

Date: May 31, 2024

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

Subject: Class II Permissive Change for PCB and Part Modification and PAG C2PCPX

Dear Sir/Madam,

With reference to the C2PCPX procedure subject to PAG approval (item C2PCPX in KDB Publication 388624 D02), the application shall meet the following conditions:

- 1) The requirements of § 2.1043 are fulfilled, i.e., device's block functions for the fundamental frequency, primary modulator circuit, maximum power or field strength ratings shall remain unchanged.  
Overall block diagram maintained and max power no change.
- 2) Transmitter PCB layout and parts changes are only permitted if there is no change in the identification of a device's form, functional specification, as initially granted, or previously approved under a Class II permissive change.  
A minor layout change on the Tx-Pre Driver side. There are no changes on the functional specification and identification of the device's form as initially granted and previously approved.
- 3) PCB changes are limited to non-substantive modifications layout changes to the same size physical circuit board previously granted.  
Yes. PCB stack up, form factor and material are maintained.
- 4) C2PCPX is not permitted to add, remove, augment, or change capabilities, such as transmitters, increased bandwidth, additional rule parts, bands, etc.  
There is no addition or removal in the transmitter capabilities, bandwidth or rules part.
- 5) In the PAG submission for item C2PCPX, the applicant shall provide complete information on testing demonstrating that the proposed changes for fundamental emissions are unchanged within the normal acceptable tolerances and out-band emissions do not exceed the appropriate limits. The PAG submission shall include all applicable test reports and internal photos.  
The test reports and internal photos are provided in the application.
- 6) The modified device shall not be marketed under the existing grant of certification before confirmation that the C2PCPX PAG is approved and granted.  
Yes.
- 7) Software Defined Radio (SDR) grants that use the C2PCPX procedure are not permitted to make subsequent Class III permissive changes.  
Software Defined Radio (SDR) is not used for this application.

- 8) The C2PCPX PAG procedure has no impact on the provisions of V) of this publication for nonSDR software-only changes, thus adding an equipment class when related to rule changes is still permitted.  
There is no addition of equipment class.
- 9) Class I permissive changes are not permitted under this C2PCPX procedure.  
Yes, Class I permissive changes were not performed

Sincerely,



---

Arine Lee  
FCC/IC Certification Manager  
E-mail : [arinelee@motorolasolutions.com](mailto:arinelee@motorolasolutions.com)

