



Date: 27 December 2024

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: AZ489FT7145

Dear Sir/Madam,

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

A. <u>DESCRIPTION OF PRODUCT CHANGES:</u>

- 1. Due to global part shortage, there are various ICs replacement (listed below) which some of the components requires re-layout. The changes have similar basic function as the previous design and no change in radio parameters.
 - i. Radio Frequency IC (RFIC) Rodinia 2.3 replaced with new Rodinia 3.0 IC. There is no change to the radio electrically and the new part is pin-to-pin comparable with the current part. No layout impacts since it is drop-in part.
 - ii. Transmitter Javelin IC replaced with Javelin 2 IC and its supporting circuitries, with new replacement and supporting design optimization circuitries. However, it is not a pin-to-pin compatible with the previous IC. A re-layout was required to accommodate the new circuitry design and all meets the same specification as the previous part.
 - iii. Passive components (capacitor and resistor) in RFIC Rodinia section drop-in part replacement due to End of Life (EOL).
 - iv. FGU/VCO SPDT RF Switch replacement part is a not pin-to-pin comparable to the current part hence need minor re-layout. The new part provides the same functionality as the previous part.
- 2. Other non-transmitter changes which do not impact the RF performance included:
 - i. Fall Alert (Mandown), Peripheral, Controller and Power Management parts replacement with minor re-layout due to End of Life (EOL).
 - ii. Peripheral and Power Management drop-in parts replacement due to End of Life (EOL).
 - iii. Frequency Stability's PPM correction for LMR UHF Transmitter's TMO and DMO section in Exhibit 12a.
- 3. Add in some of part components that missed out and correction on the application from previous filling in Exhibit 10.
- 4. PCB part number changed from PC000509A02_AB to PC003892A01_AA due to PCN changes which required re-layout and replacement parts.



B. <u>PERFORMANCE DIFFERENCES:</u>

EMC, EME & RF has been assessed and no degradation found compared to the previous filing and still within the FCC limits.

C. <u>CONCLUSION:</u>

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

Sincerely,

Arine Lee FCC/IC Certification Manager E-mail : <u>arinelee@motorolasolutions.com</u>