



Attn.: Reviewing Engineer

PHOENIX TESTLAB GmbH

RE: Certification Application

HVIN: NINA-B316, NINA-311, NINA-B312

IC: 8595A-NINAB1

FCC ID:XPYNINAB31

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Declaration of Product Family Equality

To whom it may concern:

We, u-blox AG, hereby declare that the product versions described below are identical except for the differences listed below.

Product Marketing Name: NINA-B316, NINA-311, NINA-B312

- The printed wiring board have identical layer stack-up and dielectric properties
- Impedance controlled traces and other RF-related parts of the layout, except for the antenna configurations, are identical
- The differences between the product versions are:

Module variant	Chipset	Antenna configuration
NINA-B311	nRF52840	Antenna pin
NINA-B312	nRF52840	Integrated metal sheet PIFA antenna
NINA-B316	nRF52840	Integrated PCB trace antenna



Figure 1: Antenna configuration comparison - NINA-B312 to the left, NINA-B316 to the right

Thank you for your attention in this matter.

Yours Sincerely,

Filip Kruzela

Certification Manager, u-blox