

# SIM7000G Firmware Release Note

**Latest Version: 1529B08SIM7000G**

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# SIM7000G Cellular Engine

## 1 Preamble

This Release Note introduces SIM7000G firmware versions and briefly describes the benefits over preceding release. Also user can find differences compared to preceding release.

**New Features:** It lists features or AT commands which are newly developed compared to the preceding version.

**Improved Features:** It lists features or parameters that have been changed or improved compared to the preceding version.

## 2 Related documents

[1] SIM7000 Series\_AT Command Manual

[2] SIM7000 Hardware Design

**Version: 1529B08SIM7000G**

**[New Features]**

1. Added "AT+SMRCVSLPTM" command to configure MQTT sleep time.
2. Added "AT+SMCLEANRETAIN" command.
3. Extended the "AT+FTPEXTGET" command to support the breakpoint resume function.
4. Added "AT+CALPC" command that AP part will configure low power consumption.

**[Improved Features]**

1. Fixed the bug that "AT+CMGS" module will crash if the length of <da> is too long.
2. Fixed the bug that GNSS XTRA file is not effective in some cases.
3. Modify the minimum value of <threshold>(AT+CPSMCFG) to 20.
4. Fixed the bug that the module will reboot when the output port changing the USB to UART3 during MQTT.
5. Fixed the bug that the return value of +SMCONF will miss when executing "AT+SMCONF?"

**Version: 1529B07SIM7000G**

**[New Features]**

**[Improved Features]**

1. Fixed the bug that module will crash if the length of <da> is too long of "AT+CMGS" command.
2. Fixed the bug that there is no RI Signal when "+SMSTATE: 0" URC reports.
3. Fixed some bugs that XTRA failure and NMEA data auto output to NEMA port when power on of GNSS.
4. Fixed the bug that module will crashes after configuring "AT+COPS=1,2,"46011"" in some case.
5. Fixed the bug that address format is incorrect when using "AT+SNPING6" to ping IPV6 address.

**Version: 1529B06SIM7000G**

### [New Features]

5. Added "AT+CBIPAUTH" command to configure authentication type and the default value is PAP type.
6. Added commands (AT+CPSIEXT, AT+CIPV6RS, AT+CRATPRI, AT+CNASCFG).

### [Improved Features]

1. Fixed the bug that the response of "AT+CGTP?" and "AT+CIPV6RS=" is incorrect.
2. Fixed the bug that the response of ""AT+CIPV6RS?"" and ""AT+CIPV6RS=?"" is incorrect.
3. Fixed the bug that these AT commands (AT+CRAI,AT+CPSIEXT,AT+CIPV6RS,AT+CRATPRI,AT+CNASCFG) do not execute successfully without SIM card
4. Fixed the bug that "AT+CNASCFG" command does not write right data.
5. Fixed the bug that file system backup function does not restore folders.
6. Optimized the related functions of TCP and SSL.
7. Fixed the bug that executing "AT+SMTPSUB?" will cause module reboot after the subject is set by "AT+SMTPSUB" command.
8. Fixed the bug that module will reboot when the certificate length set by "AT+CSSLCFG" exceeds a certain length.

**Version: 1529B05SIM7000G**

### [New Features]

1. Extended "AT+CACFG" and "AT+CNCFG" commands.
2. Extended the length of MQTT password to 512.
3. Added "AT+SHBODEXT" command.

### [Improved Features]

1. Fixed the bug that the expired certificate does not be verified when connecting to the AWS HTTPs server.
2. Fixed the bug that the return value of "AT+CNETSEQ?" is incorrect.
3. Fixed the bug that HTTP POST data greater than 10Kb will fail in some cases.
4. Fixed the bug that part of the data will be discarded if the received data contains "00"when "AT+SMPUBHEX=1".

**Version: 1529B04SIM7000G**

### [New Features]

1. Added "AT+CGNSSUPLCFG" and "AT+CGNSSUPL" command to achieve AGPS functional.
2. Extended the parameter range of MQTT topics from (0-64) to (0-128).
3. Extended the range of HTTP parameter <body> from (0-1024) to (0-4096).

### [Improved Features]

1. Fixed the bug that CAOPEN could not connect DTLS and UDP DNS sometimes.
2. Optimized LWM2M object 5 function for FOTA.
3. Fixed the bug that sometimes the signal strength of "AT+CSQ" displays slower than "AT+CPSI".

**Version: 1529B03SIM7000G**

### [New Features]

1. Added jamming detection function.
2. Added "AT+GAUTH" command to configure PDP authentication type of internal TCP/IP stack.

### [Improved Features]

1. Fixed the bug that there has no URC "SEND OK" when executing "AT+CIPSEND" in some cases.
2. Fix the bug that the remote client does not access when the module acts as a TCP server in some cases.
3. Fixed the bug that the module will reboot or return result is error when parameter <type> of "AT+SHREQ" is set to 5.
4. Fixed the bug that the module does not get the demand data and status code while HTTPS POST request is in progress.
5. Fixed the bug that the return time is not correct when executing "AT+CGTP" command.
6. Fixed the bug that the return value is not correct when executing "AT+CGSINF" command.
7. Fixed the bug that the module does not get the demand data under certain status codes of HTTP request.
8. Fixed the bug that the module will reboot when executing "AT+CPSMS?" command.
9. Fixed the bug that the return result of "AT+SHAHEAD?" is not complete in some cases.
10. Fixed the bug that the system time is not updated after the network sends the time synchronization information if switching the working mode from the flight mode.
11. Fixed the bug that the module will reboot when executing "AT+SMSTATE?" command to load a CA certificate in some cases.
12. Fixed the bug that the return value is not complete when executing "AT+SMSTATE?" command.
13. Fixed the bug that data will be lost during transparent transfers in some cases.
14. Fixed the bug that there has no RDY is reported when booting with some SIM cards.

**Version: 1529B02SIM7000G**

### **[New Features]**

1. Added "AT+CGNSXTRA","AT+CGNSHOR","AT+CGNSUTIPR" and "AT+CGNSNMEA" command.
2. Added "AT+CTBURST" command.
3. Added the "AT+CGTP" command to enable the GTP service.
4. Extended the range of the parameter <password> of "AT+SMCONF" from (0-128) to (0-256).
5. Extended the range of parameter <datalength> of "AT+SMPUB" from (0-512) to (0-1024).
6. Added "AT+CGPSNMEA" command to set output format of NEMA data.
7. Extended the maximum URL length of HTTP request to 512 bytes.
8. Added email function.

### **[Improved Features]**

1. Fixed the bug that the SSL settings in the MQTT do not be cleared.
2. Fixed the bug that the module will restart when executing "AT+SMSTATE?" or "AT+SMCONN" command.
3. Fixed the bug that the GPS NMEA data is abnormal in some cases.
4. Fixed the bug that the return result of "AT+SHAHEAD?" is not complete in some cases.
5. Fixed the bug that executing "AT+CPOL=1,2,"56702",0,0,1,0" returns error.
6. Fixed the bug that there has no return value when executing "AT+SNPING4"command.
7. Fixed the bug that executing "AT+CNACT?" command and returned wrong format when activating PDP.
8. Fixed the bug that the redundant status is reported and the format is incorrect sometimes when executing "AT+CLBS=1, 1" in the NB network.
9. Fixed the bug that GPS UART3 port does not output NEMA data.
10. Fixed the bug that the return value is not correct when executing "AT+CGNSCFG?" command.
11. Fixed the bug that "AT+GNSINF" only show the number of GPS stars.
12. Fixed the bug that differential package in EFS are not cleared after the "AT+CFOTA=1" command is executed.

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