

Date: Oct 03, 2016

## Request for a modular approval

Dear Application Examiner,

Microchip US is seeking FCC authorization for module Model: ATWILC3000-MR110CA 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

Module communicates with the host processor via standard SPI or SDIO interface which is implemented with (built into WiFi/Bluetooth System on Chip IC) microprocessor. Transmit data is stored into imbedded memory and shifted out to modulator which provides several buffering stages between incoming data and modulator.

- 3. The modular transmitter must have its own power supply regulation
- The WiFi/Bluetooth System on Chip IC contains multiple dedicated voltage regulators for transmitter chain including modulator, pre-power amplifier, and power amplifier.
- 4. The modular transmitter must comply with the antenna requirements of Section 15.203 The antenna is discrete ceramic chip antenna mounted on the module.
- 5. The modular transmitter must be tested in a stand-alone configuration

The EUT was tested in a stand-alone configuration. The controller board that it is connected to is for collection of data only.

- 6. The modular transmitter must be labeled with its own FCC ID number
- The EUT will be labeled with its own FCC ID number. 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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Microchip Technology Inc.