|   | ant/Grantee   | Microchip Technology Inc.   |  |              |  |  |
|---|---|---|--|--------------|--|--|
| FCC I   | D:  | 2ADHKR30M   |  |              |  |  |
| Section 15.212 Modular Transmitters / X Request for Modular Approval Request for Limited Modular Approval |   |   |  |              |  |  |
| X   | Request for Mo  |   | est for Limited Modular Approval  Device Conditions  | C            |  |  |
|   |   | Requirements  |  | Comply (Y/N) |  |  |
| 1   | frequency cir<br>Physical/discr<br>may be locate  | ments must have the radio cuitry shielded. ete and tuning capacitors d external to the shield, but e module assembly.   | Approval Requirements  This module has shielding case.   | Y            |  |  |
| 2   | modulation/da<br>provided) to e<br>comply with<br>applicable RS   | hall have buffered<br>ata input(s) (if such inputs are<br>ensure that the module will<br>the requirements set out in the<br>S standard under conditions<br>data rates or over-modulation. | inputs, it is integrated on the RF chip  | Y            |  |  |
| 3   | The module shall have its own power supply regulation on the module. This is to ensure that the module will comply with the requirements set out in the applicable standard regardless of the design of the power supplying circuitry in the host device which houses the module. Requirements set out in the applicable standard regardless of the design of the power supplying circuitry in the host device which houses the module. |   | The EUT and the RF SiP (System in package) has integrated LDOs to provide the required core voltages for RF sections including both Transmitter and Receiver sections.   | Y            |  |  |
| 4   | The module shall comply with the provisions for external power amplifiers and antennas detailed in this standard. The Equipment certification submission shall contain a detailed description of the configuration of all antennas that will be used with the module.   |   | The module's RF output is through castellated PCB pad and modular approval is demonstrated through microstrip trace on the host's PCB as mentioned in KDB 996369 D02 Module Q and A v01 Q11. The host reference board has implementations for External Antenna (RF connector) and chip antenna. Only specific approved External antenna(s) are identified for use. | Υ            |  |  |
| 5   | The module shall be tested for compliance with the applicable standard in a standalone configuration, i.e. the module must not be inside another device during testing.   |   | See Setup Photos   | Y            |  |  |
| 6   |   | transmitter must be<br>n either a permanently affixed   | See Label Exhibit  | Υ            |  |  |

| 7 | The modular transmitter complies with all specific rules or operating requirements that ordinarily apply to a complete transmitter and the manufacturer will provide adequate instructions along with the module to explain any such requirements. A copy of these instructions is included in this application for equipment authorization: | Instructions in User Manual   | Υ |
|---|--|---|---|
| 8 | Address compliance with the Commission's RF exposure limits in Sections 1.1310 and 2.1093. In addition, spread spectrum transmitters operating under Section 15.247 are required to address RF exposure compliance in accordance with Section 15.247(b)(4).  | Instructions are given in the installation manual for compliance to the RF exposure requirements. | Υ |

A limited modular approval may be granted for single or split modular transmitters that do not comply with all of the above requirements, e.g., shielding, minimum signaling amplitude, buffered modulation/data inputs, or power supply regulation, if the manufacturer can demonstrate by alternative means in the application for equipment authorization that the modular transmitter meets all the applicable Part 15 requirements under the operating conditions in which the transmitter will be used. Limited modular approval also may be granted in those instances where compliance with RF exposure rules is demonstrated only for particular product configurations. The applicant for certification must state how control of the end product into which the module will be installed will be maintained such that full compliance of the end product is always ensured.

Signature

Name/Title: Steve Caldwell / Vice President Company Name: Microchip Technology Inc.

Date: 12 Nov 2018

Steve Caleful