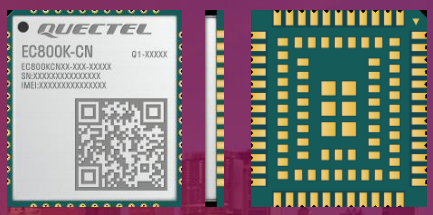
Quectel EC800K-CN

IoT/ M2M-optimized

LTE Cat 1 Module



EC800K-CN-LC_QuecPython Release Notes

LTE Standard Product

Rev. EC800K-CN-LC_QuecPython_Firmware_Release_Notes_V0706

Date: 2025-09-18

Our aim is to provide customers with timely and comprehensive service. For any assistance, please contact our company headquarters:

Quectel Wireless Solutions Co., Ltd.
Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai 200233, China
Tel: +86 21 5108 6236
Email: info@quectel.com

Or our local office. For more information, please visit:
http://www.quectel.com/support/sales.htm.

For technical support, or to report documentation errors, please visit:
http://www.quectel.com/support/technical.htm
Or email to support@quectel.com.

Disclaimer

While Quectel has made efforts to assure the accuracy of this document, unless otherwise provided by valid agreement, Quectel assumes no liability resulting from any inaccuracies or omissions in this document, or from use of the information obtained herein. Quectel reserves the right to make changes to any contents described herein and reserves the right to revise this document and to make changes from time to time in content hereof with no obligation to notify any person of revisions or changes. Before using any updated software, please read this statement carefully. By accessing or using the said software you irrevocably and unconditionally accept and confirm that you agree to be bound by this statement. In the event you disagree with any provision hereof and would not like to be bound by this statement you shall cease use of the said software immediately.

Duty of Confidentiality

The Receiving Party shall keep confidential all documentation and information provided by Quectel, except when the specific permission has been granted by Quectel. The Receiving Party shall not access or use Quectel's documentation and information for any purpose except as expressly provided herein. Furthermore, the Receiving Party shall not disclose any of the Quectel's documentation and information to any third party without the prior written consent by Quectel. For any noncompliance to the above requirements, unauthorized use, or other illegal or malicious use of the documentation and information, Quectel will reserve the right to take legal action.

Copyright

The information contained here is proprietary technical information of Quectel Wireless Solutions Co., Ltd. Transmitting, reproducing, disseminating and editing this document as well as using the content without permission are forbidden. Offenders will be held liable for payment of damages. All rights are reserved in the event of a patent grant or registration of a utility model or design.

Copyright © Quectel Wireless Solutions Co., Ltd. 2025. All rights reserved.

Quectel Confidential

Contents

Contents **2**
1. Release Content **3**
2. Matters Needing Attention **3**
3. Release History **4**
3.1. Firmware Release History 4
3.2. New Features 4
3.3. Improved Features 5
3.4. Known Issues 6
4. Functions List **8**

Quectel Confidential

1. Release Content

This document provides the Release Notes for EC800K-CN-LC_QuecPython. The current release includes the following firmware packages.

Package	Firmware Version
Firmware	EC800KCNLCR07A06M04_OCPU_QPY
Toolchain	Helios_toolchain_1.4.1.exe

2. Matters Needing Attention

Please strictly adhere to the following matters needing attention.

SN	Item
[1]	To prevent the frequently erase and write of SIM card due to the frequent changes in network information, affecting the service life of the SIM card, the network information is not updated by default, and GUTI and other network information are saved when the module is turned off normally with *Power.powerDown()*. The normal shutdown method is recommended.
[2]	To extend the service life of flash, it is recommended that the total number of operations related to power-on/off, CFUN switching, SIM card hot plugging, or dual-SIM switching should not exceed 30 times per day.
[3]	Please make sure that the APN has been set correctly before network registration.
[4]	There are two upgrade packages for upgrading via mini-system.
[5]	For UART transmission, it is recommended to add hardware flow control to reduce the risk of data loss during transmission.
[6]	The module turns on the remap function by default. This function is suitable for most operators' LTE network scenarios.
[7]	During the FOTA upgrade process, it is necessary to ensure the stable power supply of the module. If the power is disconnected during the upgrade, there is a small probability that the flash will be damaged.
[8]	It is not recommended to use non-mass production firmware versions for mass production. If necessary, please contact Quectel Technical Support for evaluation to mitigate risks.
[9]	Please perform thorough acceptance testing of firmware versions, covering both normal and abnormal scenarios. Please also confirm that the firmware version used in production matches the one that has been tested and accepted.
[10]	When performing firmware flashing, ensure that the target firmware version matches the module hardware. Incompatibility may lead to various issues, such as degraded RF performance.

