

EC25-AF-FA Release Notes

LTE Standard Module Series

Rev. EC25-AF-FA_Firmware_Release_Notes_V0708_30.001.30.001

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1. Preamble

This document provides the Release Notes for EC25-AF-FA firmware version **EC25AFFAR07A08M4G_30.001.30.001**. It describes major changes compared to EC25-AF-FA firmware version **EC25AFFAR07A08M4G_01.002.01.002**. For a detailed listing of all changes, refer to *Quectel_EC2x&EG9x&EG2x-G&EM05_Series_AT_Commands_Manual*.

2. Matters Needing Attention

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

3. New Features

Item/Category	Brief Description	Since
AUDIO	Supported recording and playing audio in AMR format.	R07A08_30.0 01.30.001
AUDIO	Optimized AT+QLTONE to play tone.	R07A08_30.0 01.30.001
AUDIO	Extended the AT command AT+QCFG="tone/incoming" to support playing the specified ringtone when a call came in.	R07A08_30.0 01.30.001
GENERAL	Added Bluetooth function (SPP, BLE, HFG) and AT command AT+QCFG="spi/set" to write a mark in rawdata to control the initialization of GPIO/SPI6/UART6.	R07A08_30.0 01.30.001
DFOTA	Supported HTTP FOTA to parse URL with type of <code>http://user:password@www.baidu.com</code> .	R07A08_30.0 01.30.001
DFOTA	Added AT command AT+QFOTADL=<url>,"down_to_ufs",<local_file_name>[,<username>,<password>] to download the FTP file to local UFS directory.	R07A08_30.0 01.30.001
DFOTA	Supported resuming reporting FOTA upgrade progress after powering down during FOTA upgrade.	R07A08_30.0 01.30.001
DTMF	Added AT command AT+QVTS to send a DTMF signal.	R07A08_30.0 01.30.001
DTMF	Added AT command AT+QWDTMF to play DTMF files or send it to Far-end.	R07A08_30.0 01.30.001
FILE	Supported upload and download file in SFS format.	R07A08_30.0

		01.30.001
FTP	Added commands EPSV/EPRT to match IPv6 FTP.	R07A08_30.0 01.30.001
HTTPS	Added AT+QSSLCFG="session_cache" command to configure whether to enable session reuse for SSL.	R07A08_30.0 01.30.001
LowPower	Added AT command AT+QCFG="wakeuptin/level" to set the wake-up pin level and whether to enable the wake-up function.	R07A08_30.0 01.30.001
MMS	Added AT command AT+QMMSCFG="maxpktlen" to support setting MMS sending length.	R07A08_30.0 01.30.001
MMS	Added AT command AT+QCFG="mms_rec_control" to control whether to save the received MMS.	R07A08_30.0 01.30.001
MQTT	Added AT command AT+QMTCFG="protocol/check" to configure whether to check MQTT header information.	R07A08_30.0 01.30.001
NETWORK	Added AT+QCFG="urc_cause_support" to control whether to actively report network rejection causes such as ESM/EMM/CP/GMM/MM through URC.	R07A08_30.0 01.30.001
NETWORK	Added AT command AT+QDISABLERETRY to cancel attaching request within 12 minutes when the value of attaching request is 19.	R07A08_30.0 01.30.001
NETWORK	Added AT command AT+QEGPAPN to query the actual APN and the configured APN.	R07A08_30.0 01.30.001
NETWORK	Added the function of preferential registration to the network for the specified LTE band.	R07A08_30.0 01.30.001
NETWORK	Added jamming detection function.	R07A08_30.0 01.30.001
NETWORK	Added AT command AT+QRETRYCTL to control attachment request according to rogers back off mechanism.	R07A08_30.0 01.30.001
NETWORK	Added AT commands AT+QOPSCFG="scancontrol" to configure bands to be scanned under 2G/3G/4G and AT+QOPSCFG="displayrssi" to enable/disable to display RSSI under LTE.	R07A08_30.0 01.30.001
NETWORK	Added AT command AT+QCFG="cops_control" to control AT+COPS to scan band, not affecting the band scan of AT+QCFG="nwscanmodeex" .	R07A08_30.0 01.30.001
PPP	Added AT command AT+QCFG="ppp/sleep_ri" to configure the feature whether to enable informing the module wakeup from sleep by RI PIN.	R07A08_30.0 01.30.001
PPP	Solved the problem that setting PPP to IPV4V6 could dial but could not to access the Internet under 3GPP network.	R07A08_30.0 01.30.001
QuecLocator2.0	Added AT command AT+QLBSCFG="contextid" to configure the QuecLocator context ID.	R07A08_30.0 01.30.001
QuecThing	Supported QuecThing.	R07A08_30.0 01.30.001

SIMCARD	Added AT command AT+QSIMCHK to send UIM_AUTHENTICATE_REQ (UIM authentication).	R07A08_30.0 01.30.001
SIMCARD	Added AT commands AT+QSIMWRFREQ to record the frequency of EF files written to SIM card and AT+QSIMVOL to configure SIM card supply voltage.	R07A08_30.0 01.30.001
SMS	Added AT+QCFG="sms_control" to control SMS sending and reception.	R07A08_30.0 01.30.001
TCP SSL	Added AT command AT+QSSLRECV to read the remaining data.	R07A08_30.0 01.30.001
TCP SSL	Added AT command AT+QSSLCFG="alpn" to set SSL alpn.	R07A08_30.0 01.30.001
TCP SSL	Added AT command AT+QSSLCFG="renegotiation" to enable/disable renegotiation function.	R07A08_30.0 01.30.001
TCP/UDP	Added AT command AT+QCFG="tcp/windowsize" to configure HTTP socket window size.	R07A08_30.0 01.30.001
TCP/UDP	Added AT command AT+QICFG="tcp/keepalive" to configure whether to enable TCP keep-alive function.	R07A08_30.0 01.30.001
UAC	Supported 16K sampling rate by UAC.	R07A08_30.0 01.30.001
Voice Call	Added AT+QCFG="call_control" command to control voice MO and MT functions.	R07A08_30.0 01.30.001
Voice Call	Added AT command AT+QCFG="voice_busytone" to enable/disable busy tone playback for Verizon network.	R07A08_30.0 01.30.001
Voice Call	Added DSCI report in emergency call.	R07A08_30.0 01.30.001
WIFI	Added AT commands AT+QWIFICFG="scan" to scan WIFI, AT+QWIFICFG="scanresult" to get the scan result and AT+QWIFICFG="stastatus" to get the WIFI status.	R07A08_30.0 01.30.001
WIFI	Added AT command AT+QWIFICFG="bridgemode" to support WIFI dongle function.	R07A08_30.0 01.30.001
WIFI	Added AT+QWIFICFG="dongle_mac" to get the MAC address connecting to the ECM/RNDIS device.	R07A08_30.0 01.30.001
WIFI	Supported LTE and WIFI coexistence mechanism.	R07A08_30.0 01.30.001
GENERAL	Supported Rogers MBN with version 201909171.	R07A08_30.0 01.30.001
GENERAL	Extended AT command AT+QMBNCFG="list" to get MBN separately.	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QCFG="iprulectl" to control whether to use IP rules customized by users.	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QRRCCONSTATE to get RRC connection state of WCDMA/LTE.	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QICSGPEH to configure quoted context parameters.	R07A08_30.0 01.30.001

