

## Information note

Topic **LARA-R6401D-00B IP information note Rev. 2**  
UBX-22014149 C1-Public  
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Date 30-Jan-2023

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## 1 Affected products

Product name	Ordering code	Type number	Firmware	Remarks
LARA-R6401D	LARA-R6401D-00B	LARA-R6401D-00B-00	Modem: 01.14 Application: A00.01	

## 2 Type

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Product status change    | <input checked="" type="checkbox"/> Documentation update |
| <input type="checkbox"/> Hardware/component change           | <input type="checkbox"/> Certification information       |
| <input checked="" type="checkbox"/> Firmware/software update | <input type="checkbox"/> Security advisory               |
| <input checked="" type="checkbox"/> Label change             | <input type="checkbox"/> Other                           |

## 3 Description

Status of the above listed product has changed from Engineering Samples (ES) to Initial Production (IP). The module labels have been updated to include related certification information.

### 3.1 Hardware changes

No hardware changes.

### 3.2 Software changes

The following features have been added:

- [u-blox ID 805]: Implemented +UDCONF=81 AT command to disable SIM / UICC integrity check on test network.
- [u-blox ID 1795]: Ring Indicator (RI) line implemented on the virtual serial port over USB.
- [u-blox ID 1797]: Data Set Ready (DSR) line implemented on the virtual serial port over USB.
- [u-blox ID 2332]: Implement 3 AT terminals over MUX protocol.

The following issues have been fixed:

#### Internet suite

- [u-blox ID 1983]: Four simultaneous HTTP PUT operations can cause a socket error.

#### Connectivity

- [u-blox ID 1547]: "CONNECT 15000000" returned when starting a dial-up.
- [u-blox ID 1608]: MSC packets are not sent to indicate RI line transitions on MUX.

- [u-blox ID 1913]: The activation of dialup connection over USB can fail if &S value is set to 1.

### **Positioning**

- [u-blox ID 1645]: CellLocate® and AssistNow requests always fail in 3G RAT. AssistNow online using AT+UGPS=1,4 command always returns +UUGIND: 4,9 (generic error).
- [u-blox ID 1680]: Local aiding GNSS files are not saved into file system at module reboot or power off.
- [u-blox ID 1637] [u-blox ID 1638] [u-blox ID 1641] [u-blox ID 1774] [u-blox ID 1855] [u-blox ID 1897]: CellLocate® performance is not optimized.
- [u-blox ID 2080]: AssistNow Online and CellLocate® requests do not work after flash the device until AssistNow Offline is requested.

### **File system**

- [u-blox ID 1235]: Large file download on internal file system via USB can fail. The file shall be sent in chunks of 1 MB.

### **Security**

- [u-blox ID 1726]: +USECOPCMD fails if not empty APN parameter is used.
- [u-blox ID 1714]: +USECE2EDATAENC fails using E2E encryption.
- [u-blox ID 1976]: Backup and restore feature can cause an error on RoT persistent data.
- [u-blox ID 2073]: Wrong response from AT+USECMODE=0 when security is disabled.

## **4 Schedule**

Estimated first shipment date <sup>1</sup> :	15-Jul-2022
Documentation (e.g. release note)	Available

## **5 Firmware update**

- ES units (LARA-R6401D-00B-00, FW version: 00.11 A00.01) can be upgraded to the IP firmware by means of the u-blox EasyFlash tool, FOAT and FOTA procedures. See section 2.6 of the u-blox LARA-R6 series system integration manual [3] for details on the hardware requirements to perform the firmware update over USB interface using the u-blox EasyFlash tool.
- An IP unit cannot be downgraded with the ES firmware.

### **5.1 Firmware update packages and md5 signature**

Product / delivery	Filename	md5sum
<b>LARA-R6401D-00B</b>		
EasyFlash	LARA-R6401D-00B-00-IP-0114A0001-006K00.dof	1853bd4c2380ee1d157c71196d409e05

<sup>1</sup> The estimated first shipment date is the forecasted date that a customer may expect to receive product

Product / delivery	Filename	md5sum
FOTA from ES 00.11,A00.01 to IP 00.14,A00.01 uFOTA ID: 1637	LARA-R6401D-00B-00-ES-0011A0001- 006K00_LARA-R6401D-00B-00-IP- 0114A0001-006K00.upd	14fae6cbf0ef3af68eecd2c588dc9b2
FOAT	LARA-R6401D-00B-00-IP-0114A0001- 006K00.upd	c280edb4307d5a16df31661a78f84a6d
FOTA test 00.14 to 00.14_ENG0099 uFOTA ID: 1638	LARA-R6401D-00B-00-IP-0114A0001- 006K00_LARA-R6401D-00B-00-XX- 0114ENG0699A0001-006K00.upd	5090a6e1654d513dbf2595464de6ccc3
FOTA test 00.14_ENG0099 to 00.14 uFOTA ID: 1639	LARA-R6401D-00B-00-XX- 0114ENG0699A0001-006K00_LARA- R6401D-00B-00-IP-0114A0001- 006K00.upd	a98d80395e6f8add968d1d85e4782a14

## 6 Tools

- m-center v02.06.00 – Download from the u-blox.com website via this page: [m-center](#)
- EasyFlash 13.03 – Download from the u-blox.com website via this link: [EasyFlash](#)
- Windows driver v1.0.0.0 – Download from the u-blox.com website via this link: [LARA-R6 driver](#)

## 7 Related documentation

- [1] u-blox LARA-R6 series AT commands manual, [UBX-21046719](#)
- [2] u-blox LARA-R6 series data sheet, [UBX-21004391](#)
- [3] u-blox LARA-R6 series system integration manual, [UBX-21010011](#)
- [4] u-blox EVK-R6 user guide, [UBX-21035387](#)

## Appendix

### A Known bugs and limitations

#### Internet suite

- [u-blox ID 2523]: AT commands are not processed, and URC not printed on one serial interface while in direct link mode on another serial interface.
- [u-blox ID 2939]: +USOER AT command is not functional.
- [u-blox ID 2687]: keep alive option of +USOCO is not functional.
- [u-blox ID 2859]: MQTT-SN connect command fails if it is already connected.

#### Registration/Network services

- [u-blox ID 1932]: Transitory registration URCs (+CREG, +CEREG, +CGREG) do not always match with the effective registration state.

#### SIM management

- [u-blox ID 890]: SIM not present is returned by +CPIN read command after boot for a transitory phase of a few seconds.

### **Connectivity**

- [u-blox ID 2967]: FOAT file transfer on UART with baud rate 3000000 bit/s is not functional.

### **V24 control and V25ter**

- [u-blox ID 77]: All modules have echo disabled (ATE0). After a factory reset (+UFACTORY) the echo configuration is set to enable. If it is necessary to have the echo enabled, we suggest issuing the command to enable the echo (ATE1) at module boot, as soon as the AT interface is ready. This is suggested to be executed within the host application production process, where we recommend also to execute the file system backup by issuing the AT+UBKUPDATA command after having enabled the echo.

## **B Supporting product**

### **ADP-R6401D-00B**

- The product does not support the auxiliary UART interface.