

# SIM7070 Firmware Release Note

**Latest Version: 1951B08SIM7070**

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# SIM7070 Cellular Engine

## 1 Preamble

This Release Note introduces SIM7070 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] SIM7070\_SIM7080\_SIM7090 Series\_AT Command Manual

[2] SIM7070 Hardware Design

**Version: 1951B08SIM7070**

### **[New Features]**

1. Extended MQTT function for one device or model corresponds to one secret key.
2. Added "AT+SPIC" command to query the remaining times of PIN/PUK input.
3. Added "AT+CRATPRI" command to configure the priority of each wireless access technology.
4. Added "AT+CNASCFG" command to configure the NAS configuration file of the terminal.
5. Added "AT+CLRNET" command to clear previous network registration information.
6. Added MQTT connect asynchronous function.
7. Extended LwM2M function.

### **[Improved Features]**

1. Fixed the bug that executing "AT+CRATSRCH=1,20" command returns ERROR.
2. Fixed the bug that module can enter PSM again without data interaction after exiting PSM.
3. Fixed the bug that the display format of the "AT+CIPV6RS" command is incorrect.
4. Disabled the keepalive mechanism when the <keepalive> parameter of "AT+SMCONF" is set to 0.
5. Fixed the bug that some parameters of the EMAIL function have not been judged for validity.
6. Fixed the bug that module returns to delete successfully when executing "AT+POP3DEL" to delete the non-existent mail.
7. Fixed the bug that module will report multiple redundant information and reboot if <topic> of "AT+SMSUB" is "#" in some cases.
8. Fixed the bug that some issues related to "AT+SECMEN" command.
9. Fixed the bug that Google MQTT does not be used normally.
10. Fixed the bug that the data read by "AT+SHREAD" is incomplete in some cases.
11. Fixed the bug that MQTT connection is not successful after executing "AT+SMCONF="cleanss",0".
12. Fixed the bug that the serial port is blocked when reading data in some applications.
13. Fixed the bug that NIDD does not receive the second packet of data.
14. Fixed the bug that there are two URC "+STIN:" reports when set "AT+STK=1" and then reboot.
15. Fixed the bug that the <topic> of "+SMSUB: <topic>,<message>" will have garbled characters in some cases.

**Version: 1951B07SIM7070****[New Features]****[Improved Features]**

1. Optimized the SSL function to improve the stability of the data transmission process.
2. Fixed the bug that the module will reboot when the subject is set by "AT+SMTPSUB" and then query in some cases.
3. Fixed the bug that the module will reboot when executing "AT+SMSTATE?" in some cases.

**Version: 1951B06SIM7070****[New Features]**

1. Extended the length of MQTT username to 256 and the length of password to 512.
2. Added the function of FOTA through LwM2M.
3. Added "AT+CIPV6RS" command to configure related parameters for sending IPV6 RS packets.
4. Extended "AT+CACFG" and "AT+CNCFG" commands.
5. Extended parameters of "AT+CACFG" command.
6. Extended <urc\_type> of "AT+CURCCFG" command to configure URC of TCPUDP.

**[Improved Features]**

1. Fixed the bug that when the UDP SERVER and the remote client are continuously sending data to each other, an exception occurs and the serial port is blocked after executing "AT+CACLOSE=0".
2. Fixed the bug that after sending the "AT+SHREQ" request, then close the connection and reconnect, the data read by "AT+SHREAD" becomes "\0".
3. Fixed the bug that the expired certificate does not be verified when connecting to the AWS HTTPs server.
4. Fixed the bug that FTP cannot connect to IPV6 server in some cases.
5. Fixed the bug that the module will reboot when connect to the non-existent TCP server through "AT+CAOPEN" command.
6. Fixed the bug that the parameter <content length> range is not correct of "AT+SMPUB=?" command.
7. Fixed the bug that AP upgrade will fails during the FOTA upgrade process in some cases.
8. Fixed the bug that the module will reboot when the number in "AT+CMSS" is too long in GSM mode.
9. Fixed the bug that module will detach after executing "AT+CDNSGIP" command."

