PCN – Product Change Notification

Topic:	**Maintenance release of ODIN-W260-03B / ODIN-W262-03B**
	UBX-17049563
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1 Affected Products

Product Name	Order Number	Type Number (Old)	Type Number (New)	Remarks
ODIN-W260	ODIN-W260-03B	ODIN-W260-03B-00	ODIN-W260-03B-01	
ODIN-W262	ODIN-W262-03B	ODIN-W262-03B-00	ODIN-W262-03B-01	

2 Type of Change

[ ] Hardware modification
[x] Firmware update
[ ] Others

3 Description of Change

The ODIN-W26x-03B will have a maintenance update of the software including a new radio firmware. This update corrects an issue that could make ODIN-W2 disconnect from the Wi-Fi access point in some rare cases.

This issue has been found on a very few modules and is not judged as severe. Still, in order to guarantee the best quality and avoid any further issues while using the ODIN-W2, a correction has been implemented. More details can be found in the Appendix.

3.1 Documentation update

See the Reference Documents section for the updated documentation.

4 Schedule

Estimated First Shipment Date[1]:	2017-09-15
Documentation:	2017-08-31

5 Customer Impact and Recommended Action

Customers placing orders on an existing Order Number will, after the change is effective, receive the updated software automatically.

u-blox has taken the utmost care to ensure that the updated software is backward compatible with its predecessor. The update is done at a low software level and is expected to be fully transparent in customer applications. This maintenance update will not affect the existing product certifications.

[1] The Estimated First Shipment Date is the forecasted date that a customer may expect to receive changed product with the new Type Number. This is determined by the estimated date of inventory depletion on the PCN issue date. This may be affected by fluctuations in supply and demand. Consequently, although customers should be prepared to receive the changed product on this date, u-blox will continue to ship pre-changed product until a time in which inventory has been depleted. This may result in pre-changed product being shipped to customers after this forecasted date.

6 Reference Documents

[1] u-blox Short Range Modules AT Command Manual, UBX-14044127
[2] ODIN-W2 Data Sheet, UBX-14039949
[3] ODIN-W2 Getting Started, UBX-15017452
[4] ODIN-W2 System Integration Manual, UBX-14040040
[5] Release Notes Software v4.0.1 for ODIN-W2, UBX-17049663

A Appendix – Detailed issue description

When ODIN-W2 operates in Wi-Fi low power mode, the radio chip will as often as possible go into sleep mode in order to save power. When waking-up from the low power mode, a certain procedure is followed by the firmware provided by the radio chipset supplier. In the radio firmware used in ODIN-W26x-03B, there is a bug in the wake-up procedure that could be seen when ODIN-W2 is connected to a Wi-Fi access point.

There is a disconnection from the access point; due to this, the firmware asserts and the ODIN-W2 module restarts. This is normally seen after a minute of connection. Background to the problem is that a race condition could occur in the chip during the wake-up procedure.

An updated radio firmware is provided by the chip supplier and integrated into the software used in ODIN-W26x-03B. The updated firmware includes a correction to the described issue by inserting some delays during the wake-up. Nothing else is changed in this firmware.