

EC25-AUX-GA Release Notes

LTE Standard Module Series

Rev. EC25-AUX-GA_Firmware_Release_Notes_V0811_01.001.01.001

Date: 2023-08-24



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. 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. 2023. All rights reserved.

1. Preamble

This document provides the Release Notes for EC25-AUX-GA firmware version **EC25AUXGAR08A11M1G_01.001.01.001**. It describes major changes compared to EC25-AUX-GA firmware version **EC25AUXGAR08A10M1G_01.001.01.001**.

2. Matters Needing Attention

SN	Brief Description
[1]	Multiple PDN is not supported by MBIM.
[2]	Support Secboot, but SecBoot is disabled by default. And the folder related to SecBoot is not included in FW folder. If you need to support this function, please contact Quectel Technical Support.
[3]	To extend the service life of flash, the following operations should be avoided to be performed frequently: powering on/off the module, CFUN switching, SIM card hot swapping, dual-SIM switching, and repeated execution of NVM commands.
[4]	It is not recommended to directly modify the pre-set APN profiles. Please create an APN profile after the existed CID number. Suppose you modify the APN profile of IMS, SOS, etc. with added specific attributes, these attributes are hidden after modification, causing the profile to still be unavailable.
[5]	<p>AT+QGDCNT=1 and AT+QPDPGDCNT=1 will write data to the flash. Therefore, please do not execute the AT commands frequently. AT+QAUGDCNT is used in conjunction with the above commands to automatically save the packet data counter.</p> <ol style="list-style-type: none"> 1. If there is no mandatory need, it is not recommended to use these AT commands; 2. The time interval set by the timer needs to be lengthened when you use these AT commands.

3. New Features

Item/Category	Brief Description	Since
NETWORK	Display the information related to China Broadnet after AT+COPS was executed.	R08A11_01.001.01.001
GENERAL	Added AT+QIMSCFG="qsipec_enable" to configure URC to report SIP message sent by the network.	R08A11_01.001.01.001
GENERAL	Added AT+QUARTCFG to configure main UART.	R08A11_01.001.01.001

GENERAL	Added AT+QFOTAPKGCFG to set MV or CP mode for moving delta packages used for local upgrade.	R08A10_01 .001.01.001
UAC	Supported UAC to play local ringback tone.	R08A09_01 .001.01.001
GENERAL	Added AT+QCFG="clat" to enable CLAT.	R08A09_01 .001.01.001
GENERAL	Added AT+QNWCFG="reject_cause" to report the rejection reason issued by the network.	R08A09_01 .001.01.001
GENERAL	Supported AT+USBAUTO to configure the host USBnet.	R08A09_01 .001.01.001
NETWORK	Relevant technical controls have been carried out to restrict normal network registration in regions such as RUS and IRN, thus ensuring that the module can be used only for civilian applications.	R08A08_01 .001.01.001
GENERAL	Added AT+QMMSCFG="user_agent" and AT+QMMSCFG="x_wap_profile" to configure User-Agent and x-wap-profile respectively.	R08A08_01 .001.01.001
GENERAL	Extended AT+QOPS to support the parameter ABORT to allow the module to be interrupted by external input during network searching.	R08A08_01 .001.01.001
GENERAL	Added the function of automatically downloading XTRA.	R08A08_01 .001.01.001
GENERAL	Added optus operator MBN.	R08A08_01 .001.01.001
GENERAL	Added AT command AT+QGPSPPI to obtain positioning analysis data.	R08A07_01 .001.01.001
GENERAL	Supported UK_Vodafone_IOT MBN.	R08A07_01 .001.01.001
GENERAL	Added AT command AT+QIMSCFG="ims_status" to enable IMS URC.	R08A07_01 .001.01.001
AUDIO	Supported saving recording files to SD card.	R08A06_01 .001.01.001
AUDIO	Supported recording 16K audio files in wav format.	R08A06_01 .001.01.001
CMUX	Added AT command AT+QCFG="cmux/flowctrl" to control hardware flow control in CMUX mode.	R08A06_01 .001.01.001
HTTP	Added the AT command AT+QHTTPCFGEX , and AT+QHTTPCFGEX="send_add" can support the configuration of up to 36 parameters for POST multiple files to the server.	R08A06_01 .001.01.001
NETWORK	Added AT+QNWCFG="rej_cause_7_mapping" command to control whether to map the network rejection reason value #7.	R08A06_01 .001.01.001
TCP SSL	Added AT command AT+QSSLOPENEX to support the establishment of SSL connection in a short time.	R08A06_01 .001.01.001
TCP SSL	Solved the problem that an error occurred at AT+QSSLCFG="renegotiation" to set.	R08A06_01 .001.01.001

