



Attn: Reviewing Engineer
Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046

RE: Certification Application
Model: ANNA-B112
FCC ID: XPYANNAB1

Registered office:
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Request for Part 15 Single-Modular Transmitter Approval

To whom it may concern:

We, u-blox AG, hereby requests for a limited modular transmitter approval of our OEM-Bluetooth module ANNA-B112. The equipment is described as follows:

Brand name: u-blox
HVIN: ANNA-B112
FCC ID: XPYANNAB1

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 module ANNA-B112 has an integrated antenna mounted on the substrate. The RF signal can also be connected to an external antenna connector and the antenna trace reference design guides the module integrator how to connect this solder land to a U.FL connector.

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

The module was soldered onto the evaluation boards EVB-ANNA-B112U, EVB-ANNA-B112C and REF-ANNA-B112E and tested in a stand-alone configuration. The antenna trace reference design connecting the RF-port of ANNA-B112 to a U-FL connector was implemented on the EVB-ANNA-B1 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 module ANNA-B112 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.

ANNA-B112 complies with the RF exposure limits when integrated into host devices categorized as mobile and/or fixed. See separate document for RF exposure calculations.

Thank you for your attention in this matter.



Filip Kruzela
Certification Manager

Job Title and Dept.: