

PCN – Product Change Notification

Topic:	WiBear 11n series
	UBX-15010487
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1 Affected Products

Product Name	Ordering Codes	Type No	New Product Name	New Ordering Code	New Type No
WiBear11n-SF1	AN00J94359 AN00J93170	AN00J94359	ELLA-W131-A	ELLA-W131-00A	ELLA-W131-00A-00
WiBear11n-DF1	AN00J94360 AN00J93172	AN00J94360	ELLA-W161-A	ELLA-W161-00A	ELLA-W161-00A-00
WiBear11n-SF2	AN00J94361 AN00J93174	AN00J94361	ELLA-W133-A	ELLA-W133-00A	ELLA-W133-00A-00
WiBear11n-DF2	AN00J94362 AN00J93176	AN00J94362	ELLA-W163-A	ELLA-W163-00A	ELLA-W163-00A-00
WiBear11n-DF1 Evaluation kit	AN00J93704	AN00J93704	EVK-ELLA-W161	EVK-ELLA-W161-A	EVK-ELLA-W161-A-00
WiBear11n-DF2 Evaluation kit	AN00J93705	AN00J93705	EVK-ELLA-W163	EVK-ELLA-W163-A	EVK-ELLA-W163-A-00

2 Type of Change

Others:

- 2.1 Change of name and ordering codes
- 2.2 Change of manufacturing location
- 2.3 Change of label on module
- 2.4 Change of packaging and labels on packaging
- 2.5 New production test system
- 2.6 Product qualification
- 2.7 Change of FCC and IC certificate owner and IDs
- 2.8 Documentation update

Hardware modification

- 2.9 Minor PCB changes
- 2.10 Minor component changes

Firmware update

3 Description of Change

u-blox acquired the wireless modules product line from lesswire AG effective January 1, 2015, including the above listed products. The following changes are required to integrate these products to the u-blox portfolio and harmonize their production standard with the high quality level customers can expect from a u-blox product. This also includes the relocation of the product's manufacturing location to production channels in Althofen, Austria.

3.1 Change of name and ordering codes

The product name will change from WiBear11n series to ELLA-W1 series, in line with the u-blox product naming convention. For traceability, new ordering codes and type numbers have been assigned to the revised products. See the table in section 1 "Affected products" for details.

3.2 Change of manufacturing location

The manufacturing location will be changed from Prettl Electronics AG, Radeberg, Germany to:

Flextronics Int. GmbH
Friesacher Strasse 3
Althofen, 9330
Austria

The Product Change Notification issued by lesswire AG regarding a change of the product's manufacturing location to Flextronics, Zalaegerszeg, Hungary is hereby recalled:

Issuer: lesswire AG
PCN-number: PCN-F2012002-05
Date of issue: 2014-12-01

3.3 Change of label on module

The label affixed to the module will be changed. The new label will have dimensions of 7.5 x 7.5 mm and contain the following information:

- u-blox logo: changed from lesswire logo
- Product name / type number: changed to new name
- Data Matrix code containing serial number



Fig. 1 – Example of new module label

3.4 Change of packaging and labels on packaging

The inner product packaging (tape and reel) and the outer packaging as well as the packaging labels will be changed to the u-blox standard packaging and labels. Appendix A contains specification for the tape and reel. Only minor changes are made to the tape and the reel. For further details see the ELLA-W1 Datasheet and the u-blox package information user guide [\[1\]](#). Reel type A will be used.

The same new ordering code is used for both samples orders and full reels. For orders with a quantity smaller than a full reel (500 pcs) a piece of the tape will be cut from the reel and shipped without reel.

3.5 New production test system

The production test system will be replaced by a fully automated system. The change does not affect the test scope or the product functionality.

3.6 Product qualification

The new revision will be qualified according to ISO 16750. The test report will become available before first volume shipments.

3.7 Change of FCC and IC certificate owner and IDs

The original FCC IDs of the lesswire WiBear11n product with grantee code “PV7” and IC IDs with company number “7738A” remain valid. **This does not affect end customer product approvals based on these FCC and IC grants.**

For the new revision, marketed as ELLA-W1, new FCC and IC IDs will be created under §2.933 of the FCC rules (“Change in identification of equipment”) and RSP-100 (section 4.3) of the IC rules, with u-blox AG as the applicant.

Please see section 5 for information about the required changes when the new revision of the module is used.

The new revision will have the following FCC and IC IDs:

Product Name	Ordering Code	Type No	FCC ID	IC ID
ELLA-W131-A	ELLA-W131-00A	ELLA-W131-00A-00	XPYELLAW131	8595A-ELLAW131
ELLA-W161-A	ELLA-W161-00A	ELLA-W161-00A-00	XPYELLAW161	8595A-ELLAW161
ELLA-W133-A	ELLA-W133-00A	ELLA-W133-00A-00	XPYELLAW133	8595A-ELLAW133
ELLA-W163-A	ELLA-W163-00A	ELLA-W163-00A-00	XPYELLAW163	8595A-ELLAW163

3.8 Documentation update

Documentation is transferred from lesswire to u-blox and adapted with the new u-blox product names, document style and document naming.

