

Modular Approval Request FCC (KDB 996369 D01 & Part 15.212)

FCC ID: 2AGJ2-001

| Items to be covered by Single modular transmitters. | | Answer from applicant |
|---|---|--|
| 1. | The modular transmitter must have its own RF shielding. | Yes; The module has an SMT shield that encompasses all RF components and traces aside from the u.FL IO connector. |
| 2. | The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with Part 15 requirements under conditions of excessive data rates or overmodulation. | Yes; All data inputs to the nRF52840 are buffered internal to the nRF52840. |
| 3. | The modular transmitter must have its own power supply regulation. | Yes; It is integrated in the nRF52840. |
| 4. | The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(b)(c). The antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the module and the antenna, including the cable). | Yes; The SMT-mount antenna option will be permanently attached to the host (product) PCB. The external antenna variants use "unique" RP-SMA connectors for antenna attachment to the host product. |
| 5. | The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing. This is intended to demonstrate that the module is capable of complying with Part 15 emission limits regardless of the device into which it is eventually installed. | Yes. |
| 6. | The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number in accordance with 15.212 (a)(1)(vi)(A) / (B). | Yes; The FCC ID will be laser etched into the shield. |
| 7. | The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements. A copy of these instructions must be included in the application for equipment authorization. For example, there are very strict operational and timing requirements that must be met before a transmitter is authorized for operation under Section 15.231. For instance, data transmission is prohibited, except for operation under Section 15.231(e), in which case there are separate field strength level and timing requirements. Compliance with these requirements must be assured. | Yes; Instructions and datasheets will indicate these requirements and be adhered to for all host products that use the radio module. |
| 8. | The modular transmitter must comply with any applicable RF exposure requirements. For example, FCC Rules in Sections 1.1310, 2.1091, 2.1093, and specific Sections of Part 15, including 15.319(i), 15.407(f), 15.253(f) and 15.255(g), require that Unlicensed PCS, UNII and millimeter wave devices perform routine environmental evaluation for RF Exposure to demonstrate compliance. In addition, spread spectrum transmitters operating under Section 15.247 are required to address RF Exposure compliance. Modular transmitters approved under other Sections of Part 15, when necessary, may also need to address certain RF Exposure concerns, typically by providing specific installation and operating instructions for users, installers and other interested parties to ensure compliance. | Yes. |

Name and surname of applicant (or <u>authorized</u> representative): Kristine Song

Date: December 04, 2018

Signature: /