

Information Note

Topic NINA-B1 software, certification, and mass production updates

UBX-17065020

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1 Affected Products

Product Name	Order Code	Type No	Remarks
NINA-B111	NINA-B111-00B	NINA-B111-00B-00	New ordering code with software v4: NINA-B111-03B
NINA-B112	NINA-B112-00B	NINA-B112-00B-00	New ordering code with software v4: NINA-B112-03B
NINA-B111	NINA-B111-01B	NINA-B111-01B-00	New ordering code with software v4: NINA-B111-03B
NINA-B112	NINA-B112-01B	NINA-B112-01B-00	New ordering code with software v4: NINA-B112-03B
NINA-B111	NINA-B111-02B	NINA-B111-02B-00	New ordering code with software v4: NINA-B111-03B
NINA-B112	NINA-B112-02B	NINA-B112-02B-00	New ordering code with software v4: NINA-B112-03B
EVK-NINA-B111	EVK-NINA-B111	EVK-NINA-B111-00	
EVK-NINA-B112	EVK-NINA-B112	EVK-NINA-B112-00	

2 Type of Change

- Hardware modification
- Software update available
- Certification and Bluetooth qualification update
- Documentation update
- Others, Mass Production status reached for modules with software v3

3 Description of Change

The change includes new NINA-B1 software v4, Bluetooth qualification and country certification updates, and Mass Production status for modules with software v3. Related documentation updates are available.

3.1 NINA-B1 u-blox connectivity software v4.0.0 available

Version 4.0.0 of the *NINA-B1 u-blox connectivity software* [1] is now available. The software contains all features of the previous software releases plus improvements and new features, such as:

- Bluetooth 5 – High speed support
- GPIO pin control
- Additional conditions to trigger DTR pin (for example, to wake up the host on a Bluetooth GAP connection)
- Customized Device Information Service
- Increased number of GATT services and characteristics
- Simplified software updates using XMODEM

The released software is for use in volume production. For details about this software release, please see the *Release notes [2]*. New ordering codes for modules with software v4 are:

- NINA-B111-03B
- NINA-B112-03B

The ordering codes for the modules with software v1, v2, and v3 remains unchanged and are listed below:

- Software v3:
 - NINA-B111-02B
 - NINA-B112-02B
- Software v2:
 - NINA-B111-01B
 - NINA-B112-01B
- Software v1:
 - NINA-B111-00B
 - NINA-B112-00B

All modules and evaluation kits can be updated to v4 via a software update. See the *NINA-B1 series System Integration Manual [5]* for instructions on how to upgrade your module. Note that the update procedure for software v4.0.0 has been updated.

3.2 Certification and Bluetooth qualification update

3.2.1 Country certification

The new high-speed (2 Mbit/s physical layer) feature introduced in Bluetooth 5 adds a new modulation alternative with 2 MHz wide channels instead of the 1 MHz wide channels used with the 1 Mbit/s physical layer. If the new 2 Mbit/s physical layer is activated, the regulatory certifications could be affected due to the new wider channels, and thus the certifications are re-evaluated for compliance also with the new mode. u-blox is updating all applicable country certifications for NINA-B1. All certification IDs will remain the same.

The default configuration is that the new 2 Mbit/s physical layer will be used if another device requests it. This can however be disabled via AT commands, so that only 1 Mbit/s physical layer is used (so that it remains the same as it is in the software versions 1 to 3).

Certification (country)	Status
FCC (US)	Complete
ISED / IC (Canada)	Complete
ETSI / RED (Europe)	Complete <i>Note: ETSI/RED is a non-modular approval. The end customer must evaluate the end product. Test reports from u-blox are available on request.</i>
ACMA (Australia / New Zealand)	Complete
Anatel (Brazil)	Complete
ICASA (South Africa)	Complete
NCC (Taiwan)	Complete
MIC (Japan)	All tests have been completed. Certificate update is in progress.
KCC (South Korea)	Addition of 2 Mbit/s mode in progress

3.2.2 Bluetooth qualification

NINA-B1 software v4 (Nordic Semiconductor SoftDevice S132 v5) has support for Bluetooth v5.0 and NINA-B1 has gone through the Bluetooth qualification for Bluetooth v5.0. The new Bluetooth qualification for Bluetooth v5 has a new Qualified Design ID (QDID), which customers who use software v4 (SoftDevice v5) and are Bluetooth listing their end product shall refer to in their end product listing. See the *Data Sheet [4]* for further information.

3.3 Documentation update

The following documents have been updated to reflect the latest changes. See the revision history in each document for details.

- AT commands manual [3]
- NINA-B1 Data Sheet [4]
- NINA-B1 System Integration Manual [5]
- NINA-B1 Getting Started [6]
- NINA-B1 Product Summary [7]

3.4 Mass Production product status for modules with software v3

The NINA-B1 series modules with software v3 (ordering codes NINA-B111-02B and NINA-B112-02B) are now in Mass Production status. The new modules with software v4 are in Initial Production status currently and will move to Mass Production later.

4 Schedule

All documentation and software v4.0.0 are available for download from www.u-blox.com.

Modules flashed with software v4.0.0 (ordering codes NINA-B111-03B and NINA-B112-03B) can be ordered now.

The Data Sheet will be updated with MIC (Japan) and KCC (South Korea) certification information for Bluetooth 5 on completion of the certification updates.

5 Customer Impact and Recommended Action

We recommend that customers review the updated documentation and learn how the certification and Bluetooth qualification updates could affect their end product. It is recommended to upgrade to the latest software [1] to take advantage of the latest updates and features and to perform a verification of the new release in the customer application.

6 Reference Documents

- [1] [NINA-B1 u-blox connectivity software v4.0.0 zip package](#)
- [2] [NINA-B1 u-blox connectivity software v4.0.0 Release notes](#), UBX-17063069
- [3] [u-blox Short Range Modules AT Commands Manual](#), UBX-14044127
- [4] [NINA-B1 Data Sheet](#), UBX-15019243
- [5] [NINA-B1 System Integration Manual](#), UBX-15026175
- [6] [NINA-B1 Getting Started](#), UBX-16009942
- [7] [NINA-B1 Product Summary](#), UBX-15018552