## **Product Changes illustration and comparison**

### **Description of the changes**

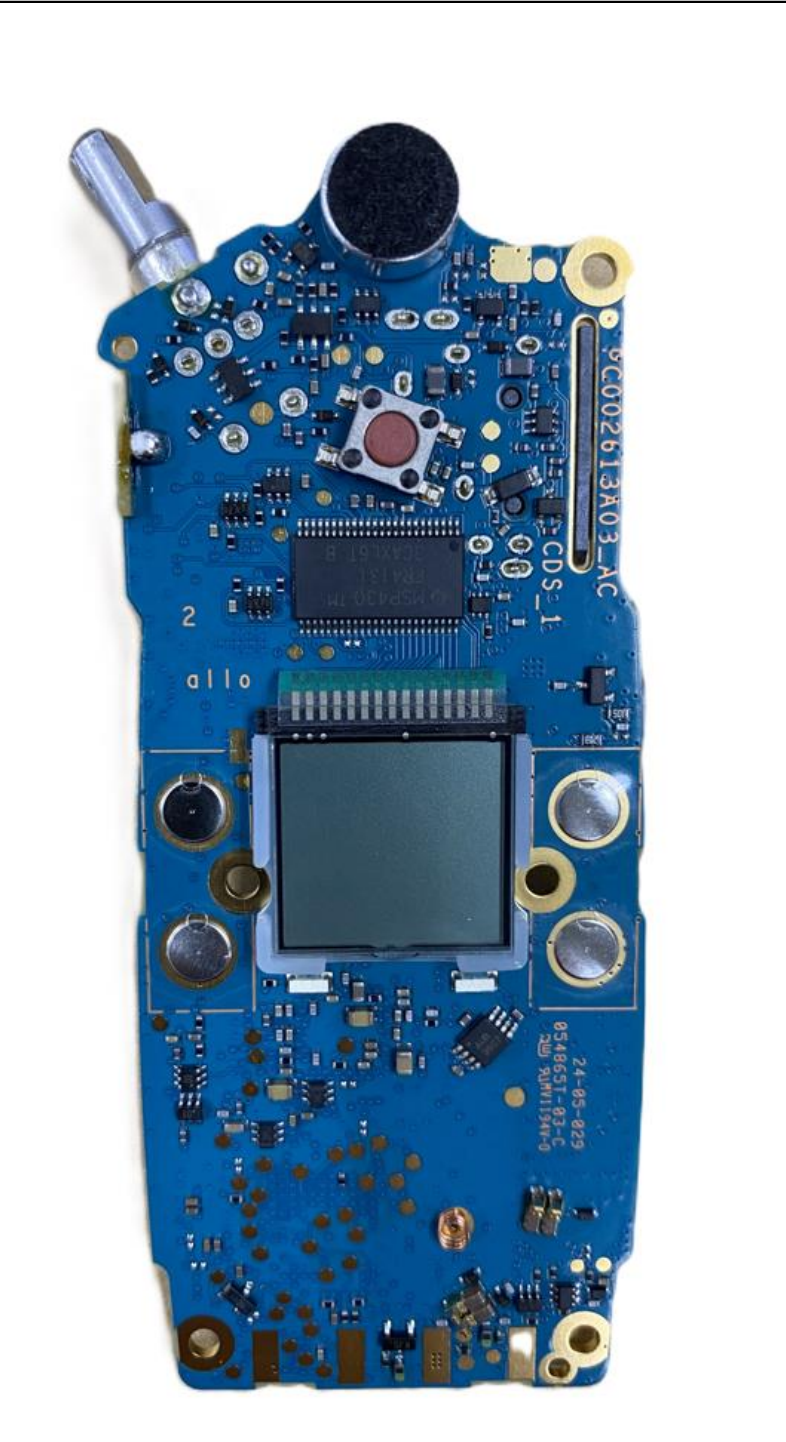
1. Rodinia RFIC change: An up revision of Rodinia RFIC, a multi-mode, multi-band transceiver IC that contains a multi-band high dynamic range receiver for Direct Conversion Receiver, Dual Conversion Receiver, or VLIF applications and multi-band RF transmitter path for constant-envelope TDMA.  
It's a drop in replacement from the same manufacturer that has the same function and form factor. There is no change to the radio electrically and the replacement part is pin-to-pin comparable with the current part.
2. Transmitter section change involving the Tx Pre-Driver replacement and capacitor downsizing with a minor layout change
3. Controller section change on the Power Supply Regulator On Off switch with a direct drop-in replacement part and Flash IC with a minor layout change
4. Front panel section change with layout change and additional component to fix the ESD issue.
5. No change to the existing sales model number
6. Reuse shipping batteries, chargers and accessories.

