UC15-E Release Notes

UMTS/HSPA Module Series

Rev. UC15E_Firmware_Release_Notes_V1102E1G

Date: 2018-08-03

1. Preamble

This document provides the Release Notes for UC15-E firmware version **UC15EQCR11A02E1G**. It describes major changes compared to UC15-E firmware version **UC15EQBR03A12E1G**. For a detailed list of all changes, refer to the UC15 AT Command Set.

2. New Features

Item /Category	Brief description	Since
MMS	Added new function of **MMS**.	R01A02
FTP	Added new function of **FTP**.	R01A02
SMTP	Added new function of **SMTP**.	R01A02
HTTP	Added new function of **HTTP**.	R01A02
TCP SSL	Added new function of **TCP SSL**.	R01A02
SMTPS	Added new function of **SMTPS**.	R01A02
HTTPS	Added new function of **HTTPS**.	R01A02
PING	Added new function of **PING**.	R01A02
CMUX	Added new function of **CMUX**.	R01A02
ECALL	Added new function of **eCall**.	R01A02
SIM DETECTION	Added **AT+QSIMDET** command to enable SIM card detection.	R01A02
USSD	Added AT command **AT+CUSD**.	R01A02
TCP/UDP	Added AT command **AT+QISDE**.	R01A02
OTHERS	Added **AT+QRST** command to reset the module automatically.	R01A02
VOICE CALL	Added **AT+QCFG="call/alpha"** to set the call URC to report the related name if the number is stored in the ME.	R01A02
SMS	Added **AT+QCFG="sms/alpha"** to set the SMS URC to report the related name if the number is stored in the ME.	R01A02
GENERAL	Added **AT+QCFG="urc/delay"** to delay URC indication.	R01A03
GENERAL	Added AT command **AT+QISUSIM** to check the type of SIM.	R01A04
GENERAL	Added AT command **AT+CCID** to check CCID of SIM.	R01A04

CMUX	Supported the 460800bps rate of CMUX.	R01A04
QUEC FOTA	Added the FOTA function.	R01A04
OTHERS	Added the command **AT+QCFG="cmux/urcport"** to specify URC port of CMUX.	R01A04
FTP	Added the command **AT+QFTPMLSD** and **AT+QFTPMDTM**.	R03A01
FTP	Added the command **AT+QFTPCFG="ssltype"**, **AT+QFTPCFG="sslctxid"**.	R03A01
Jamming Detection	Added jamming detection function.	R03A01
USSD	Added the command **AT+QCFG="ussd/textescape"**.	R03A02
SMS	Added the command **AT+QCFG="sms/textescape"**.	R03A02
SD	Added command **AT+QSDMOUNT**.	R03A03
Network	Added Network system automatically report function. Open or Close this function with command **AT+QINDCFG="act"**.	R03A03
TCP/UDP	Added command **AT+QICFG="viewmode"**, **AT+QICFG="dataformat"** and **AT+QISENDEX**.	R03A03
Audio	Added audio play and audio record function.	R03A04
NETWORK	Added the command **AT+QOPS** for scan current available networks.	R03A04
TTS	Added new function of **TTS**.	R03A04
Audio	Supported MAX9860 codec.	R03A04
GENERAL	Added the command **AT+QCFG="urc/debounce"** for URC debouncing.	R03A04
TCP/UDP	Added the command **AT+QICFG="tcp/retranscfg"**.	R03A04
OTHERS	Added RF forced to transmit function.	R03A04
OTHERS	Added GPIO configure command **AT+QGPIOS**/ **AT+QGPIOR**/ **AT+QGPIOW**/ **AT+QGPIOL**.	R03A05
OTHERS	Added the command **AT+QRFTEST** for RF force to transmit.	R03A05
SD	Added the function of operate SD's folder.	R03A05
Audio	Added the command **AT+QPSND** to play wav format file.	R03A05
Audio	Added the command **AT+QCFG="dtmf/filter"** to block uplink DTMF.	R03A05
NETWORK	Supported some new carrier operator PLMN.	R03A05
AUDIO	Added the command **AT+QAUDCFG="innercodec/dlgain"** and **AT+QAUDCFG="digital/dlgain"**.	R03A06

NETWORK	Added the command **AT+QGDCNT** and **AT+QAUGDCNT**.	R03A06
NETWORK	Added the command **AT+QENCALG** In order to get the GSM data encryption.	R03A10
TCP/UDP	Added the support of IPv6 for internal protocol stack	R11A02
TCP/UDP	Added the parameter on **AT+QIOPEN** to set the max socket number of TCP/UDP server.	R11A02

