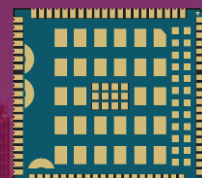


# Quectel EC20 R2.1

IoT/M2M-optimized  
LTE Cat 4 Module



## EC20-CE-FRG R2.1 Release Notes

### LTE Standard Module Series

Rev. EC20-CE-FRG R2.1\_Firmware\_Release\_Notes\_V0604

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## 1. Release Content

This document provides the Release Notes for EC20-CE-FRG R2.1. The current release includes the firmware package.

Package	Version
Firmware	EC20CEFRGR06A04M4G

## 2. Matters Needing Attention

SN	Item
[1]	Multiple PDN is not supported by MBIM.
[2]	In AP mode, due to memory limitations, WIFI supports 10 clients at most.

## 3. Release History

### 3.1. Firmware Release History

Firmware Version	Description
EC20CEFRGR06A03M4G	Mass Production
EC20CEFRGR06A04M4G	Mass Production

### 3.2. New Features

EC20CEFRGR06A04M4G	
Item	Brief Description
AUDIO	Supported MP3 audio playback.
FTP	Added AT command <b>AT+QFTPCFG="restenable"</b> to configure whether the support of REST command was required for FTP server.
HTTP	Added AT command <b>AT+QFWDHTTPCFG</b> to configure features related to HTTP transmission on the AP side.
MQTT	Supported MQTT to receive up to 100K data at a time.
NETWORK	Added AT command <b>AT+QCFG="QOOS"</b> to optimize power consumption of network search in sleep mode.
QuecLocator 2.0	Added AT command <b>AT+QLBSEX</b> to enter the cell parameter for positioning.
QuecLocator 2.0	Added AT command <b>AT+QLBSCFG="contextid"</b> to configure the QuecLocator context ID.
VOICE CALL	Added AT command <b>AT+QCFG="call_control"</b> to control MO or MT of voice call.
GENERAL	Added AT command <b>AT+QCFG="urcport/sms"</b> to get SMS reporting port.
GENERAL	Added <b>AT+QCFG="lpm/dataind"</b> command to detect any combination of SCLK, DTR, and USB to enable wakeup function conditionally.
GENERAL	Added AT command <b>AT+QGPSCFG="fixfreq"</b> to configure NEMA sentence output in 10Hz.

### 3.3. Improved Features

EC20CEFRGR06A04M4G	
Item	Brief Description
HTTP	Solved the problem that AT/UART port could not work normally when <b>AT+QHTTPSTOP</b> was executed after HTTP request expiration.
HTTP	Solved the <b>AT+QHTTPREAD</b> failed to read HTTP(S) server response information.
HTTP	Solved the problem that <b>AT+QFWDHTTP</b> POST could not transmit body files.
MQTT	Solved the problem that <b>+QMTSTAT: 0,65535</b> may be reported after <b>AT+QMTOPEN</b> execution.
MMS	Supported using <b>AT+QMMSCFG="proxy"</b> to set MMS proxy address starting with 0.
NETWORK	Increased the maximum length of APN from 62 to 65.
NETWORK	Improved China Telecom B5 to search frequency 2452 in the historical frequency point (acq_db) in priority under LTE.
TCP SSL	Optimized the stability of the module when one TCP SSL was multiplexed at the same time under multiple TCP SSL context.
TCP SSL	Solved the problem of incorrect data sending status returned by <b>AT+QSSSEND=&lt;clientId&gt;,0</b> .
GENERAL	Updated CMCC MBN version to 202102221, and supported SIM card with MCC/MNC of 46013.
GENERAL	Solved the problem that the domain name address in IPv6 format resolved by <b>AT+QIDNSGIP</b> was incorrect.
GENERAL	Solved the problem that the local time queried by <b>AT+CCLK</b> was inconsistent with the local time synchronized by <b>AT+CTZU=3</b> from the network.
GENERAL	Solved the problem that in USB mode, <b>AT+QCFG="lpm/dataind"</b> detected the wrong wake-up condition and judges to wake up the module constantly.
GENERAL	Not reported the status of PIN2 by default in MBIM mode.
GENERAL	Solved the problem that in CMUX mode, <b>AT+QURCCFG="URCPORT","all"</b> set all ports to output URCs, but URC could not output from USB AT port properly.
GENERAL	Extended <b>AT+QCFG="dhcpcpfilter"</b> command to determine whether to filter packets according to DHCP destination addresses.
GENERAL	Solved the problem that the sleep_ri pin did not jittered when receiving PPP data in the sleep state ( <b>AT+QCFG="ppp/sleep_ri"</b> did not take effect).
GENERAL	Solved the problem of unable to register to the network caused by abnormal SIB messages.
GENERAL	Optimized <b>AT+QPOWD=0</b> to fast shut down the module.
GENERAL	Optimized the ubi read-write partition mounting and exception handling mechanism.

