

IN – Information Note

Topic:	u-blox 6 Modules New PCB cutting process
	UBX-13004026
Author:	svin, amil
Date:	Jan 23 2014

We reserve all rights in this document and in the information contained therein. Reproduction, use or disclosure to third parties without express permission is strictly prohibited.

© 2014 u-blox ag.

1 Affected Products

Product Name	Order Number	Type No	Remarks
NEO-6G	NEO-6G-0	NEO-6G-0-001	No change to Ordering and Type number, with effect now
NEO-6T	NEO-6T-0	NEO-6T-0-000	No change to Ordering and Type number, with effect now
LEA-6S	LEA-6S-0	LEA-6S-0-001	No change to Ordering and Type number, with effect Jan. 2014
LEA-6A	LEA-6A-0	LEA-6A-0-001	No change to Ordering and Type number, with effect Jan. 2014
LEA-6T	LEA-6T-0	LEA-6T-0-001	No change to Ordering and Type number, with effect Jan. 2014
LEA-6T	LEA-6T-1	LEA-6T-1-001	No change to Ordering and Type number, with effect Jan. 2014
LEA-6N	LEA-6N-0	LEA-6N-0-000	No change to Ordering and Type number, with effect Jan. 2014
LEA-6H	LEA-6H-0	LEA-6H-0-002	No change to Ordering and Type number, with effect Jan. 2014
LEA-6R	LEA-6R-0	LEA-6R-0-002	No change to Ordering and Type number, with effect Jan. 2014
NEO-6M	NEO-6M-0	NEO-6M-0-001	No change to Ordering and Type number, with effect Mar. 2014
NEO-6P	NEO-6P-0	NEO-6P-0-000	No change to Ordering and Type number, with effect Mar. 2014
NEO-6V	NEO-6V-0	NEO-6V-0-000	No change to Ordering and Type number, with effect Mar. 2014

2 Type of Change

- Hardware modification
- Firmware update
- Documentation update
- Others: New PCB cutting process

3 Description of Changes

In order to improve overall product quality for the LEA-6 and NEO-6 products listed above, a PCB (printed circuit board) laser cutting process has been introduced in manufacture. The new process results in small changes to the shape of the edges of the PCB which will no longer be nominally straight. However, the dimensions and dimensional tolerances remain within the existing specifications.

4 Schedule

The delivery of LEA products with the new PCB cutting process will begin in January 2014 and NEO-6M, -6P and -6V products in Mar 2014.

During a transition phase, our customers may receive modules from both processes: the new laser cutting process as well as the V-cut process.

5 Customer Impact and Recommended Action

5.1 Impact

No impact is anticipated for assembly processes that account for the dimensional tolerances specified for the original design, which remain unchanged. The shape of the module edges produced by the laser-cut process is different from that of the previous V-cut as follows and illustrated below:

- the previously slightly uneven (broken) edge (right below) becomes clean and square (left below)
- the previously nominally straight edge now includes extended sections where the module PCB has been cut from the supporting panel used during production. The extensions remain within the specified dimensions but the edges are no longer nominally straight.



5.2 Recommended action

5.2.1 Assembly process: no change

Assembly processes should continue to use the module contacts as positional references as described in the existing hardware integration manuals for u-blox 6 modules

- <http://www.u-blox.com/en/download/documents-a-resources/u-blox-6-gps-modules-resources.html>

5.2.2 Inspection: review

u-blox recommends that any optical or other inspection procedures that make use of characteristics beyond those defined in the product data-sheet be reviewed for compatibility with the new characteristics.