

SIM900A Firmware Release Note

Latest Version: 1137B12SIM900A64_ST

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SIM900A GSM Cellular Engine

1 Preamble

This Release Note introduces SIM900A 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] SIM900 AT Command Set, V1.07

[2] SIM900A Hardware Design, V1.01

Version: 1137B12SIM900A64_ST**[New Features]**

1. Added "AT+CQUICKPDP" command, if it is enabled, T3380 will be changed from 30s to 8s, T3390 from 8s to 6s.
2. Added "AT+CELLFORBID" command to set more than four certain Arfcn, which is not allowed to select. The command affects only after the module resets.
3. Added the command "AT+CTBURST" to support continuous rapid data transmission.
4. Added "AT+CIPSTTIMER" command to set a timer when activating or deactivating a PDP connection. The scope of the time is from 90 to 255.
5. Added "AT+CIPTKA" command to set TCP keep alive parameters.
6. Added AT command "AT+CADDFORBID" to manage the list of limited frequency point. e.g. =0 means closing this function. =1 means adding current frequency point to the limit list. =2 means deleting the special frequency point.
7. Added "AT+CIPOPTION" command to configure TCP Nagel algorithm.

[Improved Features]

1. Solved the problem that the +CSGS parameter will not be saved after the module resets or powers off.
2. Solved the problem that when setting the White List with a phone number which has more than 40 characters time after time, the phone numbers may be saved wrong.
3. Solved the problem that, when executing "AT+CENG=2,2", it will return error, but it also sends the URC report of network information incessantly, and can not stop after executing the command "AT+CENG=2".
4. When processing "atd*988#", change the data service mode from gprs to ussd.
5. Changed the AT command "AT+CLDTMF" to support remote dtmf tone, the scope of <basicdur> is extended to (40-500), the supported ascii chars add up E(1400HZ),F(2300HZ),G(1000HZ), reference command is: +CLDTMF:(1-100),(0-9,A,B,C,D,*,#,E,F,G),(40-500),(0,1,2).
6. Changed the AT command "AT+CRNQP", when executing "AT+CRNQP=2", it will be forced to scan the network in the full frequency.
7. Solved the problem that, after some certain sms setting, +cscs, +csmp, the module will reset if sending sms with more than 160 bytes.(e.g. AT+CSCS="UCS2" AT+CSMP=49,5,0,0).
8. Changed the AT command format AT*PSGPRS to AT+CGCS, you can query the GPRS

timeslot and Coding scheme in real time.

9. Solved the problem that, once it has just sent a long sms, the module will return error if you type the first command "AT".
10. Changed the return strings of "AT+CBST=?" command.
11. Solved the problem that, when executing the command "AT+CMSS" or "AT+CMGD" after "AT+CMSS" command is executed, the module will be blocked.
12. Solved the problem that, after the module powered on, the first call cannot work in half duplex mode.
13. When processing the command "AT+CGCS?", it doesn't return the result in a new line.
14. Changed the AT command "AT+CGCLASS="CG"". If no SIM card is detected, it will return error when executing the command.
15. Changed the AT command "AT+CGCLASS?". if a SIM card is not detected, it will return error when executing the command.
16. Solved the problem that the second parameter of "AT+STTONE" command can not be omitted.
17. Solved the problem that when playing STTONE, if executing the command "AT+STTONE=0", it will return ERROR, and STTONE stops.

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[New Features]

8. Added "AT+CSGS=0/1" command, if it is enabled, the netlight will be enter into 64ms on/300ms off state in the connection of Email, TCP/IP, UDP/IP.
9. Added "AT+CNITZNN" command to disable NITZNN function.
10. Added "AT+HTTPSTATUS" command to require the state during data transmission process.
11. Added a third parameter to TEST command "AT+CLDTMF".
12. Added "HTTPSTATUS" test command.

[Improved Features]

18. Resolved the problem that in some server, error message will return when user executes "AT+FTPSIZE" command.
19. Resolved the problem when the module get and continuously read the data from the URL to which large data was uploaded, the module may restart.

20. Resolved the problem that there was no response when user using "HTTPGET" to get some URL.
21. Solved the problem in adaptive low rate situation that when user using "FTPGET" to obtain data, some URC will be inserted into the received data.
22. Solved the problem that when CGCLASS="CC" was set, "AT+CGATT?" command could not be executed.
23. Solved the problem that the command "AT+CR99=12511" cannot be set. Now it can be achieved by setting "AT+CR99=0/1", the read result required by "AT+CR99" will be "0x12511/0x12510".
24. Solved the problem that CGREG state is still 0 when the module attached GPRS service.
25. Solved the problem that after "ATV0" is set, a needless value "4" will be shown when "ATD>1;" was executed.
26. Solved the problem that executing "AT+CSIM=42,"A088000010FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF" will return error.
27. Solved the problem that executing CRSM command will lead to data loss.
28. Extended the maximum length of "FTPGETPATH" and "FTPPUTPATH" to 256 bytes.
29. Supported the data rate of 4800 bps for CBST command.
30. Unified the format of read commands: "AT+CIPSCONT?", "AT+FTPPSCONT?", "AT+HTTPSCONT?", a space must be after the colon.
31. Supported the voice coding type value "17": AMR-FR/AMR-HR/EFR/FR/HR of "AT+SVR" set command.
32. Modified the scope of parameter <T1> of CMUX command to "1-254".

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[New Features]

None

[Improved Features]

1. Solved the problem that if user input data during the period that the module is outputting large amounts of data in TCP mode, it may cause data loss or some other problems.
2. Solved the problem that the audio channel was relatively slow when user answered the call by ATA command in some special condition.

3. Resolved the problem that after "ATV0" was set to all channels in MUX mode, "ATV1" command would be invalid to all channels except the first one.
4. Solved the problem that "AT+CGATT?" option was not allowed after "AT+CGCLASS="CC" was set.
5. Solved the problem that the module would not report current state via "+GREG" indication after "AT+CFUN=4" was set.
6. Modified the scope of parameter <index> of "AT+SPWM" command to "0-2".
7. Solved the problem that no response returned from serial port if user writes a number to the phonebook after the SIM card was pulled out.
8. Solved the problem that the value of parameter <SQ> of "EXUNSOL" command was not saved after reset.
9. Solved the problem that "+CGREG" and "+CREG" reported error information after "AT+CFUN=0" was set.

Version: 1137B09SIM900A64_ST

Note: It is the first version of SIM900A64_ST module, the software version is updated from 1137B09SIM900A32_ST.

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