on the label: This device complies with Part 15 of 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.

Warning

802.11b/802.11g/BT警語：

第十二條→經型式認證合格之低功率射頻電機，非經許可，公司，商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條→低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

802.11a警語：

無線傳輸設備 (UNII)

在 5.25-5.35 種類頻帶內操作之無線資訊傳輸設備，限於室內使用。 (4.7.5)

無線資訊傳輸設備忍受合法通信之干擾且不得干擾合法通信；如造成干擾，應立即停用，俟無干擾之虞，始得繼續使用。 (4.7.6)

無線資訊傳輸設備的製造廠商應確保頻率穩定性，如依製造廠商使用手冊上所述正常操作，發射的信號應維持於操作頻帶中。 (4.7.7)

LP0002 4.3 無線電遙控器

- (1) 限單向控制。
- (2) 不得於機場及其飛航管制區內使用。
- (3) 於軍事管制區內應依其管制規定使用。
- (4) 使用航空模型飛機遙控器亦須符合其他有關無線電遙控航空模型飛機之管理規定。

LP0002 3.4.2 Full Module Approval

在314-316MHz及433-435MHz作業者：如為手動發射器材者須有一開關，按下並釋放此開關後5秒內應自動停止發射。

或具自動控制裝置者每次發射時間應少於5秒。

除314-316MHz及433-435MHz作業者之作業頻率以外者：如為手動發射器材須有一開關，按下此開關後5秒內應自動停止發射。具自動控制裝置者每次發射時間應少於5秒。

選擇性填寫

Case By Case 還有一些不常遇到的產品情況增列到使用手冊中。

LP0002 4.4 民用頻段無線電對講機 (Citizens Band Radio Service)

民用頻段無線電對講機之第九頻道定為緊急頻道，不得作一般通話使用。使用者並應經常守聽該頻道之信息。 民用頻段無線電對講機使用者遭遇緊急事故，請求救援時，應於第九頻道先呼「緊急求救」三次，再說明求救人、事故、地址及需求。無人回應時，得改用其他任何頻道呼救。 接獲前項求救信息者，應即中止通話並採適宜之救援措施。