

Information note

Topic LARA-R6 / LARA-L6 “01B” Initial production Rev 3
UBXDOC-686885345-1861 C1-Public

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Date 14-Mar-2024

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1 Affected products

Product name	Ordering code	Type number	Firmware
LARA-R6001	LARA-R6001-01B	LARA-R6001-01B-00	04.22,A00.01
LARA-R6001D	LARA-R6001D-01B	LARA-R6001D-01B-00	04.22,A00.01
LARA-R6401	LARA-R6401-01B	LARA-R6401-01B-00	04.22,A00.01
LARA-R6401D	LARA-R6401D-01B	LARA-R6401D-01B-00	04.22,A00.01
LARA-R6801	LARA-R6801-01B	LARA-R6801-01B-00	04.22,A00.01
LARA-R6801D	LARA-R6801D-01B	LARA-R6801D-01B-00	04.22,A00.01
LARA-L6004	LARA-L6004-01B	LARA-L6004-01B-00	04.22,A00.01
LARA-L6004D	LARA-L6004D-01B	LARA-L6004D-01B-00	04.22,A00.01
LARA-L6804D	LARA-L6804D-01B	LARA-L6804D-01B-00	04.22,A00.01

2 Type

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

3 Description

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

For the details of the new features and improvements in the IP version, see appendix [C](#).

Non-conformities declared in predecessors and not declared here are solved.

4 Schedule

First production parts will be available in 2024 calendar week 7.

5 Certification

5.1 Certifications achieved

Certifications available for "00B" product versions are also available with "01B" product versions, and new approvals have been added as illustrated in the tables below.

Certification scheme	LARA-R6001	LARA-R6001D	LARA-R6401	LARA-R6401D	LARA-R6801	LARA-R6801D
GCF conformance	•	•	•	•	•	■
PTCRB conformance	•	•	•	•		
CE (Europe)	•	•			•	■
FCC (United States)	•	•	•	•		
FCC ID	XPYUBX21BE01	XPYUBX21BE01	XPYUBX21BE02	XPYUBX21BE02		
ISED (Canada)	•	•	•	•		
ISED certification number	8595A-UBX21BE01	8595A-UBX21BE01	8595A-UBX21BE02	8595A-UBX21BE02		
NCC (Taiwan)	•	•			•	■
ACMA RCM (Australia)	•	•			•	■
GITEKI (Japan)	•	•			•	■
ANATEL (Brazil)	■	•				
KC (South Korea)		•				
AT&T	■	•	•	•		
FirstNet			•	•		
Verizon	■	■	•	•		
T-Mobile US		■	■	■		
Deutsche Telekom		■				
Telefonica		■				
Telstra		■				
NTT DoCoMo						■
SoftBank Mobile						■
KDDI						■

• = Approval available with "00B" and "01B" product versions ■ = Additional approval available with "01B" product versions

Certification scheme	LARA-L6004	LARA-L6004D	LARA-L6804D
CE (Europe)	•	•	■
FCC (United States)	•	•	
FCC ID	XPYUBX21BE01	XPYUBX21BE01	
ISED (Canada)	•	•	
ISED certification number	8595A-UBX21BE01	8595A-UBX21BE01	
NCC (Taiwan)	•	•	■
ACMA RCM (Australia)	•	•	■
GITEKI (Japan)	•	•	■
KC (South Korea)		•	
ANATEL (Brazil)	■	■	
GCF conformance		■	■
PTCRB conformance		■	
AT&T		■	
Verizon		■	

Certification scheme	LARA-L6004	LARA-L6004D	LARA-L6804D
Deutsche Telekom		■	
Telefonica		■	
Telstra		■	
NTT DoCoMo			■
SoftBank Mobile			■
KDDI			■

● = Approval available with "00B" and "01B" product versions ■ = Additional approval available with "01B" product versions

5.2 Customer impact and recommended action migrating from “00B” to “01B” versions

The HW / FW changes from the “00B” product versions to the “01B” product versions do not affect RF / EMC properties of the modem.

- Country regulatory approvals:
 - The FCC United States, ISED Canada, ANATEL Brazil, GITEKI Japan, NCC Taiwan and KC Korean certificate numbers / IDs of “00B” product versions remain valid for “01B” product versions, with Class II Permissive Change process executed for FCC and ISED.
 - The technical documentation for European RED and Australian ACMA RCM regulatory conformity has been updated from the “00B” product versions.
 - u-blox recommends that integrators check with their preferred certification body to find out if any action is needed for the regulatory approvals of the host product.
- Conformance approvals:
 - PTCRB and GCF certifications have been updated from the “00B” product versions.
 - u-blox recommends that integrators having a conformance certification in place for the host product should execute the PTCRB ECO and/or the GCF update process, due to the use of the new HW and new FW version of the module in the host product, or due to the use of only the new FW version of the module in the host product. No testing is expected, paperwork only.
- Mobile network operators (MNO) approvals:
 - AT&T (with FirstNet where available) and Verizon approvals have been updated from the “00B” product versions.
 - u-blox recommends that integrators having any MNO approval in place for the host product should notify related mobile network operator, due to the use of the new HW and new FW of the module in the host product, or due to the use of only the new FW version of the module in the host product. No testing is expected, paperwork only.

