

IN – Information Note

Topic:	LISA-C200-04S/LISA-C200-24S release to production
	UBX-14042040
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Date:	27-Oct-2014

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1 Affected Products

Product Name	Order Number	Type No	Firmware	Remarks
LISA-C200	LISA-C200-04S	LISA-C200-04S-00	E0.S.07.00.07R	
LISA-C200	LISA-C200-24S	LISA-C200-24S-00	E0.V.07.00.07R	

2 Type of Change

- Hardware modification
- Firmware update
- Documentation update

3 Description of Change

Implementation of various new features and improvements, see **Appendix A** for detailed description of the changes.

4 Schedule

First production parts will be available in calendar week 46

5 Customer Impact and Recommended Action

- Previous LISA-C200 versions can still be ordered by customers who want to use an older version although the migration to the latest LISA-C200 version is highly recommended.
- CDMA operators require the latest firmware versions for new devices entering operator certification lab.
- LISA-C200-24S memory map has changed because of the implementation of the FOAT feature; as a result of this change it is not possible to upgrade LISA-C200-22S or LISA-C200-23S units to the new 24S firmware. This limitation does not apply to LISA-C200-04S modules.

6 Reference Documents

- [1] LISA-C200 and FW75-C200 AT Commands Manual (UBX-13000621)
- [2] LISA-C200 data sheet (UBX-13000623)
- [3] LISA-C200 & FW75-C200 System Integration Manual (UBX-13000620)

A Description of Changes

A.1 Hardware

None

A.2 Firmware

A.2.1 New features and improvements

Positioning features

- Implementation of u-blox's proprietary CellLocate and Hybrid positioning features
- u-bloxM8 control via DDC interface and multi-GNSS AssistNow support
- AT+UBSLOC? command provides base station latitude, longitude and current ID of the base station to which the device is connected.

Force FTP socket closure

The following new AT commands have been implemented:

- +UFTPC: This triggers the FTP actions corresponding to <ftp_command> parameter. The response indicates whether sending the command request to FTP process was successful or not. Final result of FTP action will be returned to the user via the URC +UUFTPCR (please refer to paragraph 17.4 for the command description). As well, when data is requested by user (e.g. file or directory lists), the information is notified after reception from the FTP server via the URC +UUFTPCD.
- +USOCL: Close the specified socket, like the BSD close routine. In case of remote socket closure the user is notified via the URC (TCP only).

FTP direct link

FTP direct link functionality implemented, see +UFTPC in [1]

MIP Indicator +CMIPIND

Enables or disables sending of URC notification of a change in the MIP/PPP link.

MIP/PPP Separation from Socket/DNS

The following new AT commands have been implemented:

- +UPSDACFG: This command allows enable/disable starting and terminating independent PPP connection, the default state being "disable".
- +UPSDA: Start/Terminate PPP connection, this allows the device to register/unregister (acquire IP) independent of any other data operation. This command is dependent on the AT+UPSDACFG value, if the value is enabled then AT+UPSDA can be used to start/terminate PPP connection.

Create Socket +USOCR

Creates a socket and associates it with the specified protocol (TCP or UDP), returns a number identifying the socket. Such command corresponds to the BSD socket routine. Up to 6 TCP sockets and up to 6 UDP sockets can be created. It is possible to specify the local port to bind within the socket in order to send data from a specific port. The bind functionality is available for both TCP and UDP.

New command +UPRVSTATE

The +UPROVSTATE command returns an indication as to whether or not the wireless module has ever been provisioned over-the-air (e.g. through OMADM or OTASP).

New command +UPLAYFILE

AT+UPLAYFILE command allows to play (locally) an audio file, which is already stored in FFS. Also implemented the AT+USTOPFILE command.

New command +UFWUPD

The command allows to update the module firmware via USB or serial interface through the host processor. The module firmware must be stored in the host memory

New command AT+URINGCFG

New AT command AT+URINGCFG allows to enable or disable the RING resulting from incoming data calls, voice calls or SMS.

AT+UDNSRN DNS field

DNS name field can now be up to 1K byte (previously was only 20 Bytes).

UDP improvement

Fixes an issue which caused the module, in some cases, to send corrupted UDP data packets

TCP direct link improvement

Fixes an issue which caused the module, in some cases, to send corrupted TCP data packets during direct link operation

Listening sockets improvement

Previously, when creating a socket and then querying, the response would return 0 when expecting 1. This would cause issues on incoming connections and could cause vulnerability to DOS attacks. Resolution is to have the command return the proper value upon checking the status of the socket.

Error code returned in case of wrong +UFTP syntax

+UFTP commands returns now ERROR when a wrong syntax is used

SMS URCs with +UCST enabled

SMS URCs are now provided by the module also when AT+UCST is enabled

AT+UDCONF command HEX mode enable

AT+UDCONF command can now enable the HEX mode in binary mode

MO SMS number of characters

+CMGS and +CNGW now accept no more than 160 characters, as in the SMS specification.

A.2.2 Known Open Issues:

- U_C200-164: When +UCST is enabled and the device is set out of service, URC indication of any state change is not given.
- U_C200-314: FTP abort doesn't work during FTP login if a wrong IP address is used. The workaround is to use AT+USOABT command to abort the long socket operation timeouts.
- U_C200-330: +UGPIOC test command does not show 6 (network indication) as a parameter
- U_C200-337: USORD commands causes a software reset of the module when more sockets are open at the same time and then closed without having read all the data from the socket. The workaround is to read the entire data before closing any sockets.
- U_C200-311: AT+UANTR command's <antenna_id> is an optional parameter