

Date: April 19, 2017

## Request for a modular approval

Dear Application Examiner,

Microchip US is seeking FCC authorization for module Model: ATBTLC1000-ZR110CA as a modular transmitter. The requirements of FCC 15.212 are met. The following requirements are fulfilled:

# 1. The modular transmitter must have its own RF shielding

The radio portion of the module is contained under its own RF shield; please refer to the module photos.

### 2. The modular transmitter must have buffered modulation/data inputs

The modular transmitter has its own data buffer. Transmit data is stored in imbedded memory and shifted out to the modulator which provides several buffering stages between incoming data and the modulator.

### 3. The modular transmitter must have its own power supply regulation

The BLE device has its own regulation for the transmitter. The on-chip Power Amplifier and the Pre-Power Amplifier use a supply which is generated internally to the chip. The supply to this on-chip regulator must be between 1.8V and 4.3V.

4. The modular transmitter must comply with the antenna requirements of Section 15.203 The antenna is permanently attached on each module.

## 5. The modular transmitter must be tested in a stand-alone configuration

The EUT was tested in a stand-alone configuration. A motherboard which supplied power to the module and connectors for control signals was attached to the module with wires. The module and the motherboard were separated by 10cm.

#### 6. The modular transmitter must be labeled with its own FCC ID number

The EUT due to limited space will not be labeled with its own FCC ID number. FCC ID information will be placed in the User Manual (Datasheet) and packaging box.

The User Manual instructs OEM customers on how to place an exterior label in case it is not visible.

7. The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements.

The EUT is compliant with all applicable FCC rules. Detailed instructions are given in the User's Guide.

8. The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.

Instructions are given in the installation manual for compliance to the RF exposure requirements

Sincerely

**Steve Caldwell** 

Vice President

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