MC60 BPS Release Notes

GSM/GPRS/GNSS Module Series

Rev. MC60(R2.0)_Firmware_Release_Notes_V0120_BPS

Date: 2023-02-03

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1. Preamble

This document provides the Release Notes for MC60 firmware version **MC60ECAR01A20_BPS**. It describes major changes compared to MC60 firmware version **MC60ECAR01A02_BPS**. For a detailed listing of all changes, refer to the MC60 AT Command Set.

2. Matters Needing Attention

SN	Brief Description
[1]	The new firmware version cannot be downgraded to previous versions, otherwise the module will not be able to work normally.

3. New Features

Item /Category	Brief description	Since
QuecFOTA	Added the function of GNSS using QuecFOTA to upgrade.	R01A20_BPS
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.	R01A20_BPS
GENERAL	The new firmware version cannot be downgraded to previous versions, otherwise the module will not be able to work normally.	R01A20_BPS
GENERAL	Added **AT+QUESTAT** to get the UE status in the specified scenario.	R01A20_BPS
BT	Added SPP service name.	R01A02_BPS
QuecLocator2.0	Added AT command **AT+QLBS**,**AT+QLBSCFG** for QuecLocator function.	R01A02_BPS
QuecLocator2.0	Added AT command **AT+QLBSCFG="QUTOKEN"** to query the encrypted token value.	R01A02_BPS
SSL	Added SSL transparent transmission function.	R01A01_BPS
BLE	Added API to get BLE search results through callback function.	R01A01_BPS
BLE	Added AT command **AT+QBTGATSENLE** use to control the broadcast of BLE, when Bluetooth is visible.	R01A04
BLE	Added AT command **AT+QBTGATCCON?** to query the current connection status.	R01A04
BLE	Added AT commands **AT+QGATADVDATA** and **AT+QGATSCANRSP** for setting advertising data and scan	R01A04

	response data respectively.	
BLE	Added AT command **AT+QGATCFGSCAN** for setting scan interval and scan window.	R01A04
OCPU	Added the parameter **QL_UART_TX_BUF_SEND_OUT** for **QI_UART_GetOption** to check whether the serial data is sent out or not.	R01A04
GNSS	Added AT Command **AT+QGNSSEPO=2,<server_name>[,<port>]** to set the EPO server domain name and port.	R01A04
MQTT	Added AT command **AT+QMTCFG="VERSION",<tcpconnectID >[,<version_num>]** for setting MQTT version, support MQTT version 3.1.1.	R01A04
SIM	Add **AT+CGLA** command for SIM.	R01A04
SIM	Add refresh function for SIM.	R01A04
DTMF	Add **AT+QWDTMF** command for sending DTMF tones to remote peer.	R01A04
BLE	Added BLE CLIENT function.	R01A03
MQTT	Added MQTT function.	R01A03

4. Improved Features

Item/Category	Brief description	Since
HTTPS	Solved the following problem: When setting responseheader=1, https performs no authentication, one-way authentication, two-way authentication connection, after get/post and read, there is no header information.	R01A20_BPS
BLE	Fixed the bug that the BLE client cannot obtain the UUID after connecting to the BLE server multiple times.	R01A02_BPS
GNSS	Updated the latest baseline AXN5.1.9 to fix the bug that GLONASS rollover.	R01A02_BPS
QuecLocator	Deleted **AT+QGSMLOCSETL** command and **AT+QGSMLOC** command.	R01A02_BPS
HTTP	Fixed the bug that when the HTTP hostname larger than 50 bytes, connection fail.	R01A02_BPS
EPO	Optimized the EPO download process.	R01A02_BPS
OpenCPU	Fixed the bug that more than 0x7CFFFFF of the execution **QI_GetMsSincePwrOn** will cause overflow.	R01A01_BPS

BT	Fixed the bug that traditional Bluetooth is unable to get supported profile after pairing.	R01A01_BPS
BLE	Fixed the bug that BLE is connected to server as a client and the client address reported by server is a traditional Bluetooth address.	R01A01_BPS
GNSS	Update to latest AXN5.1.6 to fix that satellites number reduced in GSV when output frequency is greater than 1Hz, and fix that PMTK255 is invalid.	R01A01_BPS
BLE	Cancel saving the scanned device information to Flash when BLE search is enabled.	R01A01_BPS
BLE	Fixed the bug that cannot search more than 30 BLE devices.	R01A01_BPS
BLE	Fixed the bug that When the **AT+QGATSETADV** command is executed, there is no device name in the advertising data.	R01A04
BLE	Changed the BLE scan mode from active scan to passive scan.	R01A04
GNSS	Enhanced QZSS stability due to new announcement #194 and #195.	R01A04
GENERAL	Optimized the FOTA function.	R01A04
FILE	Fixed the bug that when the operation for FAT is performed, the return value "OK" is delayed for more than two seconds after exited transparent mode.	R01A04
BT	Fixed the bug that when the module is used for HF call in speaker mode, the other side will hear the echo.	R01A03

5. Known Issues

Item/Category	Brief Description
/	/

6. Functions

Basic Function								
SMS	Voice Call	Data Call	Fax	USSD	PHB	STK	CMUX	FILE[1]
Y	Y	N	N	Y	Y	Y	Y	Y
Triple UART								
Y								

Protocol Function								
TCP/ UDP	PPP	FTP	HTTP	NITZ	PING	NTP	HTTPS	TCP SSL
Y	Y	Y	Y	Y	Y	Y	Y	Y
MQTT								
Y								

Special Function								
Jamming Detection	DTMF	Audio Play	Quec FOTA	OpenCPU FOTA	Quec Locator2.0[2]	Open CPU	DSSS	eCall
Y	Y	Y	Y	Y	Y	Y	Y	Y
BT[3]	SIM Detection	ALARM						
Y	Y	Y						

GNSS Function								
AIC	EASY	EPO[4]	SBAS	Always Locate	LOCUS	PPS sync NMEA	QuecFast Fix Online	SDK[5]
Y	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] 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.
5. [3] Supports BT 4.0 dual_mode(Classic Mode and Bluetooth Low Energy).

6. [4]After EPO is enabled, it will actively attach GPRS network.
7. [5]Supports PQECEF, PQBAUD, PQEPE, PQJAM, PQVEL, PQODO, PQPZ90, PQGLP, PQGEO, PQGBS.
8. Verification Environment is shown below. For more details, please contact Quectel technical support.
    For Windows,
    Qcom Tool: QCOM_V1.6 or QCOM_V1.7_01_Beta4
    Qflash Tool: QFlash_V6.2

    For Linux,
    CMUX Driver: linux_cmux_2018.zip