TCP/UDP	Added AT command AT+QICFG="wakeup/data" to configure the content of the wakeup data packet.	R08A06_01 .001.01.001
GENERAL	Added AT commands AT+QCFG="urc/ri/udp" and AT+QCFG="urc/ri/udp_enable" to control the RI of TCP/UDP.	R08A06_01 .001.01.001
GENERAL	Added AT command AT+QGPSSNRTEST to test CN of satellite signal.	R08A06_01 .001.01.001
GENERAL	Supported SecBoot.	R08A06_01 .001.01.001
GENERAL	Added AT command AT+QCFG="secbootstat" to get SecBoot status.	R08A06_01 .001.01.001
TCP/UDP	Added AT+QCFG="TCP/SendMode" command to control the way to report SEND OK.	R08A05_01 .004.01.004
TCP/UDP	Added commands below: 1. AT+QICFG="send/auto" to send specified data (heartbeat) regularly. 2. AT+QICFG="recv/ignore" to ignore the specified data (response) received.	R08A05_01 .003.01.003
GENERAL	Supported RF Tuner.	R08A05_01 .003.01.003
NETWORK	Added AT command AT+QLTENGBR to get LTE neighborhood information.	R08A05_01 .002.01.002
TCP/UDP	Added AT command AT+QICFG="sendpktsize" to set the size of data that can be sent by AT+QISEND .	R08A05_01 .002.01.002
TCP/UDP	Added AT command AT+QCFG="tcp/mss" to set MSS size.	R08A05_01 .002.01.002
TCP SSL	Added AT command AT+QSSLCFG="dtls" to support DTLS function.	R08A05_01 .002.01.002
NETWORK	Added AT command to control AT+COPS to scan band, not affecting the band scan of AT+QCFG="nwscanmodeex" .	R08A05_01 .002.01.002
NETWORK	Added AT command AT+QCFG="netmaskset" to configure network card subnet mask.	R08A05_01 .002.01.002
GENERAL	Added AT command AT+QWDNS to configure DNS server address.	R08A05_01 .002.01.002
NETWORK	Added AT command AT+QCOPSCFG to configure the performance of AT+QCOPS command.	R08A05_01 .002.01.002
GENERAL	Added AT command AT+QCFG="hardcoded_ecc_list" .	R08A05_01 .002.01.002
FTP	Improved the operation of FTP related commands, optimized FTP server compatibility, and supported the certificate encryption function.	R08A05_01 .001.01.001
Voice Call	Added AT+QCFG="call_control" to configure whether to automatically hang up a voice call.	R08A04_01 .001.01.001
MBIM	Supported the feature of MBIM.	R08A03_01 .001.01.001

NETWORK	Added PDP activation request event, that is the reporting of URC +CGEV: PDN ACT1 after executing AT+CGEREP=1,0 and attaching LTE network.	R08A03_01 .001.01.001
GENERAL	Added AT+QCFG="urc_cause_support" to control the reporting of network rejection cause URC.	R08A03_01 .001.01.001
SIM Detection	Supported the feature of invalid SIM card detection.	R08A03_01 .001.01.001
GENERAL	Added AT+QADCDDET to support ADC values periodic detection and report.	R08A03_01 .001.01.001
NETWORK	Extended the valid value of <op> of AT+QCFG="fast_dormancy" , the new value 3 means SCRI would be sent out at T323+1 second if there was no PS data transmission in the period of T323 timer.	R08A03_01 .001.01.001
NETWORK	Added AT+QCFG="roamserviceex" to disable network card dialing and voice call in roaming state.	R08A03_01 .001.01.001
NETWORK	Added AT+QXPWREX to identify whether the antenna was main antenna if only one antenna signal was searched under weak signal situation.	R08A03_01 .001.01.001
GENERAL	Added AT+QLOCI to list or clear EF_LOCI files including RPLMN.	R08A03_01 .001.01.001
NETWORK	Supported to lock PLMN without inserting a SIM card.	R08A03_01 .001.01.001
AUDIO	Added AT+QCFG="frhrcodec" to control the EFR/HR/FR voice coding method of GSM.	R08A03_01 .001.01.001
GENERAL	Added AT+QCFG="urc/ri/restart" to control whether to re-start RI timer for a new URC.	R08A03_01 .001.01.001
SIM CARD	Added AT+QCFG="sim/poll_time_delay" to configure uim_ptr->setting.poll_time_delay.	R08A03_01 .001.01.001
UAC	Supported to paly local music with UAC.	R08A03_01 .001.01.001
GENERAL	Added Reliance MBN.	R08A03_01 .001.01.001
UAC	Added the feature of UAC Music.	R08A03_01 .001.01.001
NETWORK	1. Added AT+QPDPTRYCFG to configure PDP activation request times and AT+QPDPTRYCHK to check request frequency and report request status via URC. 2.Supported to report URC +CGEV: ME ACT after executing AT\$QCRM_CALL successfully with +CGEV was enabled by AT+CGEREP under 3G/2G network.	R08A03_01 .001.01.001
GENERAL	Improved AT+QTEST to write files into efs2.	R08A03_01 .001.01.001
NETWORK	Added AT+QICSGPEH .	R08A02_01 .001.01.001
HTTP	Added AT commands as follows: AT+QHTTTPUT , AT+QHTTTPUTFILE , AT+QHTTTPPOST ,	R08A02_01 .001.01.001

