

EC25-EUX-GA

Release Notes

LTE Standard Module Series

Rev: EC25-EUX-GA_Firmware_Release_Notes_V0817_A0.200.A0.200

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1. Preamble

This document provides the Release Notes for EC25-EUX-GA firmware version **EC25EUXGAR08A17M1G** (Configuration version **A0.200.A0.200**). It describes major changes compared to EC25-EUX-GA firmware version **EC25EUXGAR08A17M1G** (Configuration version **20.200.20.200**).

2. Matters Needing Attention

SN	Brief Description
[1]	Multiple PDN is not supported by MBIM.
[2]	The current firmware version supports Secure Boot and Secure Debugging, and the Quectel signature is included in the security firmware versions by default. Whether Secure Boot is enabled by default when the firmware version is shipped from the factory depends on the OC you select. Secure Debugging is disabled by default and you can enable it with AT commands as required.
[3]	The new firmware version cannot be downgraded to versions released before EC25EUXGAR08A13M1G_20.200.20.200 , otherwise the module will not be able to work normally.
[4]	To extend the service life of flash, it is recommended that the total number of operations related to powering on/off the module, CFUN switching, SIM card hot swapping, dual-SIM switching, or repeated execution of NVM commands should not exceed 30 times per day.
[5]	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.
[6]	<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.
[7]	Cross-baseline software version update is not supported. For EC25EUXGAR08A17M1G_A0.200.A0.200 , "R08" represents the baseline information. This Quectel module does not support updating to a firmware version other than R08. If you have any related requirements, please contact Quectel

Technical Support.

3. New Features

Item/Category	Brief description	Since
NETWORK	Added AT+QCFG="timeupdate" to configure whether the UE time can be updated from the network.	R08A17_A0.200.A0.200
Security	Added Secure Boot and Secure Debugging.	R08A17_A0.200.A0.200
GENERAL	Added AT+QUSBINTERFACE to control fixed USB port number.	R08A17_A0.200.A0.200
SD	Added exFAET to support 128G SD card.	R08A16_20.200.20.200
GENERAL	Added TTS output function through USB NMEA port.	R08A16_20.200.20.200
GENERAL	Supported setting AT+QCFG= "hplmn/search_timer",0 to turn off the LPLMN search timer.	R08A16_20.200.20.200
GENERAL	Added AT+QAUDCFG= "callwaiting/tone" to control the call waiting tone.	R08A16_20.200.20.200
GENERAL	Added AT+QVOLTEDTMFDET to control whether to detect URC reported form DTMF in-band in all networks.	R08A16_20.200.20.200
GENERAL	Added AT+QCFG="LANIP" to query or modify DHCP address pool of the default LAN interface.	R08A16_20.200.20.200
GENERAL	Added AT+QAUDCFG= "alc5616e/dlgain" to adjust the downlink gain for 5616e codec.	R08A16_20.200.20.200
GENERAL	Added AT+QFOTAPKGCFG to set MV or CP mode for moving delta packages used for local upgrade.	R08A16_20.200.20.200
NETWORK	Added Spain_VDF_VOLTE MBN to meet the IMS requirement of operators.	R08A15_20.200.20.200
UAC	Supported UAC to play local ringback tone.	R08A15_20.200.20.200
GENERAL	Added AT+QUARTCFG to configure main UART.	R08A15_20.200.20.200
GENERAL	Added AT+QIMSCFG="qsiipc_enable" to configure URC to report SIP message sent by the network.	R08A15_20.200.20.200
GENERAL	Disabled eDRX in ATTACH and TAU message when RRC SIB did not support eDRX.	R08A15_20.200.20.200
GENERAL	Added AT+QCFG="clat" to enable CLAT.	R08A15_20.200.20.200