6 Resolved security vulnerability issues

Various security vulnerability issues (CVE) haven been resolved with “01B” IP firmware. See the list in appendix B.

7 Firmware update

The predecessor products can be updated to the 04.22, A00.01 IP FW following the process depending on the product.

For LARA-R6, before updating the FW, Windows and Linux drivers must align to the new VID and PID.

The u-blox Windows USB drivers **MUST** be updated to [version v.2.0.0.0](#) before updating via EasyFlash.

7.1 LARA-R6001

7.1.1 FW update procedure

- FW update via FOTA / FOAT from 00B-00 to 01B IP, 2 steps required:
 1. LARA-R6001-00B-00 to LARA-R6001-00B-01. Use FOTA 1 / FOAT 1 package.
 2. LARA-R6001-00B-01 to LARA-R6001-01B. Use FOTA 2 / FOAT 2 package.
- FW update via FOTA from 01B ES to 01B IP, 1 step required:
 1. Use FOTA 3 package.
- FW update via EasyFlash, 1 step required.

7.1.2 Firmware update packages and md5 signature

Product / delivery	Filename	md5sum
LARA-R6001		
EasyFlash	LARA-R6001-01B-00-IP-0422A0001-002K01.dof	e3276b119e0cd2a0f4bafa4fb0fccc1f
FOAT 1 from 02.14,A00.01 to 02.14,A00.01	LARA-R6001-00B-01-P1- 0214A0001-002K00.upd	f089ed0a010a4dac431db5706dda1aee
FOAT 2 from 02.14,A00.01 to 04.22,A00.01	LARA-R6001-00B-01-P1- 0214A0001-002K00_LARA-R6001- 01B-00-IP-0422A0001- 002K01_FOAT.upd	8bf3ba930e707f8fd6a7c6befbfd8e1c
FOAT test 04.22,A00.01 to 04.22_ENG0499,A00.01	LARA-R6001-01B-00-IP- 0422A0001-002K01_LARA-R6001- 01B-00-XX-0422ENG0499A0001- 002K01_FOAT.upd	1ed3018b455272ce9d3f2e3b634afa69
FOAT Test 04.22_ENG0499,A00.01 to 04.22,A00.01	LARA-R6001-01B-00-XX- 0422ENG0499A0001-002K01_LARA- R6001-01B-00-IP-0422A0001- 002K01_FOAT.upd	a59fddf8aa63eb10d5fdcee2dcdbd22ad
FOTA 1 from 02.14,A00.01 to 02.14,A00.01 uFOTA ID: 2211	LARA-R6001-00B-00-IP- 0214A0001-002K00_LARA-R6001- 00B-01-P1-0214A0001-002K00.upd	0d017e2bbaef7917400e27769880b646
FOTA 2 from 02.14,A00.01 to 04.22,A00.01 uFOTA ID: 2294	LARA-R6001-00B-01-P1- 0214A0001-002K00_LARA-R6001- 01B-00-IP-0422A0001- 002K01_FOTA.upd	db8ef45294d8ca8cee1a0054b0b81d57
FOTA 3	LARA-R6001-01B-00-ES- 0419A0001-002K01_LARA-R6001-	d493ae53866a794fbed9f7c3b5e27fde

Product / delivery	Filename	md5sum
from ES 04.19,A00.01 to IP 04.22,A00.01 uFOTA ID: 2299	01B-00-IP-0422A0001-002K01_FOTA.upd	
FOTA test 04.22,A00.01 to 04.22_ENG0499,A00.01 uFOTA ID: 2279	LARA-R6001-01B-00-IP-0422A0001-002K01_LARA-R6001-01B-00-XX-0422ENG0499A0001-002K01_FOTA.upd	ba5b84b72667676136650f825ed4f8e9
FOTA test 04.22_ENG0499,A00.01 to 04.22,A00.01 uFOTA ID: 2280	LARA-R6001-01B-00-XX-0422ENG0499A0001-002K01_LARA-R6001-01B-00-IP-0422A0001-002K01_FOTA.upd	bd18ac9fd8b1991aace073761831741a

7.2 LARA-R6001D

7.2.1 FW update procedure

- FW update via FOTA / FOAT from 00B-00 to 01B IP, 2 steps required:
 - LARA-R6001D-00B-00 to LARA-R6001D-00B-01. Use FOTA 1 / FOAT 1 package.
 - LARA-R6001D-00B-01 to LARA-R6001D-01B. Use FOTA 2 / FOAT 2 package.
- FW update via FOTA from 01B ES to 01B IP, 1 step required:
 - Use FOTA 3 package.
- FW update via EasyFlash, 1 step required.

