



Ring
1523 26th Street
Santa Monica CA 90404
USA

2021/04/10

FCC C2PC / ISED C3PC Permissive change letter

Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046

Certification and Engineering Bureau
ISED Canada
3701 Carling Avenue (Building 94)
Ottawa, Ontario
K2H 8S2

To whom it may concern,

We, Ring LLC. apply for certification of the below described changes to the following existing certifications:

FCC ID: 2AEUPBHALV002, initial grant data: 2019-06-18

IC: 20271-BHALV002, HVIN: 5AT1S9, PMN: Transformer, approval date: 2019-08-07

under FCC Class 2 Permissive Change rules according to FCC §2.1043 (b)(2) and ISED Class 3 Permissive Change rules according to ISED RSP-100, issue 12, section 10.

For ISED, the updated products will be identified with the following dedicated FVIN: 1.7.16-56 (IC ID, PMN and HVIN remain unchanged).

The purpose of this application is to flip from DTS (902-928MHz band) to the following hopping modes by SW activation:

FSK FHSS 50Kbps 902.2-927.8MHz(Channel Separation:200KHz)---129channels
FSK FHSS 150Kbps 902.4-927.6MHz(Channel Separation:400KHz)---64channels
FSK FHSS 250Kbps 902.5-927.5MHz(Channel Separation:500KHz)---51channels

There is no any changes made on BLE, test results in original report EC1903011F01 will be re-used.



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In addition, we introduce the following HW modification for further production units.
HW modification:

(1) C5 and C6 changed from 12pF to Not Connect (Remove SX1262 32MHz crystal load capacitors)

In SX1262 datasheet explain this:

The SX1261/2 does not require the user to set external foot capacitors on the XTAL supplying the 32 MHz clock. Indeed, the device is fitted with internal programmable capacitors connected independently to the pins XTA and XTB of the device.

Ongoing compliance with all limits according to FCC 15.247 and ISED RSS-247 issue 2 for hopping modes has been verified by testing in accredited and recognized laboratories of TÜV Rheinland / CCIC (Ningbo) Co., Ltd. and is documented in related test reports, as listed below:

Test Report number 50347990 001

We confirm, that all changes are within the boundaries of the FCC C2PC and ISED C3PC rules.

Sincerely,

Hand signed signature

Printed name Carro Hsieh
title Engineer

Company name and address

Ring LLC
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