GENERAL	Added AT command AT+QODM="devinfo" to configure the device information.	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QODM="script" to read value of omadm node.	R07A08_30.0 01.30.001
GENERAL	Supported to report all URC via command AT+QURCCFG="urcport","all" .	R07A08_30.0 01.30.001
GENERAL	Supported socket data forward and added related AT commands: AT+QFWDCLIENT , AT+QFWDSENDER , AT+QFWDCLOSE , AT+QFWDSEND and AT+QFWDRECV .	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QCFG="fast/poweroff" to control whether to power off the module quickly.	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QCFG="qoos" to optimize the power consumption of network search in sleep mode.	R07A08_30.0 01.30.001
GENERAL	Supported to report URC to MCU when thermal mitigate level was up to 3.	R07A08_30.0 01.30.001
GENERAL	Added AT+QFWDCFG="urc_with_len" to control the reporting format and behavior of +QFWDURC.	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QLBSEX to enter the cell parameter for positioning.	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QWIFICFG="speedlimit" to limit WIFI speed.	R07A08_30.0 01.30.001
GENERAL	Added class 6 APN for Verizon.	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QGPSCFG="1pps" to turn on/off the GPS 1pps (1HZ pulse per second) signal.	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QOPS to scan full frequency and display a list of network information of all available operators in the current physical location.	R07A08_30.0 01.30.001
GENERAL	Supported using AT+CSCS command with no SIM card inserted.	R07A08_30.0 01.30.001
GENERAL	Added AT+QGSN to get module GSN number and AT+QIMI to get IMEI number.	R07A08_30.0 01.30.001
GENERAL	Supported VoLTE by TELUS.	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QFORMATUSRDATA to format usrdata ubi.	R07A08_30.0 01.30.001
GENERAL	Supported outputting \$PQXMI NMEA sentences, and not outputting \$PQXMI sentences by default.	R07A08_30.0 01.30.001
GENERAL	Added AT+QCFG="usbauto" command to control USB network card to automatically adapt to Windows, Linux, macOS without a driver.	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QCFG="secbootstat" to get whether SecBoot is enabled or not.	R07A08_30.0 01.30.001
GENERAL	Added AT command AT+QGETPANAME? to get PA name.	R07A08_30.0 01.30.001

GENERAL	Added AT command AT+QGPSPAI to obtain GNSS positioning assistance information.	R07A08_30.0 01.30.001
GENERAL	Supported Telus-consumer_volte MBN.	R07A08_30.0 01.30.001
GENERAL	Supported Hong Kong Telecom SIM card, with ICCID 8985231 and PLMN 45431.	R07A08_30.0 01.30.001
HTTP	Added the following AT commands: AT+QHTTPSEND; AT+QHTTPCFGEX; AT+QHTTPPUT; AT+QHTTPPUTFILE.	R07A08_01.0 02.01.002
GENERAL	Added AT command AT+QNETINFO.	R07A08_01.0 02.01.002
GENERAL	Added LTE band14/band66/band71 for the TX of AT command AT+QRFTEST.	R07A08_01.0 01.01.001
Voice Call	Added AT command AT+QECBM to actively exit ECBM mode under Verizon network.	R07A08_01.0 01.01.001
NETWORK	Added AT command AT+QNWLOCK = "common/lte".	R07A08_01.0 01.01.001
TCP SSL	Added AT command of AT+QSSLSEND=0,0 to query the cache status of the AT+QSSLSEND.	R07A08_01.0 01.01.001
AUDIO	Added UAC function.	R07A08_01.0 01.01.001
GENERAL	Added AT command AT+QCFG="fast_dormancy".	R07A08_01.0 01.01.001
GENERAL	Added AT command AT+CCHO/ AT+CCHC/AT+CGLA.	R07A08_01.0 01.01.001
GENERAL	Added URC for fumo pkg checking.	R07A08_01.0 01.01.001
SIMCARD	Added AT command AT+QSIMAUTH.	R07A08_01.0 01.01.001
GENERAL	Added the positioning function of AT+QLBS.	R07A08_01.0 01.01.001
GENERAL	Added AT command AT+QCFG="usbmode" to query USB port status and automatically reported the status to main UART.	R07A08_01.0 01.01.001
GENERAL	Added AT command AT+QCFG="lpm/dataind" to enable the wake-up function conditionally.	R07A08_01.0 01.01.001
GENERAL	Added AT command AT+QIACTEX.	R07A08_01.0 01.01.001
TCP SSL	Added the function of PSK verification.	R07A08_01.0 01.01.001
GENERAL	Added DTLS function.	R07A08_01.0 01.01.001
GENERAL	Added AT command AT+QIDEACTEX.	R07A08_01.0 01.01.001

GENERAL	Added AT command AT+QFWDCLIENT .	R07A08_01.0 01.01.001
GENERAL	Added AT command AT+QCFG="volte_disable" .	R07A07_01.0 01.01.001
GENERAL	Added ADB and UART security features.	R07A07_01.0 01.01.001
GENERAL	Added AT command AT+QGPSCFG="fixfreq" .	R07A07_01.0 01.01.001
MQTT	Added AT command AT+QMTCFG="willex" to configure will_msg.	R07A07_01.0 01.01.001
CMUX	Supported CMUX feature.	R07A07_01.0 01.01.001
Voice Call	Added AT commands AT+QIMSACT , AT+QDIAL and AT+QCHLDIPMPY .	R07A07_01.0 01.01.001
AUDIO	Added AT command AT+QAUDCFG="nau8810/config" .	R07A06_01.0 01.01.001
GENERAL	Added AT command AT+QODM="fumo" .	R07A06_01.0 01.01.001
GENERAL	Added AT command AT+QODM="dme" .	R07A06_01.0 01.01.001
TCP SSL	Added AT command AT+QSSLCFG="clientkey" .	R07A05_01.0 01.01.001
GENERAL	Added subcommand AT+QCFG="divctl" .	R07A05_01.0 01.01.001
GENERAL	Added AT command AT+QODM="hostdevice" for ATT OMA.	R07A05_01.0 01.01.001
RMNET	Added AT+QCFG="dhcppktnl" command to Disable/Enable DHCP server on module side when using Gobinet or QMI_WWAN driver. DHCP server is enabled by default.	R07A03
GENERAL	Changed to show same USB description as normal mode when module converts to DM during firmware upgrading.	R07A03
GENERAL	Supported to convert module from DM mode to Firehose mode.	R07A03
HTTP	Added AT command AT+QHTTPCFG="windowsize" to configure size of slide window for HTTP socket.	R07A02
GENERAL	Refreshed NV settings when one of Verizon/AT&T/T-Mobile sim card inserted.	R07A02
GENERAL	Supported to auto-select MBN file.	R07A01
GENERAL	Supported AT+QMBNCFG="Select" to select MBN manually.	R07A01