	AT+QHTTPPOSTFILE, AT+QHTTPCFG="CUSTOM_HEADER".	
TCP/UDP	Added AT+QCFG="tcp/windowsize".	R08A02_01 .001.01.001
NETWORK	Added AT+QCFG="iprulectl".	R08A02_01 .001.01.001
GENERAL	Solved the probabilistic problem of module instability when executing AT command AT+QMIC?.	R08A02_01 .001.01.001
FTP	Added commands EPSV/EPRT to match IPv6 FTP.	R08A02_01 .001.01.001
HTTP	Solved the problem of HTTP 400 error when URL is IPv6 IP in IPv6.	R08A02_01 .001.01.001
GENERAL	Added AT+QCFG="qoos".	R08A02_01 .001.01.001
Voice Call	Added DSCI report in emergency call.	R08A02_01 .001.01.001
GENERAL	Added the MBN of TIM operator.	R08A02_01 .001.01.001
TCP SSL	Added AT+QSSLRECV to read the remaining unread messages.	R08A02_01 .001.01.001
GENERAL	Added AT+QEGPAPN to output the actual APN of the network and the APN that the user set.	R08A02_01 .001.01.001
GENERAL	Added AT+QGPSCFG="gnssrawdata",<onoff> to control the output of GNSS raw data.	R08A02_01 .001.01.001

4. Improved Features

Item/Category	Brief Description	Since
SMS	Fixed the problem of failure to send SMS in 3G network by selecting CS preference or PS preference through AT+CGSMS.	R08A11_01. .001.01.001
TCP SSL	Fixed the problem that data may be lost in case of retransmission when data was sent in SSL connection.	R08A10_01 .001.01.001
GENERAL	Fixed the problem that the module did not report QMICTL_REVOKE_CLIENT_ID_IND, resulting in the RIL library not updating the dialing status.	R08A10_01 .001.01.001
QuecLocator 2.0	Fixed the problem that error code 730 may be returned in a possibility after AT+QLBS was executed.	R08A09_01 .001.01.001
SMTP	Modified the format of the "To" and "CC" fields in the mail header to conform to the RFC 5322 standard.	R08A09_01 .001.01.001
GENERAL	1. Fixed the problem that GALILEO satellite could not be obtained in the United States. 2. Fixed the problem that QZSS could not be used for positioning	R08A09_01 .001.01.001

after AT+QGPSCFG="gnssconfig" was executed.		
GENERAL	1. Fixed the module exception occurred after AT+QGPSCFG="nmeasrc",1 was executed. 2. Fixed the module exception caused by frequent opening and closing of GPS.	R08A09_01 .001.01.001
AUDIO	Fixed the problem that there was no sound when Codec 5616e playing.	R08A08_01 .001.01.001
HTTP	Fixed the problem that the URC was not returned after executing AT+QHTTPPOST expired.	R08A08_01 .001.01.001
MQTT	Fixed the problem that the URC of +QMTRECV could not be reported.	R08A08_01 .001.01.001
MQTT	Fixed the problem that MQTT PINGREQ packets would still be sent after executing AT+QMTCFG="keepalive",0 .	R08A08_01 .001.01.001
NETWORK	Optimized the network registration of frequency 2452 in Band 5.	R08A08_01 .001.01.001
SIMCARD	Fixed the problem of network searching was limited due to the lack of EFACC files of some SIM cards.	R08A08_01 .001.01.001
SMTP	Solved the problem of slow sending 10 M files for SMTP.	R08A08_01 .001.01.001
SMTP	Fixed the problem that the error code 423 was reported when uploading files to UFS via USB, because the file descriptor was not properly turned off after UFS attachment files in certain size was sent through SMTP.	R08A08_01 .001.01.001
GENERAL	Fixed the problem that \r\n was missing in the return value after inputting AT+QCFG="bootup", wlan-services, 2 .	R08A08_01 .001.01.001
GENERAL	Optimized the problem the obtained positioning information was incorrect after waking up from sleep.	R08A08_01 .001.01.001
GENERAL	Fixed the problem that AT+QIDNSCFG failed to set IPv6 DNS.	R08A08_01 .001.01.001
GENERAL	Optimized CMUX channel.	R08A08_01 .001.01.001
GENERAL	Solved the problem that the configuration of AT+QCFG="call_control" was not saved after the module was rebooted.	R08A08_01 .001.01.001
GENERAL	Solved the problem that CREG URC did not report.	R08A08_01 .001.01.001
GENERAL	Resolved the problem of handshake failure caused by abnormal handshake time set by DTLS.	R08A08_01 .001.01.001
GENERAL	Fixed the problem that the return value was abnormal when AT+QFLST queried.	R08A08_01 .001.01.001
CMUX	Fixed the problem that channel four could not work normally after four CMUX virtual ports were enabled.	R08A07_01 .001.01.001
FILE	Solved the problem of system instability caused by using AT+QFUPL to upload files whose file name or path contained "\" or "/".	R08A07_01 .001.01.001