7.2.2 Firmware update packages and md5 signature

Product / delivery	Filename	md5sum
LARA-R6001D		
EasyFlash	LARA-R6001D-01B-00-IP-0422A0001-003K01.dof	4ac187a6646ae564277f002137db4fad
FOAT 1 from 00.13 A00.01 to 00.13 A00.01	LARA-R6001D-00B-01-P1-0013A0001-003K00.upd	be6eb7d3449dc030f0de41bbd4b341c4
FOAT 2 from 00.13 A00.01 to 04.22,A00.01	LARA-R6001D-00B-01-P1-0013A0001-003K00_LARA-R6001D-01B-00-IP-0422A0001-003K01_FOAT.upd	cd14d27ef2a219922cad96cc3172c7df
FOAT test 04.22,A00.01 to 04.22_ENG0499,A00.01	LARA-R6001D-01B-00-IP-0422A0001-003K01_LARA-R6001D-01B-00-XX-0422ENG0499A0001-003K01_FOAT.upd	331122d2d0876e3fa0e585eb806d3971
FOAT test 04.22_ENG0499,A00.01 to 04.22,A00.01	LARA-R6001D-01B-00-XX-0422ENG0499A0001-003K01_LARA-R6001D-01B-00-IP-0422A0001-003K01_FOAT.upd	f0b303ab64efc2687758fb364b96c32f
FOTA 1 From 00.13 A00.01 to 00.13 A00.01 uFOTA ID: 2217	LARA-R6001D-00B-00-IP-0013A0001-003K00_LARA-R6001D-00B-01-P1-0013A0001-003K00.upd	d8d3fd3105906286c3d5b7fee422bdbd
FOTA 2 from 00.13 A00.01	LARA-R6001D-00B-01-P1-0013A0001-003K00_LARA-R6001D-	bfb6e6a716b96ae20bdce5d7c9a52114d

Product / delivery	Filename	md5sum
to 04.22,A00.01 uFOTA ID: 2295	01B-00-IP-0422A0001- 003K01_FOTA.upd	
FOTA 3 from ES 04.19,A00.01 to IP 04.22,A00.01 uFOTA ID: 2300	LARA-R6001D-01B-00-ES- 0419A0001-003K01_LARA-R6001D- 01B-00-IP-0422A0001- 003K01_FOTA.upd	026f82ca520752d301615c3b01d96b51
FOTA test 04.22,A00.01 to 04.22_ENG0499,A00.01 uFOTA ID: 2281	LARA-R6001D-01B-00-IP- 0422A0001-003K01_LARA-R6001D- 01B-00-XX-0422ENG0499A0001- 003K01_FOTA.upd	906d63db07afbfb58009ec8203fc58e6
FOTA test 04.22_ENG0499,A00.01 to 04.22,A00.01 uFOTA ID: 2282	LARA-R6001D-01B-00-XX- 0422ENG0499A0001-003K01_LARA- R6001D-01B-00-IP-0422A0001- 003K01_FOTA.upd	b096756c9ef506a856b514f3a75efc05

7.3 LARA-R6401

7.3.1 FW update procedure

- FW update via FOTA / FOAT from 00B-00 to 01B IP, 2 steps required:
 - LARA-R6401-00B-00 to LARA-R6401-00B-01. Use FOTA 1 / FOAT 1 package.
 - LARA-R6401-00B-01 to LARA-R6401-01B. Use FOTA 2 / FOAT 2 package.
- FW update via EasyFlash, 1 step required.

7.3.2 Firmware update packages and md5 signature

Product / delivery	Filename	md5sum
LARA-R6401		
EasyFlash	LARA-R6401-01B-00-IP- 0422A0001-005K01.dof	73ec3050e4f8da508f7d3ef6f63cf8d8
FOAT 1 from 02.14,A00.01 to 02.14,A00.01	LARA-R6401-00B-01-P1- 0214A0001-005K00.upd	556f27477e8e7d6026968c3e161fb767
FOAT 2 from 02.14,A00.01 to 04.22,A00.01	LARA-R6401-00B-01-P1- 0214A0001-005K00_LARA-R6401- 01B-00-IP-0422A0001- 005K01_FOAT.upd	7e76f3955c9aaf74c99240dd95a830d1
FOAT test 04.22,A00.01 to 04.22_ENG0499,A00.01	LARA-R6401-01B-00-IP- 0422A0001-005K01_LARA-R6401- 01B-00-XX-0422ENG0499A0001- 005K01_FOAT.upd	010640109b53db31424f2fd89d4464af
FOAT Test 04.22_ENG0499,A00.01 to 04.22,A00.01	LARA-R6401-01B-00-XX- 0422ENG0499A0001-005K01_LARA- R6401-01B-00-IP-0422A0001- 005K01_FOAT.upd	485e319626848a2ec4fa3d2909f1d100
FOTA 1 from 02.14,A00.01 to 02.14,A00.01 uFOTA ID:2239	LARA-R6401-00B-00-IP- 0214A0001-005K00_LARA-R6401- 00B-01-P1-0214A0001-005K00.upd	10dcde713c699050db8e5adf8dd1a0d9

Product / delivery	Filename	md5sum
FOTA 2 from 02.14,A00.01 to 04.22,A00.01 uFOTA ID: 2296	LARA-R6401-00B-01-P1- 0214A0001-005K00_LARA-R6401- 01B-00-IP-0422A0001- 005K01_FOTA.upd	98e78307dab62487b551c1f785bddd3b
FOTA test 04.22,A00.01 to 04.22_ENG0499,A00.01 uFOTA ID:2283	LARA-R6401-01B-00-IP- 0422A0001-005K01_LARA-R6401- 01B-00-XX-0422ENG0499A0001- 005K01_FOTA.upd	a67329dd0bb16c83975ec8e08ee19554
FOTA test 04.22_ENG0499,A00.01 to 04.22,A00.01 uFOTA ID: 2284	LARA-R6401-01B-00-XX- 0422ENG0499A0001-005K01_LARA- R6401-01B-00-IP-0422A0001- 005K01_FOTA.upd	4d3b7100dbb06daabddf561bb8da33af

