

## Standalone SAR test exclusion considerations

| RF feature | Mode              | Transmitting Frequency(MHz) | Test separation distance (mm) | ANT Gain (dBi) | Max. power with tune-up tolerance (dBm) <sup>Note1</sup> | Max. power with tune-up tolerance (mW) | Power thresholds | SAR test exclusion thresholds |
|------------|-------------------|-----------------------------|-------------------------------|----------------|--|--|------------------|-------------------------------|
| BLE        | GFSK(1Mbps)       | 2 402.00 ~ 2 480.00         | 5.0                           | 0.93           | -23.00   | 0.005 0                                | 0.002            | 3.000                         |
| Zigbee     | O-QPSK (250 kbps) | 2 480.00 ~ 2 480.00         | 5.0                           | 0.74           | -23.00   | 0.005 0                                | 0.002            | 3.000                         |
|            |                   |                             |                               |                |  |  |                  |                               |
|            |                   |                             |                               |                |  |  |                  |                               |
|            |                   |                             |                               |                |  |  |                  |                               |
|            |                   |                             |                               |                |  |  |                  |                               |
|            |                   |                             |                               |                |  |  |                  |                               |
|            |                   |                             |                               |                |  |  |                  |                               |
|            |                   |                             |                               |                |  |  |                  |                               |
|            |                   |                             |                               |                |  |  |                  |                               |
|            |                   |                             |                               |                |  |  |                  |                               |

Note1. Please refer to the operation description for Max Tune-up power.

### KDB 447498 D01 clause 4.3.1 Step 1) SAR test exclusion thresholds for 100MHz to 6GHz at test separation distances ≤ 50 mm

$$\left[ \left( \text{max. power of channel, including tune-up tolerance, mW} \right) / \left( \text{min. test separation distance, mm} \right) \right] \cdot \left[ \sqrt{f(\text{GHz})} \right] \leq 3.0 \text{ for 1g SAR and } \leq 7.5 \text{ for 10g extremity SAR}$$

#### Sample Calculation

$$= \left[ \left( 0.005\text{mW} / 5\text{mm} \right) \right] \times \left[ \sqrt{2.402\text{GHz}} \right] = 0.002$$

Note. The calculation result was rounded to two decimal place for comparison.

**Conclusion :** SAR evaluation for general population exposure conditions by measurement or numerical simulation is not required