**RF Board With Shields (Top)**

**Before Changes**



**After Changes**

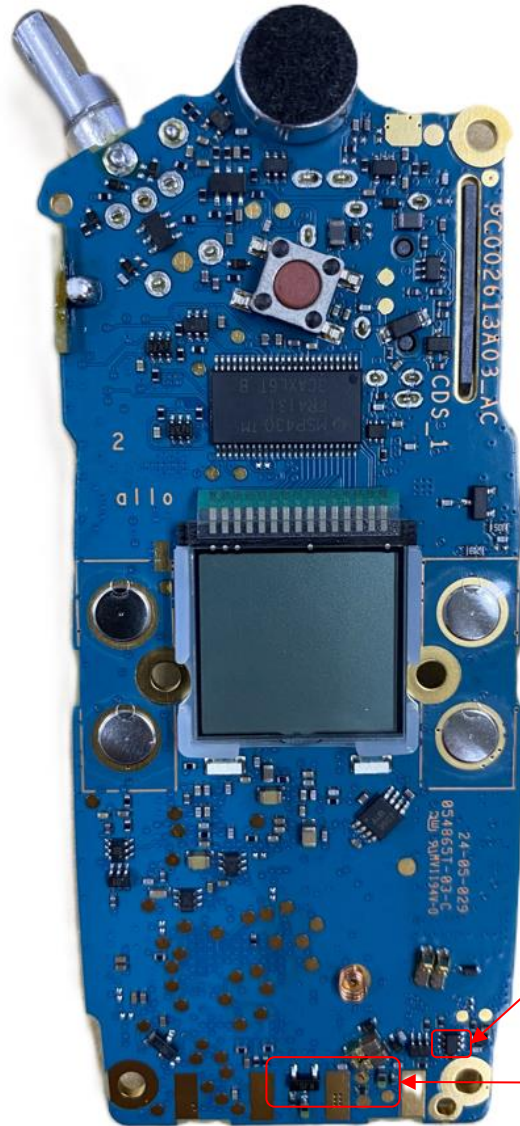


**RF Board Without Shields (Top)**

**Before Changes**



**After Changes**

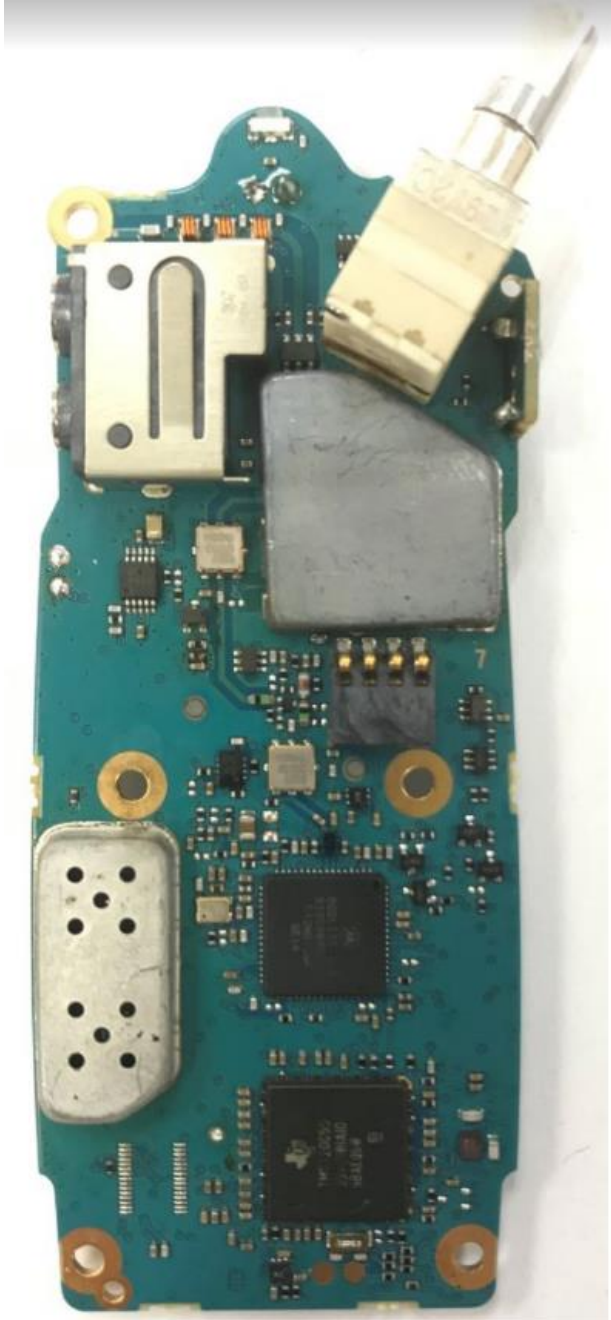


U1002 (Power  
Supply  
Regulator  
Switch)  
ESD Issue  
Fixed

**RF Board With Shields (Bottom)**

**Before Changes**

**After Changes**



**RF Board Without Shields (Bottom)**

**Before Changes**



**After Changes**