10. Fixed the bug that some SIM cards do not return the correct phone number using "AT+CNUM" command.
11. Fixed the bug that ""AT+CRAI"" command does not take effect after setting.
12. Fixed the bug that the module will reboot when executing "AT+FTPLIST" command after the download using "AT+FTPEXTGET" command failed.
13. Fixed the bug that the module will reboot when executing "AT+FTPEXTGET" to read after executing "AT+FTPEXTGET" command.

**Version: 1951B05SIM7070****[New Features]**

1. Added LBS function.
2. Extended <urc\_type> of "AT+CURCCFG" command to configure TCPIP URC.
3. Added "AT+FTPTOFSST" command to get FTP download status.
4. Added "AT+SECMEN" command to enable ECM auto connecting.
5. Extended the parameter <keepime> of "AT+SMCONF" command to (0-65535).
6. Modified the length of <username> to 128 and <password> to 256 of "AT+SMCONF" command.
7. Extended parameter <subhex> of "AT+SMCONF" to set data format.
8. Pulled down RI pin for 120ms when reporting URC of high and low voltage.
9. Extended the length of filename to 230 bytes about file system command.

**[Improved Features]**

1. Fixed the bug that sometimes data is not sent successfully in FTP active mode.
2. Fixed the bug that any LBS command will return error if LBS positioning is unsuccessful.
3. Fixed the bug that sometimes data is not correct in FTP active mode.
4. Fixed the bug that MQTT reconnecting does not receive data sent to the server by other modules during the disconnection after MQTT sets the cleansession flag.
5. Fixed the bug that LBS could not successfully obtain information.
6. Fixed the bug that reported information of "AT+SGNSCMD" is error in some cases.
7. Fixed the bug that an error will occur if you try to download again after a failed download in some cases.
8. Fixed the bug that parameter <cleanss> of "AT+SMCONF" has no effect.
9. Fixed the bug that when "AT+CFGRI=0" the RI pin keeps high level without change after the remote call RING is reported.

**Version: 1951B04SIM7070**

### [New Features]

1. Added LBS function.
2. Added IPV6 for NTP function.
3. Added IPV6 for HTTPTOFS function
4. Added "AT+SPKMUTESW" command to control hands free.
5. Extended "AT+SGNSCFG="ADSS"".

### [Improved Features]

1. Optimized DNS resolution for IPV6.
2. Fixed the bug that PPP dial-up fails in CMUX mode in some cases.
3. Fixed the bug that too much URC will cause USB blocking in some cases.
4. Fixed the bug that sometimes the module won't boot after pressing the power key for the first time.
5. Fixed the bug that the UART will report garbled characters after power on in the case of adaptive baud rate.
6. Fixed the bug that the module does not report RDY URC for some SIM cards.

**Version: 1951B03SIM7070**

### [New Features]

1. Added "AT+ANTENALLCFG" command to configure antenna tuner.
2. Added "AT+CURRECFG" command to configure URC report.
3. Extended "AT+SGNSCFG="NMEATYPE"".
4. Added SSL for FTP function.
5. Added certificate and key for Email SSL function.

### [Improved Features]

**Version: 1951B02SIM7070**

### [New Features]

1. Added the "AT+CAACK" command for query send data information.
2. Added support for band 72 of "AT+CBANDCFG" command.
3. Extended "AT+SGNSCFG" command.
4. Added "AT+CTBURST" function.

### [Improved Features]

1. Fixed the bug that "AT+NCELLLOCK" or "AT+MCELLLOCK" does not lock NB-IOT/CAT-M cell.
2. Fixed the bug that the DNS server name does not be set anymore after setting it once.
3. Fixed the bug that module will reboot when a client accesses a server whose transmission type is IPV6.
4. Fixed the bug that APP network does not be deactivated after it was automatic activated with "AT+CNACT=<pdpidx>,2".
5. Fixed the bug that CMUX flow control does not work in some cases.
6. Fixed the bug that executing "AT+CNMP?" returns incorrect value in some cases.
7. Fixed the bug that the module will reboot when executing "AT+SHREAD" command in some case.
8. Fixed the bug that module does not receive class0 text messages.

# Contact

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