

BG96 Release Notes

LTE Module Series

Rev. BG96 Firmware_Release_Notes_V0206

Date: 2018-02-28



1. Preamble

This document provides the Release Notes for BG96 firmware version **BG96MAR02A06M1G**. It describes major changes compared to BG96 firmware version **BG96MAR02A05M1G**. For a detailed listing of all changes, refer to the BG96 AT Command Set.

2. New Features

FILE Add FILE function and associated AT commands support. R02A02 FTP(S) Add FTP(S) function and associated AT commands support. R02A02 HTTP(S) Add HTTP(S) function and associated AT commands support. R02A02 NITZ Add NITZ function support. R02A02 PING Add PING function and associated AT commands support. R02A02 TCP SSL Add TCP SSL function and associated AT commands support. R02A02 GNSS Add GNSS function support. R02A02 NETWORK Add AT Command AT+QENG. R02A04 OTHERS Add AT Command AT+CLCC. R02A04 DNS Add DNS function support. R02A04 DFOTA Add DFOTA function support. R02A05 MQTT Add MQTT function and associated AT commands support R02A05 GNSS Add GNSS XTRA function support. R02A05 PPP Add AT Command AT+QGAUTH. R02A05	Item /Category	Brief description	Since
HTTP(S)Add HTTP(S) function and associated AT commands support.R02A02NITZAdd NITZ function support.R02A02PINGAdd PING function and associated AT commands support.R02A02TCP SSLAdd TCP SSL function and associated AT commands support.R02A02GNSSAdd GNSS function support.R02A02NETWORKAdd AT Command AT+QENG.R02A04OTHERSAdd AT Command AT+CLCC.R02A04DNSAdd DNS function support.R02A04DFOTAAdd DFOTA function support.R02A05MQTTAdd MQTT function and associated AT commands support.R02A05GNSSAdd GNSS XTRA function support.R02A05	FILE	Add FILE function and associated AT commands support.	R02A02
NITZAdd NITZ function support.R02A02PINGAdd PING function and associated AT commands support.R02A02TCP SSLAdd TCP SSL function and associated AT commands support.R02A02GNSSAdd GNSS function support.R02A02NETWORKAdd AT Command AT+QENG.R02A04OTHERSAdd AT Command AT+CLCC.R02A04DNSAdd DNS function support.R02A04DFOTAAdd DFOTA function support.R02A05MQTTAdd MQTT function and associated AT commands support.R02A05GNSSAdd GNSS XTRA function support.R02A05	FTP(S)	Add FTP(S) function and associated AT commands support.	R02A02
PINGAdd PING function and associated AT commands support.R02A02TCP SSLAdd TCP SSL function and associated AT commands support.R02A02GNSSAdd GNSS function support.R02A02NETWORKAdd AT Command AT+QENG.R02A04OTHERSAdd AT Command AT+CLCC.R02A04DNSAdd DNS function support.R02A04DFOTAAdd DFOTA function support.R02A05MQTTAdd MQTT function and associated AT commands supportR02A05GNSSAdd GNSS XTRA function support.R02A05	HTTP(S)	Add HTTP(S) function and associated AT commands support.	R02A02
TCP SSLAdd TCP SSL function and associated AT commands support.R02A02GNSSAdd GNSS function support.R02A02NETWORKAdd AT Command AT+QENG.R02A04OTHERSAdd AT Command AT+CLCC.R02A04DNSAdd DNS function support.R02A04DFOTAAdd DFOTA function support.R02A05MQTTAdd MQTT function and associated AT commands supportR02A05GNSSAdd GNSS XTRA function support.R02A05	NITZ	Add NITZ function support.	R02A02
GNSSAdd GNSS function support.R02A02NETWORKAdd AT Command AT+QENG.R02A04OTHERSAdd AT Command AT+CLCC.R02A04DNSAdd DNS function support.R02A04DFOTAAdd DFOTA function support.R02A05MQTTAdd MQTT function and associated AT commands supportR02A05GNSSAdd GNSS XTRA function support.R02A05	PING	Add PING function and associated AT commands support.	R02A02
NETWORKAdd AT Command AT+QENG.R02A04OTHERSAdd AT Command AT+CLCC.R02A04DNSAdd DNS function support.R02A04DFOTAAdd DFOTA function support.R02A05MQTTAdd MQTT function and associated AT commands supportR02A05GNSSAdd GNSS XTRA function support.R02A05	TCP SSL	Add TCP SSL function and associated AT commands support.	R02A02
OTHERSAdd AT Command AT+CLCC.R02A04DNSAdd DNS function support.R02A04DFOTAAdd DFOTA function support.R02A05MQTTAdd MQTT function and associated AT commands supportR02A05GNSSAdd GNSS XTRA function support.R02A05	GNSS	Add GNSS function support.	R02A02
DNSAdd DNS function support.R02A04DFOTAAdd DFOTA function support.R02A05MQTTAdd MQTT function and associated AT commands supportR02A05GNSSAdd GNSS XTRA function support.R02A05	NETWORK	Add AT Command AT+QENG.	R02A04
DFOTAAdd DFOTA function support.R02A05MQTTAdd MQTT function and associated AT commands supportR02A05GNSSAdd GNSS XTRA function support.R02A05	OTHERS	Add AT Command AT+CLCC.	R02A04
MQTT Add MQTT function and associated AT commands support R02A05 GNSS Add GNSS XTRA function support. R02A05	DNS	Add DNS function support.	R02A04
GNSS Add GNSS XTRA function support. R02A05	DFOTA	Add DFOTA function support.	R02A05
	MQTT	Add MQTT function and associated AT commands support	R02A05
PPP Add AT Command AT+QGAUTH. R02A05	GNSS	Add GNSS XTRA function support.	R02A05
	PPP	Add AT Command AT+QGAUTH.	R02A05
GENERAL Add AT Command AT+QFWD="GPIO" to control PIN#26, PIN#64 R02A05	GENERAL	Add AT Command AT+QFWD="GPIO" to control PIN#26, PIN#64	R02A05
GNSS Support NMEA sentences output through the UART3. R02A05	GNSS	Support NMEA sentences output through the UART3.	R02A05
GNSS Support NMEA sentences output through the USB NMEA port. R02A05	GNSS	Support NMEA sentences output through the USB NMEA port.	R02A05
GENERAL Add AT Command AT+QADC. R02A06	GENERAL	Add AT Command AT+QADC.	R02A06
GENERAL Add AT Command AT+QTEMP. R02A06	GENERAL	Add AT Command AT+QTEMP.	R02A06