FILE	Solved the problem that files stored in SFS were lost after AT+QFDEL="SFS:* was executed.	R08A07_01 .001.01.001
HTTPS	Fixed the problem of error code 702 reported in low probability when HTTPS file uploaded.	R08A07_01 .001.01.001
NETWORK	Fixed the problem that BSIC of the 2G frequency point scanned by AT+QOPS was empty.	R08A07_01 .001.01.001
SMS	Fixed the problem that the received SMS was not stored in ME space restored by AT&F .	R08A07_01 .001.01.001
SMTP	Optimized the recipients display of SMTP, and fixed the problem that more contacts cannot be viewed in the content of sent emails.	R08A07_01 .001.01.001
SMTP	Solved the problem of slow data sending of SMTP.	R08A07_01 .001.01.001
Voice Call	Solved the problem of system instability during the dialing process.	R08A07_01 .001.01.001
GENERAL	Solved the problem that executing AT+QISEND ending with character "\r\n" would cause the server to receive data abnormally.	R08A07_01 .001.01.001
GENERAL	Solved the problem that AT+QCSQ returns a positive number (expect a negative value).	R08A07_01 .001.01.001
DFOTA	Solved the problem of cefs partition backup failure due to power down during DFOTA upgrade.	R08A06_01 .001.01.001
DTMF	Modified to support sending a maximum of 32 tones at DTMF sending.	R08A06_01 .001.01.001
HTTP	Fixed the problem that the module was unstable after receiving RST during HTTPS handshake.	R08A06_01 .001.01.001
RMNET	Solved the problem that the module could not receive data after setting up a UDP server after NDIS dialing.	R08A06_01 .001.01.001
SIMCARD	Solved the problem of an error QMI reported after the SIM card removed/inserted after a probabilistic power-on failure.	R08A06_01 .001.01.001
SMS	Solved the problem that the response format was incorrect when an error returned by AT+CMGL=4 to read a SMS.	R08A06_01 .001.01.001
TCP SSL	Added SSL cipher suite,and deleted invalid suite.	R08A06_01 .001.01.001
TCP SSL	Fixed the problem of system instability caused by the use of ALPN in SSL.	R08A06_01 .001.01.001
TCP/UDP	Solved the problem that Modem would discard the the TCP data packet sent by the server when window scale was 14.	R08A06_01 .001.01.001
Voice Call	Solved the problem that the previous call number returned by AT+CLIP may be abnormally sometimes.	R08A06_01 .001.01.001
GENERAL	Solved the problem of CVE-2021-3169.	R08A06_01 .001.01.001
GENERAL	Modified the attach APN to telstra.internet for Telstra operator.	R08A06_01 .001.01.001
GENERAL	Set the ROW MBN profile1 to null and profile3 APN name to sos APN name.	R08A06_01 .001.01.001

