NXP Austria GmbH,
Mikron-Weg 1,

A-8101 Gratkorn, Austria
Date: Dec 23, 2015

RE: LIMITED MODULAR APPROVAL REQUEST

To Whom It May Concern:

We, NXP Austria GmbH, Micron-Weg 1, 8101 Gratkorn, Austria, hereby requests for part 15 unlicensed limited modular transmitter approval of our device, described as follows:

Brand name: NXP
Model name: Customer Development Board
Type number: PNEV5180B
FCC ID: OWRPNEV5180B

In FCC Public Notice DA 00-1407 released June 26,2000 there are eight numbered requirements that our device complies with:

1. The modular transmitter must have its own shielding.

Customer Development Board PNEV5180B has no extra shielding covering all critical RF components. This can be seen in the photographs included in the accompanying test report. But PNEV5180B board has passed spurious emissions test without shielding. Under FCC part 15.212(b), shielding is not required. As noted in integration manual, the development board is intended for professional and development use only and cannot be used in final products. The module is tested to comply with relevant part 15 rules without shielding and in the same configuration as it is intended to be used by developer.

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.

Customer Development Board PNEV5180B 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.

Customer Development Board PNEV5180B is powered via usb port from computer or from external power supply 7.5 V DC / 500 mA. PNEV5180B board has power supply filter in front of IC PN5180. Supply voltage from usb port must be between 4.75 V and 5.25 V DC (current consumption is up to 450 mA). Supply voltage from external power supply 7.5 V DC / 500 mA must be between 6.4 V and 8.6 V DC (current consumption is up to 450 mA). All other power supply voltages are generated internally.

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.

Customer Development Board PNEV5180B has a unique antenna coupler (matching capacitors) - at all connections between the module PN5180 and the pcb antenna. PCB antenna is in the same board with the reader IC PN5180 and it is permanently attached, without cable, to the reader IC via matching capacitors.

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

Customer Development Board PNEV5180B is tested in standalone configuration. It complies with Part 15 emissions. Customer Development Board PNEV5180B does not contain any ferrites. The module is provided as an evaluation module only and a grant note will restrict the usage to development and prohibit the use of the module in a finale product without further certification on the final assembly.

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.

Customer Development Board PNEV5180B is fitted with his own labels (and printed marks), including the FCC ID label (printed on pcb). Hardware manual has instructions for host labeling on page #16.

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.

Customer Development Board PNEV5180B 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 integration manual). The grantee has provided instructions to explain that the device is only to be used for development and cannot be used in final assembly.

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

Customer Development Board PNEV5180B operates in the 13.56 MHz (+/- 7 kHz) ISM unlicensed band and is suitable for worldwide use. The frequency is not adjustable. This device complies with Part 15 FCC Rules.

9. Comment

This is a limited modular approval is being sought because the module does not have a shield and the device is intended for development purposes and cannot be used in a final assembly.

Signature

Name: Peter Raggam
Title: Head of Product Management