GENERAL	Added AT+QNWCFG="reject_cause" to report the rejection reason issued by the network.	R08A15_20. 200.20.200
GENERAL	Supported AT+USBAUTO to configure the host USBnet.	R08A15_20. 200.20.200
GENERAL	Added AT+QMMSCFG="user_agent" and AT+QMMSCFG="x_wap_profile" to configure User-Agent and x-wap-profile respectively.	R08A15_20. 200.20.200
GENERAL	Extended AT+QOPS to support the parameter ABORT to allow the module to be interrupted by external input during network searching.	R08A15_20. 200.20.200
GENERAL	Added Ireland Vodafone MBN.	R08A15_20. 200.20.200
GENERAL	Added the function of automatically downloading XTRA.	R08A14_20. 200.20.200
GENERAL	Added AT+QTELEFONICA to control Telefonica retry mechanism and solved the problem of Telefonica lab certification.	R08A14_20. 200.20.200
NETWORK	Relevant technical controls have been carried out to restrict normal network registration in regions such as RUS and IR, thus ensuring that the module can be used only for civilian applications.	R08A13_20. 200.20.200
GENERAL	Added AT+QGPSPPI to obtain positioning analysis data.	R08A13_20. 200.20.200
GENERAL	Supported UK_Vodafone_IOT MBN.	R08A13_20. 200.20.200
GENERAL	Added AT+QIMSCFG="ims_status" to enable IMS URC.	R08A13_20. 200.20.200
GENERAL	The new firmware version cannot be downgraded to previous versions, otherwise the module will not be able to work normally.	R08A13_20. 200.20.200
AUDIO	Supported recording 16K audio files in WAV format.	R08A11_20. 003.20.003
GENERAL	Supported SecBoot.	R08A11_20. 003.20.003
GENERAL	Added AT+QCFG="secbootstat" to get SecBoot status.	R08A11_20. 003.20.003
GENERAL	Extended AT+QCFG="ledmode" : When <mode>=3 , the NET_STATUS light outputs a high level when SIM card is not inserted or registered, and the NET_STATUS light is expected to flash in the network state.	R08A11_20. 003.20.003
GENERAL	Added the function of fast shutdown triggered by GPIO.	R08A11_20. 003.20.003
HTTP	Added AT+QHTTPCFGEX , and AT+QHTTPCFGEX="send_add" can support the configuration of up to 36 parameters for POST multiple files to the server.	R08A09_20. 003.20.003
NETWORK	Added AT+QNWCFG="rej_cause_7_mapping" to control whether to map the network rejection reason value #7.	R08A09_20. 003.20.003

TCP SSL	Added AT+QSSLOPENEX to support the establishment of SSL connection in a short time.	R08A09_20.003.20.003
TCP SSL	Enabled client renegotiation on the module through AT+QSSLCFG="renegotiation" .	R08A09_20.003.20.003
GENERAL	Added AT+QCFG="cmux/flowctrl" to control hardware flow control in CMUX mode.	R08A09_20.003.20.003
GENERAL	In SoftSIM SDK, supported the rollback function if the upgrade fails.	R08A09_20.003.20.003
GENERAL	Added AT+QVOICECFG="enable_srvcc_cap_report" to control the module to report the SRVCC capability in ms_network_cap when 2G and 3G are not supported.	R08A09_20.003.20.003
GENERAL	Added AT+QGPSSNRTEST to test CN of satellite signal.	R08A09_20.003.20.003
AUDIO	Supported saving recording files to SD card.	R08A09_20.002.20.002
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.	R08A09_20.002.20.002
TCP/UDP	Added AT+QCFG="TCP/SendMode" to control when to report SEND OK.	R08A09_20.002.20.002
TCP/UDP	Added AT+QICFG="wakeup/data" to configure the content of the wakeup data packet.	R08A09_20.002.20.002
GENERAL	Enabled Steering of Roaming feature for ROW.	R08A09_20.002.20.002
GENERAL	Supported PA VC7912-61 and VC7916-62.	R08A09_20.002.20.002
GENERAL	Added AT+QCFG="urc/ri/udp" and AT+QCFG="urc/ri/udp_enable" to control the RI of TCP/UDP.	R08A09_20.002.20.002
MQTT	Added AT+QMTCFG="protocol/check" to configure whether to start checking the MQTT header.	R08A08_20.002.20.002
NETWORK	Added AT+QLTENGBR to get LTE neighborhood information.	R08A08_20.002.20.002
TCP SSL	Added AT+QSSLCFG="dtls" to support DTLS function.	R08A08_20.002.20.002
TCP/UDP	Added AT+QICFG="sendpktsize" to set the size of data that can be sent by AT+QISEND .	R08A08_20.002.20.002
TCP/UDP	Added AT+QICFG="tcp/mss" to set MSS size.	R08A08_20.002.20.002
GENERAL	Supported AT+QIOT related commands.	R08A08_20.002.20.002
GENERAL	Supported Telefonica Retry & Reboot solution.	R08A08_20.002.20.002