4. Improved Features

Item/Category	Brief Description	Since
AUDIO	Solved the problem that the AT performance port would not work normally after executing AT+QRXIR? .	R07A08_30.0 01.30.001
AUDIO	Solved the problem that the following commands returned ERROR and CME ERROR at the same time: 1. AT+QAUDRD 2. AT+QAUDPLAY 3. AT+QPSND 4. AT+QWTTTS 5. AT+QLDTMF	R07A08_30.0 01.30.001
AUDIO	Solved the problem that the ACDB file could not be imported and obtained by AT+QACDBLOAD .	R07A08_30.0 01.30.001
DFOTA	Solved the problem that FOTA package was failed to download when analyzing HTTP URL with user name and password.	R07A08_30.0 01.30.001
DFOTA	Solved the problem of 502 and 520 error codes reported after rebooting the module due to powering down when FOTA upgrade to 90%.	R07A08_30.0 01.30.001
DFOTA	Solved the problem that FOTA upgrade failed when special characters included in the HTTP URL.	R07A08_30.0 01.30.001
DFOTA	Supported using the fixed baud rate set before the upgrade during DFOTA upgrade.	R07A08_30.0 01.30.001
DFOTA	Solved the problem that the module could not report the FOTA upgrade result to the Verizon server after the OMA-DM FOTA upgrade ended.	R07A08_30.0 01.30.001
DTMF	Solved the problem that an URC would be reported unexpectedly when executing AT+VTS .	R07A08_30.0 01.30.001
DTMF	Extended AT+QTONEDT=1 to support softdecode feature.	R07A08_30.0 01.30.001
FILE	Solved the problem that data may lost when upload files by sending FILE related commands on UART/debug ports.	R07A08_30.0 01.30.001
FTP	Supported multiple server response parsing in FTP mode.	R07A08_30.0 01.30.001
FTP	Solved the problem that the module could not work normally after executing AT+CFUN=0 on other AT ports during FTP upload or download.	R07A08_30.0 01.30.001
FTP	Solved the problem that error code 627 returned when data was downloaded discontinuously through FTP.	R07A08_30.0 01.30.001
FTP	Solved the problem that error code 619 may be returned when PUT file via FTP.	R07A08_30.0 01.30.001
FTP	Solved the problem of timeout error (error code 609 returned) when executing AT+QFTPOPEN to log in to the FTP(S) server.	R07A08_30.0 01.30.001
HTTP	Updated the encode_buffer size from 1024 to 2048 bytes for supporting	R07A08_30.0

	long URL.	01.30.001
HTTP	Improved HTTP feature under IPv6.	R07A08_30.0 01.30.001
HTTP	Optimized the feature of HTTP after enabling automatically outputting HTTP(S) response header by AT+QHTTPCFG="rspout/auto",1 .	R07A08_30.0 01.30.001
HTTP	Solved the problem that the module worked improperly after asking an HTTP request with wrong URL.	R07A08_30.0 01.30.001
HTTP	Solved the problem that after connecting HTTP(S) server successfully with wrong URL and sending GET request through AT+QHTTPGET , executing AT+QHTTPSTOP to cancel HTTP(S) request before URC reported, AT port may not work normally.	R07A08_30.0 01.30.001
HTTP	Solved the problem that an extra +QHTTPURC: "closed" reported when enabling HTTP(S) session closing reporting through AT+QHTTPCFG="closed/ind" .	R07A08_30.0 01.30.001
HTTP	Solved the problem that AT+QHTTPGET may not send the GET request to HTTP(S) server and there may be no timeout occurred.	R07A08_30.0 01.30.001
HTTP	Solved the problem of an error code 702 reported when there was no response from TCP server after HTTP PUT request was sent.	R07A08_30.0 01.30.001
HTTP	Solved the problem that the module automatically rebooted when AT+QHTTPPOSTFILE sends a POST request to HTTP(S) server through a file larger than 1M.	R07A08_30.0 01.30.001
MMS	Supported using AT+QMMSCFG="proxy" to set MMS proxy address starting with 0.	R07A08_30.0 01.30.001
MQTT	Fixed the module rebooting caused by MQTT receiving a large number of subscribed topics.	R07A08_30.0 01.30.001
MQTT	Solved the problem that after setting willmessage with a length of 256 bytes through AT+QMTCFG="WILLEX" , willtopic will also be returned after willmessage in URC.	R07A08_30.0 01.30.001
MQTT	Optimized AT command AT+QMTPUBEX to improve the module's stability after the server disconnected automatically from the module and WM has been released under the data mode.	R07A08_30.0 01.30.001
MQTT	Fixed module RI changed but no URC reported when sending data via MQTT protocol.	R07A08_30.0 01.30.001
MQTT	Corrected the response format of AT+QMTUNS=? from +QMTSUB to +QMTUNS.	R07A08_30.0 01.30.001
MQTT	Solved the problem that the MQTT disconnected when receiving the message with QoS level 2 subscribed successfully.	R07A08_30.0 01.30.001
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.	R07A08_30.0 01.30.001
NETWORK	Optimized AT command AT+QCOPS to search nearby PLMN information as much as possible.	R07A08_30.0 01.30.001

