

PCN – Product Change Notification

Topic:	LEON-G100 Product Change Notification
	UBX-13005361
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1 Affected Products

Product Name	Order Number	Type No (Old)	Type No (New)	Firmware (New)	Remarks
LEON-G100	LEON-G100-08S	LEON-G100-08S-00	LEON-G100-08S-01	07.92	
LEON-G100	LEON-G100-07S	LEON-G100-07S-00	LEON-G100-07S-01	07.92	
LEON-G100	LEON-G100-06S	LEON-G100-06S-00/01/50	LEON-G100-06S-02	07.60.17	AT&T certified

2 Type of Change

- Hardware modification
 Firmware update
 Others, _____

3 Description of Change

Due to the end-of-life of the power amplifier (PA) used within the LEON-G100 product family, the new products LEON-G100-08S-01, LEON-G100-07S-01 and LEON-G100-06S-02 supporting a new power amplifier have been released.

Due to the PA change, the FCC ID and IC ID have changed (addition of "N"), as in the below tables:

Old FCC ID	New FCC ID
XPLYEONG100	XPLYEONG100N

Old IC ID	New IC ID
8595A-LEON-G100	8595A-LEON-G100N

If applicable, the label on the customer device and documentation must be updated in order to report the correct FCC/IC IDs.

The notified body ID associated with the CE mark and printed on the label (see LEON-G100 picture further down in this document) has changed too.

LEON-G100-06S-02 is AT&T certified and is recommended for applications already AT&T certified.

3.1 LEON-G100-08S-01 new features and improvement

The new features and improvements below have been implemented (with respect to LEON-G100-08S).

3.1.1 New features

- InBand modem implementation, including new command +CECALL (equivalent to +UECALLTYPE), as specified by 3GPP
- 3G SIM (USIM) support implementation
- +CSQ reports BER even during GPRS data connection
- +COPS and +CGED now provide network information without textual information, to allow parsing with a basic CPU

3.1.2 General Improvements

- AT+CSQ works even when the SIM card is not inserted
- Several improvements on circuit switch data calls (CSD)
- +USORD creates a new socket even if the previous one was closed without reading the residual data in the buffer [14575]
- +CMUX improved when the baud-rate is different than 115200 [14798]
- +USOCO works properly, also when the assigned IP address ends with "255" (e.g. x.y.z.255) [12694]
- +COPS=5 now returns MNC="01" and not "1" when the first digit of the MNC is "0" [10951]
- +CCLK behaviour improved to always provide correct time information [11321]
- Mobile originated circuit switch data calls can be terminated after the module outputs the "CONNECT 9600" message, via ATH command [12289]
- When LEON controls the GNSS receiver via tunnelling through the I2C connection, it is possible to send the message RXM-PMREQ to the GNSS receiver [12324]
- +ULOC behaviour improved to provide proper information in no network scenarios [13001]
- Memory pool increased to improve the behaviour when there are multiple consecutive +ULOC calls [13331]

3.2 LEON-G100-07S-01 new features and improvement

The new features and improvements below have been implemented (with respect to LEON-G100-07S).

3.2.1 New features

- Embedded DTMF decoding capability has been implemented. LEON is able to detect incoming DTMF tones, decode them and output the related DTMF code via the +UDTMFD AT command. LEON DTMF decoding capability allows the device embedding a LEON module to be remotely managed via DTMF tones without the need to add an external DTMF decoder chipset.
- LEON can be instructed to remain camped on a specific BTS via the newly introduced +UCELLOCK command.
- InBand modem implementation, including the new +CECALL command (equivalent to +UECALLTYPE) as specified by 3GPP
- 3G SIM (USIM) support implementation
- +CSQ reports BER even during GPRS data connection
- +COPS and +CGED now provide network information without textual information, to allow parsing with a basic CPU

3.2.2 General Improvements

- AT+CSQ works even when the SIM card is not inserted
- Several improvements on circuit switch data calls (CSD)
- +USORD creates a new socket even if the previous one was closed without reading the residual data in the buffer [14575]
- +CMUX improved when the baud-rate is different than 115200 [14798]
- +USOCO works properly also when the assigned IP address ends with "255" (e.g. x.y.z.255) [12694]
- +COPS=5 now returns MNC="01" and not "1" when the first digit of the MNC is "0" [10951]
- +CCLK behaviour improved to always provide correct time information [11321]
- Mobile originated circuit switch data calls can be terminated after the module outputs the "CONNECT 9600" message, via ATH command [12289]
- When LEON controls the GNSS receiver via tunnelling through the I2C connection it is possible to send the message RXM-PMREQ to the GNSS receiver [12324]
- +ULOC behaviour is improved to provide proper information in no network scenarios [13001]
- Memory pool increased to improve the behaviour when there are multiple consecutive +ULOC calls [13331]
- +CTZU setting is saved in the Non Volatile Memory
- +CCLK command works even when the SIM card is not inserted
- Module keeps on sending out the jamming notification when jamming presence is detected, even if the module was able to camp on a forbidden network
- TCP/IP and UDP/IP has been improved to optimize the round trip delay under challenging network conditions
- Open sockets are automatically closed when AT+UPSDA=0.4 command is sent to LEON-G100
- Error message generated when the SIM card is still engaged in the boot sequence has been changed from "SIM not inserted" to "Operation not allowed"

3.3 LEON-G100-06S-02 new features and improvement

There are no new features or improvements (with respect to previous LEON-G100-06S version) in addition to the PA replacement mentioned in Chapter 3.

4 Schedule

Samples:	Available
Estimated Transition Date:	July 2014

The Estimated Transition Date is the forecast date at which customers should be prepared to receive the changed product with the New Type Number. The exact date depends on u-blox stock depletion and may be affected by fluctuations in supply and demand. u-blox will continue to ship the Old Type Number until inventory has been depleted. This may result in product with the Old Type Number being shipped to customers beyond the forecast Estimated Transition Date.

5 Customer Impact and Recommended Action

- u-blox has taken utmost care to ensure backward compatibility between LEON-G100-08S-01, LEON-G100-07S-01 and LEON-G100-06S-02 and their predecessors. A system check before deployment in production is however recommended.

- Old LEON versions must not be updated to the new firmware to avoid unrecoverable lock of the modules.

The module type number is printed on the module, reel, sealed bag, packing carton and shipping parcel. It is recommended to check the type number during incoming inspection in order to be notified of the product change.



Depending on the type of application and required certification schemes, a delta certification may apply. We recommend consulting with your preferred notified body to verify the actual requirements applicable to your product.

6 Reference Documents

- [1] LEON-G100 System Integration Manual, u-blox document UBX-13002023
- [2] LEON-G100 Data sheet, u-blox document UBX-13001913
- [3] LEON-G100 AT command manual, u-blox document UBX-132752