3.9 Minor PCB changes

The PCB manufacturer will be changed and with that some minor modifications of the PCB will be made to improve manufacturability. The stack-up and the design of the micro strip lines are unaltered and the changes have no effect on the product functionality.

- Minor adjustments of solder pads and solder mask openings
- Re-routing of traces of some digital signals
- Removal of through holes

3.10 Minor component changes

Some passive components have been changed to a new manufacturer and/or changed to automotive-grade versions. There is no change in the electrical specifications of these components, and the changes have no effect on the product functionality.

4 Schedule

The change of the evaluation kits will take place with immediate effect.

Engineering samples:	15.06.2015
Last order of WiBear11n:	31.08.2015
Fully automated test system:	15.10.2015
Product qualification report:	15.10.2015
Last delivery of WiBear11n:	30.11.2015
First volume shipment:	01.11.2015

5 Customer Impact and Recommended Action

We expect no changes in functionality of the products, but we do recommend a verification of the updated module in the end customer product design.

The changes of the labelling and packaging may require updates of visual inspection systems and goods arrival processes.

Customers with PPAP will need to go through the PPAP process.

For customers with an **FCC or IC end product certification**, i.e. who do **not make use of the lesswire modular approval**, we will issue a declaration ensuring the lesswire WiBear11n product is technically identical to the u-blox ELLA-W1 products even though they have different FCC and IC IDs.

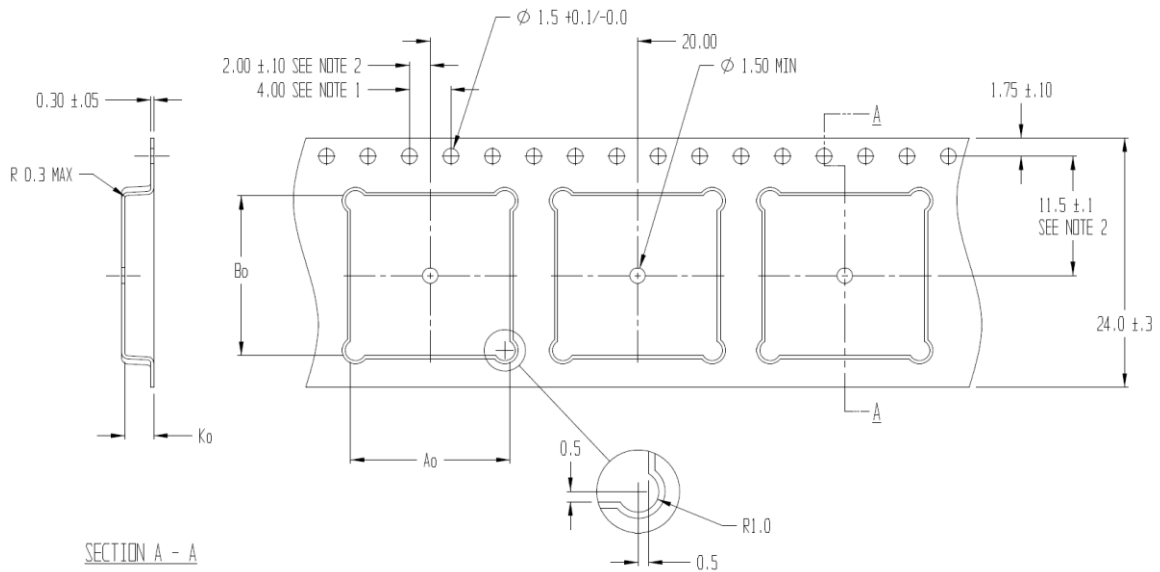
Customers that **use the lesswire FCC or IC modular approval**, i.e. who state on their label or in their documentation "Contains FCC ID...", will need to obtain a new grant under their own FCC identifier by following the change in ID procedure under §2.933 of the FCC rules. u-blox will provide an authorization letter and technical documents to streamline this process. The same applies to the IC approval where customers must follow the multiple listings procedure according to RSP-100. This is due to changes of the regulatory requirements by FCC. For further information please contact us.

Customers can, if needed, order samples for verification via u-blox sales.

