

Date: 21 March 2024

## NB-IoT offset description

**Manufacturer:** Nordic Semiconductor ASA

**FCC ID:** 2ANPO00NRF9151

**IC:** 24529-NRF9151

We, **Nordic Semiconductor ASA**, hereby states that our module nRF9151 has been tested to certify Cat M1 and NB-IoT bands for FCC and ISED certification. The strategy followed to perform this testing was finding the channels outermost of the bands, which complies with the block edge testing; accordingly, we can demonstrate the lowest and highest channels for NB-IoT bands are the following ones:

Channel Number (Frequency MHz) – NB-IoT											
	B2	B4	B5	B8	B12	B13	B17	B25	B26	B66	B85
<b>Lowest</b>	18602 (1850.2)	19952 (1710.2)	20402 (824.20)	21628 (897.80)	23012 (699.20)	23182 (777.20)	23732 (704.20)	26042 (1850.2)	20402 (814.20)	131974 (1710.2)	134004 (698.2)
<b>Middle</b>	18900 (1880)	20300 (1745)	20525 (836.50)	21640 (899)	23090 (707)	23230 (782)	23790 (710)	26365 (1882.5)	20525 (836.50)	132322 (1745)	134092 (707)
<b>Highest</b>	19198 (1909.8)	132670 (1754.8)	20648 (848.80)	21652 (900.20)	23179 (715.9)	23278 (786.80)	23848 (715.80)	26688 (1914.8)	20648 (848.80)	132670 (1779.8)	134181 (715.9)

For NB-IoT technology, an offset of  $\pm 100$  kHz for the first/last transmission channel is needed because the bandwidth required for a transmission is 200 kHz. However, for some bands it has been adjusted the lower and/or higher operating band limits in order to be in compliance with the results obtained in the band-edge test. All measurements have been performed in accordance with the allocated channels above, being the result of the band edge limit test case.

The operating frequency bands for this module are defined as above for NB-IoT, and this restriction will be applied by enabling only the above specified bandwidths via firmware setting, without hardware modifications.

For ISED the band 26 is limited to B5.

Yours sincerely,




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