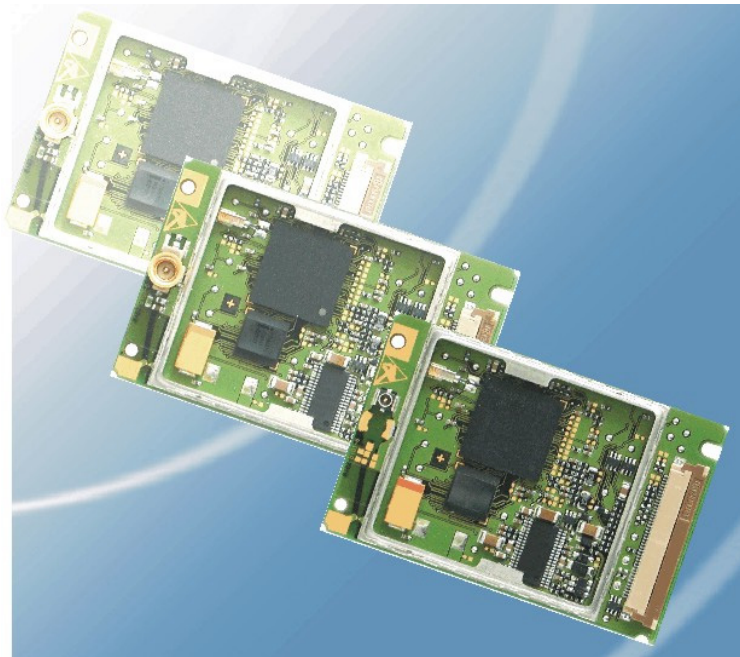
SIEMENS

TC35

Siemens Cellular Engines



RELEASE NOTES

Version: 04.00
DocID: TC35_RN_v04.00

Wireless Modules

1 Preamble

This Release Note introduces TC35 Version 04.00 and briefly describes the benefits over the preceding release 03.10. Referred to as TC35, the software applies to the Siemens GSM engines **TC35** and **TC35 Terminal.**

Prior to using the TC35 engines or upgrading to a new firmware release carefully read the latest product information provided in the Release Notes.

1.1 Related Documents

[1] AT Command Set for TC35, TC37 and TC35 Terminal, Version 04.00

[2] Release Notes: TC35 Version 04.00

[3] Application Note 16: Updating TC35 Firmware, as of Version 03.10

[4] DSB35 Support Box - Evaluation Kit for Siemens Cellular Engines

[5] TC3x Multiplexer User's Guide, as of Version 04.00

[6] Application Note 02: Audio Interface Design

[7] Application Note 14: Audio and Battery Parameter Download

[8] Multiplex Driver Developer's Guide for Windows 2000 and Windows XP

[9] Multiplex Driver Installation Guide for Windows 2000 and Windows XP

1.2 Approval considerations

When upgrading to a new firmware release you are advised to verify that any approvals and certificates obtained for earlier TC35 applications are still valid. Please contact your Notified Body to check whether you need to take further actions.

2 New features

AT command	Brief description
AT^SMONC	AT^SMONC is the latest addition to the cell monitoring commands. It provides enhanced information on a maximum of 7 base stations, including the serving cell. Each base station can be presented with the following parameters: MCC Mobile country code MNC Mobile network code LAC Location area code Cell Cell ID BSIC Base station identity code Chann ARFCN (Absolute Frequency Channel Number) of the BCCH carrier RSSI Received signal level C1 Criterion for base station reselection C2 Criterion for base station reselection
AT^SNFPT	AT^SNFPT serves to switch on or off the Call Progress Tones shortly heard on the phone when the mobile starts to set up a call.
AT^SSDA	The new AT^SSDA command lets you specify whether your TC35 product is designed to provide a display. If there is one available, AT^SSDA enables or disables the mobile station to present incoming Class 0 short messages immediately on the display.
AT^SSCONF	This command is the latest addition to SMS related AT commands. It allows you to control the presentation of the recipient address parameters <ra> and <tora>. Both parameters appear in the result codes of the AT commands AT+CMGL, AT^SMGL, AT+CMGR, AT^SMGR and the unsolicited result code +CDS.
AT+CCFC AT+CLCK	Call forwarding and call barring can be set for a greater choice of classes. The parameter <class> now offers the following options: <class> 1 voice 2 data 4 fax 8 short message service 16 data circuit sync 32 data circuit async 64 dedicated packet access 128 dedicated PAD access x combination of some of the above classes. For example, the default setting 7 represents the sum of the integers 1, 2 and 4 (call forwarding or call barring for voice, data and fax). The value 255 covers all classes.

2.1 Improved features

AT command	Brief description
CSD calls to ISDN subscribers	Mobile originated calls to V.110 terminals using 14.4 k bit rates can now be made without encountering problems.
CTS line	When the mobile is switched off the CTS line now goes immediately inactive.
AT^MONI	AT^MONI now issues correct 4-digit channel numbers The indication of frequency hopping has been modified. Instead of the previously used value “0” the parameter <chann> now presents “h” to signalize frequency hopping. If during a connection the radio cell is changed, the parameters LAC, Cell, NCC and BCC of the serving cell will now be correctly updated. However, the two parameters PWR and RXLev will be updated when the call ends.
AT^MONP	If new neighbour cells are added to the list (e.g. due to handover), their C1 and C2 parameters cannot be displayed until the connection is released. In this case “-“ is presented for C1 and C2.
AT+COPN, AT^SPLM	The provider list has been updated to account for modified provider and operator names.
AT+CCFC	The time to wait before an incoming call forwarded is fixed to 20 seconds, although stated otherwise in [1]. Any attempt to determine another value will be acknowledged with OK, but the change will not take effect.

2.2 Important notes

The table contains a list of known problems and provides workarounds where appropriate.

Feature	Brief description
Data calls	Data transmission at a rate of 14.4 kbps might be aborted if the local data rate (= DTE-DCE rate) uses the maximum of 115.2 kbps. Workarounds: To avoid problems you can use one of the following options: 1. To benefit from over-the-air data rates of 14.4 kbps it is recommended to limit the local DTE-DCE data rate to 57.6 kbps, or even to 19.2 kbps (lower DTE-DCE rates will yield better performance). Example: AT+IPR=57600 Sets the DTE-DCE data rate to 57.6 kbps. AT+CBST=14 Sets the bearer service to 14.4 kbps. 2. Lower bearer service types can be combined with high DTE-DCE data rates without encountering problems: Example: AT+IPR=115200 Sets DTE-DCE data rate to 115.2 kbps (= maximum local rate) AT+CBST=7 Sets the bearer service to 9.6 kbps. Note: If Multiplex mode is active, the maximum bearer capability is 9.6 kbps, i.e. in this case you will need to set AT+CBST=7. The local data rate is recommended to be limited to 57.6 kbps on the 1st logical channel (AT+IPR=57600) and 19.2 kbps on channels 2 and 3 (AT+IPR=19200).
Data calls from T-D1 to VIAG-Interkom	Mobile originated data calls using 9.6k or 14.4.k data rates from a TC35 module with T-D1 SIM to a mobile with VIAG SIM cannot be set up successfully. Though RING will be indicated to the called party, the call cannot be established. Note: MO data calls to other providers are not affected.
AT+CEER Release cause for call control	The notification “Called party barred incoming call” does not appear with the required Location ID 22. It is coded as “0,300,0” instead of “22,300,0”.