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Date: 2017.06.27

LIMITED MODULAR APPROVAL REQUEST

To Whom It May Concern:

We hereby requests limited modular transmitter approval of our device, described as follows:

Brand name: NFC card reader board
Product: X-NUCLEO-NFC05A1
Type ref: X-NUCLEO-NFC05A1
FCC ID: YCPNFC05A1
PMN: X-NUCLEO-NFC05A1

1. The modular transmitter must have its own shielding.

X-NUCLEO-NFC05A1 has no extra shielding covering all critical RF components. This can be seen in the photographs included in the accompanying test report. But X-NUCLEO-NFC05A1 has passed Part 15 FCC Rules. Under FCC part 15.212(b), shielding is not required. As noted in technical manual, X-NUCLEO-NFC05A1 is intended to be used only in combination with NUCLEO-L476RG specific device (Host), where it will be ensured, that the product complies with relevant FCC part 15 rules.

2. The modular transmitter must have buffered modulation/data inputs to ensure that the device will comply with Part 15 requirements with any type of input signal.

X-NUCLEO-NFC05A1 is in compliance with ISO 14443A and ISO 14443B mode, Felica mode and NCIP-1 mode and has buffered, ASK modulated output.

3. The modular transmitter must have its own power supply regulation. This is intended to ensure that the module will comply with Part 15 requirements regardless of the design of the power supplying circuitry in the device into which the module is installed.

X-NUCLEO-NFC05A1 is powered by NUCLEO-L476RG Host device.

4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204c. 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). Any antenna used with the module must be approved with the module, either at the time of initial authorization or through Class II permissive change. The “professional installation” provision of Section 15.203 may not be applied to modules.

X-NUCLEO-NFC05A1 has integrated PCB type RFID antenna and can not be changed by other antennas.

5. The modular transmitter must be tested in a stand-alone configuration

X-NUCLEO-NFC05A1 was tested in its typical configuration with representative host since normal operation without a host can not be achieved. It complies with Part 15 Rules. The module is provided as an limited module and a grant note will restrict the usage only to NUCLEO-L476RG specific device (Hosts).

6. The modular transmitter must be labelled with its own FCC ID number, and, if the FCC ID is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: “Contains Transmitter Module FCC ID: “XYZMODEL1” or “Contains FCC ID: XYZMODEL1.” Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment authorization.

X-NUCLEO-NFC05A1, is fitted with his own labels (and printed marks), including the FCC ID label (printed on pcb).

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.

X-NUCLEO-NFC05A1, has been tested to comply with all rules under Part 15. The compliance is assured by the design of this device. The user must be able to operate with device correctly (must follow technical manual). The grantee has provided instructions to explain that the device is only to be used in NUCLEO-L476RG specific type device (Host).

8. The modular transmitter must comply with any applicable RF exposure requirements.

X-NUCLEO-NFC05A1, operates in the 13.56 MHz ISM unlicensed band and is suitable for worldwide use. The frequency is not adjustable. This device complies with FCC radio frequency (RF) Exposure Guidelines. This equipment has very low levels of RF energy that are deemed to comply without testing of specific absorption ratio (SAR).

9. Comment

This is a limited modular approval and it could be integrated only in the NUCLEO-L476RG specific type device (Host).



Signature

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Title: Head of Laboratory

