

Request of Class II Permissive Change

Product family	Model	FCC ID	IC ID
ELLA-W1	ELLA-W131	PV7-WIBEAR11N-SF1	7738A-WB11NSF1
ELLA-W1	ELLA-W133	PV7-WIBEAR11N-SF2	7738A-WB11NSF2
ELLA-W1	ELLA-W161	PV7-WIBEAR11N-DF1	7738A-WB11NDF1
ELLA-W1	ELLA-W163	PV7-WIBEAR11N-DF2	7738A-WB11NDF2

Company number: CH-020.3.020.161-7

info@u-blox.com
 support@u-blox.com

Request of Class II Permissive Changes to ELLA-W1

This request is for full modular approvals for all ELLA-W1 models with FCC IDs PV7-WIBEAR11N-xxx, see table below for all existing limited modular approvals:

FCC ID	Certified unshielded models	Shielded model	Date of original grant
PV7-WIBEAR11N-SF1	WiBear11n-SF1, ELLA-W131-A*	ELLA-W131	02/15/2013
PV7-WIBEAR11N-SF2	WiBear11n-SF2, ELLA-W133-A*	ELLA-W133	04/14/2014
PV7-WIBEAR11N-DF1	WiBear11n-DF1, ELLA-W131-A*	ELLA-W161	04/14/2014
PV7-WIBEAR11N-DF2	WiBear11n-DF2, ELLA-W133-A*	ELLA-W163	04/14/2014

* The unshielded ELLA-W1 models were added by C1PC since they are technically equivalent to the originally certified WiBear11n models and have been renamed when u-blox AG became grantee after transfer of control from the original grantee lesswire AG

The major change to filed applications is that an RF shield have been added to all ELLA-W1 models, certified as Limited Modular Approval under the above mentioned FCC ID.

There have been no change in the circuitry of the already certified device except that in the production process an RF shield is mounted on the module and covers all its electrical circuitry.

Conducted and radiated spurious emissions tests have been performed to compare the emissions of the shielded model with the already certified unshielded device.

No relevant differences have been noted. The test reports shall be filed as exhibits to this request.

The following table provides an overview of all test reports for the ELLA-W1 series WLAN/Bluetooth host-based modules and their applicability for certification applications of other models of this product family:

Test report	Wireless technology	Tested models	Re-used for models	Justification
G0M-1510-5172-TFC247BT-131-V01	Bluetooth	ELLA-W131-A, ELLA-W131	ELLA-W161-A, ELLA-W161	ELLA-W161 adds only diplexer in RF path
G0M-1510-5172-TFC247WF-131-V01	IEEE 802.11b/g/n	ELLA-W131-A, ELLA-W131	ELLA-W133-A, ELLA-W133	Identical RF path
G0M-1510-5172-TFC247BT-133-V01	Bluetooth	ELLA-W133-A, ELLA-W133	ELLA-W163-A, ELLA-W163	Identical RF path
G0M-1510-5172-TFC247WF-161-V01	IEEE 802.11b/g/n	ELLA-W161-A, ELLA-W161	ELLA-W163-A, ELLA-W163	Identical RF path
G0M-1510-5172-TFC407WF-161-V01	IEEE 802.11a/n	ELLA-W161-A, ELLA-W161	ELLA-W163-A, ELLA-W163	Identical RF path

If you have any questions regarding this application, please feel free to contact

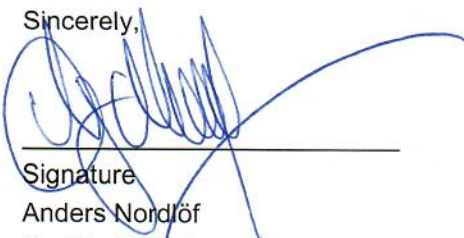
Contact name: Mr. Daniel Dietterle

Company name: u-blox Berlin GmbH

Phone No.: +49 30 55573 1020

Email: daniel.dietterle@u-blox.com

Sincerely,



Signature
Anders Nordlöf
Certification Manager
u-blox Malmö