GENERAL	Add AT Commands AT+CIND .	R02A06
SMS	Add concatenated messages function support.	R02A06
PSM	Add AT Command AT+QPSMS, AT+QPSMCFG and AT+QPSMEXTCFG for config Power Saving Mode.	R02A06
GNSS	Add GNSS Geo Fence function support.	R02A06
NETWORK	Add AT Command AT+QCSCON to get the status of RRC connection.	R02A06
GENERAL	Add AT Command for RF TX/RX FTM operation.	R02A06

3. Improved Features

Item/Category	Brief description	Since				
NETWORK	Optimized the display format of the return value of the AT+QNWINFO.					
GENERAL	Fixed that no URC report while incoming SMS.	R02A04				
GENERAL	Fixed the bug that no SIM PIN URC report when module power on with SIM lock.	R02A04				
GENERAL	Fixed the bug that URC not report to correct port after execute AT+QURCCFG="urcport".	R02A04				
GENERAL	Fixed the bug that cannot config the baud rate of Main UART with 46800 bps.	R02A05				
GENERAL	Fixed the bug that cannot execute AT+CFUN related operation after exit from TCP/IP connection by +++ symbol.	R02A05				
GENERAL	Fixed the bug that incorrect return format of the AT+QSSLSEND=?.	R02A05				
NETWORK	Fixed the bug that module will crash under CAT-NB1 network with a very small probability.	R02A05				
SMS	Fixed the bug that the +CMT URC could not output normally.	R02A05				
SMS	Fixed the bug that could not send SMS with China Union SIM card.	R02A05				
NETWORK	Fixed the bug that after detach from the network with AT+COPS=2, then manual register to the network with AT+COPS command always return ERROR: 13.	R02A05				
GENERAL	Adjusts the display order of the return value with AT&V.	R02A05				
GENERAL	Adjust AT Command AT+QCFG="servicedomain" only can config module with PS domain.	R02A05				
NETWORK	Fixed the bug that incorrect return value of AT+QCSQ.	R02A06				



GENERAL Fixed the bug that incorrect return value of AT+IPR=?. R02A06

4. Functions

Basic Fun	ction							
SMS	Voice Call	Data Call	Fax	USSD	PHB	STK	CMUX	Dual UART
Υ	N	N	N	Υ	Ν	N	N	N
FILE 1)	Triple UART							
Υ	N							

Protocol F	Function							
TCP/ UDP	PPP	FTP	HTTP	NITZ	PING	HTTPS	TCP SSL	FTPS ²⁾
Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y
MQTT								

Υ

Special Fu	nction		
GNSS	PSM DF	FOTA	
Y	Υ	Υ	

NOTES

- 1. Y means the firmware supports this function.
- 2. N means the firmware does not support this function.
- 3. 1) Supports UFS FILE only.
- 4. ²⁾ Supports FTPS-Implicit SSL only.