GENERAL	Added AT+QWDNS to configure DNS server address.	R08A08_20. 002.20.002
GENERAL	Added AT+QCFG="freezeband" to allow/disable bandpref configuration.	R08A08_20. 002.20.002
GENERAL	Added AT+QCFG="hardcoded_ecc_list" .	R08A08_20. 002.20.002
NETWORK	Added AT+QCOPSCFG to configure the performance of AT+QCOPS .	R08A08_20. 002.20.002
NETWORK	Added to control AT+COPS to scan band, not affecting the band scan of AT+QCFG="nwscanmodeex" .	R08A08_20. 002.20.002
NETWORK	Added AT+QCFG="netmaskset" to configure network card subnet mask.	R08A08_20. 002.20.002
GENERAL	Supported RDA PA.	R08A07_20. 001.20.001
GENERAL	Supported Telefonica MBN.	R08A07_01. 001.01.001
FTP	Added AT+QFTPCFG="restenable" to configure whether the support of REST command was required for FTP server.	R08A06_01. 001.01.001
Voice Call	Added AT+QCFG="call_control" to configure whether to automatically hang up a voice call.	R08A06_01. 001.01.001
FTP	Improved the operation of FTP related commands, optimized FTP server compatibility, and supported the certificate encryption function.	R08A06_01. 001.01.001
AUDIO	Supported le9641 slic.	R08A04_01. 001.01.001
GENERAL	Added AT+QCFG="defaultdns" to manually configure primary and secondary DNS address for PDP context, and the feature was disabled by default.	R08A04_01. 001.01.001
GENERAL	Added AT+QGPSCFG="gnssrawdata",<onoff> to control the output of GNSS raw data.	R08A03_01. 001.01.001
NETWORK	Added the feature of priority network registration with specified LTE frequency.	R08A03_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+QADCDET 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
GENERAL	Added AT+QLOC1 .	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" .	R08A03_01. 001.01.001
GENERAL	Added AT+QCFG="sim/poll_time_delay" .	R08A03_01. 001.01.001
UAC	Supported to paly local music with UAC.	R08A03_01. 001.01.001
NETWORK	1. Added AT+QDPTRYCFG to configure PDP activation request times and AT+QDPTRYCHK to check request frequency and report request status via URC. 2.Supported to report URC +CGEV: ME ACT after executing AT\$QCRMCall successfully with +CGEV was enabled by AT+CGEREP under 3G/2G network.	R08A03_01. 001.01.001
GENERAL	Added AT+QRRCCONSTATE .	R08A02_01. 001.01.001
LowPower	Added AT+QCFG="wakeuin/level" .	R08A02_01. 001.01.001
NETWORK	Added AT+QICSGPEH .	R08A02_01. 001.01.001
GENERAL	Added Socket forward feature.	R08A02_01. 001.01.001
HTTP	Added AT+QHTTTPUT and AT+QHTTTPUTFILE in HTTP and added AT+QHTTPCFG="CUSTOM_HEADER" for customers to define HTTP headers for themselves.	R08A02_01. 001.01.001
TCP/UDP	Added AT+QCFG="tcp/windowsize" .	R08A02_01. 001.01.001
GENERAL	Added AT+QCFG="iprulectl" .	R08A02_01. 001.01.001
GENERAL	Solved the probabilistic problem of module instability when executing AT+QMIC? .	R08A02_01. 001.01.001
GENERAL	Supported SGMII feature.	R08A02_01. 001.01.001

GENERAL	Added TW_Mobile_China_VoLTE、Bouygues_France_VoLTE and Telstra-Commercial_VoLTE MBN.	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	Changed the range of return value <io> of AT+QDAI=? to 1-6.	R08A02_01. 001.01.001
GENERAL	Solved the problem that the return value format of AT+QCFG="usbcfg" had no \r\n .	R08A02_01. 001.01.001
GENERAL	Added AT+QCFG="qoos" .	R08A02_01. 001.01.001
GENERAL	Supported VoLTE for Smartfren.	R08A02_01. 001.01.001
Voice Call	Added DSCI report in emergency call.	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 MBN STC_Saudi_VoLTE,0x0501FE01,201912231.	R08A02_01. 001.01.001

4. Improved Features

Item/Category	Brief description	Since
MQTT	Solved the problem that when AT+QIDEACT was executed immediately after AT+QMTOPEN execution for the first time, +QMTSTAT: 0,2 was reported continuously after AT+QMTOPEN execution again.	R08A17_A0. 200.A0.200
NETWORK	Fixed the problem that the result related to LTE was not returned after AT+QCOPS=7,0 was executed.	R08A17_A0. 200.A0.200
GENERAL	Solves the problem of abnormal SIM card recognition caused by module deleting SIMLock configuration file after Secure Boot was enabled.	R08A17_A0. 200.A0.200
GENERAL	Removed support on AT+QIOT related commands.	R08A17_A0. 200.A0.200
GENERAL	Upgraded the version of cURL to 7.42.0, the version of Dnsmasq to 2.89, and the version of Expat to 2.5.0.	R08A17_A0. 200.A0.200
GENERAL	Supported modifying module DHCP server configuration via	R08A17_A0.