<b>GENERAL</b>	Optimized the jamming detection algorithm in GSM mode.
<b>GENERAL</b>	Solved the problem that Host could not obtain the IP from MBIM if the network only allocated IP without DNS address.
<b>GENERAL</b>	Solved the problem that Modem could not work normally after executing <b>AT+CFUN=4</b> during booting.
<b>GENERAL</b>	Solved the problem that GPS did not automatically turn off when the number of positioning times reached.
<b>GENERAL</b>	Solved the problem that unplugging and plugging the network cable may lead to abnormal SGMII clear interrupt.

### 3.4. Known Issues

Item	Bug Description
/	/

#### NOTE

Verification Environment is shown below. For more details, please contact Quectel technical support.

For Windows,

USB driver: Quectel\_LTE&5G\_Windows\_USB\_Driver\_V2.2.2.zip

Qflash tool: QFlash\_V5.4

QLog tool: QWinLog\_V1.6.1.zip

For Linux,

QMI\_WWAN driver: Quectel\_Linux&Android\_QMI\_WWAN\_Driver\_V1.2.0.12.zip

GobiNet driver: Quectel\_Linux&Android\_GobiNet\_Driver\_V1.6.2.11.zip

QFirehose tool: Quectel\_LTE&5G\_QFirehose\_Linux&Android\_V1.3.2.zip

Quectel-CM tool: Quectel\_QConnectManager\_Linux\_V1.6.0.17.zip

QLog tool: Quectel\_QLog\_Linux&Android\_V1.4.7.zip

## 4. Functions List

Category	Item	Supported Version(Since)	Note
Basic Function	SMS	EC20CEFRGR06A01M4G	/
	Voice Call	EC20CEFRGR06A01M4G	/
	Data Call	/	Not supported currently.
	USSD	EC20CEFRGR06A01M4G	/
	PHB	EC20CEFRGR06A01M4G	/
	CMUX	EC20CEFRGR06A01M4G	/
	FILE	EC20CEFRGR06A01M4G	Supports RAM FILE only.
	FAX	/	Not supported currently.
	STK	/	Not supported currently.
Protocol Function	QMI	EC20CEFRGR06A01M4G	/
	TCP/UDP	EC20CEFRGR06A01M4G	/
	PPP	EC20CEFRGR06A01M4G	/
	FTP	EC20CEFRGR06A01M4G	
	NITZ	EC20CEFRGR06A01M4G	Supports MMS sending only.
	NTP	EC20CEFRGR06A01M4G	/
	HTTP	EC20CEFRGR06A01M4G	/
	MMS	EC20CEFRGR06A01M4G	/
	SMTP	EC20CEFRGR06A01M4G	/
	PING	EC20CEFRGR06A01M4G	/
	SMTPS	EC20CEFRGR06A01M4G	/
	HTTPS	EC20CEFRGR06A01M4G	/
	TCP SSL	EC20CEFRGR06A01M4G	/



	MQTT	EC20CEFRGR06A01M4G	/
	SIM Detection	EC20CEFRGR06A01M4G	/
	DFOTA	EC20CEFRGR06A01M4G	/
	DTMF	EC20CEFRGR06A01M4G	Supports DTMF decoding only.
	Dual UART	EC20CEFRGR06A01M4G	/
	TTS	EC20CEFRGR06A01M4G	/
Special Function	Quec Locator 2.0	EC20CEFRGR06A01M4G	QuecLocator2.0 is an efficient location technology developed by Quectel, while it's not free, you need pay for it if you would like to use it.
	WIFI	EC20CEFRGR06A01M4G	/
	Low Power	EC20CEFRGR06A01M4G	/
	RMNET	EC20CEFRGR06A01M4G	/
	ECM	EC20CEFRGR06A01M4G	/
	MBIM	EC20CEFRGR06A01M4G	/
	RNDIS	EC20CEFRGR06A01M4G	/
	UAC	EC20CEFRGR06A01M4G	/
	SD	EC20CEFRGR06A01M4G	/

## About Quectel

Quectel Wireless Solutions is the leading global supplier of cellular and GNSS modules, with a broad product portfolio covering the most recent wireless technologies of 5G, LTE/LTE-A, NB-IoT/LTE-M, UMTS/HSPA(+), GSM/GPRS and GNSS. As a professional IoT (Internet of Things) technology developer and cellular module supplier, Quectel is able to provide one-stop services for IoT cellular modules. Quectel products have been widely applied in IoT/M2M fields including smart payment, telematics and transport, smart energy, smart cities, security, wireless gateways, industry, healthcare, agriculture, and environment monitoring.