7.4 LARA-R6401D

7.4.1 FW update procedure

- FW update via FOTA / FOAT from 00B-00 to 01B IP, 2 steps required:
 - LARA-R6401D-00B-00 to LARA-R6401D-00B-01. Use FOTA 1 / FOAT 1 package.
 - LARA-R6401D-00B-01 to LARA-R6401D-01B. Use FOTA 2 / FOAT 2 package.
- FW update via FOTA from 01B ES to 01B IP, 1 step required:
 - Use FOTA 3 package.
- FW update via EasyFlash, 1 step required.

7.4.2 Firmware update packages and md5 signature

Product / delivery	Filename	md5sum
LARA-R6401D		
EasyFlash	LARA-R6401D-01B-00-IP- 0422A0001-006K01.dof	7d7c884ad22ec68a2430836a7ac972fc
FOAT 1 from 01.14,A00.01 to 01.14,A00.01	LARA-R6401D-00B-01-P1- 0114A0001-006K00.upd	8f67d334ceb6d76b1a6370377dc71fdb
FOAT 2 from 01.14,A00.01 to 04.22,A00.01	LARA-R6401D-00B-01-P1- 0114A0001-006K00_LARA-R6401D- 01B-00-IP-0422A0001- 006K01_FOAT.upd	771cb8650d5cb9d47b3722417b30d21c
FOAT test 04.22,A00.01 to 04.22_ENG0499,A00.01	LARA-R6401D-01B-00-IP- 0422A0001-006K01_LARA-R6401D- 01B-00-XX-0422ENG0499A0001- 006K01_FOAT.upd	005f66767f992b07eb72c1c858777e43
FOAT Test 04.22_ENG0499,A00.01 to 04.22,A00.01	LARA-R6401D-01B-00-XX- 0422ENG0499A0001-006K01_LARA- R6401D-01B-00-IP-0422A0001- 006K01_FOAT.upd	4b58dd20c59cd8ab5153485a8f2ff08d
FOTA 1 from 01.14,A00.01 to 01.14,A00.01 uFOTA ID: 2212	LARA-R6401D-00B-00-IP- 0114A0001-006K00_LARA-R6401D- 00B-01-P1-0114A0001-006K00.upd	4160e8b09a59c0c917d9994ad78c9a65

Product / delivery	Filename	md5sum
FOTA 2 from 01.14,A00.01 to 04.22,A00.01 uFOTA ID: 2297	LARA-R6401D-00B-01-P1- 0114A0001-006K00_LARA-R6401D- 01B-00-IP-0422A0001- 006K01_FOTA.upd	d40b7125f39f8fb24935505f87c61755
FOTA 3 from ES 04.19,A00.01 to IP 04.22,A00.01 uFOTA ID: 2301	LARA-R6401D-01B-00-ES- 0419A0001-006K01_LARA-R6401D- 01B-00-IP-0422A0001- 006K01_FOTA.upd	99df9906d47765d043863eeee1de320be
FOTA test 04.22,A00.01 to 04.22_ENG0499,A00.01 uFOTA ID: 2285	LARA-R6401D-01B-00-IP- 0422A0001-006K01_LARA-R6401D- 01B-00-XX-0422ENG0499A0001- 006K01_FOTA.upd	0ea93a74f3ae2db296e5d9d34ade077c
FOTA test 04.22_ENG0499,A00.01 to 04.22,A00.01 uFOTA ID: 2286	LARA-R6401D-01B-00-XX- 0422ENG0499A0001-006K01_LARA- R6401D-01B-00-IP-0422A0001- 006K01_FOTA.upd	ae7776f81dfc6b3f4f5349815f604a40

7.5 LARA-R6801

7.5.1 FW update procedure

- FW update via FOTA / FOAT from 00B-00 to 01B IP, 2 steps required:
 - LARA-R6801-00B-00 to LARA-R6801-00B-01. Use FOTA 1 / FOAT 1 package.
 - LARA-R6801-00B-01 to LARA-R6801-01B. Use FOTA 2 / FOAT 2 package.
- FW update via FOTA from 01B ES to 01B IP, 1 step required:
 - Use FOTA 3 package.
- FW update via EasyFlash, 1 step required.