	AT+QWDHCP.	200.A0.200
GENERAL	Fixed the problem that Error: 100 was returned after AT+CHLD=1x was executed.	R08A17_A0. 200.A0.200
NETWORK	Solved the problem that when there was no CDMA network around, the module could not register on the network after the module was configured as Voice Centric and China Telecom card which did not support voice was inserted.	R08A17_20. 200.20.200
SMS	Solved the problem of abnormal SMS sending in 2G network.	R08A17_20. 200.20.200
GENERAL	Fixed the timing disparity issue between AT command XTRA injection and API XTRA injection.	R08A17_20. 200.20.200
GENERAL	Fixed the problem that AT+CNUM did not get the number after the number was written and the module was rebooted.	R08A17_20. 200.20.200
AUDIO	Fixed the problem that there was no network ring back tone in special scenes in UAC.	R08A16_20. 200.20.200
AUDIO	Fixed the problem that the module could not enter sleep after software decoding was enabled.	R08A16_20. 200.20.200
NETWORK	GEA1 and GEA2 were disabled, and GEA3 was enabled by default.	R08A16_20. 200.20.200
NETWORK	For the Vodafone operator, GEA1 and GEA2 were disabled, and GEA3 and GEA4 were enabled by default.	R08A16_20. 200.20.200
TCP SSL	Fixed the problem that data may be lost in case of retransmission when data was sent in SSL connection.	R08A16_20. 200.20.200
GENERAL	Fixed the problem that eSIM returned 6A88 during some eSIM LPA usage.	R08A16_20. 200.20.200
GENERAL	Fixed the problem of failure to send SMS in 3G network by selecting CS preference or PS preference through AT+CGSMS .	R08A16_20. 200.20.200
GENERAL	Fixed the problem that the module did not report QMCTL_REVOKE_CLIENT_ID_IND, resulting in the RIL library not updating the dialing status.	R08A16_20. 200.20.200
GENERAL	Fixed the problem that modem manager reported an error SIM missing in low power mode.	R08A16_20. 200.20.200
AUDIO	Fixed the problem that there was no sound when Codec 5616e playing.	R08A15_20. 200.20.200
GENERAL	Fixed the problem that error code 730 may be returned in a possibility after AT+QLBS was executed.	R08A15_20. 200.20.200
SMS	Fixed the problem of failure to send SMS in 3G network by selecting CS preference or PS preference through AT+CGSMS .	R08A15_20. 200.20.200
SMS	Added the function of receiving CMAS broadcast SMS.	R08A15_20. 200.20.200
SMTP	Modified the format of the "To" and "CC" fields in the mail header to conform to the RFC 5322 standard.	R08A15_20. 200.20.200

GENERAL	Fixed the problem of network searching was limited due to the lack of EFACC files of some SIM cards.	R08A15_20. 200.20.200
GENERAL	Restored AT+QLWCFG="startup" to configure the startup mode of LwM2M client.	R08A15_20. 200.20.200
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 after AT+QGPSCFG="gnssconfig" was executed.	R08A15_20. 200.20.200
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.	R08A15_20. 200.20.200
GENERAL	Fixed the problem that \r\n was missing in the return value after inputting AT+QCFG="bootup", wlan-services, 2 .	R08A15_20. 200.20.200
GENERAL	Optimized the problem the obtained positioning information was incorrect after waking up from sleep.	R08A15_20. 200.20.200
GENERAL	Fixed the problem that AT+QIDNSCFG failed to set IPv6 DNS.	R08A15_20. 200.20.200
CMUX	Optimized CMUX channel.	R08A14_20. 200.20.200
HTTP	Fixed the problem that the URC was not returned after executing AT+QHTTPPOST expired.	R08A14_20. 200.20.200
GENERAL	Optimized the problem related to throughput.	R08A14_20. 200.20.200
GENERAL	Updated the third APN in Telefonica MBN to SOS.	R08A14_20. 200.20.200
GENERAL	Solved the problem that CREG URC did not report.	R08A14_20. 200.20.200
GENERAL	Solved the problem that the configuration of AT+QCFG="call_control" was not saved after the module was rebooted.	R08A14_20. 200.20.200
CMUX	Fixed the problem that channel four could not work normally after four CMUX virtual ports were enabled.	R08A13_20. 200.20.200
HTTPS	Fixed the problem of error code 702 reported in low probability when HTTPS file uploaded.	R08A13_20. 200.20.200
NETWORK	Fixed the problem that BSIC of the 2G frequency point scanned by AT+QOPS was empty.	R08A13_20. 200.20.200
NETWORK	Fixed the problem that the module could not camp on the network normally when AT+QICSGP set repeated parameters.	R08A13_20. 200.20.200
SMTP	Solved the problem of slow data sending of SMTP.	R08A13_20. 200.20.200
SMTP	Fixed the problem that SMTP could not properly close the attachment file descriptor after sending UFS attachments of certain sizes, causing USB subsequent uploads to UFS to report error 423.	R08A13_20. 200.20.200