NETWORK	Set the default value of the RTP/RTCP inactivity timer to 20s; Set the UT1/UT2/UT3 timers in AGSP to 10s, 10s and 30s respectively.	R07A08_30.0 01.30.001
NETWORK	Disabled the eDRX function by default.	R07A08_30.0 01.30.001
NETWORK	Optimized AT+QCFG="fast_dormancy" to support fast dormancy mode 3.	R07A08_30.0 01.30.001
NETWORK	Optimized AT command AT+QCFG="lte/preferfre" to solve the problem the module may be unstable due to incorrect bandwidth parameter of AT+QCFG="lte/preferfre" .	R07A08_30.0 01.30.001
NETWORK	Solved that problem of unable to relaunch Home PLMN search after 313-100 SIM card was registered on the 310-410 PLMN.	R07A08_30.0 01.30.001
NETWORK	Improved China Telecom B5 to search frequency 2452 in the historical frequency point (acq_db) in priority under LTE.	R07A08_30.0 01.30.001
NETWORK	Change the range of SINR value returned by AT+QENG="SERVINGCELL" from (0~250) to (-20~30).	R07A08_30.0 01.30.001
PHB	Fixed the problem that AT+CPBR could not read emergency calls from SIM card.	R07A08_30.0 01.30.001
PPP	Solved the problem that AT port may not work normally after executing AT+CGACT=1,1 to activate the first PDP context which has been activated by default again.	R07A08_30.0 01.30.001
QuecLocator 2.0	Solved the problem that the base station positioning server could not be configured by AT+QLBSCFG="server" .	R07A08_30.0 01.30.001
QuecLocator 2.0	Modified parameter format for AT commands related to base station positioning locator/LBS 2.0 as AT+QLBSCFG? , AT+QLBSCFG=? and AT+QLBSCFG="token" .	R07A08_30.0 01.30.001
SIMCARD	Enabled invalid SIM card identification.	R07A08_30.0 01.30.001
SMS	Solved the problem that the current operator's SMS center number could not be displayed after enabling the SIM card hot-plugging function.	R07A08_30.0 01.30.001
SMS	Solved the problem that AT+QCFG="urcport/sms" could not set SMS reporting port to debug port.	R07A08_30.0 01.30.001
SMS	Optimized AT command AT+QCFG="sms/listmsgmap" .	R07A08_30.0 01.30.001
SMS	Extended AT command AT+QCFG="ltesms/format" to send SMS in 3GPP2 format only and receive SMS in 3GPP2 and 3GPP format at the same time.	R07A08_30.0 01.30.001
TCP SSL	Ignored the verification for multi-level certificate chains by default in the embedded SSL protocol.	R07A08_30.0 01.30.001
TCP SSL	Solved the problem that memory leak occurred when unilateral and mutual authentication connection with SSL was performed.	R07A08_30.0 01.30.001
TCP SSL	Solved the problem that there was one more empty line on the "cacertex" certificate path returned by AT+QSSLCFG="cacertex" .	R07A08_30.0 01.30.001
TCP/UDP	Solved the problem that after activating PDP, the AT port may not work normally after executing AT+QIDEACT command immediately without	R07A08_30.0 01.30.001

	response.	
TCP SSL	Increased the length of domain name returned by AT+QSSLOPEN from 40 bytes to 256 bytes.	R07A08_30.0 01.30.001
TCP/UDP	Extended AT+QICFG="window/scale" to configure TCP Window scale.	R07A08_30.0 01.30.001
TCP/UDP	Solved the problem that after connecting to TCP server through AT+QIOPEN for 60 seconds, the module did not send TCP disconnection wave after AT+QICLOSE was executed.	R07A08_30.0 01.30.001
UAC	Solved the problem that UAC had no sound.	R07A08_30.0 01.30.001
Voice Call	Optimized the three-party call function.	R07A08_30.0 01.30.001
Voice Call	Reported DSCI when making an emergency call.	R07A08_30.0 01.30.001
WIFI	Solved the problem that TCP server could not be established due to failing to set the default AT port by AT+QWTOCLIEN after enabling WIFI and connecting to laptop.	R07A08_30.0 01.30.001
WIFI	Solved the problem of failed to enable WIFI after configuring WIFI dual AP (AP0 + AP1) mode.	R07A08_30.0 01.30.001
WIFI	Solved the problem that WIFI could not connect to the hidden SSID.	R07A08_30.0 01.30.001
WIFI	Solved the problem that without SIM card, ECM could not work normally while FC20 was in the WIFI STA mode.	R07A08_30.0 01.30.001
WIFI	Solved the problem that after setting AT+QWSSIDHEX=1 , rebooting the module, 0 was always returned by AT+QWSSIDHEX? .	R07A08_30.0 01.30.001
WIFI	Solved the problem that WIFI could not work normally after WIFI SSID was set via AT+QWIFICFG="ssid" .	R07A08_30.0 01.30.001
WIFI	Solved the problem that IPv6 information could not be returned by AT+QWIFICFG="stainfo" .	R07A08_30.0 01.30.001
GENERAL	Optimized IMEI backup protection mechanism.	R07A08_30.0 01.30.001
GENERAL	Supported AT+QCOPS to search the available operators according to the band configured by AT+QCFG="BAND" .	R07A08_30.0 01.30.001
GENERAL	Fixed the problem of abnormal automatic activation of Rogers MBN and ROW MBN.	R07A08_30.0 01.30.001
GENERAL	Removed the default value of appid for Verizon.	R07A08_30.0 01.30.001
GENERAL	Solved the problem CMAS message could not be received for ATT test case of LTE-BTR-5-4121 & 4125 & 4552 & 4127.	R07A08_30.0 01.30.001
GENERAL	Disabled ECC CALL for TMO MBN.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that some special 7bit control characters (such as "@") could not be displayed normally in ASCII.	R07A08_30.0 01.30.001

GENERAL	Fixed that there was a hyphen missed between user agent after Verizon MBN activation.	R07A08_30.0 01.30.001
GENERAL	Solved the problem where ATT, ATT_FIRSTNET, ATT_NDO (three-in-one) MBN would not work properly when the AUTOSEL function was disabled.	R07A08_30.0 01.30.001
GENERAL	Fixed CMAS bug for LTE-BTR-5-4118 ATT bug for not display 7bit 0x00f1, increased extension ASCII.	R07A08_30.0 01.30.001
GENERAL	Updated GSMA TS.25 publication date.	R07A08_30.0 01.30.001
GENERAL	Enabled ECBM function.	R07A08_30.0 01.30.001
GENERAL	Fixed the problem that AT+QCFG="DIVCTL" did not take effect.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that AT+QFWDCLIENT may not work normally.	R07A08_30.0 01.30.001
GENERAL	Solved the problem occurred in test GPS use cases in PTCRB certification: SUPL-2.0-con-024-2 not displayed QGPSURC characters.	R07A08_30.0 01.30.001
GENERAL	Optimized AT+QGPSCFG="outport","uartdebug" to solve the problem that the GPS URC could not output from debug port.	R07A08_30.0 01.30.001
GENERAL	Optimized AT+QWWAN command to solve the problem of file storage path error.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that WCDMA Band4 diversity was opened unexpectedly by AT+QCFG="diversity",1 .	R07A08_30.0 01.30.001
GENERAL	Optimized the history call record function.	R07A08_30.0 01.30.001
GENERAL	Modified the range of the parameter <dpoenable> of AT+QGPSCFG="dpoenable" from (0,1) to (0,2).	R07A08_30.0 01.30.001
GENERAL	Solved the problem that the error code returned incorrectly after executing AT+QLBS .	R07A08_30.0 01.30.001
GENERAL	Solved the problem that the computer could not connect to the network after executing AT+QWWAN=1 .	R07A08_30.0 01.30.001
GENERAL	Update ROW MBN version to 201901141.	R07A08_30.0 01.30.001
GENERAL	Update the ID of Profile5 in Verizon MBN.	R07A08_30.0 01.30.001
GENERAL	Expand AT+QFOTADL command to increase FOTA upgrade path length.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that ATT OMADM could not connect DM server caused by a failure of SSL handshake.	R07A08_30.0 01.30.001
GENERAL	Solved the problem of error returned when querying NV553 after activating ATT MBN.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that the default server port (80) could not be obtained by AT+QLBSCFG? .	R07A08_30.0 01.30.001