7.5.2 Firmware update packages and md5 signature

Product / delivery	Filename	md5sum
LARA-R6801		
EasyFlash	LARA-R6801-01B-00-IP- 0422A0001-007K01.dof	86df21646582661b323060a699d88a4c
FOAT 1 from 02.14,A00.01 to 02.14,A00.01	LARA-R6801-00B-01-P1- 0214A0001-007K00.upd	8cfb5e6aa41f460e7b31fa74a32277bc
FOAT 2 from 02.14,A00.01 to 04.22,A00.01	LARA-R6801-00B-01-P1- 0214A0001-007K00_LARA-R6801- 01B-00-IP-0422A0001- 007K01_FOAT.upd	cc88c646d4dd76631803b43f7fd1e9b9
FOAT test 04.22,A00.01 to 04.22_ENG0499,A00.01	LARA-R6801-01B-00-IP- 0422A0001-007K01_LARA-R6801- 01B-00-XX-0422ENG0499A0001- 007K01_FOAT.upd	a2c35ea9fb846e11c72eb3cc1abce6c8
FOAT Test 04.22_ENG0499,A00.01 to 04.22,A00.01	LARA-R6801-01B-00-XX- 0422ENG0499A0001-007K01_LARA- R6801-01B-00-IP-0422A0001- 007K01_FOAT.upd	c39778982a43793c0510e4281ffd7c3b

Product / delivery	Filename	md5sum
FOTA 1 from 02.14 A00.01 to 02.14 A00.01 uFOTA ID: 2216	LARA-R6801-00B-00-IP- 0214A0001-007K00_LARA-R6801- 00B-01-P1-0214A0001-007K00.upd	09e7f7e81dd7a04df1a1acfa34926485
FOTA 2 from 02.14,A00.01 to 04.22,A00.01 uFOTA ID: 2298	LARA-R6801-00B-01-P1- 0214A0001-007K00_LARA-R6801- 01B-00-IP-0422A0001- 007K01_FOTA.upd	4dc1a9120e9183a16f6935d423b06a3a
FOTA 3 from ES 04.19,A00.01 to IP 04.22,A00.01 uFOTA ID: 2302	LARA-R6801-01B-00-ES- 0419A0001-007K01_LARA-R6801- 01B-00-IP-0422A0001- 007K01_FOTA.upd	7d3fff817b8f40671d8c047b47516047
FOTA test 04.22,A00.01 to 04.22_ENG0499,A00.01 uFOTA ID: 2287	LARA-R6801-01B-00-IP- 0422A0001-007K01_LARA-R6801- 01B-00-XX-0422ENG0499A0001- 007K01_FOTA.upd	2f028a5cd85282d64eb3a0ec371bfff61
FOTA test 04.22_ENG0499,A00.01 to 04.22,A00.01 uFOTA ID: 2288	LARA-R6801-01B-00-XX- 0422ENG0499A0001-007K01_LARA- R6801-01B-00-IP-0422A0001- 007K01_FOTA.upd	3604e640e2a2ece908105a8e5413a728

7.6 LARA-R6801D

7.6.1 FW update procedure

- FW update via FOTA from 01B ES to 01B IP, 1 step required:
 - Use FOTA 3 package.
- FW update via EasyFlash, 1 step required.

7.6.2 Firmware update packages and md5 signature

Product / delivery	Filename	md5sum
LARA-R6801D		
EasyFlash	LARA-R6801D-01B-00-IP- 0422A0001-010K00.dof	0936ef7551bcff4c012a6ec417adeef0
FOTA 3 from ES 04.19,A00.01 to IP 04.22,A00.01 uFOTA ID: 2303	LARA-R6801D-01B-00-ES- 0419A0001-010K00_LARA-R6801D- 01B-00-IP-0422A0001- 010K00_FOTA.upd	5cdebfee5162032baa426c3c9cd20e16
FOTA test 04.22,A00.01 to 04.22_ENG0499,A00.01 uFOTA ID: 2292	LARA-R6801D-01B-00-IP- 0422A0001-010K00_LARA-R6801D- 01B-00-XX-0422ENG0499A0001- 010K00_FOTA.upd	92b22d1bcc48e89713bcf2a630129aaf
FOTA test 04.22_ENG0499,A00.01 to 04.22,A00.01 uFOTA ID: 2293	LARA-R6801D-01B-00-XX- 0422ENG0499A0001-010K00_LARA- R6801D-01B-00-IP-0422A0001- 010K00_FOTA.upd	287004d4bcfa2db4f73e4550cc8a63e3
FOAT test 04.22,A00.01 to 04.22_ENG0499,A00.01	LARA-R6801D-01B-00-IP- 0422A0001-010K00_LARA-R6801D-	6b44dc77f5204adfb70d83b171ff210f

Product / delivery	Filename	md5sum
	01B-00-XX-0422ENG0499A0001-010K00_FOAT.upd	
FOAT test 04.22_ENG0499,A00.01 to 04.22,A00.01	LARA-R6801D-01B-00-XX-0422ENG0499A0001-010K00_LARA-R6801D-01B-00-IP-0422A0001-010K00_FOAT.upd	f32e81f354dbf9ea9b25981630997697

7.7 LARA-L6004

7.7.1 FW update procedure

- FW update via FOTA / FOAT from 00B IP to 01B IP, 1 step required:
 - LARA-L6004-00B to LARA-L6004-01B. Use FOTA 1 / FOAT 1 package.
- FW update via EasyFlash, 1 step required.

