

Product change note

Topic **LEXI-R10801D-00B-01 Firmware update**
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1 Affected products

Product name	Ordering code	Old type number	New type number	Old Firmware	New Firmware	SVN
LEXI-R10801D	LEXI-R10801D-00B	LEXI-R10801D-00B-00	LEXI-R10801D-00B-01	01.05.A00.02	01.06.A00.01	01
ADP-R10801D	ADP-R10801D-00	ADP-R10801D-00-00	ADP-R10801D-00-01	01.05.A00.02	01.06.A00.01	
EVK-R10801D	EVK-R10801D-00	EVK-R10801D-00-00	EVK-R10801D-00-01	01.05.A00.02	01.06.A00.01	

2 Type

- | | |
|--|--|
| <input 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 type="checkbox"/> Label change | <input type="checkbox"/> Other |

3 Description

Implementation of various new features and improvements.

3.1 New features

Local Connectivity

- [u-blox ID 246]: Added the +IPRX AT command to change UART baud rate without storing the setting in the NVM.

3.2 Improvements

The following issues have been fixed:

Registration/Network services

- [u-blox ID 77_1]: The T3396 started at failed activation of PDN connection on CID different than 1, cannot be retried until timer has elapsed.

SIM

- [u-blox ID 364]: The BIP client always reserves a separate <cid> even if there was already one available with the same APN and IP type. This might cause BIP failures if the network does not allow multiple PDN connections with the same APN.

System functionalities

- [u-blox ID 935]: The ATV0 command is not fully supported.

Local Connectivity

- [u-blox ID 1693]: Uplink Data loss (contiguous bytes lost, less than 1%) may occur in direct link mode at UART maximum speed (3 Mbit/s).
- [u-blox ID 2119]: The RING line for URCs or data events is not toggled if MAIN UART data is blocked by Flow Control (RTS OFF).
- [u-blox ID 2433, 86_1]: MUX protocol replies with a SABM (0x3F) control byte instead of an UA+F bit (0x73) at a SABM request with DLC address greater than 0.

Internet applications

- [u-blox ID 2243 / 86_1]: The +UPING command may fail due to the wrong name resolution type used.
- [u-blox ID 2419 / 78_1]: The first HTTP download may fail if the filesystem is not initialized correctly.
- [u-blox ID 2429]: In case USOCL=<id> is issued in out of coverage with data queued for sending, even if the linger time is enabled, the command returns ERROR at 5s timeout: the <id> socket is locally closed, but all socket AT commands will not work and will return ERROR as long as the out of coverage condition persists.
- [u-blox ID 2408 / 98_1]: If the +UMQTT logout command (AT+UMQTTC=0) is executed in out-of-coverage condition, the logout URC (+UUMQTTC: 0,1) may be reported after about 2 minutes; during this time any other the +UMQTTC AT command will return "+CME ERROR: 3 (Operation not allowed)".

4 Schedule

Product type number (new)	Sample availability date	Estimated first shipment date ¹
All products listed above	2025 CW07	2025 CW14

5 Customer impact and recommended action

- u-blox has taken utmost care to ensure full backward compatibility to the previous versions. The product with the new firmware is functionally equivalent to the previous version. However, a system check before deployment in production is recommended.
- The FW changes do not impact RF / EMC properties nor any regulatory conformity of the product.

6 Firmware update

LEXI-R10801D-00B-00 IP (01.05.A00.02) units can be updated to this PCN firmware.

¹ The estimated first shipment date is the forecasted date when a customer may expect to receive the 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 the pre-changed product until the inventory has been depleted. This may result in the pre-changed product being shipped to customers after this forecasted date.

6.1 Firmware update packages and md5 signature

Product / delivery	Filename	md5sum
LEXI-R10801D-00B		
EasyFlash	LEXI-R10801D-00B-01-IP-0106A0001-002K01.dof	7c7e6faa8774edf49b9db5dca549e064
FOAT & FOTA from 01.05 A00.02 to 01.06 A00.01	LEXI-R10801D-00B-00-IP-0105A0002-002K01_LEXI-R10801D-00B-01-IP-0106A0001-002K01.par	8d99db00d09442d43415ed1067031a21
FOAT & FOTA from 01.06 A00.01 to 01.06 ENG06.99 A00.01	LEXI-R10801D-00B-01-IP-0106A0001-002K01_LEXI-R10801D-00B-01-XX-0106ENG0699A0001-002K01.par	a6415a174c35a1bfbe912a99c42eb2aa
FOAT & FOTA from 01.06 ENG06.99 A00.01 to 01.06 A00.01	LEXI-R10801D-00B-01-XX-0106ENG0699A0001-002K01_LEXI-R10801D-00B-01-IP-0106A0001-002K01.par	8f956f4d2b5d6981000f9310ed44b1d3

Click to download the EasyFlash image from the table above.