GENERAL	Updated AT command AT+CGSN to support querying IMEI number and SN number.	R07A08_30.0 01.30.001
GENERAL	Solved the problem of incorrect default value of ATX queried by AT&V .	R07A08_30.0 01.30.001
GENERAL	Modified the parameter return format of AT+QCFG="siminvalirecovery" command.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that the domain name address in IPV6 format resolved by AT+QIDNSGIP was incorrect.	R07A08_30.0 01.30.001
GENERAL	Changed the range value returned by AT+QDAI=? from (1-4) to (1-6).	R07A08_30.0 01.30.001
GENERAL	Solved the problem of an error returned by AT+QSGMIICFG="config" to set SGMI.	R07A08_30.0 01.30.001
GENERAL	Updated Verizon MBN version to 202004091.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that NMEA sentence returned by AT+QGPSGNMEA="GSA" was incomplete.	R07A08_30.0 01.30.001
GENERAL	Changed the number of attachments returned by AT+QCFG="siminvalirecovery" from 208 to (0-1).	R07A08_30.0 01.30.001
GENERAL	Solved the problem that after the band was set to a fixed value, it would resume to the default value obtained after the module rebooted twice or three times.	R07A08_30.0 01.30.001
GENERAL	Optimized the AT+QCFG="airplanecontrol" command to support not exiting the airplane mode by setting QMI when pulling w_disable to low.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that the default value of NV1920 was incorrect when activating Rogers MBN.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that the local time queried by AT+CCLK was inconsistent with the local time synchronized by AT+CTZU=3 from the network.	R07A08_30.0 01.30.001
GENERAL	Solved the problem of disconnection after USB suspended and then resumed.	R07A08_30.0 01.30.001
GENERAL	Solved the problem of NMEA port output error.	R07A08_30.0 01.30.001
GENERAL	Fixed the problem that the USB could not work normally when the module rebooted for the first time after DFOTA upgrade.	R07A08_30.0 01.30.001
GENERAL	For non-Chinese operators, turned on the AGPS function.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that pcmclk could not be enabled by AT+QCFG="PCMCLK" .	R07A08_30.0 01.30.001
GENERAL	Solved the problem that data sent and received by the module would lose after the module connected to the DTLS server.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that the incorrect value (0, indicating that RNDIS is not automatically connected) returned by AT+QCFG="QCAUTOCONNECT" after RNDIS mode was set by AT+QCFG="usbnet",3 .	R07A08_30.0 01.30.001

GENERAL	Fixed the problem that AT+QWSSIDHEX could not set SSID encoding mode to default text mode.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that after PPP dialing was successful, USSD URC could not be received on the USB AT port after AT+CUSD=1, "***100#" was executed.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that the default values of HSDPA returned by AT+QCFG="hsdpacat" and HSUPA returned by AT+QCFG="hsupacat" were incorrect.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that after QBI service closed, MBIM could not work normally when it was repeatedly opened or closed.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that ATT could not be activated by FIRSTNET or NDO after activating ROW.	R07A08_30.0 01.30.001
GENERAL	Modify the first TMO profile to spmode.ne.jp to support TMO data transmission, and updated TMO version to 202009271.	R07A08_30.0 01.30.001
GENERAL	Disabled VICE feature for Verizon.	R07A08_30.0 01.30.001
GENERAL	Modified the value of voipMinSessionExpires to 90 for Commercial-TMO_VoLTE MBN.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that the usrdta ubi may be mounted abnormally in a short time after the module was powered off by executing AT+QPOWD=0 .	R07A08_30.0 01.30.001
GENERAL	Optimized the jamming detection algorithm to improve the accuracy.	R07A08_30.0 01.30.001
GENERAL	Optimized three-in-one MBN solution: 1. Solved the problem that the interfaces for three-in-one MBN could not be called normally. 2. Solved the problem that the parameters for three-in-one MBN could not take effect at booting after the firmware was downloaded into the module.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that Host could not obtain the IP from MBIM if the network only allocated IP without DNS address.	R07A08_30.0 01.30.001
GENERAL	Updated SE13 TABLE date to 2020/12/21.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that the module could not work normally when executing AT+QGPSGNMEA="GSV" after searching for multiple satellites.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that AT+QCFG="PCMCLK",0 could not turn off PCM clock.	R07A08_30.0 01.30.001
GENERAL	Updated the ATT MBN version to 202102031 to use the MTU size allocated by the network and change ue_usage_setting to DATA Centric.	R07A08_30.0 01.30.001
GENERAL	Updated the Telus MBN version to 202103121 to reconfigure the APN profile.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that after AT+QCFG="usbenum/seoctl",1 execution, GPS data output could not be controlled by DTR.	R07A08_30.0 01.30.001

GENERAL	When peer IP address length was more than 50 chars, silently truncated the string to 50 chars.	R07A08_30.0 01.30.001
GENERAL	Not triggered card power-down if EF-DIR read fails.	R07A08_30.0 01.30.001
GENERAL	Populated file attributes for EST file when card did not return FCP data.	R07A08_30.0 01.30.001
GENERAL	No sim E911 call for specific operators should not be blocked.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that the Verizon OMA server could not be connected using IPV6.	R07A08_30.0 01.30.001
GENERAL	Solved the problem that the uploaded ATT APN name of Object 11 instance 0 is null.	R07A08_30.0 01.30.001
GENERAL	Solved the problem URC broadcast could not work normally after enabling CMUX feature.	R07A08_30.0 01.30.001
GENERAL	Set the default MTU to 1430 for ATT and to 1342 for FirstNet.	R07A08_30.0 01.30.001
GENERAL	Modified the configuration of the 2nd profile (IMS) for TMO to change the OVRIDEHOPDP to IPV6.	R07A08_30.0 01.30.001
GENERAL	Extended AT command AT+QCFG="cmux/urcport" to support turning off CMUX port to report URC.	R07A08_30.0 01.30.001
GENERAL	Fixed the problem of incorrect RTC time synchronized from NITZ in some time zones.	R07A08_30.0 01.30.001
GENERAL	Optimized the operator's 3G Sunset solution to solve the problem of no network in some scenarios (such as roaming) at AT&T 3G Sunset.	R07A08_30.0 01.30.001
GENERAL	Solve the problem of the incorrect results returned by AT+QTELEFONICA="retry_schema" .	R07A08_30.0 01.30.001
GENERAL	Disabled fast dormancy feature for TMO.	R07A08_30.0 01.30.001
DFOTA	Changed FOTA cache path.	R07A08_01.0 02.01.002
GENERAL	Optimized the file system backup restore mechanism.	R07A08_01.0 02.01.002
GENERAL	Solved the problem that the decoded CMAS message was incorrect.	R07A08_01.0 02.01.002
DFOTA	Opened the serial port for URC output at the baud rate that the customer set during the recovery process.	R07A08_01.0 02.01.002
GENERAL	Disabled the control of GPIO.	R07A08_01.0 02.01.002
FTP	Improved the stability of FTP.	R07A08_01.0 02.01.002
FTP	Solved the problem of serial port abnormality while returned ERROR directly after returning CONNECT via commands AT+QFTPPUT , AT+QFTPGET , AT+QFTPLIST and AT+QFTPNLST under PORT mode.	R07A08_01.0 02.01.002
RMNET	Solved the problem of data call error after executing command AT\$QCRMCall .	R07A08_01.0

