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Date: 5/21/2018

Federal Communications Commission
Authorization & Evaluation Division
7345 Oakland Mills Road
Columbia, Maryland 21046

RE: Class II Permissive Change for FCC ID: KNY821191151819, Granted 03/21/2008

To Whom It May Concern:

We, FreeWave, are submitting an application for Class II Permissive Change against FCC ID: KNY821191151819.

The changes filed under this application are:

Function/ Description	Old part	New part	Location Changes made with comments
Pre-Scalar	HMC426, U3	ADVM2101, U3	Transmitter Section drop in replacement
Tx/Rx switch	Diodes D2, D4	IC, U15	Transmitter and Receiver sections
LNA	Transistor Q2	IC Q2	Receiver section
IF Filter, secondary	N/A	F5, F6	Receiver section
IF Filter Switches	N/A	U16, U17	Receiver section
Analog switch	Transistors Q6, Q8	IC U20	Analog section
Analog switch	Transistors Q10	IC U21	Analog section
Microcontroller	N/A	IC U19	Digital section
Voltage regulator	N/A	IC U25	Digital section
PCB Rev	EPC0406xb	EPC0406MA/MB	

Resistors, capacitors and inductors were added/removed as well to accommodate the new ICs



There were changes to the layout since we went from discrete components (Diodes D2 & D4) to IC (IC, U15). The "Transmitter portion" was not altered by the layout changes since Transmit output power, Transmit frequency and Transmit modulation, were not affected.

Below are software changes

- On the Tx side, changes were made to the FM modulation waveform (digital shaping filter).
- On the Rx side, changes were made to the demodulation filter (digital shaping filter).

Change current Modular equipment approval to Single Modular approval

Please contact me if you have any questions or need further information regarding this application.

Sincerely,

A handwritten signature in black ink that reads "Riaz Momand". The signature is written in a cursive, flowing style.

Riaz Momand
Sr. Compliance Engineer
FreeWave Technologies, Inc.