7.7.2 Firmware update packages and md5 signature

Product / delivery	Filename	md5sum
LARA-L6004		
EasyFlash	LARA-L6004-01B-00-IP-0422A0001-008K00.dof	9557241ea3c5168859f478b4129edf54
FOTA 1 From 03.16 A00.01 to 04.22 A00.01 uFOTA ID: 2338	LARA-L6004-00B-00-IP-0316A0001-008K00_LARA-L6004-01B-00-IP-0422A0001-008K00_FOTA.upd	92449055bf41b356c992e12ccb199514
FOAT 1 From 03.16 A00.01 to 04.22, A00.01	LARA-L6004-00B-00-IP-0316A0001-008K00_LARA-L6004-01B-00-IP-0422A0001-008K00_FOAT.upd	368b67a5581211c000ef7584ac09347b
FOTA test 04.22,A00.01 to 04.22_ENG0499,A00.01 uFOTA ID: 2273	LARA-L6004-01B-00-IP-0422A0001-008K00_LARA-L6004-01B-00-XX-0422ENG0499A0001-008K00_FOTA.upd	f8bf3bc562eae41b95a6a1b5c259b7f6
FOTA test 04.22_ENG0499,A00.01 to 04.22,A00.01 uFOTA ID: 2275	LARA-L6004-01B-00-XX-0422ENG0499A0001-008K00_LARA-L6004-01B-00-IP-0422A0001-008K00_FOTA.upd	3fae0a169138e7e165ee8a49adc53fe0
FOAT test 04.22,A00.01 to 04.22_ENG0499,A00.01	LARA-L6004-01B-00-IP-0422A0001-008K00_LARA-L6004-01B-00-XX-0422ENG0499A0001-008K00_FOAT.upd	5808f76df09a91be4b1621ceec9a33f1
FOAT test 04.22_ENG0499,A00.01 to 04.22,A00.01	LARA-L6004-01B-00-XX-0422ENG0499A0001-008K00_LARA-L6004-01B-00-IP-0422A0001-008K00_FOAT.upd	31ald60bb7c66919334ceaa66a00e505

7.8 LARA-L6004D

7.8.1 FW update procedure

- FW update via FOTA/FOAT from 00B IP to 01B IP, 1 step required:
 - LARA-L6004D-00B to LARA-L6004D-01B. Use FOTA 1/ FOAT 1 package.

- FW update via EasyFlash, 1 step required.

7.8.2 Firmware update packages and md5 signature

Product / delivery	Filename	md5sum
LARA-L6004D		
EasyFlash	LARA-L6004D-01B-00-IP-0422A0001-009K00.dof	80172003bc1ac572b8dedbb8d7574a19
FOTA 1 From 03.16 A00.01 to 04.22 A00.01 uFOTA ID: 2337	LARA-L6004D-00B-00-IP-0316A0001-009K00_LARA-L6004D-01B-00-IP-0422A0001-009K00_FOTA.upd	1e91563910463d21590b05716975ff38
FOAT 1 From 03.16 A00.01 to 04.22, A00.01	LARA-L6004D-00B-00-IP-0316A0001-009K00_LARA-L6004D-01B-00-IP-0422A0001-009K00_FOAT.upd	53f9690156b3b6548bc78620d36b8bb5
FOTA test 04.22,A00.01 to 04.22_ENG0499,A00.01 uFOTA ID: 2274	LARA-L6004D-01B-00-IP-0422A0001-009K00_LARA-L6004D-01B-00-XX-0422ENG0499A0001-009K00_FOTA.upd	d5a075adaf1cb5e9ffef68d94ce5fb4b
FOTA test 04.22_ENG0499,A00.01 to 04.22,A00.01 uFOTA ID: 2276	LARA-L6004D-01B-00-XX-0422ENG0499A0001-009K00_LARA-L6004D-01B-00-IP-0422A0001-009K00_FOTA.upd	d9bc660c8b13ccb5b7656dfc66898aef
FOAT test 04.22,A00.01 to 04.22_ENG0499,A00.01	LARA-L6004D-01B-00-IP-0422A0001-009K00_LARA-L6004D-01B-00-XX-0422ENG0499A0001-009K00_FOAT.upd	79d0d1b948730d9a78683b60c4d053df
FOAT test 04.22_ENG0499,A00.01 to 04.22,A00.01	LARA-L6004D-01B-00-XX-0422ENG0499A0001-009K00_LARA-L6004D-01B-00-IP-0422A0001-009K00_FOAT.upd	ece2554b9c1ad10c7d4d556e243c6456

7.9 LARA-L6804D

7.9.1 FW update procedure

- FW update via FOTA from 01B ES to 01B IP, 1 step required:
 1. Use FOTA 3 package.
- FW update via EasyFlash, 1 step required.

7.9.2 Firmware update packages and md5 signature

Product / delivery	Filename	md5sum
LARA-L6804D		
EasyFlash	LARA-L6804D-01B-00-IP-0422A0001-011K00.dof	d32895bdc80339f22f9a14db64427028
FOTA 3 from ES 04.19,A00.01 to IP 04.22,A00.01 uFOTA ID: 2305	LARA-L6804D-01B-00-ES-0419A0001-011K00_LARA-L6804D-01B-00-IP-0422A0001-011K00_FOTA.upd	cfed434f2d403da2268ed6ed7ef3a7ec

