Documentation for FCC Modular transmitters subject to Certification, FCC Rule Section 2.1033(b)



Integration instructions and Limitation of use § 15.212 rules

Date: 12/11/2016 Rev.2

Subject: Integration instructions and Limitation of use for FCC frequency band restriction

III MODULAR TRANSMITTERS SUBJECT TO § 15.212 RULES (b)

The modular transmitter embeds the nRF24L01+ Single Chip 2.4GHz Transceiver manifactured by Nordic Semiconductor.

To assure that the module can transmit ONLY inside the permitted frequency band specified by FCC rules (§15 chapter), the manufacturer must program the RF-single chip with the admitted values, limited to the following registers.

In reference to the original datasheet from Nordic Semiconductor titled "nRF24L01+ Single Chip 2.4GHz Transceiver Product Specification v1.0" Revision 1.0, Chapter "9 Register Map", Table 28. "Register map of nRF24L01+" page 58:

MUST BE PROGRAMMED WITH VALUES BETWEEN 0x02 and 0x50 (hexadecimal value)

This register specify the radio channel used during transmission/receiving data. If the user doesn't program this register at all, his values at the power on of the equipment will be equals to 0x02 and the frequency of transmission will be 2400MHz + 2Mhz = 2402MHz that is inside the allowed RF band. The minimum Channel correspond to 2402MHz and the maximum correspond to 2480MHz (both inside the allowed RF band).

No other register or software adjustment practice are required to submit the FCC requirements.

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