Shenzhen Ai-Thinker Technology Co., Ltd

Federal Communications Commission Equipment Authorization Division 7435 Oakland Mills Road Columbia, MD 21046 USA

Date: 2022.12.12

Subject; LoRa Module

Company name: Shenzhen Ai-Thinker Technology Co., Ltd

FCC ID: 2ATPO-01SCH

Dear Sir/Madam,

This letter includes the FCC application requirements for Modular Transmitter Approval Request for;-

FCC KDB 996369 D01 'Module Certification Guide v02; and FCC KDB 996369 D03 OEM Manual v01

In accordance with 47CFR 15.212 Modular Transmitters and KDB 996369 D01 'Module Equip Auth Guide v02'. FCC ID 2ATPO-01SCH has been examined against the following requirements.

| Requirement per 15.212 and KDB 996369 D01 | Explanation from Grantee (do not write yes/no, but explain why product complies/how it is achieved) | |
|--|---|--|
| The radio elements must have the radio frequency circuitry shielded. Physical components and tuning capacitor(s) may be located external to the shield, but must be on the module assembly. | YES, The module is protected by shielding cover | |
| The module must have buffered modulation/data inputs to ensure that the device will comply with Part 15 requirements with any type of input signal. | YES, All modulation and data inputs are buffered by circuitry on the transmitter chip HW3000RF, as is shown in the schematic. | |
| The module must contain power supply regulation on the module. | YES, Power supply regulation is provided by circuitry on the transmitter chip HW3000RF, as is shown in the schematic. | |
| The module must contain a permanently attached antenna, or contain a unique antenna connector, and be marketed and operated only with specific antenna(s), per §§ 15.203, 15.204(b), 15.204(c), 15.212(a), 2.929(b). | YES, The module contain a unique antenna connector and spurious emission have been fulfilled. Please reference the exhibition Test Report. | |
| The module must demonstrate compliance in a stand-alone configuration. | YES, Please reference exhibition Test Configuration Photo for the stand-alone test configuration. | |
| The module must be labeled with its permanently affixed FCC ID label, or use an electronic display (see KDB Publication 784748). | YES, The instruction on the labelling rule of the end product has been stated in the Users manual of this module. Please also see the exhibition Label Sample. | |
| The module must comply with all specific rules applicable to the transmitter, including all the conditions provided in the integration instructions by the grantee. | YES, The required FCC rule has been fulfilled and all the instructions for maintaining compliance has been clearly stated in the Users Manual. | |
| The module must comply with RF exposure requirements | YES, Please refer exhibition RF Exposure for the compliance of MPE RF exposure rule. | |

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Integration Instructions for host product manufacturers

The following items are submitted in support of application for Modular Transmitter FCC ID as noted above as required by the FCC KDB 996369 D03 OEM Manual v01.

These items are provided as integration instructions for host product manufacturers (e.g., OEM instruction manual) to use when integrating a module in a host product.

Any requirements that are not applicable to the Module are as indicated below.

Summary of requirements and Checklist. Refer to the KDB for description of the complete requirements;

| KDB | Requirements of KDB 996369 D03 | User Manual Page Number |
|----------|---|-------------------------|
| Ref Sect | | reference |
| 2.2 | List of applicable FCC rules | 21 |
| 2.3 | Summarize the specific operational use conditions | 21 |
| 2.4 | Limited module procedures | 21 |
| 2.5 | Trace antenna designs | 22 |
| 2.6 | RF exposure considerations | 22 |
| 2.7 | Antennas | 23 |
| 2.8 | Label and compliance information | 24 |
| 2.9 | Information on test modes and additional testing | 24 |
| | requirements | |
| 2.10 | Additional testing, Part 15 Subpart B disclaimer | 24 |

Name: Ning Guan Date: 2022.12.12

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Title: manager

Signature of applicant