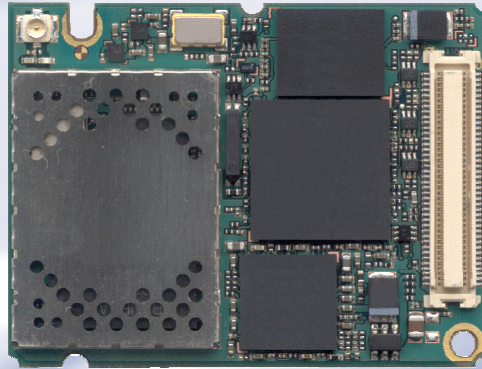


**SIEMENS**



**MC75**  
**Siemens Cellular Engine**

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**Release Notes**

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## 1 Preamble

This Release Note applies to the Siemens MC75 Firmware Release 01.001.

### 1.1 Related Documents

- [1] MC75 Hardware Interface Description
- [2] MC75 AT Command Set
- [3] DSB75 Support Box – Evaluation Kit for Siemens Cellular Engines

## 2 Improved Features

The following chapter lists features or parameters that have been improved over the preceding MC75 release.

- All features of MC75 have been approved to comply with the GCF and PTCRB standards.
- The EONS feature has been improved. MC75 now correctly reads all records of the EF-OPL table. As a result, the EONS information delivers the appropriate provider names coded in the EF-PNN table, instead of indicating only their numeric equivalents (MCC.MNC).
- This release has fixed the problem that short messages were queued up in the Short Message Service Center until an MO short message was sent.
- The concurrent indication of the NITZ messages and the URC "+CGREG" no longer causes the module to shut down.
- ENS: The faulty dependency on GPRS autoattach has been removed.
- "#" in a dial string now leads to an MO call.

## 3 General Hardware and Software Limitations

- The SD Card interface is not supported.
- Noise Reduction and Echo Cancellation are working only at low quality level. Basic Handsfree operation is not supported. The Ringing Tone generator does not always work reliably.
- Autobauding does not work reliably. It is recommended to set a fixed bit rate. By default, when shipped from factory or after a firmware update, the modules are set to 115200 bps.
- Only the first serial interface ASC0, the USB interface and the first Multiplexer channel MUX1 are intended for data and fax calls.
- In rare cases, when transferring large amounts of circuit switched data (several Megabytes), loss of data packets may still occur.
- The indicator "msclass" defined with AT^SIND does not work during EGPRS connections.
- If ATSO with n>0 (autoanswering) is set immediately after the URC "+CREG: 1" was received the module fails to respond.  
Workaround: After the URC "+CREG: 1" was received wait at least 1 second before activating the autoanswer mode.
- Furthermore, autoanswer mode shall not be activated before the module is registered to the network.

- GPRS attached state (AT+CGATT?) is shown as detached during loss of network coverage.
- AT^SMOND and AT^SMONC sometimes show incorrect values.
- The feature RTC wake-up from POWER DOWN mode is not available. Programming an alarm time (AT+CALA) will not wake up the module automatically. Despite this, AT+CALA can be used any time during normal operation.
- If the Socket service is configured for UDP, the size of each data packet shall be limited to 1472 bytes rather than using the maximum size of 1500 bytes specified in [2].  
Example:  
AT^SISW=x,1472 (where x = ID of the service profile).
- Currently no release causes will be displayed for bearer connections opened with AT^SISO. There are only the two return states:  
OK - bearer is up  
ERROR - bearer is down and the internet service is not started
- The Socket Listener may not work properly if the service is re-opened shortly after having closed the Socket Listener. To ensure that the service works correctly the host is required to wait at least two minutes before re-opening a Listener.
- It is not recommended to query the status of Call Forwarding with ATD and a \*# sequence. Instead, please use the AT+CCFC command which delivers the correct response without any problems.
- In North America (MCC 302 to 316), always 3 digits MNC from the SIM-IMSI are used to detect the Home PLMN. In all countries other than North America, 2 MNC digits from the SIM-IMSI are used to detect the Home PLMN. If this condition is not met roaming may be indicated erroneously.  
This problem may sometimes be found in a test network or protocol simulation, but is not likely to occur in a real network.
- A Service Center Address (SCA) optionally stored within a PDU short message (SMS-SUBMIT TPPDU) will be ignored. The module uses only the SCA set with AT+CSCA.
- With AT+CNMI=2,1, incoming short messages are indicated by the URC "+CMTI:". If the AT interface is free the URCs appear upon receipt of the short message. If the AT interface is reserved, for example while an AT command is being executed or a data call is in progress, all URCs are buffered to be output when the AT interface becomes free again. The current release of MC75, however, delivers only one buffered "+CMTI:" URC no matter regardless of the number of short messages received while the AT interface was blocked.  
Workaround: Use AT+CMGL or AT^SMGL to check if there were more short messages received.
- The MC75 shuts down immediately when the terminal sends the following two responses: AT^SSTR=16,20 ("USSD/SS Transact terminated by user") and AT^SSTR=16,35 ("User cleared down call before connection or network release").

## 4 Using the USB Interface in a PC Environment

- When the module fails to respond while controlled via USB first close the Terminal program. Then disconnect the module from its power supply, press the IGT key on DSB75 to restart the module and finally open the Terminal program again.
- After using the command AT^SMSO on the USB port the Terminal program must be closed before the module can be restarted with IGT. The URC "^SHUTDOWN" is not generated on the USB interface.

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## **5 Handling of MC75 Modules Prepared for Customer IMEI**

This section applies only to MC75 modules delivered with the IMEI and software version number (SVN) left blank. This is a product line which allows application manufacturers to store their own IMEIs and software version numbers.

Mobile equipment is not admitted to the GSM network unless the IMEI is assigned and stored inside the device. Therefore all MC75 modules with blank IMEIs are preconfigured only for use in Airplane mode, meaning that the MC75 enters the Airplane mode when switched on. The mode is indicated by the URC "SYSSTART AIRPLANE MODE".

In Airplane mode, all AT commands requiring a radio connection are deactivated, including the option to enable/disable the Airplane mode with AT^SCFG. Only network-independent features are usable and available to run basic tests in the factory. The AT commands required for writing the IMEI and the SVN are also permitted. After successfully writing the IMEI and the SVN the MC75 module needs to be restarted. The module will then enter the Normal mode, indicated by the URC "SYSSTART".

Note:

- It is the responsibility of the application manufacturer to apply for a block of IMEIs and to complete all relevant national and international certification and Type Approval processes.
- The AT commands required for writing the IMEI and the SVN are not part of the standard AT Command Specification and are delivered on request.