GENERAL	Improved dual UART feature to solve the problem that AT command could not be received and sent normally.	R08A06_01 .001.01.001
SIMCARD	Solved the problem of an error QMI reported after the SIM card removed/inserted after a probabilistic power-on failure.	R08A05_01 .004.01.004
MQTT	Solved the problem of MQTT connection failure.	R08A05_01 .003.01.003
GENERAL	Solved the problem that the traffic statistics data obtained by AT+QGDCNT may be inaccurate sometimes.	R08A05_01 .003.01.003
GENERAL	Solved the problem that the positioning method returned by AT+QGPSLOC was inconsistent with GPGSA.	R08A05_01 .003.01.003
AUDIO	Solved the problem that it failed to enable the PCM clock output by AT+QCFG="pcmclk",1 at booting.	R08A05_01 .002.01.002
AUDIO	1. Support playing MP3 single-channel and dual-channel files. 2. Optimized the fast switching between the command AT+QAUDPLAY (to play the audio) and AT+QAUDSTOP (to stop audio play).	R08A05_01 .002.01.002
DFOTA	Solved the problem of DFOTA upgrade failure caused by URL containing special characters.	R08A05_01 .002.01.002
FILE	Solved the problem that after the encrypted SFS file uploaded to FTP server was decrypted abnormally.	R08A05_01 .002.01.002
HTTP	Solved the problem that AT+QHTTPREAD failed to read HTTP(S) server response information.	R08A05_01 .002.01.002
MQTT	Solved the problem that the MQTT disconnected when receiving the message with QoS level 2 subscribed successfully.	R08A05_01 .002.01.002
MQTT	Fixed the problem of module instability caused by failure of two-way authentication using SSL.	R08A05_01 .002.01.002
MQTT	Solved the problem that +QMTSTAT:0,65535 may be reported after AT+QMTOPEN execution.	R08A05_01 .002.01.002
NETWORK	Solved the problem that after the module searched the network successfully, and AT+CREG/AT+CGREG/AT+CEREG set automatically reporting network registration status, there was no network registration status reported after executing AT+CFUN=4 , AT+CFUN=1 to deactivate network.	R08A05_01 .002.01.002
PPP	Solved the problem that PPP may disconnect under certain scenarios.	R08A05_01 .002.01.002
QuecLocator2.0	Solved the problem that AT+QLBS failed to locate under mobile network.	R08A05_01 .002.01.002
TCP SSL	Improved the stability of the module when TCP SSL was multiplexed at the same time.	R08A05_01 .002.01.002
TCP SSL	Solved the problem of incorrect data sending status returned by AT+QSSLSEND=<clientID>,0 .	R08A05_01 .002.01.002
TCP/UDP	Solved the problem that after TCP connection was established through debug port, incorrect socket connection port was returned by AT+QISTATE . (the connection port should be uart2.)	R08A05_01 .002.01.002

TCP/UDP	Solved the problem that the context type from IPv4v6 to IPv4 configured by AT+QICSGP did not take effect.	R08A05_01 .002.01.002
TCP/UDP	Solved the problem of abnormal UDP IPV6 address.	R08A05_01 .002.01.002
GENERAL	Solved the problem that Host could not obtain the IP from MBIM if the network only allocated IP without DNS address.	R08A05_01 .002.01.002
GENERAL	Solved the problem that an empty menu list was obtained by AT+QSTKGI=37 .	R08A05_01 .002.01.002
GENERAL	Solved the problem of invalid value returned by AT+QCSQ command caused by the delay in RSSI reporting.	R08A05_01 .002.01.002
GENERAL	Updated SE13 TABLE date to 2020/12/21.	R08A05_01 .002.01.002
GENERAL	Updated the VF_Germany_VoLTE MBN version to 202103022, adding two APNs, hos and sos.	R08A05_01 .002.01.002
GENERAL	Removed the support for G711 encoding and Updated Telstra MBN version to 202103191 .	R08A05_01 .002.01.002
GENERAL	Not triggered re-search the network by the module under the registered status when AT+QDPTRYCFG disabled F1-F4 timer.	R08A05_01 .002.01.002
GENERAL	<ol style="list-style-type: none"> 1. When peer IP address length was more than 50 chars, silently truncated the string to 50 chars. 2. Not triggered card power-down if EF-DIR read fails. 3. Populated file attributes for EST file when card did not return FCP data. 4. No sim E911 call for specific operators should not be blocked. 	R08A05_01 .002.01.002
GENERAL	Updated Telstra-Commercial_VoLTE MBN version to 202105192.	R08A05_01 .002.01.002
GENERAL	Solved the problem that modem kept restarting when activating Smartfren MBN.	R08A05_01 .001.01.001
HTTP	Solved the problem that 702 error was reported when reading response sent from the server after sending a PUT request in a packet format through the serial port.	R08A05_01 .001.01.001
AUDIO	Solved the problem that the failure URC could not be reported immediately when the playback was interrupted after executing AT+QLTONE to play the tone repeatedly.	R08A05_01 .001.01.001
GENERAL	Solved the problem of serial port blocking caused by executing AT+CGACT=1,1 to re-activate the first context that was already activated by default.	R08A05_01 .001.01.001
AUDIO	Solved the problem that no uac_fs and uac_music were returned by AT+QAUDCFG=? .	R08A05_01 .001.01.001
GENERAL	Optimized AT+QPOWD=0 to fast shut down the module.	R08A05_01 .001.01.001
GENERAL	Solved the problem that the module could not work normally due to executing AT+QACDBREAD to read ACDB files in the AP/modem side.	R08A05_01 .001.01.001
GENERAL	Updated the time of SE13 TABLE to 2020/08/31.	R08A05_01 .001.01.001

