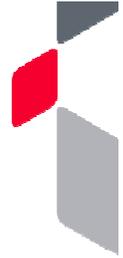


User Manual to FCC

Murata Manufacturing Co.,Ltd.



LBEE6ZZ1PY User Manual



Product Outline

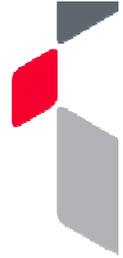
This product has a function as an IEEE802.11 a/b/g/n/ac + BT + BLE

- Product Size : 20.9 x 14.8 x 2.6(max) [mm]
- RF-IC : Marvell 88W8987 (AEC-Q100 compliant)
- Reference Clock : 38.4MHz X'tal

Feature

- Product Name : Communication Module
- Model Name : LBEE6ZZ1PY
- Purpose of the equipment : Telecommunication
- Equipment Type : Transceiver
- Frequency : 2412-2462MHz/2402-2480MHz/5180-5320MHz/5500-5720MHz/
5745-5825MHz
- Channel : (WLAN)1~11ch/36~64ch/100~144ch/149~165ch
(BT)0~78ch (BLE)0~39ch
- Bandwidth : (WLAN) 2.4GHz 11b(20MHz)/11g(20MHz)/11n (20MHz)
5GHz 11a(20MHz)/11n(20/40MHz)/11ac(20/40/80MHz)
(BT) Hopping off 1MHz/Hopping on 79MHz
(BLE) 2MHz
- Input Voltage to RF parts : VDD33 Typ.3.3V

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FCC ID: VPYLB1PY

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 shown in User manual.

- Please describe the following warning on the final product which contains this module.

Contains Transmitter Module FCC ID:VPYLB1PY

or

Contains FCC ID: VPYLB1PY

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.

If it is difficult to describe this statement on the host product due to the size, please describe in the User's manual.

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Notice



- The following statements must be described on the user manual of the host device of this module;

FCC CAUTION

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

Compliance with FCC requirement 15.407(c)

Data transmission is always initiated by software, which is then passed down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets are initiated by the MAC. These are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets is being transmitted. In other words, this device automatically discontinues transmission in case of either absence of information to transmit or operational failure.

Frequency Tolerance: ± 20 ppm

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

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Notice



- When installing it in a mobile equipment. Please describe the following warning to the manual.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

- When installing it in a portable equipment. Please describe the following warning to the manual.

The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. LBEE6ZZ1PY has been tested and found to comply with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines.

It is necessary to take a SAR test with your set mounting this module.
Class II permissive change application is necessary using the SAR report.
Please contact Murata.

Note)

Portable equipment : Equipment for which the spaces between human body and antenna are used within 20cm.

Mobile equipment : Equipment used at position in which the spaces between human body and antenna exceeded 20cm.

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Notice



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

1) The antenna must be installed such that 20 cm is maintained between the antenna and users, and 2) 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