		02.01.002
HTTP	Solved the problem of returning +CME ERROR: 702 when executing AT commands AT+QHTTPPOST and AT+QHTTPPUT .	R07A08_01.0 02.01.002
Voice Call	Sent STK CALL CONTROL to the SIM card by the module, and then released a call to the network after ATD calling if SIM card supported STK CALL CONTROL.	R07A08_01.0 01.01.001
SMS	Solved the problem that when CPMS was all set to SM and the SM was full, sent a message to the module and the message would be received after deleted one message.	R07A08_01.0 01.01.001
GENERAL	Solved the problem that AT+QGPSSUPLCA testing failed under the mode of MT SMS.	R07A08_01.0 01.01.001
GENERAL	Optimized RF Factory Test feature.	R07A08_01.0 01.01.001
LowPower	Optimized low power performance at 85°C.	R07A08_01.0 01.01.001
TCP/UDP	Optimized the module stability when receiving more than 751 bytes under TCP hex mode.	R07A08_01.0 01.01.001
WIFI	Supported bandwidth 40/80 Hz for WiFi 802.11AN/802.11AC.	R07A08_01.0 01.01.001
TCP/UDP	Supported to report the data length also when TCPIP reporting URC.	R07A08_01.0 01.01.001
GENERAL	Solved the problem that no response returned or URC for manufacturer command when executed AT+CMEE=0 .	R07A08_01.0 01.01.001
TCP/UDP	Optimized the stability of TCPIP function.	R07A08_01.0 01.01.001
LowPower	Solved the problem of current consumption when module was in sleep mode.	R07A08_01.0 01.01.001
GENERAL	Solved the problem that LTE uplink throughput could not be restricted by thermal engine.	R07A08_01.0 01.01.001
GENERAL	Updated Commercial-Sprint MBN to version 0x05010205.	R07A08_01.0 01.01.001
GENERAL	Updated ROW / ATT of MBN to the latest version.	R07A08_01.0 01.01.001
GENERAL	Solved the problem that USB could not worked normally after configuring ndis mode.	R07A08_01.0 01.01.001
TCP/UDP	Solved the problem that if TCP half-closed, error returned when executing AT+QISEND=0,0 .	R07A08_01.0 01.01.001
GENERAL	Updated VoLTE-ATT MBN to version 0x0501033C.	R07A08_01.0 01.01.001
NETWORK	Solved the problem that there was no LTE result when executing AT+QCOPS=7,0 and AT+QCOPS=4,0 .	R07A08_01.0 01.01.001
NETWORK	Changed the Roaming state to home service when 313-100 SIM was registered on a 310-410 PLMN.	R07A08_01.0 01.01.001
GENERAL	Solve the problem that the module would automatically download the ephemeris and report URC unexpectedly.	R07A08_01.0

		01.01.001
AUDIO	Solved the problem of low WB downlink volume.	R07A08_01.0 01.01.001
GENERAL	Solved the low probability problem that /data changed into read-only state after rebooting multiple times.	R07A08_01.0 01.01.001
AUDIO	Solved the problem that DTMF plays without sound when in call connected state.	R07A08_01.0 01.01.001
AUDIO	Solved the problem that voice over USB feature was not available.	R07A08_01.0 01.01.001
DFOTA	Solved the problem that the error code DELTA_UPDATE_CHECK_FILE_FAILED and IP_PREVIOUS_UPDATE_FAILED of US vzw were not reported after FOTA ungraded.	R07A08_01.0 01.01.001
GENERAL	Optimized the process of fumo running after powered off and rebooted.	R07A08_01.0 01.01.001
GENERAL	Solved the low probability problem that MMS could not be received.	R07A08_01.0 01.01.001
GENERAL	Solved the problem that the ME memory ran slowly led to OMADM types of WAP PUSH SMS could not being received.	R07A08_01.0 01.01.001
GENERAL	Updated connmo.tre for Verizon OMA.	R07A08_01.0 01.01.001
GENERAL	Solved the problem that FGI bit20 was not supported by modules.	R07A08_01.0 01.01.001
NETWORK	Solved the problem that client could not connect to network after executing AT+QWWAN=1 .	R07A08_01.0 01.01.001
GENERAL	Updated hVoLTE-Verizon MBN to version 0x0501014.	R07A08_01.0 01.01.001
DFOTA	Supported HTTPs protocol download in the process of FOTA upgrading.	R07A08_01.0 01.01.001
GENERAL	Supported qfwd socket AT commands: AT+QFWDCLIENT , AT+QFWDSEVER , AT+QFWDCLOSE , AT+QFWDSEND and AT+QFWDRECV .	R07A08_01.0 01.01.001
TCP SSL	Extended the command AT+QSSLCFG="cacertex" to add multiple CA certificates.	R07A08_01.0 01.01.001
MQTT	Corrected the reported MSG_ID when MQTT sending the timeout message.	R07A08_01.0 01.01.001
TCP SSL	Optimized the command AT+QSSLCFG to support the TLS 1.3 protocol.	R07A08_01.0 01.01.001
GENERAL	Updated CEFS to version V00020.	R07A08_01.0 01.01.001
QMI	Solved the problem that the network card could not work after switching SIM card and first rebooting.	R07A08_01.0 01.01.001
RMNET	Solved the problem that error occurred after executing command AT\$QCRM_CALL .	R07A08_01.0 01.01.001

