Federal Communications Commission
Authorization and Evaluation Division
Equipment Authorization Branch
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Request for Part 15 Single-Modular Transmitter Approval

Company name: u-blox AG

FCC ID: XPYNINAB5

FCC Part 15 Certification

To whom it may concern:

Herewith we state that the requirements according to FCC Part 15.212 are met and the module qualifies for a single modular transmitter approval.

In CFR Title 47 Chapter I Subchapter A Part 15 Subpart C Section 15.212 there are eight numbered requirements that our device complies with:

1. The modular transmitter must have its own RF shielding

The module has its RF-parts enclosed by a shield cover soldered onto the module ground plane.

2. The modular transmitter must have buffered modulation/data inputs

The module does not have modulation inputs. The electrical interface available to the module integrator consists of Power supply, UART, SPI and I/O signals. The interface signals are internally buffered by the module System on Chip and cannot affect the modulation.

3. The modular transmitter must have its own power supply regulation

The module SoC (System on Chip) has its own internal voltage regulators. In case the supply voltage fluctuates internal voltages will be kept unaffected.

4. The modular transmitter must comply with the antenna requirements of Section 15.203, 15.204(b) and 15.204(c)

The RF-port of module versions of NINA-B501 is available at a solder land and the antenna trace reference design guides the module integrator how to connect this solder land to a U.FL connector.

The module versions NINA-B506 are equipped with an integrated antenna. On these module versions, the RF-port is not available for external antenna connection.

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

The module was soldered onto the evaluation board EVB-NINA-B5 and tested in a stand-alone configuration. The antenna trace reference design connecting the RF-port of NINA-B501 to a U-FL connector was implemented on the EVB-NINA-B5 evaluation board.

6. The modular transmitter must be labelled with its own FCC ID number

The module is too small for the FCC ID to be readable and as a consequence not labelled with its own FCC ID. The FCC identifier is instead in accordance with 47 CFR §2.925 (f) placed in the user manual

and also placed on the device packaging. Instructions are also provided in the user manual how the end-product containing the module must be labelled.

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.

The Bluetooth modules NINA-B501 and NINA-B506 is compliant with all applicable FCC rules. Detailed instructions to the module integrator are presented in the User's Guide.

8. The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.

NINA-B501 and NINA-B506 complies with the RF exposure limits when integrated into host devices categorized as mobile and/or fixed. See separate document for RF exposure calculations.

Sincerely,

u-blox AG
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Filip Kruzela, Certification Manager, u-blox AG