Voice Call	Solved the problem of system instability during the dialing process.	R08A13_20. 200.20.200
GENERAL	Solved the problem that AT+QCSQ returned a positive number (expect a negative value).	R08A13_20. 200.20.200
GENERAL	Modified the format of AT+EGMR=0,8 .	R08A13_20. 200.20.200
GENERAL	Fixed the problem that the return value was abnormal when AT+QFLST queried.	R08A13_20. 200.20.200
GENERAL	Resolved the problem of handshake failure caused by abnormal handshake time set by DTLS.	R08A13_20. 200.20.200
GENERAL	Fixed the problem that MQTT pingreq packets would still be sent after executing AT+QMTCFG="keepalive",0 .	R08A13_20. 200.20.200
GENERAL	Fixed the problem that the URC of +QMTRECV could not be reported.	R08A13_20. 200.20.200
FILE	Solved the problem of system instability caused by using AT+QFUPL to upload files whose file name or path contained "/".	R08A11_20. 003.20.003
FILE	Solved the problem that files stored in SFS were lost after AT+QFDEL="SFS:*" was executed.	R08A11_20. 003.20.003
HTTPS	Fixed the problem that the module was unstable after receiving RST during HTTPS handshake.	R08A11_20. 003.20.003
NETWORK	Fixed the problem that the network icon displayed abnormally under GSM.	R08A11_20. 003.20.003
SMS	Updated Telefonica Spain_VoLTE MBN to configure SMS over IMS.	R08A11_20. 003.20.003
SMS	Fixed the problem that the received SMS was not stored in ME space restored by AT&F.	R08A11_20. 003.20.003
SMTP	Optimized the recipients display of SMTP, and fixed the problem that more contacts cannot be viewed in the content of sent emails.	R08A11_20. 003.20.003
Voice Call	Solved the problem that the previous call number returned by AT+CLIP may be abnormally sometimes.	R08A11_20. 003.20.003
Voice Call	Solved the problem that the system was unstable during the process of making calls.	R08A11_20. 003.20.003
GENERAL	Solved the problem that TF_Spain_VoLTE MBN could not be activated normally after auto-select MBN was enabled and TF_Spain card was inserted.	R08A11_20. 003.20.003
GENERAL	Update the Telstra MBN version to set the first APN to NULL.	R08A11_20. 003.20.003
GENERAL	Solved the problem that executing AT+QISEND ending with character "\r\n" would cause the server to receive data abnormally.	R08A11_20. 003.20.003
DFOTA	Solved the problem of cefs partition backup failure due to power down during DFOTA upgrade.	R08A09_20. 003.20.003
DTMF	Modified to support sending a maximum of 32 tones at DTMF sending.	R08A09_20. 003.20.003

