

Information Note

Topic u-connect Bluetooth mesh experimental software available for NINA-B3
UBX-19028461

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1 Affected Products

Product name	Ordering code	Type number	Software version
NINA-B311	NINA-B311-01B	NINA-B311-01B-00	u-connectXpress V2.0.0
NINA-B312	NINA-B312-01B	NINA-B312-01B-00	u-connectXpress V2.0.0
NiNA-B316	NINA-B316-01B	NINA-B316-01B-00	u-connectXpress V2.0.0
NINA-B311	NINA-B311-00B	NINA-B311-00B-00	u-connectXpress V1.0.0
NINA-B312	NINA-B312-00B	NINA-B312-00B-00	u-connectXpress V1.0.0
NINA-B311	NINA-B311-20B	NINA-B311-20B-00	u-connectScript V1.0.1
NINA-B312	NINA-B312-20B	NINA-B312-20B-00	u-connectScript V1.0.1
EVK-NINA-B311	EVK-NINA-B311		
EVK-NINA-B312	EVK-NINA-B312		
EVK-NINA-B316	EVK-NINA-B316		

2 Type of change

- Hardware modification
- Firmware update
- Documentation update
- Others

3 Description of change

u-connect Bluetooth mesh experimental software is now available. **Note that it is intended only for evaluation purposes and should not be used for volume production. A commercial release is planned for a later date; contact u-blox for further details.** See the Release Notes ([6], [7]) for details about this software release.

u-connect includes both the u-connectXpress and u-connectScript software variants.

u-connectXpress Bluetooth mesh experimental introduces an easy to use AT command interface for creation of Bluetooth mesh nodes. It supports regular node and relay node according to Bluetooth mesh v1.0 [10]. New AT commands and events have been introduced with the following functionality:

- Model creation including pre-defined Bluetooth SIG models
- Configuration and provisioning of mesh nodes
- Publishing data
- Reception of status and data

u-connectScript Bluetooth mesh experimental introduces a JavaScript interface for creation of Bluetooth mesh nodes with a stand-alone application running inside the module. It supports regular node and relay node according to Bluetooth mesh v1.0 [10]. Functions, callbacks and events have been added for the following functionality:

- Model creation including pre-defined Bluetooth SIG models
- Publishing data
- Reception of status and data
- Reception of beacons, Eddystone and iBeacon

For further details visit NINA-B3 scripting at GitHub. New AT commands have been added for configuration and provisioning of mesh nodes. Features from u-connectScript v1.0.1 are also available.

All affected modules and evaluation kits can be updated to u-connect Bluetooth mesh experimental via a software update. See the NINA-B3 series System Integration Manual [1] for instructions on how to upgrade your module.



Note that u-connectScript mesh experimental requires EVK revision -01 or later. Details on how to check this can be found in the NINA-B3 EVK User Guide [2].

3.1 Documentation update

The following new document is provided for this release:

- Bluetooth mesh with u-connect software Application Note [1]

4 Schedule

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

5 Customer impact and recommended action

We recommend that customers review the new documentation. Customers interested in evaluating Bluetooth mesh using u-connect software are recommended to upgrade to the experimental software ([6], [7]) and follow the example provided in the Bluetooth mesh with u-connect SW application note [1].

Reference documents and software

- [1] Bluetooth Mesh with u-connect software Application Note, Doc. [No. UBX-19025268](#)
- [2] NINA-B3 EVK User Guide, Doc. No. [UBX-17056481](#)
- [3] NINA-B3 System Integration Manual, Doc. No. [UBX-17056748](#)
- [4] NINA-B30 Product Summary, Doc. No. [UBX-17052930](#)
- [5] NINA-B31 Product Summary, Doc. No. [UBX-17052931](#)
- [6] u-connectXpress Mesh Experimental v0.7.0 for NINA-B31 series Release Notes, Doc. No. [UBX-19027388](#)
- [7] u-connectScript Mesh Experimental v0.7.0 for NINA-B31 series Release Notes, Doc. No. [UBX-19027614](#)
- [8] NINA-B31 u-connectXpress Experimental Software v0.7.0 zip package
- [9] NINA-B31 u-connectScript Experimental Software v0.7.0 zip package
- [10] Bluetooth Mesh Networking Specs, www.bluetooth.com/specifications/mesh-specifications/