Product / delivery	Filename	md5sum
FOTA test 04.22,A00.01 to 04.22_ENG0499,A00.01 uFOTA ID: 2277	LARA-L6804D-01B-00-IP- 0422A0001-011K00_LARA-L6804D- 01B-00-XX-0422ENG0499A0001- 011K00_FOTA.upd	019414166c9768f7fe75acf042fc4a8f
FOTA test 04.22_ENG0499,A00.01 to 04.22,A00.01 uFOTA ID: 2278	LARA-L6804D-01B-00-XX- 0422ENG0499A0001-011K00_LARA- L6804D-01B-00-IP-0422A0001- 011K00_FOTA.upd	32d0826a28dc4bcab744e63c9b683929
FOAT test 04.22,A00.01 to 04.22_ENG0499,A00.01	LARA-L6804D-01B-00-IP- 0422A0001-011K00_LARA-L6804D- 01B-00-XX-0422ENG0499A0001- 011K00_FOAT.upd	389ab16ef14f92a7a4f6d2881e86ac4e
FOAT test 04.22_ENG0499,A00.01 to 04.22,A00.01	LARA-L6804D-01B-00-XX- 0422ENG0499A0001-011K00_LARA- L6804D-01B-00-IP-0422A0001- 011K00_FOAT.upd	30c8595096b50d795c8c7767223066f0

Click to download EasyFlash .dof images in the table above.

For the FW packages, contact u-blox technical support, www.u-blox.com/support.

For more details of FW update, see LARA-L6 / LARA-R6 series FW update application note [5].

8 Tools

- [u-blox evaluation tool m-center v02.08.00 for Windows](#)
- [u-blox FW flash tool EasyFlash 13.09 for Windows](#)
- [u-blox modules USB driver v2.0.0.0 for Windows](#)

9 Related documentation

- [1] u-blox LARA-L6 / LARA-R6 series AT commands manual, [UBX-21046719](#)
- [2] u-blox LARA-R6 series data sheet, [UBX-21004391](#)
- [3] u-blox LARA-L6 series data sheet, [UBX-21047783](#)
- [4] u-blox LARA-L6 / LARA-R6 series system integration manual, [UBX-21010011](#)
- [5] u-blox LARA-L6 / LARA-R6 series FW update application note, [UBX-22008011](#)
- [6] u-blox LARA-L6 / LARA-R6 application dev guide application note, [UBX-22001850](#)
- [7] u-blox EVK-L6 / EVK-R6 user guide, [UBX-21035387](#)

Appendix

A Known limitations

Network Services

- [u-blox ID 3343]: After early wake-up from PSM deep-sleep, the +COPS read command in alphanumeric format returns error. **Workaround:** Use Numeric format.
- [u-blox ID 2159]: +COPS read command <oper> parameter may return service provider PLMN name from SIM card in addition to the network alphanumeric name, retrieved from +COPN list or NITZ information.
- [u-blox ID 4292]: +CEREG URC shows registration rejected when registering to roaming cell with EPS only attach granted.

Internet suite

- [u-blox ID 3011]: Incoming IP traffic is not routed to TCP/UDP ports using ECM Router mode.
- [u-blox ID 1958]: Possible data loss while uploading file via UDP direct link.
- [u-blox ID 2779]: Keep alive and keep idle have no effect on an already connected TCP socket.
- [u-blox ID 3940] PSM deep sleep feature can be used only via UART in data-only modules with IMS client disabled or not registered.
- [u-blox ID 4183]: When AT+UPING is used with IP address, the response contains the IP address in place of the hostname.
- [u-blox ID 4229]: Modem could crash during XLAT test over IPV4. XLAT should be used only if IPV4 is unavailable.
- [u-blox ID 4288]: The IMS registration with Tim Brazil operator cannot be achieved. Specific profile needed to disable IPSEC (operator requirement).
- [u-blox ID 3455]: If NW activates default attach bearer with APN different from requested, CGDCONT does not update to reply value.
- [u-blox ID 4044] When using TCP secure sockets, if the module autonomously exits Direct link issuing "DISCONNECT" followed by "ERROR" result code (if +CMEE: 0; no result code is printed in +CMEE: 2), secure sockets cannot be used anymore and a system reboot is required (AT+CFUN=16).
- [u-blox ID 4044] Socket cannot be closed if TCP buffer is full (+USOCTL=<cid>,11,8191).

SIM management

- [u-blox ID 4220]: After PIN insertion, SIM PIN might be still required by some AT commands (e.g. +CGDCONT set command) for 1 more second.
- [u-blox ID 890]: AT+CPIN read command returns "SIM not present" after boot, for a few seconds.

Positioning

- [u-blox ID 3458]: +UULOC reports "<antenna_status>==0" and "<jamming_status>==0" with external M8 receiver.

Connectivity

- [u-blox ID 4286]: The UART flow control pins change its status during digital ping testing (AT+UTEST=10), and hence after B2B production test the UART communication with HW flow control enabled (FW default) no longer works.

- [u-blox ID 042201-35]: FOAT failure on baud rate "3000000" without hardware flow Control is supported only with USB disconnected.