3. Improved Features

Item/Category	Brief description	Since
VOICE CALL	Fixed the bug that **AT+CHLD=2X** returns error when only one call exists.	R01A02
NETWORK	Fixed the bug that **AT+COPN** lists some repetitive operation name.	R01A02
NETWORK	Fixed some incorrect parameters about **AT+QENG**.	R01A02
NITZ	Fixed the bug that time zone range is -48~56.	R01A02
SMS	Fixed the bug that **AT+CNMA** is invalid for SMS-STATUS-REPORT.	R01A02
SMS	Fixed the bug that report error when inputting character with UCS2 (e.g.dcs=8) or 8-BIT (e.g.dcs=4).	R01A02
TCP/UDP	Fixed the bug that **AT+QICSGP** can active same APN in different context profiles.	R01A02
OTHERS	Fixed the bug that **AT+IFC** default value, default is disable flow control.	R01A02
VOICE CALL	Fixed the bug that RI line issue when call incoming.	R01A02
TCP/UDP	Fixed the bug that more than one +QIURC: "recv",0 will report when send one packet to the UDP sever.	R01A02
DATA CALL	Fixed the bug that USB AT port can hang up CSD call.	R01A03
PPP	DTR function can hang up PPP in command mode now.	R01A03
SMTP	Fixed the bug that **AT+QSMTPPUT=?** returns error.	R01A03
UART	Fixed the bug about it return error that setting the baud rate continuously.	R01A03
TCP/UDP	Fixed the bug about unexpected "+QIURC: "recv", <connectid>,<currentrecvlength><CR><LF><data>" during SMS input line or TCP/UDP data input line.	R01A03
SMS	Fixed the bug that incorrect echo about special characters in SMS content (0x0D, 0x0A, 0x1A and 0x1B in hex).	R01A03

CMUX	Fixed the bug that probabilistic loss of data in CMUX.	R01A03
FTP	Fixed the bug that **AT+QFTPGET** returns +CME ERROR: 612.	R01A03
PPP	Fixed the bug that the return value of **AT+CPAS** after quitting data mode of PPP.	R01A04
SMS	Deleted "SR" message storage from **AT+CPMS=?**.	R01A04
SMS	Fixed the bug that service center address changed because of executed **ATZ** and **AT&F**.	R01A04
SMS	Modified **AT+CNMI** <ds> range from (0-2) to (0,1).	R01A04
SD	Fixed the bug that return wrong path when query an opened file.	R03A01
AUDIO	Calibrated audio parameters.	R03A01
STK	Fixed the bug that module is crashed when set **AT+QSTKGI=37** with exceptional USIM.	R03A01
SD	Fixed the bug that fail to delete all of the file on the SD.	R03A01
HTTP	Fixed the bug that return error when query **QHTTPCFG** value.	R03A01
FTP	Fixed the bug that return +CME ERROR: 613 when download file to RAM successful.	R03A01
DTMF	Optimized local DTMF function.	R03A01
USSD	Resolved the problem that the module can't recognize the value 0x40 of DCS when using USSD.	R03A01
USSD	Resolved the problem that the URC buffer is not enough, which cause the USSD information lost.	R03A01
NETWORK	Optimized network performance.	R03A01
USSD	Modified the USSD default report URC port. The URC port will configure to the port that executed the USSD command. If never execute the USSD command, the default URC port is following command **AT+QURCCFG**.	R03A02
USSD	Resolved the problem that USSD URC context character <LF> escape to <CR><LF>. Now <LF> will report <LF> only.	R03A02
TCP/UDP	Modified the command **AT+QISEND=1,0** that can query current sending status.	R03A02
OTHERS	Fixed the bug that RI pin can't reset to the default state by command **AT+QRIR** after CALL/SMS incoming and RI type is "always".	R03A02
CALL	Solved the problem that when calling using the special Unicom card, report probabilistically +CME ERROR:257.	R03A03
JAMMING	Fixed the bug that configure the options of Jamming Detection using command **AT+QJDCFG=<type>,<value>**, when type is	R03A03