Quectel Confidential

[11]	Do not modify the contents of the FOTA upgrade package, recompress it after decompression, or perform other similar operations, because these may lead to upgrade failure. Renaming the FOTA package is currently supported.
[12]	During the module shut-down process, the main UART output garbled data when it is turned off.
[13]	Upgrading from EC800KCNLCR07A01M04_OCPU_QPY to EC800KCNLCR07A02M04_OCPU_QPY over FOTA is not supported.

3. Release History

3.1. Firmware Release History

Firmware Version	Description
EC800KCNLCR07A06M04_OCPU_QPY	Mass production
EC800KCNLCR07A05M04_OCPU_QPY	Mass production
EC800KCNLCR07A04M04_OCPU_QPY	Mass production
EC800KCNLCR07A03M04_OCPU_QPY	Mass production
EC800KCNLCR07A02M04_OCPU_QPY	Mass production
EC800KCNLCR07A01M04_OCPU_QPY	Mass production

3.2. New Features

EC800KCNLCR07A06M04_OCPU_QPY	
Item	**Brief Description**
General	Enable device mounting capability on the SSP0 channel.
EC800KCNLCR07A05M04_OCPU_QPY	
Item	**Brief Description**
Modem	Add *net.setBand()* to set the required band. Add *net.getBand()* to get the band value in the current network mode. Add *net.bandRst()* to restore the initial set value of the band.
TCP/UDP	Add the SLIP feature.

Quectel Confidential

(U)SIM	Add the SIM card hot swap feature.
EC800KCNLCR07A04M04_OCPU_QPY	
Item	**Brief Description**
Network	Add *dataCall.getTraffic()* to get LTE data traffic.
EC800KCNLCR07A03M04_OCPU_QPY	
Item	**Brief Description**
Wi-Fi Scan	Support Wi-Fi Locator.
EC800KCNLCR07A02M04_OCPU_QPY	
Item	**Brief Description**
FOTA	Add *ipvtype* to the constructors of the request and app_fota modules. The default value of *ipvtype* is 0, that is, IPv4, and *ipvtype* can be set to 1, that is, IPv6.
GPIO	Add GPIO20 (pin 83).
HTTP	Support IPv6 in the request module.
SSL	Add the feature of CA certificate configuration in the ussl module.
General	Add *utime.localtime_ex()* and *utime.mktime_ex()* to solve the problem that the old functions may cause time conversion errors in scenarios of non-UTC+8 zones because they are only applicable to the UTC+8 zone.
General	Add the matrix keypad feature.
EC800KCNLCR07A01M04_OCPU_QPY	
Item	**Brief Description**
/	/

3.3. Improved Features

EC800KCNLCR07A06M04_OCPU_QPY	
Item	**Brief Description**
/	/
EC800KCNLCR07A05M04_OCPU_QPY	
Item	**Brief Description**

Quectel Confidential

General	Optimize the FTP connection timeout parameter configuration, with the default value set to 20 seconds.
General	Modify the PowerKey long-press duration for bootup to 675 milliseconds.

EC800KCNLCR07A04M04_OCPU_QPY	
Item	**Brief Description**
Timer	Solve the problem that calling *utime.localtime_ex()* to convert a timestamp to local time resulted in conversion errors due to inconsistent timestamp types.
General	Add parameter *thread name* in *_thread.start_new_thread()*.
General	Add a check for the parameter *thread name* in *_thread.start_new_thread()*, requiring *thread name* to be a string.

EC800KCNLCR07A03M04_OCPU_QPY	
Item	**Brief Description**
TCP/UDP	Optimize WebSocket performance.

