



RELM Wireless Corp. – BK Radio
7100 Technology Dr.
W. Melbourne, FL 32904

June 7, 2013

Federal Communications Commission
Authorization and Evaluation Division

K95KNGM800 Class II Permissive Change Request – Circuit Change Description

Applicant: RELM Wireless Corporation
FCC ID: K95KNGM800

The following circuit change has been made to FCC ID K95KNGM800 under the Class II Permissive Change guideline for this FCC ID to have P25 Phase II Operation incorporated; thus, requiring Emissions Designator 8K10F1W to be added.

Some changes to the transmitter power control circuitry are required in order to support the more accurate power ramping required for P25 Phase II operation (emissions designator 8K10F1W). These changes consist of: the addition of a 12-bit DAC to set power, the addition of a comparator to control the existing RX/TX LO switch, and the addition of a limiter amp in the Final Stage gate bias path to allow a software-controlled lower limit to be set during TDMA transmissions. Figure 1 below shows a block diagram of the transmitter as it was when the K95KNGM800 type acceptance was granted and Figure 2 shows a block diagram of the transmitter with the changes required to support emissions designator 8K10F1W. No changes have been made to the synthesizer, VCO, pre-driver stage, driver stage, final stage, antenna switch, harmonic filter or directional coupler. None of the changes will affect maximum output power.

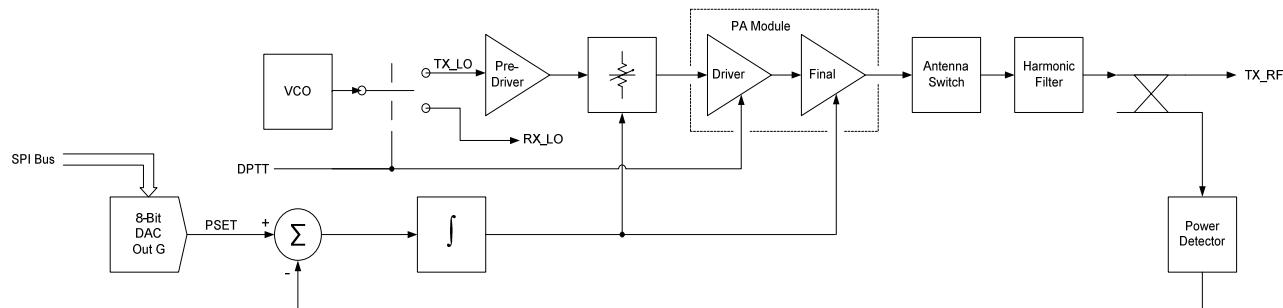


Figure 1 – Transmitter at Type Acceptance Grant

RELM

RELM / BK RADIO

BK RADIO

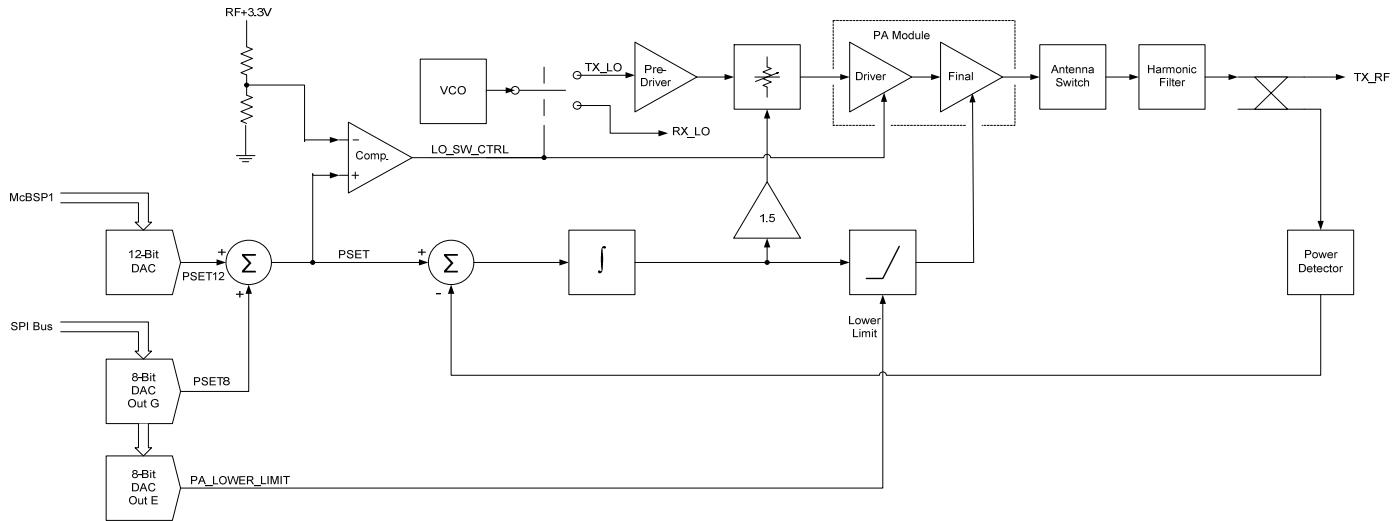


Figure 2 – Transmitter with Changes to Support Emissions Designator 8K10F1W

Sincerely,

Clinton McClanahan

Clinton McClanahan