GENERAL	Solved the problem that the module would automatically download the ephemeris and report URC unexpectedly.	R07A08_01.0 01.01.001
TCP/UDP	Solved the problem that there was additional 32 bytes reported of DATA_LENGTH when UDP server was connected.	R07A08_01.0 01.01.001
TCP/UDP	Supported to report DATA LENGTH also when TCPIP reported URC under the buffer mode.	R07A08_01.0 01.01.001
GENERAL	Optimized GPS performance.	R07A08_01.0 01.01.001
GENERAL	1. Controlled SAR on and off through GPIO pins. 2. Optimized AT+QCFG="sarcfg" to configure maximum SAR power and falling gradient for specific band of LTE/WCDMA.	R07A08_01.0 01.01.001
DFOTA	Optimized FOTA upgrade.	R07A08_01.0 01.01.001
GENERAL	Solved the problem that the OMA-DM FUMO could not achieve looping upgrade.	R07A08_01.0 01.01.001
GENERAL	Enabled AT command AT+QDIAGPORT .	R07A08_01.0 01.01.001
SIMCARD	Optimized AT command AT+QSIMAUTH .	R07A08_01.0 01.01.001
DFOTA	Solved the problem that there was SDCARDSTART and SDCARDEND URC reported unexpectedly when executing AT+QFOTADL .	R07A08_01.0 01.01.001
DFOTA	Solved the problem that saving the uploaded file to the local results in insufficient usrdta space when FOTA upgrading.	R07A08_01.0 01.01.001
FTP	Solved the problem that an error would be reported unexpectedly when the FTP transmission was not continuous.	R07A08_01.0 01.01.001
TCP SSL	Solved the problem that subcommands AT+QSSLCFG="dtls" and AT+QSSLCFG="dtlsversion" was lacked when executing AT+QSSLCFG=? .	R07A08_01.0 01.01.001
WIFI	Solved the problem of WiFi configuration lost after modules rebooted.	R07A08_01.0 01.01.001
GENERAL	Enabled AGPS function.	R07A08_01.0 01.01.001
GENERAL	Updated hVoLTE-Verizon MBN to version 0x05010141.	R07A08_01.0 01.01.001
GENERAL	Solved the problem that the CPU rate of thermal process was too high.	R07A08_01.0 01.01.001
TCP/UDP	Solved the problem that when multiple TCP connection was established, it was abnormally to loop QIRD quickly.	R07A08_01.0 01.01.001
DFOTA	Solved the problem that the error URC was returned in the process of FOTA local upgrade.	R07A08_01.0 01.01.001
NETWORK	Solved the problem that AT performance port could not work normally caused by SIM card service restriction after PPP dialing when the Telecom IoT card was inserted.	R07A08_01.0 01.01.001
GENERAL	Solved the problem that OMA-DM version could not be changed according to IMSI after switching from AT+CFUN=0 to AT+CFUN=1 .	R07A07_01.0 01.01.001

AUDIO	Fixed the problem that the incoming call has no ringtone.	R07A07_01.0 01.01.001
GENERAL	Improved low temperature performance.	R07A07_01.0 01.01.001
GENERAL	Optimized AT command AT+QGPSXTRATIME to solve the issue that when UTC time was converted to GPS time, it would increase by 5 hours.	R07A07_01.0 01.01.001
GENERAL	Solved the problem of slow USB loading.	R07A07_01.0 01.01.001
GENERAL	Turned off Qualcomm USB load script files under the Recovery mode, and loaded USB via ql_usbcfg.	R07A07_01.0 01.01.001
GENERAL	Optimized AT command AT+QGPSSUPLCA to solve the return error.	R07A07_01.0 01.01.001
GENERAL	Supported to update operator MBN after upgrading module FW.	R07A07_01.0 01.01.001
GENERAL	Disabled lighttpd and QCMAP web server.	R07A07_01.0 01.01.001
GENERAL	Optimized the parameter partition (EFS2/EFS2APPS) restore mechanism.	R07A07_01.0 01.01.001
NETWORK	Solved the problem that AT command AT+QNWINFO could not support B66/B71 and corresponding frequency.	R07A07_01.0 01.01.001
FTP	Solved the issue of FTPS connection failure.	R07A07_01.0 01.01.001
NETWORK	Solved the problem that AT commands AT+QCFG="NWSCANMODE" and AT+QCFG="NWSCANMODEEX" could not support setting feature.	R07A07_01.0 01.01.001
GENERAL	Solved the issue of no return value queried via manufacturer command when executed AT+CMEE=0 .	R07A07_01.0 01.01.001
GENERAL	Solved the misspelling of USB descriptions	R07A07_01.0 01.01.001
DFOTA	Solved the problem that USB could not be loaded after FOTA upgraded.	R07A07_01.0 01.01.001
AUDIO	Solved the issue of no sound on pcm slave mode.	R07A07_01.0 01.01.001
AUDIO	Supported pcm slot to be configurable.	R07A07_01.0 01.01.001
GENERAL	Optimized modules stability during module shutdown.	R07A07_01.0 01.01.001
DFOTA	Optimized FOTA upgrading.	R07A07_01.0 01.01.001
TCP/UDP	Improved module stability when switching data access mode.	R07A07_01.0 01.01.001
GENERAL	Solved the problem that changing APN values from uppercase to lowercase by Replace command in OMA could not take effect in the real time.	R07A07_01.0 01.01.001

GENERAL	Updated the TS25 PLMN list.	R07A07_01.0 01.01.001
GENERAL	Solved the problem that the title setting to null could also be successful not failed.	R07A07_01.0 01.01.001
GENERAL	Solved the problem that the value of man and model could not be changed by AT command AT+QODM="hostdevice" .	R07A07_01.0 01.01.001
NETWORK	Solved the problem that the cell info could not searched by AT command AT+QCOPS .	R07A07_01.0 01.01.001
GENERAL	Improved module stability when executing AT+QMMSEDT=5,1	R07A07_01.0 01.01.001
GENERAL	Solved the problem that no error report when the parameter of AT+QMMSCFG="sendparam" was missing.	R07A07_01.0 01.01.001
MQTT	Solved the problem that the module could not receive more than 1024 bytes of data sent by the MQTT server.	R07A07_01.0 01.01.001
GENERAL	Solved the problem of returned format error when executed AT command AT+CCLK? .	R07A07_01.0 01.01.001
GENERAL	Solved the problem that when set the parameter of AT+CTZU to illegal value 2, it would be set and take effect unexpectedly, not fail.	R07A07_01.0 01.01.001
GENERAL	Solved the dsi_init timeout time in ql_manager was insufficient caused ql_manager_server abnormal.	R07A07_01.0 01.01.001
SIMCARD	Set that when the SIM card was locked in PUK2, allowed to execute AT+CPIN=<PUK2>,<new PIN2> to unlock PUK2.	R07A07_01.0 01.01.001
SIMCARD	Submitted the command of AT+QCFG="sim/recovery" and AT+QLOCI .	R07A07_01.0 01.01.001
MQTT	Solved the problem that the module could not receive more than 1024 bytes of data sent by the MQTT server.	R07A06_01.0 01.01.001
NETWORK	Supported cell blacklist function when RRC access failure reached a certain condition.	R07A06_01.0 01.01.001
GENERAL	Solve the problem that could not release the IP when used the AT+QODM="comm",2,"0" to kill Quectel_QCMAP_CLI,.	R07A06_01.0 01.01.001
GENERAL	Fixed the issue that APN could not be automatically updated after switching between different ATT cards (VoLTE/NDO/FirstNET).	R07A06_01.0 01.01.001
GENERAL	Fixed problem of TMO test case L_IMS_VoLTE_6839_1.	R07A06_01.0 01.01.001
GERERAL	Disabled EDRX function.	R07A06_01.0 01.01.001
SMS	Solved the problem that the SMS content would be garbled when used AT+QCMGS to send long SMS to itself under Verizon network.	R07A06_01.0 01.01.001
SMS	Solved the problem that the SMS content would be incorrect when queried via AT+QCMGR under Verizon network.	R07A06_01.0 01.01.001
GENERAL	Optimized file system protection mechanism.	R07A06_01.0 01.01.001
AUDIO	Optimized the codec loading driver timing.	R07A06_01.0