EC800KCNLCR07A02M04_OCPU_QPY	
Item	**Brief Description**
Audio Playback	Solve the problem that the pop sound occurred before playing an audio file in the SPI_TX solution.
Audio Playback	Solve the problems of PWM analog audio stuttering, pop sound, audio loss caused by pulling up the PA too late, and the GPIO pin not being controlled normally.
Audio Playback	Solve the problem that GPIO6 and other pins were out of control when the SPI analog audio solution was used.
Flash	Update the *flasher.bin* package and configure the clock rate of all external Flash to 26 MHz to fix the problem that firmware cannot be downloaded to some external Flash.
PING	Limit the range of *SIZE* for the PING feature.

EC800KCNLCR07A01M04_OCPU_QPY	
Item	**Brief Description**
/	/

3.4. Known Issues

Item	**Brief Description**
/	/

Quectel Confidential

NOTE

Verification Environment is shown below. For more details, please contact Quectel technical support.
USB Driver: Quectel_Windows_USB_Driver(A)_Customer_V1.1.13
QPYcom Tool: QPYcom_V3.8

Quectel Confidential

4. Functions List

Category	Item	Supported Version (Since)	Note
Basic Function	(U)SIM	EC800KCNLCR07A01M04_OCPU_QPY	/
	Data Call	EC800KCNLCR07A01M04_OCPU_QPY	/
	FILE	EC800KCNLCR07A01M04_OCPU_QPY	/
Protocol Function	ALiYun	EC800KCNLCR07A01M04_OCPU_QPY	/
	HTTP	EC800KCNLCR07A01M04_OCPU_QPY	/
	HTTPS	EC800KCNLCR07A01M04_OCPU_QPY	/
	MQTT	EC800KCNLCR07A01M04_OCPU_QPY	/
	NITZ	EC800KCNLCR07A01M04_OCPU_QPY	/
	NTP	EC800KCNLCR07A01M04_OCPU_QPY	/
	PING	EC800KCNLCR07A01M04_OCPU_QPY	/
	SSL	EC800KCNLCR07A01M04_OCPU_QPY	/
	TCP/UDP	EC800KCNLCR07A01M04_OCPU_QPY	/
Special Function	ADC	EC800KCNLCR07A01M04_OCPU_QPY	/
	Alarm	EC800KCNLCR07A01M04_OCPU_QPY	/
	Audio Playback	EC800KCNLCR07A01M04_OCPU_QPY	/
	Device Info	EC800KCNLCR07A01M04_OCPU_QPY	/
	EINT	EC800KCNLCR07A01M04_OCPU_QPY	/
	Ethernet	EC800KCNLCR07A01M04_OCPU_QPY	/
	FOTA	EC800KCNLCR07A01M04_OCPU_QPY	/
	GPIO	EC800KCNLCR07A01M04_OCPU_QPY	/
	I2C	EC800KCNLCR07A01M04_OCPU_QPY	/
	Low Power	EC800KCNLCR07A01M04_OCPU_QPY	/
	MiniFOTA	EC800KCNLCR07A01M04_OCPU_QPY	/

Quectel Confidential

	Modem	EC800KCNLCR07A01M04_OCPU_QPY	/
	PWM	EC800KCNLCR07A01M04_OCPU_QPY	/
	SPI	EC800KCNLCR07A01M04_OCPU_QPY	/
	Timer	EC800KCNLCR07A01M04_OCPU_QPY	/
	UART	EC800KCNLCR07A01M04_OCPU_QPY	/
	USB	EC800KCNLCR07A01M04_OCPU_QPY	/
	Wi-Fi Scan	EC800KCNLCR07A01M04_OCPU_QPY	/
	USBNET	EC800KCNLCR07A01M04_OCPU_QPY	/
	One-Wire	EC800KCNLCR07A01M04_OCPU_QPY	/

Quectel Confidential

About Quectel

Quectel's passion for a smarter world drives us to accelerate IoT innovation. As a highly customer-centric organization, we are a global IoT solution provider backed by outstanding support and services. Our growing global team of 5,900 professionals sets the pace for innovation in cellular, automotive, smart, GNSS, satellite, Wi-Fi and Bluetooth modules as well as antennas and services.

With regional offices and support across the globe, our international leadership is devoted to advancing IoT and building a smarter world.



Quectel Confidential