Date: January 13, 2023

Office of Engineering and Technology
Laboratory Division
Equipment Authorization Branch
Federal Communications Commission Laboratory
7435 Oakland Mills Road
Columbia, MD 21046

Subject: Application for Class 2 Permissive Change to FCC Authorized Transceiver with FCC ID: ABZ99FT4093

Dear Sir/Madam,

A permissive change is requested for the subject transceiver which is marketed in the United States and elsewhere.

A. DESCRIPTION OF PRODUCT CHANGES:

1) Replacing active components below due to EOL (End of Life). The component changes are made within the RF circuitries as below:

   i) RFIC
   Replace Rodinia-Lite 1.3 with Rodinia-Lite 2.1. New part is pin-to-pin comparable with current part.
   ii) New transmitter gain stage
   iii) New limiting diode at transmitter section
   iv) New RF switch at transmitter section
   v) New buffer amplifier at VCO section
   vi) New MLCC (Multi-Layer Chip Capacitor) passive components

2) Replacing the current audio amplifier and its supporting circuitries on the controller section (non RF), with new replacement and supporting design optimization circuitries. The component changes are made within the audio circuitries as below:
   i) Existing audio amplifier was replaced due to EOL (End Of Life).
   ii) Inclusion of pre-amp circuitries to cater for new audio amplifier requirement
   iii) Value change on the passive components (capacitors, resistors and inductors)

3) Replacing the voltage detector IC on the DC supply section (non RF) with new replacement and supporting design optimization circuitries.

4) Added as dual source with the existing parts due to multiple supply constraints with the current parts. There is no change to the radio electrically and the replacement parts are pin-to-pin comparable with the current parts.

Old Part Number	New Part Number	Description	Where Used
4813978P07	CR002413A01	Diode (Non RF)	DC Distribution, as a switch

4813973A13	CR002116A01	PNP Transistor	RFIC, as a switch
4813970A59	CR002094A01	P-Channel FET	RFIC, as a switch
4813973B01	CR002535A01	NPN Transistor (Non RF)	DC Distribution, as a switch
4813973M07	CR002126A01	NPN Transistor (Non RF)	DC Distribution, as a switch
4813977M10	CR002410A01	Zener Diode (Non RF)	DC supply, as protection diode

B. PERFORMANCE DIFFERENCES:
EME, EMC and RF have been assessed and no degradation found compared to the previous filing and still within the FCC limits..

C. CONCLUSION:
This radio continues to meet all FCC emissions requirements for which authorization was granted.

Sincerely,

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