GENERAL	Optimized the ubi read-write partition mounting and exception handling mechanism.	R08A05_01 .001.01.001
DFOTA	Supported using the fixed baud rate set before upgrade during DFOTA upgrade.	R08A05_01 .001.01.001
GENERAL	Supported VoLTE for Smartfren MBN and updated Smartfren MBN version to 'Commercial-Smartfren',0x0501250A,202012291.	R08A05_01 .001.01.001
FTP	Solved the probabilistic problem of no response or reporting error code during the process of FTP uploading or downloading.	R08A04_01 .001.01.001
FTP	Solved the problem that some FTPs servers could not be connected in implicit mode.	R08A04_01 .001.01.001
FTP	Solved the problem that when receiving downlink data through encryption, the FTPs data channel could not enter into data transmission mode before the server send 150 code.	R08A04_01 .001.01.001
FTP	Solved the problem that failed to connect to VSFTP data channel in implicit mode.	R08A04_01 .001.01.001
FTP	Solved the probabilistic problem of download failure when performing resuming point downloads.	R08A04_01 .001.01.001
FTP	Solved the problem of occasional failure when uploading files with FTP service.	R08A04_01 .001.01.001
HTTP	Solved the probabilistic problem that 702 error was reported unexpectedly after sending wireshark data successfully with AT+QHTTPPOST .	R08A04_01 .001.01.001
HTTP	Solved the problem that AT port did not return response after executing AT+QHTTPSTOP during handshaking procedure when connecting to HTTPS server.	R08A04_01 .001.01.001
HTTP	Solved the problem that the URC +QHTTPURC: "closed" was reported twice unexpectedly after executing AT+QHTTPCFG="closed/ind",1 to enable the reporting of HTTP(S) session closing indication.	R08A04_01 .001.01.001
HTTP	Solved the low probability problem that the GET request would fail after performing HTTP(s) one-way authentication.	R08A04_01 .001.01.001
MQTT	Corrected the return value of AT+QMTUNS=? from +QMTSUB to +QMTUNS.	R08A04_01 .001.01.001
QuecLocator 2.0	Solved the problem that APN configured by AT+QLBSCFG="contextid" could not take effect.	R08A04_01 .001.01.001
GENERAL	Solved the problem that the cefs backup and restoration times queried by AT+QPRTPARA=4 was incorrect 0 after cefs has been backed up and restored.	R08A04_01 .001.01.001
GENERAL	mbimd program was started with AT+QCFG="usbnet",2 and no longer supported auto-start. The command configurations taken effect after the module was rebooted.	R08A04_01 .001.01.001
MBIM	Improved the module stability when loading or unloading MAC driver.	R08A04_01 .001.01.001
NETWORK	Improved the Jamming Detection feature.	R08A03_01 .001.01.001
NETWORK	Optimized the EDRX feature and disabled it by default.	R08A03_01 .001.01.001
GENERAL	Corrected the valid value of the parameter <DPO_enable> of AT+QGPSCFG="dpoenable" to (0-2).	R08A03_01 .001.01.001

QuecLocator 2.0	Solved the problem that wrong error code was reported after reaching the timeout configured by AT+QLBSCFG="timeout" when positioning.	R08A03_01 .001.01.001
QuecLocator 2.0	Changed the returned vlaue format of token after executing AT+QLBSCFG? , AT+QLBSCFG=? and AT+QLBSCFG="token" .	R08A03_01 .001.01.001
NETWORK	Optimized AT+QRRCCONSTATE to solve the following problems: 1. An illegal value was configured successfully. 2. AT+QRRCCONSTATE=0 could not take effect.	R08A03_01 .001.01.001
TCP SSL	Ignored the verification of multi-level certificate chain by default in embedded SSL protocol.	R08A03_01 .001.01.001
SMS	Solved the problem that the SMS center address did not changed to the corresponding operators after switching SIM card when the SIM card hot-plug was enabled.	R08A03_01 .001.01.001
MQTT	Solved the problem that the extra characteristics of willtopic would be outputted at the end of the data string when executing command AT+QMTCFG="willex" to read 256 bytes data.	R08A03_01 .001.01.001
NETWORK	Solved the problem that AT+QCFG="DISRPLMN" only could close RPLMNACT but could not close RPLMN.	R08A03_01 .001.01.001
GENERAL	Solve the problem that client could not connect to network after executing AT+QWWAN=1 .	R08A03_01 .001.01.001
GENERAL	Modified the "uar1" of the return value +QFWD CFG: "urc", <socketID>, ("uar1", "usbat", "usbmodem") after executing AT+QFWD CFG=? to "uart1".	R08A03_01 .001.01.001
NETWORK	Solved the problem that Telecom LTE ONLY IoT card could not register on network and supported the configurations taken effect immediately.	R08A03_01 .001.01.001
GENERAL	Solved the problem that the 7bit_alphabet data could not be printed correctly.	R08A03_01 .001.01.001
QuecLocator 2.0	Modified the first APN of China Mobile to cmnet.	R08A03_01 .001.01.001
AUDIO	Supported to record or play the audio file in AMR format.	R08A03_01 .001.01.001
GENERAL	Solved the problem that no value returned when querying the parameter that was greater than 512 bytes with AT+QEEC? .	R08A03_01 .001.01.001
GENERAL	Changed usage to 01 (data sentric) in Reliance MBN.	R08A03_01 .001.01.001
HTTP	Optimized the AT+QFWDHTTP to extend the maximum length of the URL to 1024 bytes and support timeout configuring and returning HTTP response codes after timeout.	R08A03_01 .001.01.001
MMS	Optimized AT+QMMSCFG="proxy" to support the MMS agent address starting with "0".	R08A03_01 .001.01.001
DTMF	Added a parameter for AT+QWDTMF to configure the stop playing interval.	R08A03_01 .001.01.001
GENERAL	Solved the problem that the URC of AP could not be output from the specified port.	R08A03_01 .001.01.001
LowPower	Solved the problem that AT+QCFG="wakepin/level",1,1 could not take effect.	R08A03_01 .001.01.001
DTMF	Modified the valid value range of both <duration> and <pause> of AT+QWDTMF to 55-1000.	R08A03_01 .001.01.001