B Fixes

- [u-blox ID 1806] [u-blox ID 1958]: Possible data loss while uploading file via UDP direct link.
- [u-blox ID 2373]: +UCGED in 4G does not report current MNC-MCC and signal level/quality is not correct.
- [u-blox ID 2523]: In direct link mode, AT command processing on all other COM ports is suspended, and URC are not printed.
- [u-blox ID 2687]: Keep alive option of AT+USOCO command is not functional.
- [u-blox ID 1932]: Transitory registration URCs (+CREG, +CEREG, +CGREG) do not always match the effective registration state.
- [u-blox ID 3013]: In UCS2 format, the operator name is wrongly displayed by the +COPS read command.
- [u-blox ID 2967]: FOAT file transfer on UART with baud rate 3000000 bit/s is not functional.
- [u-blox ID 2985 – CA-152045]: AT+CESQ command returns wrong RSRP value = 97, when LTE L1 reports zero.
- [u-blox ID 3185 – CA-172896]: PPP configured with only one IP stack over context defined as IPV4V6 does not work.
- [u-blox ID 3508 – CA-173914]: AT+UGGSV? returns wrong information sometimes on AT interface, if GNSS M10 is used.
- [u-blox ID 3486 - CA-180684]: Module reboots continuously when connected to LTE band 8.
- [u-blox ID 3339 – CA-182776]: AT+UTEMP? does not return the 2nd parameter, <unit>.
- [u-blox ID 3261 – CA-172241]: In MUX mode, if AT+UPSV=3 has been issued, MSC and URC are not sent out if DTR is not asserted
- [u-blox ID 4024] MUX, fixed handling of host MSC FC ON to OFF transition
- [u-blox ID 3272 – CA-177562]: Using a blank APN for a PDP context causes the failure of activating the data call.
- Common Vulnerabilities and Exposures (CVE) listed in the table below are fixed.

CVE ID	CVE ID	CVE ID	CVE ID	CVE ID	CVE ID
CVE-2022-22062	CVE-2022-22062	CVE-2022-33233	CVE-2022-25726	CVE-2022-25727	CVE-2022-25728
CVE-2022-25730	CVE-2022-25730	CVE-2022-25732	CVE-2022-25734	CVE-2022-25735	CVE-2022-25737
CVE-2022-25738	CVE-2022-25738	CVE-2022-25740	CVE-2022-25742	CVE-2022-25747	CVE-2022-33211
CVE-2022-33302	CVE-2022-33302	CVE-2022-33222	CVE-2022-33228	CVE-2022-33287	CVE-2022-33291
CVE-2022-33229	CVE-2022-33229	CVE-2022-33258	CVE-2022-33294	CVE-2022-33259	CVE-2022-33295
CVE-2022-33304	CVE-2022-33304	CVE-2022-33230	CVE-2023-21626	CVE-2022-22076	CVE-2022-40507
CVE-2022-33264	CVE-2022-33264	CVE-2022-40505			

C Improvements and new features compared to "00B"

C.1 Hardware

- LARA-R6001(D)/LARA-L6004(D): SAW filter for LTE TDD band 41 changed with a pin to pin compatible and electrically equivalent component.
- LARA-R6401(D): SP3T switch for LTE FDD bands 12, 13, 14 receiving paths changed with a pin to pin compatible and electrically equivalent component.
- LARA-R6801/LARA-R6001(D)/LARA-L6004(D): HW enabled GPIOs to support dynamic tuner interface.

C.2 Firmware

- [u-blox ID 2789] Changed LARA-R6 "01B" USB VID (to 1546) and PID. For details, see section 1.9.2, USB interface, in LARA-R6 / LARA-L6 system integration manual [4].
- [u-blox ID 2523] Added use of direct link and AT command simultaneously, added use of multiple direct link connections in parallel.
- [u-blox ID 3464] Improved +UFTPC in direct link performance.
- [u-blox ID 3711] Added point perfect service support.
- [u-blox ID 3379] Added antenna dynamic tuner interface.
- [u-blox ID 3303] Added support of Rel 12 LTE power save mode.
- [u-blox ID 3168] Improved M10 support (External GNSS control via modem)
- [u-blox ID 3109] Added ALPN extension for TLS.
- [u-blox ID 3365] Reduced FW update time.
- [u-blox ID 3602] Improved memory robustness: safe flash state (RO state) is triggered by input pin and +CFUN=11 AT command.
- [u-blox ID 4123] Network Assigned Duplexing (NAD) feature on Band 8 (LARA-R6001 / LARA-L6004)
- [u-blox ID 3034] I2S slave and 48 kHz PCM.
- [u-blox ID 13] Embedded TCP/IP, UDP/IP, HTTP/FTP, MQTT/MQTT-SN are supported on LARA-L6 "01B" product versions.
- [u-blox ID 3466] Added CDC-ECM and RmNet virtual network modes to LARA-R6 series.

C.3 Usage notes

For LARA-R6, Windows and Linux drivers must align to the new VID and PID.

For Windows, the customer must uninstall USB drivers v.1.0.0.0, then install v.2.0.0.0.

10 Revision history

Revision	Date	Comments
R02	14-Feb-2024	In section 7, notified that customer must install USB driver v2.0.0.0. In section 8, updated the link of USB driver. In Appendix C, added the change of LARA-R6 VID and PID, and its impact.
R03	14-Mar-2024	In section 7, for LARA-L6004 and LARA-L6004D, updated FW update instructions and package info of FOTA / FOAT. In Appendix A, Known limitations, added items with [u-blox ID 4044].