



April 6th, 2022

Subject: Cover Letter for FCC Application

Applicant: Leviton Manufacturing Co., Inc.
FCC Certification Number: 2ASLN-ZBMG2
Product Description: Zigbee BLE Module C0945

To Whom it May Concern:

This letter is to request certification for our device, **2ASLN-ZBMG2**, to the following certification service:

- New Modular Certification

Please grant FCC certification for this modular Zigbee BLE Module C0945 – being used in total of five (5) variants as described below, more to be added later. This module utilizes the 2.4GHz Bluetooth low-energy 5.x and ZigBee protocols – only one transmitting at a time. All variants share same module C0945 PCB board with different assembly variants to support functions as required in end-product.

This modular certified module integrates all components (Crystals, RF passives, Chip antenna and shield) required for a modular-level implementation of Bluetooth & ZigBee networks. The module PCB will be mounted on the host board and configured from the firmware for 2.4 GHz ZigBee mesh network and 2.4 GHz BLE 5.x radio for communication with mobile phones.

The assembly variants of the logic board have minor assembly changes to support functions as required in end-product. All variant changes are described in table below also.

1. The PCB is same for all variants.
2. Radio section is same for all variants with changes in antenna tuning values (Tuning #1 for internal antenna variants) to be in radio compliance.
3. The SoC used on two set of end-products is different that 0XC09454333CBxx models [serial# 4-5 in table below] support BLE protocol only and rest protocols features disabled by SoC manufacturer itself in compared to 0XC09454233CCxx models [serial# 1-3 in table below] which supports those. They are mechanically & electrically identical as per SoC manufacturer.

Preliminary testing on all variations of the module demonstrated that the RF specifications and performance are similar across all models and can be considered for a modular approval under a single FCC ID.

The table below shows the features for each model.



MODULAR APPROVAL								
Serial #	Leviton Part #	Chip #	MCU		RF Performance		Protocol	
			Flash	RAM	TX power Output	Antenna Type	Bluetooth Low Energy	Zigbee
					dBm			
1	0XC09454233CC01	EFR32MG12P433F1024GL125	1024	256	19	Chip	√	√
2	0XC09454233CC03	EFR32MG12P433F1024IL125			19	Chip	√	√
3	0XC09454233CC05	EFR32MG12P432F1024GL125			19	Chip	√	√
4	0XC09454333CB13	EFR32BG12P433F1024GL125	1024	256	19	Chip	√	--
5	0XC09454333CB15	EFR32BG12P432F1024GL125			19	Chip	√	--

If you have any questions regarding this request for certification, please feel free to contact me.

Sincerely,

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