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

For more details of FW update, see FW update application note [5].

7 Tools

- [u-blox evaluation tool m-center v02.10.00 for Windows](#)
- [u-blox FW flash tool EasyFlash 14.04 for Windows](#)

8 Related documentation

- [1] u-blox LEXI-R10 series AT commands manual, [UBXDOC-686885345-1786](#)
- [2] u-blox LEXI-R10 series data sheet, [UBX-23007594](#)
- [3] u-blox LEXI-R10 series system integration manual, [UBX-23008149](#)
- [4] u-blox LEXI-R10 series application development guide, [UBXDOC-686885345-1983](#)
- [5] u-blox LEXI-R10 series FW update application note, [UBXDOC-686885345-2005](#)

Appendix

A Known limitations

Network services

- [u-blox ID 561]: The +COPN AT command is not supported. Alphanumeric network names are not returned by the +COPS test command; the alphanumeric network name is returned by the +COPS read command if provided by NITZ information during the LTE registration.
- [u-blox ID 1952 / 2055]: The setting of the diagnostic +UCGED AT command is lost when entering Sleep-2 or Hibernate deep-sleep modes.
- [u-blox ID 2292]: The +CCLK time gets shifted by TZ setting.
- [u-blox ID 2362]: Long registration time may occur if the AT+COPS=0 is used transitioning from AT+COPS=1 in roaming. To restore automatic mode after having selected a given PLMN, it is recommended to issue AT+COPS=0 in between a +CFUN=0/1 cycle. In this manner, detach/reattach is performed, but the current RPLMN will be selected.

- [u-blox ID 241_1]: The <qual> parameter returned by +CSQ is 0 for every RSRQ value. Use +CESQ to retrieve the correct RSRQ value.
- [u-blox ID 250_1]: SW reset triggered during SIM initialization via AT+CFUN=16 or CFUN=1,1 might fail returning +CME error "SIM wrong". The command can be repeated and will return OK.

SIM

- [u-blox ID 2387, 160_1]: If PPP/RNDIS or Internal IP based applications are used on CID different from attach, BIP close channel causes the PDN disconnection, if BIP is also using the same PDN. When using PPP/RNDIS/IP based applications on a <cid> different from the attach bearer, it is mandatory to send AT+CGACT=1,<cid> before starting the data sessions. In this way when BIP terminates the connection does not drop.
- [u-blox ID 2666]: When using PIN check enabled, in case of SIM errors the automatic UICC recovery procedures erroneously uses "0000" PIN value and leads to PUK block.

System functionalities

- [u-blox ID 1859/1912]: Sometimes the +UWIFISCAN AT command with <wifiPriority> set to 0 returns OK without displaying any Wi-Fi networks, if the module is performing data traffic or receives SMSs.
- [u-blox ID 2234]: At MUX cleardown, up to 16 buffered URCs will be sent out on UART after the first AT command.
- [u-blox ID 2574]: The +FREAD AT command will return the same value as the requested <length> parameter in the CONNECT <read_length> response.

Local Connectivity

- [u-blox ID 671]: The AT interface over MUX at 115200 bps is not reliable, if PPP is active in parallel with an uplink or downlink communication on another channel.
- [u-blox ID 2044]: When using the direct link in uplink via MUX, data loss can happen with frame size less than 200 bytes.
- [u-blox ID 252_1]: In simulated network, RI GPIO line is de-asserted before expected if the RRC connection is released immediately after the SMS reception. To overcome the issue, select a longer RRC inactivity timer as used in real networks (2s or more).

Networking

- [u-blox ID 2428]: When bounding RNDIS to a CID and trying to reach with the +UPING command an IP address that belongs to the same subnet of the UE and Host, the ping request does not work.

Internet applications

- [u-blox ID 2639]: Closing a socket (+USOCL) while an asynchronous connection is in progress leads to the closing of the socket even if the command returns ERROR. The +USOCL AT command must never be issued for a socket whose connection is in progress.