	period、minch、minsqual、PSCANFINELEV, and value is invalid argument, module do not report error.	
SSL	Fixed the bug that connect some special SSL server, when module sends data, will report "closed", after closing SSL connection, the module crash.	R03A03
TCP/UDP	Fixed the bug that execute command **AT+QICFG="dataformat",0** caused module crash.	R03A03
HTTP	Fixed the bug that post URL to small probability caused module crash under special conditions.	R03A04
TCP/UDP	Fixed the bug that **AT+QIDNSQIP** command <ttl> parameter is always zero issue.	R03A04
HTTP	Fixed the bug that report 701 error id when **AT+QHTTPPOST** command with user-defined header and body.	R03A04
GENERAL	Fixed the bug that module crashed when using some special SIM card STK function.	R03A04
OTHERS	Fixed the bug that module crashed after a few minutes when it is in USB suspend mode.	R03A04
USSD	Fixed the bug that USSD send timeout probability after **AT+CUSD=2** hung-up USSD.	R03A04
NETWORK	Fixed the bug that **AT+COPS?** command <act> parameter value indicates error in HSDPA mode.	R03A04
OTHERS	Improved the **AT+IPR** command, before when the IPR command return OK there need 500 ms delay then change to the target baud rate, now set the delay to 50 ms.	R03A05
SMTP	Fixed the problem that module sends mail with body and no attachments, iPhone received a garbled message.	R03A05
FILE	Fixed the bug that **AT+QFSEEK** return error.	R03A05
HTTP	Fixed the bug that HTTP always in busy mode when command **AT+QHTTPREADFILE** reading nonexistent page, and don't report URC +QHTTPREADFILE: 0.	R03A05
TCP/IP	Fixed the bug that receives the data through UDP, it only report data length except client IP and port.	R03A05
GENERAL	Fixed the bug that **AT+CRSM=192,XXX,XX,XX,XX** return error when using the USIM card.	R03A05
SMTP	Fixed the bug that module crash when SMTP sending mail with an invalid attachment.	R03A05
Audio	DTMF decode optimized.	R03A06
OTHERS	Improved the response return time of commands **AT+QCCID** and **AT+CIMI**.	R03A06
OTHERS	Fixed the bug that module can't go to sleep mode while headset or handset connecting.	R03A06
MMS	Optimized MMS sending process.	R03A07

FTP	Fixed the bug that QFTPPUT return error code 125.	R03A07
FTPS	Changed the SSL handshake time of FTP data connection after "1 50" was received from FTP control connection.	R03A08
HTTPS	Fixed the problem that **QHTTPREADFILE** reported error after **QHTTPGET** in some cases.	R03A08
SMS	Fixed the problem that CMT/CDS can't report more than 60 messages.	R03A08
SSL	Fixed the bug that **AT+QSSLOPEN** didn't report error when the Subject CN of certificate was different with the server IP.	R03A08
NETWORK	Solved the dump problems when QENG in WCDMA switch to GSM.	R03A10
SSL	Solved the problem SSL connect failed when build two-way authentication sometimes.	R03A10
STK	Fixed the bug that **AT+QSTKRSP** may block module when responds to STK command: GET INPUT or GET INKEY.	R03A10
SIM	Improved the feature that **AT+CPIN** or **AT+CPWD** can handle password with special characters.	R03A10
TCPIP	Fixed the bug that serial port always report +QIURC after command **AT+QICLOSE** when TCPIP download.	R03A10
HTTP	Fix the bug that module dump when read file on the pressure of HTTP-UFS-GET-POST.	R03A10
SIM	Resolved the problem that SIM card will be broken if SIM card file is written frequently.	R03A12
JAMMING	Resolved the problem that JAMMED URC is still reported if we open the jammer before system power on without the card inserted and close the jammer after system power on.	R03A12
ECALL	Resolved the problem that there is no voice but ECALL URC reported when the module is called by other module or phone after the ECALL is hanged up.	R03A12
CALL	Resolved the problem that incorrect phone numbers reported by CLIP when caller calls.	R03A12
DTMF	Resolved the problem that the serial port has a death problem if the other side hang off the phone during use **AT+VTS** command to send DTMF tones.	R03A12
TCP/UDP	Optimized the process of the close of TCP socket.	R11A02

4. Functions

Basic Function							
SMS	Voice Call	Data Call	USSD	PHB	STK	CMUX	FILE [1]
Y	Y	Y	Y	Y	Y	Y	Y

Protocol Function								
TCP/UDP	PPP	MMS [2]	FTP	SMTP	HTTP	NITZ	PING	NTP
Y	Y	Y	Y	Y	Y	Y	Y	Y
SMTPS	HTTPS	TCP SSL	FTPS [3]					
Y	Y	Y	Y					

Special Function								
Jamming Detection	DTMF	Audio Record	Audio Play	Quec FOTA	TTS	Quec Locator	eCall	DFOTA
Y	Y	Y	Y	Y	Y	Y	Y	Y
SIM Detection								
Y								

NOTES

1. Y means the firmware supports this function.
2. N means the firmware does not support this function.
3. [1] Supports RAM/UFS/SD FILE only.
4. [2] Supports MMS sending only.
5. [3] Supports FTPS-Implicit SSL only.