

## Product change note

**Topic** SARA-G450-01C PCN  
UBX-21006193 C1-Public  
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**Date** 17-Mar-2021

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### 1 Affected products

Product name	Order code	Type number (OLD)	Type number (NEW)	Remarks
SARA-G450	SARA-G450-01C	SARA-G450-01C-00	SARA-G450-01C-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

u-blox has released a new firmware for the above listed product.

See the appendix [A](#) for detailed description of the changes.

The modem version will remain unchanged while the application version will change as indicated in the table below:

Old type number	Current firmware version	New type number	New firmware version
SARA-G450-01C-00	Modem: 09.02	SARA-G450-01C-01	Modem: 09.02
	Application: A04.23		Application: A05.01

The modem and application version can be polled from the module by sending the ATI9 command. For more details, see the u-blox AT commands manual [\[2\]](#).

The firmware is fully tested and has passed all the u-blox release tests.

The new firmware will be applied in production according to the schedule below.

### 4 Schedule

Product type number (new)	Sample availability date	Estimated first shipment date <sup>1</sup>
SARA-G450-01C-01	April 15 <sup>th</sup> 2021	July 2021

<sup>1</sup> 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.

## 5 Certifications

Regulatory, conformance and MNOs certifications remain unchanged and valid:

Certification scheme	SARA-G450-01C-01
GCF (Global Certification Forum)	•
CE (European Conformity)	•
Anatel (Agência Nacional de Telecomunicações Brazil)	•
CCC (Chinese Compulsory Certification)	•
SRRC (State Radio Regulation of China)	•
ICASA (Independent Communications Authority South Africa)	•

## 6 Customer impact and recommended action

u-blox has taken utmost care to ensure full backward compatibility to the previous versions. The applied change is not relevant for approvals and certifications.

However, it is recommended to run a system check before deployment in production.

## 7 Firmware update

It is possible to upgrade SARA-G450-01C units to the new firmware version. Backward compatibility between new type number (SARA-G450-01C-01) and its predecessor (SARA-G450-01C-00) is ensured.

For more details, please contact u-blox local technical support.

### 7.1 Firmware update packages and md5 signature

Product / delivery <sup>2</sup>	Filename	md5sum
<b>SARA-G450</b>		
Upgrade tool	SARA-G450-01C-01_FW09.02_A05.01_MP.lod	243E6E9E41A54212705BFB6374D7DB9B
FOAT upgrade	delta_FW09.02_A04.23_to_FW09.02_A05.01.pack	60A9CD6394ACCED483D66C790C7EC701
FOAT downgrade	delta_FW09.02_A05.01_to_FW09.02_A04.23.pack	B3929B65E4443D087FC88D711E579CB9

## 8 Reference documents

- [1] SARA-G450 data sheet, [UBX-18006165](#)
- [2] u-blox AT commands manual, [UBX-13002752](#)
- [3] SARA-G450 system integration manual, [UBX-18046432](#)

<sup>2</sup> For more details, see readme.txt files inside FW package folder.

## Appendix

### A Description of changes

#### A.1 Hardware

No changes.

#### A.2 Firmware

##### A.2.1 New features

The range of data that can be sent and read at once on UDP sockets has been extended. The following new features have been implemented:

- [u-blox ID 01-150] Extend data maximum length for +USOST AT command: new range is 1-1460 for all modes (base syntax normal, base syntax HEX, binary syntax).
- [u-blox ID 01-155] Extend data maximum length for +USORF AT command: new range is 0-1460.

##### A.2.2 Issues fixed in this release

- [u-blox ID 00-132 / u-blox ID 01-163 / CA-097074] 1-way authentication (with root certificate) on TCP socket with TLS is not working.
- [u-blox ID 01-151 / CA-103891] Partial read of a file with the +URDBLOCK AT command stops if a 0x00 character is encountered.
- [u-blox ID 01-152 / CA-104662] Serving cell is missing when performing a network timing advance scan with the AT+COPS=8 command.
- [u-blox ID 01-154 / CA-110007] Some data are lost when multiple UDP packets are received and not read in time.
- [u-blox ID 01-158 / CA-105209] Username and password fields for the +UPSD AT command are limited to 20 characters.
- [u-blox ID 01-159 / CA-099819] Issuing the +CGREG read command, <lac> value is incorrect if a "0" is present.
- [u-blox ID 01-161 / CA-104662] In HTTP header, first "SPACE" character after ":" (colon) is removed.

## B Known issues and limitations

Known limitations identified as [u-blox id]:

- [u-blox ID 00-32] The last four parameters of the +CIND read command provide inconsistent results.
- [u-blox ID 00-59] Data loss might occur during transfer of files greater than ~100 kB via direct link mode and low UART data rate (9,600 b/s).
- [u-blox ID 01-14] The DUT returns the OK final result code starting the multiplexer from the AUX UART interface.
- [u-blox ID 01-15] The +CMUX read command through the AUX UART interface produces the same answer whether the multiplexer is active or not.
- [u-blox ID 01-18] The +ULOCGNSS <psv\_mode> parameter does not set “low power mode” in UBX-CFG-RXM string sent to the GNSS. Workaround: use +UGUBX AT command instead.
- [u-blox ID 01-32] The local aiding does not collect data from the GNSS and send to the GNSS all available aiding data.
- [u-blox ID 01-82] User busy tone is not played on the DUT and call waiting tone is not compliant to 3GPP specifications.
- [u-blox ID 01-130] MUX GNSS tunneling port may double some messages.
- [u-blox ID 01-139] If not set, the +CLVL default value is 12, but answer to the read command is 6. Workaround: always set the desired value.
- [u-blox ID 01-143] The <level> parameter of +CLVL AT command changes after using the +UPLAYFILE AT command. Workaround: after using +UPLAYFILE, always set desired <level> parameter for +CLVL.