

IN – Information Note

Topic:	SARA-R410M-01B Release to Production
	UBX- 17051617
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1 Affected Products

Product Name	Order Number	Type No	Firmware version	Remarks
SARA-R410M	SARA-R410M-01B	SARA-R410M-01B-00	L0.0.00.00.02.03	Status: Initial Production

2 Type of Change

- Hardware modification
- Firmware update
- Documentation update
- Others, _____

3 Description of Change

Known limitations are listed in Annex A and B.

4 Schedule

This information is effective as of 10 Oct, 2017.

5 Customer Impact and Recommended Action

ES modules can be updated to this IP firmware by contacting u-blox Customer Support Team

6 Reference Documents

- [1] SARA-R4 AT Commands Manual, u-blox Document UBX-17003787
- [2] SARA-R4 Data Sheet, u-blox Document UBX-16024152
- [3] SARA-R4 System Integration Manual, u-blox Document UBX-16029218

A Restriction compared to specifications

A.1 Hardware

No restrictions or limitations

A.2 Firmware

A.2.1 Known Limitations

Data:

- ~+++ is not supported. DTR line must be set low to end PPP connection.
- SARA_R4-1017 : FTP direct link URC queue-up is not disabled after DISCONNECT
- SARA_R4-1177 : AT+USECMNG command not displaying correct MD5
- SARA_R4-1230 : UFTPC commands not functioning after 10 retries in active mode
- SARA_R4-1243 : AT+USOCL - Reset seen while using USOCL ,TCP Socket plus FTP
- SARA_R4-1266 : +USORD/+USORF has 2 limitations: <LF> bytes (0x0A) are replaced with <CR><LF> (0x0D0A) and NUL causes truncation of IRC.
- SARA_R4-1260 : Writing a different certificate content with the same name is causing FFS crash
- SARA_R4-1273 : AT+UHTTTPC have an issue while trying to get a large file (>=273KB) from server
- SARA_R4-1306 : Incoming Data using AT+USODL with SSL Enable causes a modem crash
- SARA_R4-1307 : Cannot receive incoming data on direct link when we have prior UUSORD URC

AT Command:

- SARA_R4-527 : Issuing AT+CPWROFF does not store any changed profile values in NVM. The host application should re-enter those values when device is powered on.
- SARA_R4-1125 : Crash seen with concatenated AT commands
- SARA_R4-1245: At times, when an AT command is sent, the module will not respond. Sending an additional carriage return and line feed <S3, S4> will cause the module to respond
- SARA_R4-1442 : AT+CEREG = 2 reports an additional field for the URC
- SARA_R4-1454 : The works as designed functionality for Direct Link (and different from other u-blox products) is there is no 'OK' after the DISCONNECT message

Connectivity:

- SARA_R4-534 : AT+CIND wrong values seen for SIM indicator parameter.
- SARA_R4-1094 : CIEV URC's not seen when UGPIOC command is used to set SIM Detect to Pad disabled and enabled

File System:

- UART flow control is not supported. For data sizes in the range of MBs, it is recommended to send data in 1 kB blocks every 20 ms when either writing data to the file system or when sending data over the air (OTA)
- SARA_R4-1210 : AT+URDFILE - OK not seen at the end of reading 4MB pdf file
- SARA_R4-1446: AT+URDFILE At times, the file system read command stops at 30kB and goes back into command mode.

uTEST

- SARA_R4-1207 : Second and subsequent TX measurements report lower values. As a workaround, power cycle the module and take one measurement per power cycle.
- SARA_R4-1550 : Certain AT-command sequences for AT+UTEST in non-signaling mode causes modem to crash

A.3 Tools and drivers

USB driver:

USB driver for Windows is: qud.win.1.1_installer_10044.7.zip

Updating of firmware:

In order to flash update the firmware, the following are required:

- USB interface to the module
- Licensed tool as provided by chipset supplier

Contact u-blox Customer Support Team for assistance.

Collecting of log files:

In order to collect a log, licensed tool as provided by chipset supplier is required.

Contact u-blox Customer Support Team for assistance.

A.4 Network and Operator

Dependency information:

The following features and functionalities are not available at initial production and will be made available in a future release, pending operator readiness:

- ODIS

The following will not be available at initial production due to network readiness:

- eDRX feature is disabled by default in the firmware
- Frequency Hopping on common channels

B Usage notes

- **Device Drivers:** Please contact u-blox support team to obtain the necessary device drivers.
- **Connectivity, Network:** The AT&T LTE Cat M1 network is currently accessible only in limited markets. For network connectivity, please contact AT&T.
- **Connectivity, Lab Environment:** LTE Cat M1 lab test equipment is not yet commercially available. Pre-commercial lab test capability is available by contacting suppliers such as Rohde & Schwarz or Anritsu.
- **Support:** SARA-R410M samples should be used while collaborating closely with the u-blox support team.