SMS	Solved the problem that the response format was incorrect when an error returned by AT+CMGL=4 to read a SMS.	R08A09_20.003.20.003
GENERAL	Solved the problem that the call could not be made when the Unifi operator card was used.	R08A09_20.003.20.003
GENERAL	Solved the problem that the module worked unstably at Telefonica certification.	R08A09_20.003.20.003
GENERAL	Solved the problem of CVE-2021-3169.	R08A09_20.003.20.003
GENERAL	Set the ROW MBN profile1 to null and profile3 APN name to SOS	R08A09_20.003.20.003
GENERAL	Fixed the problem that the dual serial port function may fail to be enabled.	R08A09_20.003.20.003
GENERAL	Modified the AT+QCFG="USBCFG" setting to take effect immediately.	R08A09_20.002.20.002
GENERAL	Solved the problem that the traffic statistics data obtained by AT+QGDCNT may be inaccurate sometimes.	R08A09_20.002.20.002
DFOTA	Solved the problem that error codes (502) may be reported when resuming upgrade after power-down during DFOTA upgrade.	R08A09_20.002.20.002
MQTT	Solved the problem of MQTT connection failure.	R08A09_20.002.20.002
NETWORK	Solved the problem that there was no network registration status reported at AT+CFUN=0 execution after AT+CREG/AT+CGREG/AT+CEREG was set to report network registration status actively.	R08A09_20.002.20.002
NETWORK	Solved the problem of SIM card with type of ecall_only_mode not registered to the network.	R08A09_20.002.20.002
RMNET	Solved the problem that the module could not receive data after setting up a UDP server after NDIS dialing.	R08A09_20.002.20.002
TCP/UDP	Solved the problem that Modem would discard the TCP data packet sent by the server when window scale was 14.	R08A09_20.002.20.002
TCP/UDP	Fixed the problem of the incorrect IP address returned by AT+QIACCEPT .	R08A09_20.002.20.002
TCP SSL	Fixed the problem of system instability caused by the use of ALPN in SSL.	R08A09_20.002.20.002
TCP SSL	Added SSL cipher suite, and deleted invalid suite.	R08A09_20.002.20.002
GENERAL	Solved the failure of eUICC use case 27.22.7.2.2.	R08A09_20.002.20.002
AUDIO	1. Support playing MP3 single-channel and dual-channel files. 2. Optimized the fast switching between AT+QAUDPLAY (to play the audio) and AT+QAUDSTOP (to stop audio play).	R08A08_20.002.20.002
DFOTA	Solved the problem of DFOTA upgrade failure caused by URL containing special characters.	R08A08_20.002.20.002

HTTP	Solved the AT+QHTTPREAD failed to read HTTP(S) server response information.	R08A08_20.002.20.002
MQTT	Fixed the problem of module instability caused by failure of two-way authentication using SSL.	R08A08_20.002.20.002
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.	R08A08_20.002.20.002
PPP	Solved the problem that PPP may disconnect under certain scenarios.	R08A08_20.002.20.002
TCP SSL	Improved the stability of the module when TCP SSL was multiplexed at the same time.	R08A08_20.002.20.002
TCP SSL	Solved the problem of incorrect data sending status returned by AT+QSSSEND=<clientID>,0 .	R08A08_20.002.20.002
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.)	R08A08_20.002.20.002
TCP/UDP	Solved the problem that the context type from IPv4v6 to IPv4 configured by AT+QICSGP did not take effect.	R08A08_20.002.20.002
TCP/UDP	Solve the problem of abnormal UDP IPV6 address.	R08A08_20.002.20.002
GENERAL	Solved the problem of invalid value returned by AT+QCSQ caused by the delay in RSSI reporting.	R08A08_20.002.20.002
GENERAL	Updated SE13 TABLE date to 2020/12/21.	R08A08_20.002.20.002
GENERAL	Not triggered re-search the network by the module under the registered status when AT+QPDPTRYCFG disabled F1-F4 timer.	R08A08_20.002.20.002
GENERAL	When peer IP address length was more than 50 chars, silently truncated the string to 50 chars.	R08A08_20.002.20.002
GENERAL	Not triggered card power-down if EF-DIR read fails.	R08A08_20.002.20.002
GENERAL	Populated file attributes for EST file when card did not return FCP data.	R08A08_20.002.20.002
GENERAL	No sim E911 call for specific operators should not be blocked.	R08A08_20.002.20.002
GENERAL	Updated Telstra-Commercial_VoLTE MBN version to 202105192.	R08A08_20.002.20.002
GENERAL	Supported VC7912-61 and VC7912-62.	R08A08_20.002.20.002
GENERAL	Solved the problem that the positioning method returned by AT+QGPSLOC was inconsistent with GPGSA.	R08A08_20.002.20.002
GENERAL	Solved the problem of the incorrect results returned by AT+QTELEFONICA="retry_schema" .	R08A08_20.002.20.002