GENERAL	Solved the problem that an error would occurred when executing AT+QCFG="qcautoconnect" to query configuration.	R08A03_01 .001.01.001
DTMF	Solved the problem that illegal letters would be saved successfully instead of error reporting when configuring parameters with AT+QTONEDET .	R08A03_01 .001.01.001
ECM	Solved the problem that the ECM device could not obtain the IP address when the device was started for the first time.	R08A03_01 .001.01.001
GENERAL	Optimized the USB suspend and resume logic.	R08A03_01 .001.01.001
GENERAL	Solved the problem of incorrect data output via NMEA port.	R08A03_01 .001.01.001
DFOTA	Solved the problem that 502 and 520 error would be occurred unexpectedly caused by poweroff and rebooting when DFOTA upgrades to 90%-100%.	R08A03_01 .001.01.001
GENERAL	Solved the problem of unexpectedly ESM reporting after disabling rejection code reporting or configuring no ESM reporting with AT+QCFG="urc_cause_support" .	R08A03_01 .001.01.001
GENERAL	Updated cefs to version 202005191.	R08A03_01 .001.01.001
AUDIO	Optimized the dialing process during call waiting.	R08A03_01 .001.01.001
AUDIO	Solved the problem that AT+QCFG="pcmclk",1 could not take effect.	R08A03_01 .001.01.001
GENERAL	Updated Telstra MBN version to 202007141.	R08A03_01 .001.01.001
CMUX	Solved the problem that executing AT+QURCCFG="URCPORT","all" in CMUX mode to set the CMUX port and USB port as URC output ports did not take effect.	R08A03_01 .001.01.001
SMS	Solved the problem that the default value of ME and MT stroage space queried by AT+CPMS="ME","SM","MT" was 23 instead of 255.	R08A03_01 .001.01.001
NETWORK	Solved the problem that the China Telecom B5, 2452 frequency point could not be registered.	R08A03_01 .001.01.001
DFOTA	Supported xz compress option in Kernel.	R08A02_01 .001.01.001
MQTT	Changed to return error when sending 0 bytes data by AT+QMTPUBEX after connecting MQTT server.	R08A02_01 .001.01.001
GENERAL	Supported AT+QFWDCLIENT .	R08A02_01 .001.01.001
GENERAL	Solve the problem that the emergency power-off mode did not take effect after setting the AT+QCFG="FAST/POWEROFF",1 .	R08A02_01 .001.01.001
GENERAL	Optimized AT+QGPSCFG="autogps",1 .	R08A02_01 .001.01.001
GENERAL	Solved the problem that NMEA data could not be outputted.	R08A02_01 .001.01.001
TCP/UDP	Solved the problem that only one URC for the first data would be reported with sending data multiple times by the server even set AT+QICFG="recvind",1 after establishing TCP buffer connection.	R08A02_01 .001.01.001