6 Reference Documents

- [1] u-blox package information user guide
[http://www.u-blox.com/images/downloads/Product_Docs/ublox-PackageInfo_UserGuide_\(UBX-14001652\).pdf](http://www.u-blox.com/images/downloads/Product_Docs/ublox-PackageInfo_UserGuide_(UBX-14001652).pdf)

A Tape and reel specification

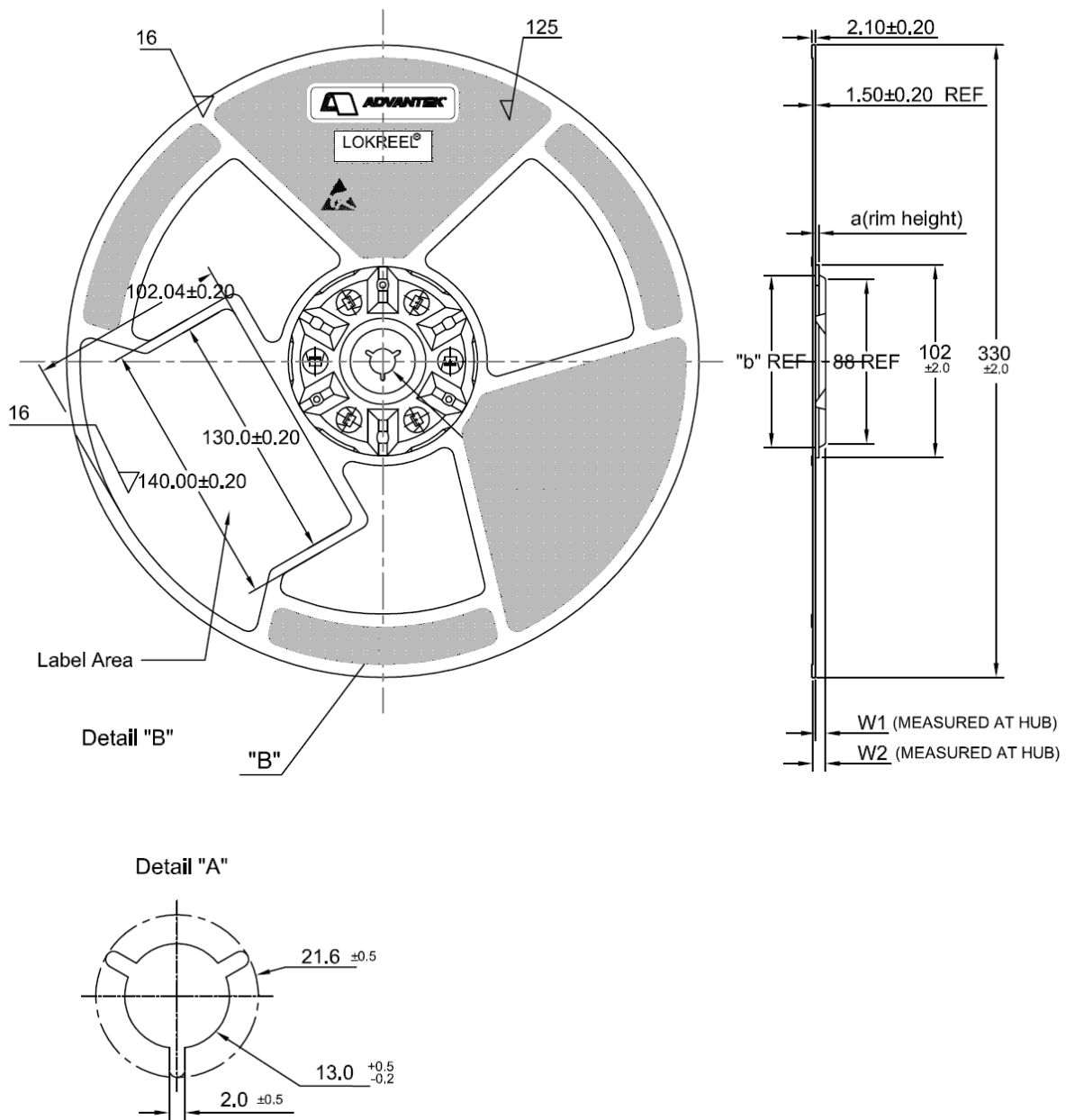


NOTES:

1. 10 SPROCKET HOLE PITCH CUMULATIVE TOLERANCE ± 0.2
2. POCKET POSITION RELATIVE TO SPROCKET HOLE MEASURED AS TRUE POSITION OF POCKET, NOT POCKET HOLE
3. A_0 AND B_0 ARE CALCULATED ON A PLANE AT A DISTANCE "R" ABOVE THE BOTTOM OF THE POCKET.

$A_0 = 15.4$
 $B_0 = 15.4$
 $K_0 = 2.8$

All dimensions in millimeters



All dimensions in millimeters

Flange variant	Nominal hub width	W1 [+0.3mm / -0.2mm]	W2 MAX	a	b	Unit
Flange 1	8	8.4	11.1	1.5	97.3	mm
Flange 2	16	16.4	19.1	4.5	97.3	mm

One reel consists of one "Flange 1" and one "Flange 2"