GENERAL	Updated VF_Germany_VoLTE MBN version to 202106171.	R08A08_20. 002.20.002
GENERAL	Optimized RDA PA.	R08A07_20. 002.20.002
DFOTA	Supported using the fixed baud rate set before upgrade during DFOTA upgrade.	R08A07_01. 001.01.001
FILE	Solved the problem that after the encrypted SFS file uploaded to FTP server was decrypted abnormally.	R08A07_01. 001.01.001
MQTT	Solved the problem that the MQTT disconnected when receiving the message with QoS level 2 subscribed successfully.	R08A07_01. 001.01.001
MBIM	Solved the problem that Host could not obtain the IP from MBIM if the network only allocated IP without DNS address.	R08A07_01. 001.01.001
GENERAL	Supported VoLTE for Smartfren MBN and updated Smartfren MBN version to 'Commercial-Smartfren',0x0501250A,202012291.	R08A07_01. 001.01.001
GENERAL	Solved the problem that an empty menu list was obtained by AT+QSTKGI=37 .	R08A07_01. 001.01.001
FTP	Solve the probabilistic problem of download failure when performing Resuming point downloads.	R08A06_01. 001.01.001
MQTT	Corrected the return value of AT+QMTUNS=? from +QMTSUB to +QMTUNS .	R08A06_01. 001.01.001
FTP	Solved the problem of occasional failure when uploading files with FTP service.	R08A06_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.	R08A06_01. 001.01.001
GENERAL	Solved the problem that APN configured by AT+QLBSCFG="contextid" could not take effect.	R08A06_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.	R08A06_01. 001.01.001
HTTP	Solved the low probability problem that the GET request would fail after performing HTTP(s) one-way authentication.	R08A06_01. 001.01.001
GENERAL	Improved the module stability when loading or unloading MAC driver.	R08A06_01. 001.01.001
GENERAL	Solved the problem that jammed was reported unexpectedly under the premise of weak signal or setting the rejection reason value when the interference protection feature was not turned on.	R08A06_01. 001.01.001
GENERAL	Optimized interference protection features under WCDMA by adding anti-jitter feature.	R08A06_01. 001.01.001
GENERAL	Solved the problem that modem part of the module kept restarting when activating Smartfren MBN.	R08A06_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	R08A06_01. 001.01.001

	packet format through the serial port.	
GENERAL	Changed the mapping relations among hardware PIN143,144 and GPIO52,53.	R08A06_01. 001.01.001
GENERAL	Optimized jamming detection algorithm in GSM mode.	R08A06_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.	R08A06_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.	R08A06_01. 001.01.001
AUDIO	Solved the problem that no uac_fs and uac_music were returned by AT+QAUDCFG=? .	R08A06_01. 001.01.001
GENERAL	Optimized AT+QPOWD=0 to fast shut down the module.	R08A06_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.	R08A06_01. 001.01.001
GENERAL	Updated the time of SE13 TABLE to 2020/08/31.	R08A06_01. 001.01.001
GENERAL	Optimized the ubi read-write partition mounting and exception handling mechanism.	R08A06_01. 001.01.001
FTP	Solved the probabilistic problem of no response or reporting error code during the process of FTP uploading or downloading.	R08A05_01. 001.01.001
NETWORK	Supported to automatically trigger network search procedure after the RPM feature was disabled.	R08A05_01. 001.01.001
NETWORK	Improved RPM registration procedure to solve the problem that the registration request cannot be initiated again when the number of re-initiated registration requests for the specified PDN rejection reason reaches the maximum value within the specified timeout value.	R08A05_01. 001.01.001
GENERAL	Solved the problem that the returned DNS address characters of AT+QCFG="defaultdns" and AT+CGCONTRDP were in reverse order after setting DNS address with AT+QCFG="defaultdns",1,<dns1> .	R08A05_01. 001.01.001
SMS	Solved the problem that the default value of ME and MT storage space queried by AT+CPMS="ME","SM","MT" was 23 instead of 255.	R08A04_01. 001.01.001
GENERAL	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.	R08A04_01. 001.01.001
GENERAL	Updated Telstra MBN version to 202007141.	R08A04_01. 001.01.001

