Application Note:
GSM2000TN003

GSM2218 and GSM2208
0.7.6 Release Notes

Objective: This document defines firmware changes and additions to the GSM2218 and GSM2208 since SW release 0.6.1.

> **WHEN UPGRADING FROM 102MT7, OR OLDER, THE USER MUST DO AN AT$MSGLOGCL AND INSURE THAT THE DEVICE IS NOT GENERATING EVENTS THAT ARE STORED TO THE MESSAGE LOG. AFTER UPGRADE COMPLETES THE USER MUST AT&F, AT&W, RESET THE DEVICE, THEN RE-LOAD USER'S CONFIGURATION**.

> **Because of the change in the length of AT$STOATEV command, current stored AT events will not be available after reprogramming the firmware. User must re-enter events after re programming. It is highly recommended that the user issues the AT&F and AT&W commands after reprogramming.**

Features:

The following are features were added:

- Added AT commands AT$OFF and AT$OFFDLY to facilitate powering down
- Added ENS and EONS capability for Cingular
- ADDED LUPREJ unsolicited response capability
- Reduced long registration times in areas where CDMA is present
- Added AT$PWRMSG to edit the ASCII message on powerup
- Added capability to send AT commands over SMS
- Added ability to set periodic alarms in AT$RTCALRM
- Added AT$NETMON check for deregistration conditions
- Added AT$SNDMSG allows sending of ASCII message to various modem interfaces
- Added Domain Name lookup (DNS)
- Added TCPAPI
- Added AT$MSGLOGAL
- Added AT$IGNDBNC

Problems Fixed:

- Fixed issue with data transfer when switching PLMNs within Cingular
- Fixed issue with reading SI13 information
- Fixed AMR Rx Quality tests
- Made GPRS session stability improvements
- Fixed issue with reading SIM phonebook with ENS enabled
- Fixed issue with sending AT commands from multiple srcIDs
- Fixed issue with making GPRS connections in CMUX on DLCs greater then 1
- Fixed issue with AT&V line termination character
- Fixed issue with ATE1 taking effect right after AT&F
- Fixed issue with sending more then 255 bytes per packet in CMUX
- Fixed issue with TCP reconnect after IDLETO expiry in AT$AREG=2
- Fixed reset issue after DTR drop when in AT&D2
- Fixed issue with SMS when in ATV0
- Fixed issue with initiating a voice call in AT+FCLASS=8
- Fixed issue with using AT$STOATEV for input event 8
- Fixed issue with false OK in SMS when message did not send
- Fixed erroneous SMS error code
- Fixed issue with long registration times when GSM_LOCI info is not stored on SIM

- Fixed issue with using wildcard ? in FDN
- Fixed issue with sending SMS when incoming and outgoing SMS collide
- Fixed issue with TCP stack sending FIN/RST/ACK on TCP reconnect
- Fixed issue with ring indication on outgoing TCP connect
- Fixed issue with $ESUP=?.
- Fixed issue with BUSY audio tone
- Fixed RTC alarm after reset
- Fixed GPS valid/invalid event notification
- Fixed Ring indicator fixed for subsequent calls.
- Fixed $SNDMSG now sends correct binary/ASCII .
- Fixed Ring tones now repeating on incoming call.
- Fixed Ring indicator fixed for call waiting.
- Fixed periodicity of output event 53, RTC alarm.
- Fixed ADC values in UDP message.
- Fixed event 40, now output message when param2 is 0.
- Fixed Bit 6 of PARAM2 of the Output event is now N/A.
- Fixed Input EVENT 51 & 53 ONLY WORK as OCCURRENCE
- Fixed AT$GPSRD to accept decimal or hex, default Decimal if Hex parameter is omitted
- Fixed Output event 48 to reset counter
- Added Dynamic GEOFNC Input event 54 and output event 49
- Added Input event 60 - number of unsent messages
- Added Input event - 61 Memory % full
- Added output event to emulate AT$EVTEST (50)
- Added output event 52 - TCP reporting transport
- Added RTC output EVENT 53
- Added bit 22 to PARMA2 of the Output event

AT Command Changes:

- Added support for storing up to 6 APNs in AT+CGDCONT
- Changed functionality of AT+CGACT=0 to disconnect all active contexts
- Removed Phonebook facility "AF"
- Changed ATI0 to read Enfora, Inc.
- Changed length of AT$STOATEV from 30 characters to 142 characters
- Added a user AT command: AT$GFDBNC=<out of fence count>,<in fence count> to allow user control of geo-fence debounce values.
- AT over SMS modifications - Added: AT$RESET, AT$EVTEST, AT$GFDBNC
- Modified AT$RTCALRM
- AT$MSGLOGRD - now modified for TCP, last two values reflect pending TCP packets and sent TCP packets.
- Modified the following AT commands for TCPAPI & TCP Reporting - AT$FRIEND, AT$MSGSND .

Default settings changed:

- Default TCP API to disabled

Hardware changes:

- None

Revision History:

Date	Rev	Author	Description
3/9/2007	1.00	Tom Cone	Initial Release