		01.01.001
AUDIO	Optimized AT command AT+QAUDCFG="encgain" .	R07A05_01.0 01.01.001
NETWORK	Modified the tuner LTE band12, band13, band14 corresponding GPIO level configuration for bluebird GRFC control.	R07A05_01.0 01.01.001
MQTT	Synchronized MQTT function.	R07A05_01.0 01.01.001
DFOTA	Optimized DFOTA process.	R07A05_01.0 01.01.001
NETWORK	Fixed the problem that no service got from CREG/CGREG/CREG while module was actually registering network after executing AT+COPS=2 and AT+COPS=1,2,"plmn" .	R07A05_01.0 01.01.001
NETWORK	Fixed stuck issue when APN settings was set for thousands of times without stopping.	R07A05_01.0 01.01.001
NETWORK	Fixed the issue that when TCP/UDP connected, the module would run out of memory when under weak signal.	R07A05_01.0 01.01.001
SMS	Solved the problem that when AT+QCFG="ltesms/format",0 , sent SMS to the international type number (+1xxxx) under Verizon network, the other party could not receive it.	R07A05_01.0 01.01.001
NETWORK	Solved the issue that scanning flag was not cleared when executing AT+QCOPS returned error.	R07A05_01.0 01.01.001
AUDIO	Optimized below AT commands: AT+QAUDCFG="alc5616/dlgain" , AT+QAUDCFG="alc5616/ulgain" .	R07A05_01.0 01.01.001
GENERAL	Modified SSL to support TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384.	R07A05_01.0 01.01.001
WIFI	Optimized AT command AT+QWBCAST and AT+QWMOCH to solve response error.	R07A05_01.0 01.01.001
NETWORK	Fixed the issue when switching AT+COPS=2 to AT+COPS=0 or AT+COPS=1 would cause the module unable to register the network before IMSI was ready.	R07A05_01.0 01.01.001
TCP/UDP	Solved the problem that when established multiple TCP connection, it was abnormally to loop QIRD quickly.	R07A05_01.0 01.01.001
GENERAL	Enabled the features of the OMA-DM automatic upgrade and automatically reporting the upgrade result.	R07A05_01.0 01.01.001
GENERAL	Solved the issue that if module powered off during OMA downloading, OMA could not continue downloading after power on by executing AT+QODM="dme",2,"ui" .	R07A05_01.0 01.01.001
GENERAL	Changed APN of profile 1 to IPV4V6 for T-Mobile.	R07A04
GENERAL	Supported Emergency Callback Mode for Verizon.	R07A04
GENERAL	Updated MBN file of T-Mobile operator to support VoLTE feature.	R07A03
GENERAL	Changed Manufacture of USB description to Quectel. Change Product Info of USB description to EC25-AF.	R07A03
GENERAL	Created new rat_mask to support B66 and B71 capability.	R07A03

QMI	Saved Username/Password from QMI_WDS_CREATE_PROFILE and QMI_WDS_MODIFY_PROFILE_SETTINGS.	R07A02
GENERAL	Disabled the behavior to write EF_START_HFC frequently.	R07A02
NTP	Removed the retry mechanism when NTP can't get response from NTP server in 60s.	R07A02
FTP	Supported to handle response code 125 from FTP server during downloading.	R07A02
AUDIO	Changed default value of AT+QSIDET to 0.	R07A02
GENERAL	Extended AT+QCFG="band" to support to query and configure band index larger than 64, like B71.	R07A02
GENERAL	Extended AT+CEER command to configure format of +CEER as numeric code or string code.	R07A02
GENERAL	Changed default value of AT+CEER to 0 and the format as +CEER: <locationID>,<cause>.	R07A02
GENERAL	Fixed issue that neighbor cell list is too much to be shown in AT+QENG="neighbourcell" command in some case.	R07A02
NETWORK	Changed the RSSI of +QCSQ URC to the same as response of AT+QCSQ command.	R07A02

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	NITZ	NTP	HTTP	PING	TCP SSL
Y	Y	Y	Y	Y	Y	Y	Y	Y
MQTT	MMS ²⁾	SMTP	SMTPS	HTTPS				
Y	Y	Y	Y	Y				
Special Function								
SIM Detection	DFOTA	DTMF ³⁾	Dual UART	TTS	Quec Locator 2.0 ⁴⁾	DSSS	UAC	LowPower
Y	Y	Y	Y	Y	Y	Y	Y	Y
RMNET	ECM	RNDIS	MBIM	SD	WIFI	BT ⁵⁾	QuecThing	
Y	Y	Y	Y	Y	Y	Y	Y	

NOTES

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⁾ 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.
7. ⁵⁾ Supports SPP, BLE and HFG.
8. Verification Environment is shown below. For more details, please contact Quectel technical support.

For Windows,

USB Driver: Quectel_LTE&5G_Windows_USB_Driver_V2.2.4

Qflash Tool: QFlash_V5.4

For Linux,

QFlash Tool: LTE<E-A_QFlash_Linux&Android_V2.0
USB Driver: Quectel_LTE&5G_Linux_USB_Driver_V1.0
Quectel-CM Tool: Quectel_QConnectManager_Linux_V1.6.0.15
QLog Tool: Quectel_QLog_Linux&Android_V1.4.10
QMI_WWAN Driver: Quectel_Linux&Android_QMI_WWAN_Driver_V1.2.0.14
GobiNet Driver: Quectel_Linux&Android_GobiNet_Driver_V1.6.2.9

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