AUDIO	Optimized the dialing process during call waiting.	R08A04_01. 001.01.001
AUDIO	Solved the problem that AT+QSLIC=1,1 did not take effect after enabling SLIC with AT+QSLIC=1,1 and then disabling SLIC with AT+QSLIC=0,1 .	R08A04_01. 001.01.001
GENERAL	Solved the problem that the MBN list queried by AT+QMBNCFG="list" was empty after executing AT+QMULTIMBN="reload" and restarting the module.	R08A04_01. 001.01.001
HTTP	Optimized the feature of HTTP after enabling rspout/auto.	R08A03_01. 001.01.001
GENERAL	Solved the problem that no data was outputted from NMEA port after USB plugging.	R08A03_01. 001.01.001
GENERAL	Solved the problem that the return value of AT+QCFG=? executed via UART port was incomplete.	R08A03_01. 001.01.001
GENERAL	Merged the Qualcomm patch MDM9607.LE.2.0 Post-CS 0.0.015.1a.	R08A03_01. 001.01.001
GENERAL	Extended the supported size of AT command to 2K.	R08A03_01. 001.01.001
GENERAL	Improved the stability of the connection between the module client and Qserver.	R08A03_01. 001.01.001
AUDIO	Solved the problem that the codec would be re-initialized after executing AT commands related to Audio.	R08A03_01. 001.01.001
GENERAL	Solved the problem that no data but OK was returned after executing AT+QEEC? .	R08A03_01. 001.01.001
AUDIO	Optimized AT+QPSND=0 .	R08A03_01. 001.01.001
MQTT	Improved the MQTT stability during large data transmitting.	R08A03_01. 001.01.001
NETWORK	Remained the previous configuration after configuring LTE with AT+QCFG="band",0,0,0 .	R08A03_01. 001.01.001
GENERAL	Improved the Jamming Detection feature.	R08A03_01. 001.01.001
GENERAL	Optimized the EDRX feature and disabled it by default.	R08A03_01. 001.01.001
GENERAL	Corrected the valid value of the parameter of AT+QGPSCFG="dpoenable" to (0-2).	R08A03_01. 001.01.001
GENERAL	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
GENERAL	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 .	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 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
GENERAL	Solved the problem that the 7bit_alphabet data could not be printed correctly.	R08A03_01.001.01.001
GENERAL	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 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 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
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 incorrect data output via NMEA port.	R08A03_01.001.01.001
GENERAL	Optimized the USB suspend and resume logic.	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
DTMF	Solved the problem that illegal letters would be saved successfully instead of error reporting when configuring parameters with	R08A03_01.001.01.001

	AT+QTONEDET.	
RNDIS	Solved the problem that an error would occurred when executing AT+QCFG="qcautoconnect" to query configuration.	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
LowPower	Solved the problem that AT+QCFG="wakepin/level",1,1 could not take effect, the main UART and modem could not enter into sleep mode.	R08A03_01. 001.01.001
GENERAL	Solved the problem that the AP side URC could not be output from the specified port.	R08A03_01. 001.01.001
DFOTA	Optimized DFOTA upgrade process.	R08A02_01. 001.01.001
MQTT	Optimized module stability when sending data of 0 byte after connecting MQTT.	R08A02_01. 001.01.001
GENERAL	Optimized AT+QCFG="fast/poweroff" .	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
TCP/UDP	Solved the problem of reporting from the incorrect port when UDP listener had incoming messages.	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 unitability 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/UDP	Solved the problem that there was additional 32 bytes reported of DATA_LENGTH when UDP connection.	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
GENERAL	Updated Telstra MBN version to 201904181.	R08A02_01. 001.01.001
AUDIO	Solved the problem that the downlink sound would be recorded while the uplink sound was supposed to be recorded in a call.	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
GENERAL	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
Low Power	Solved the problem of high flow consumption when AT+CFUN=0 .	R08A02_01. 001.01.001
GENERAL	Optimized file system protection mechanism.	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
GENERAL	Optimized USB startup mechanism.	R08A02_01. 001.01.001
NETWORK	Solved the problem of displaying incorrect band value after setting LTE BAND value through AT+QCFG="band" to 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	MMS ²⁾	FTP	SMTP	HTTP	NITZ	PING
Y	Y	Y	Y	Y	Y	Y	Y	Y
NTP	SMTPS	HTTPS	TCP SSL	MQTT				
Y	Y	Y	Y	Y				
Special Function								
DTMF ³⁾	Dual UART	Security ⁴⁾	DFOTA	SIM Detection	Low Power	RMNET	ECM	SD
Y	Y	Y	Y	Y	Y	Y	Y	Y
RNDIS	UAC	MBIM	DSSS					
Y	Y	Y	Y					

NOTE

1. Y means the firmware supports this function.
2. N means the firmware does not support this function.
3. ¹⁾ Supports RAM FILE only.
4. ²⁾ Supports MMS sending only.
5. ³⁾ Supports DTMF decoding only.
6. ⁴⁾ Support Secure Boot and Secure Debugging.
7. Verification Environment is shown below. For more details, please contact Quectel Technical Support.
For Windows,
Qflash Tool: QFlash_ V6.8

For Linux,
QFirehose Tool: QFirehose_Linux_Android_V1.4.19
USB Driver: Quectel_Linux_USB_Serial_Option_Driver_20220622

Quectel-CM Tool: Quectel_QConnectManager_Linux_V1.6.7

QLog Tool: QLog_Linux_Android_V1.5.22

QMI_WWAN Driver: Quectel_Linux&Android_QMI_WWAN_Driver_V1.2.7

GobiNet Driver: Quectel_Linux&Android_GobiNet_Driver_V1.6.5

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