![u-blox logo]

Product change notification

Topic	**LARA-R211 module boot sector modification in production**
	UBX-20012865
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	19-Jun-2020

1   Affected products

Product name	Ordering code	Type no. (old)	Firmware (old)	Type no. (new)	Firmware (new)
LARA-R211	LARA-R211-02B	LARA-R211-02B-02	30.49 A01.02	LARA-R211-02B-03	30.49 A01.05

2   Type of change

☐   Hardware modification
☒   Firmware update
☒   Documentation update
☒   Module boot sequence change
☐   Others

3   Description of changes

3.1   Main change:

[u-blox ID 4722] The module boot sector has been modified to minimize the number of flash write/erase operations during the boot phase. This is to improve the module durability in specific customer applications that trigger the module to go through very frequent power off/on cycles, potentially causing the memory to wear out early.

3.2   Other product improvements:

- [CA-090695 / u-blox ID 4871] The ICMP Time Exceeded - Fragment Reassembly - message is sent by the internal IP stack after the requested 60 s.
- [CA-091276 / u-blox ID 4814] An MO VoLTE call is not released when the network sends the "403 Forbidden" error as a reply to the INVITE message.
- [u-blox ID 3734 / u-blox ID 4277] Improvements in audio features (audio tuning, echo canceller, DTMF generator), AT commands for file player and recorder.
- [CA-064451 / u-blox ID 4816] Missing ENVELOPE EventDownload (Location status) after exiting from no service condition.
- [CA-087022 / u-blox ID 4812] The module might reset because of a logic issue related to the number of EARFCN to be monitored during the setting/resuming of inter-RAT LTE measurements.
- [CA-064837 / u-blox ID 4815] A VoLTE call with a specific SIM card might not be successful with other MNOs.

- [u-blox ID 4817] With specific SIM cards, a systematic reset might occur at boot if a BIP session is active and the OPEN CHANNEL cannot be processed.
- [CA-087643 / u-blox ID 4818] The +CIND/+UREG AT commands do not work correctly in LTE-only or data-only mode.
- [CA-084363 / u-blox ID 4841] cipher suites supported:
  - TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
  - TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- [CA-089483 / u-blox ID 4868] With particular eUICC SIM cards, the module resets during the LTE registration due to a wrong internal copy of the PLMN list.

4 Schedule

Samples:	
Estimated first shipment date:	30-Jun-2020
Documentation (e.g. release note)	Available
Last time buy date (for old type number):	07-Aug-2020
Last shipment date (for old type number):	07-Sep-2020

Note: Customers have three weeks to provide feedback, and after this we consider the schedule as accepted.

5 Customer impact and recommended action

u-blox has taken utmost care to ensure full backward compatibility to the previous versions. Successor products are pin-to-pin compatible with their predecessors.

Modules with the old type number, LARA-R211-02B-01, LARA-R211-02B-02 can be upgraded with new firmware version.

Note: The module boot time is increased by roughly 0.2 s due to the modified boot sector.

5.1 Certification impact

The changes in the product do not impact the RED conformity, the GCF certification or the Vodafone certification; all remain valid.

u-blox recommends that end-device manufacturers check with their point of contact at Deutsche Telekom regarding what is needed to align the end-device certification to the updated version; no testing is expected.

6 Reference documents

[1]   u-blox AT commands manual, UBX-13002752
[2]   LARA-R2 series data sheet, UBX-16005783
[3]   LARA-R2 series system integration manual, UBX-16010573
[4]   TOBY-R200, -R202, LARA-R202,-R203,-R220,-R280,-R211 FW update, UBX-18057549