FILE	Solved the problem that the current existed file would be listed and returned OK unexpectedly when executing AT+QFLST="SD:* " after unplugging the SD card.	R08A02_01 .001.01.001
AUDIO	Solved the problem that PCM slave had no sound.	R08A02_01 .001.01.001
DFOTA	Removed the reporting of POWERED DOWN when rebooting during DFOTA.	R08A02_01 .001.01.001
DFOTA	Supported URC reporting of consecutive upgrade progress after powering off during DFOTA upgrade.	R08A02_01 .001.01.001
GENERAL	Optimized AT+QDIAGPORT .	R08A02_01 .001.01.001
MQTT	Solved the problem of module instability when MQTT server quickly sent large amount of data.	R08A02_01 .001.01.001
GENERAL	Optimized AT+QAUDRDGAIN? and AT+QAUDPLAYGAIN? .	R08A02_01 .001.01.001
TCP SSL	Optimized the SSL session reuse logic.	R08A02_01 .001.01.001
TCP/UDP	Solved the problem that there was additional 32 bytes reported of DATA_LENGTH when UDP is connected.	R08A02_01 .001.01.001
UAC	Solved the problem that UAC had no sound.	R08A02_01 .001.01.001
TCP SSL	Optimized the feature of SSL.	R08A02_01 .001.01.001
GENERAL	Solved the problem that high temperature deceleration did not take effect.	R08A02_01 .001.01.001
DFOTA	Optimized DFOTA upgrade process.	R08A02_01 .001.01.001
DFOTA	Added RSA public key in recoveryfs to check the signature of differential packets during DFOTA upgrade, it will continue to upgrade if pass, otherwise 502 error will be reported.	R08A02_01 .001.01.001
NETWORK	Improved the function of Jamming Detection.	R08A02_01 .001.01.001
GENERAL	Solved the probabilistic problem of USB disconnection after enabling USB auto-sleep.	R08A02_01 .001.01.001
HTTP	Solved the problem that the obtained URL was the URL of HTTPS unexpectedly while the HTTP URL was entered under IPv6 address.	R08A02_01 .001.01.001
MQTT	Solved the problem that when reading data via AT+QMTCFG="willex" , there were extra characters at the end of the data.	R08A02_01 .001.01.001
HTTP	Optimized the feature of HTTP after enabling rspout/auto.	R08A02_01 .001.01.001
GENERAL	Solved the problem that no data was outputted from NMEA port after USB plugging.	R08A02_01 .001.01.001
GENERAL	Solved the problem that the return value of AT+QCFG=? executed via UART port was incomplete.	R08A02_01 .001.01.001

GENERAL	Extended the supported size of AT command to 2K.	R08A02_01 .001.01.001
GENERAL	Updated CEFS version to EC25AUXGA_V00010_202001061.	R08A02_01 .001.01.001
GENERAL	Improved the stability of the connection between the module client and Qserver.	R08A02_01 .001.01.001
AUDIO	Solved the problem that the codec would be re-initialized after executing AT commands related to Audio.	R08A02_01 .001.01.001
GENERAL	Solved the problem that no data but OK was returned after executing AT+QEEC? .	R08A02_01 .001.01.001
AUDIO	Optimized AT+QPSND=0 .	R08A02_01 .001.01.001
NETWORK	Remained the previous configuration after configuring LTE with AT+QCFG="band",0,0,0 .	R08A02_01 .001.01.001

5. Known Issues

Item/Category	Brief Description
/	/

6. Functions

Basic Function								
SMS	Voice Call	Data Call	USSD	PHB	CMUX	FILE ¹⁾	Fax	STK
Y	Y	N	N	Y	Y	Y	N	N
Protocol Function								
QMI	TCP/UDP	PPP	FTP	HTTP	NITZ	NTP	TCP SSL	MQTT
Y	Y	Y	Y	Y	Y	Y	Y	Y
MMS ²⁾	SMTP	PING	SMTPS	HTTPS				
Y	Y	Y	Y	Y				
Special Function								
SIM Detection	DFOTA	ECM	Low Power	RMNET	DTMF ³⁾	Dual UART	RNDIS	QuecLocator 2.0 ⁴⁾
Y	Y	Y	Y	Y	Y	Y	Y	Y
UAC	SD	DSSS	MBIM	QuecThing				
Y	Y	Y	Y	Y				

NOTES

- Y means the firmware supports this function.
- N means the firmware does not support this function.
- ¹⁾ Supports RAM FILE only.
- ²⁾ Supports MMS sending only.
- ³⁾ Supports DTMF decoding only.
- ⁴⁾ QuecLocator 2.0 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.
- Verification Environment is shown below. For more details, please contact Quectel technical support.
For Windows,
USB Driver: Quectel_Windows_USB_Driver(Q)_NDIS_V2.7.1
QFlash Tool: QFlash_V6.5

For Linux,
USB Driver: Quectel_Linux_USB_Serial_Option_Driver_20220622

Quectel-CM Tool: Quectel_QConnectManager_Linux_V1.6.4

QLog Tool: QLog_Linux_Android_V1.5.17

QMI_WWAN Driver: Quectel_Linux_Android_QMI_WWAN_Driver_V1.2.2

GobiNet Driver: Quectel_Linux_Android_GobiNet_Driver_V1.6.3

Quectel
Confidential