



RELEASE NOTE

Open AT[®] SDK v3.14

Revision: 001
Date: April 2007



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Open AT[®] SDK v3.14 Release Note

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Document Information

Revision	Date	List of revisions	
001	April 30, 2007	Official Release	

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Contents

1	Introduction	5
1.1	Related Documents	5
1.2	Delivered Version Definition	5
1.3	Correction Severity Levels.....	5
1.4	Open AT® SDK v3.14 Content	5
2	Open AT® SDK v3.14 New Services and Modified Interfaces	6
2.1	Open AT® TCP/IP and Internet Plug-Ins.....	6
2.2	Open AT® GTi Plug-In	6
3	Open AT® v6.57c Firmware.....	7
3.1	Delivery	7
3.2	Corrections	7
4	Open AT® IDE v1.02 Update.....	8
4.1	Introduction to Open AT® IDE v1.02.....	8
5	Open AT® OS v3.13 Update.....	9
5.1	Open AT® OS ADL API Update.....	9
5.1.1	Corrections	9
6	Plug-Ins Update	10
6.1	Open AT® TCP/IP and Internet Plug-Ins.....	10
6.2	Open AT® GTi Plug-In	10
7	Restrictions & Known Problems	11
7.1	Known Problems	11
7.2	Open AT® TCP/IP and Internet Plug-Ins Restrictions	14
7.3	Open AT® GTi Plug-In Restrictions	15

1 Introduction

1.1 Related Documents

[1]	Open AT ADL Guide for Open AT v3.13	WM_ASW_OAT_UGD_00006
[2]	Open AT® IP Connectivity Development Guide	WM_DEV_OAT_UGD_021
[3]	FW 6.57c Release Note	WM_DEV_OAT_DVD_277
[4]	Open AT® GTi User Manual	WA_DEV_GTI_UGD_001-004
[5]	Open AT GTi v290 Customer Release Note	WA_DEV_GTI_DVD_017
[6]	Open AT WIP Plugin Internal Release Note	WM_DEV_OAT_DVD_217

1.2 Delivered Version Definition

This definition lists all modifications since the Open AT® SDK v3.13 Release.

1.3 Correction Severity Levels

The *Severity* values have the following meaning:

- 1: Critical
- 2: Major
- 3: Minor
- 4: Improvement

1.4 Open AT® SDK v3.14 Content

- Open AT® IDE v1.02 built on Eclipse™
- Open AT® OS v3.13
- Open AT® FW v6.57c
- Wavecom TCP/IP and Internet v2.00 Plug-Ins version
- Open AT® GTi v290 Plug-In

2 Open AT® SDK v3.14 New Services and Modified Interfaces

2.1 Open AT® TCP/IP and Internet Plug-Ins

The Open AT® SDK v3.14 supports the Open AT® TCP/IP Plug-Ins.

For more information, please refer to Open AT® IP Connectivity Development Guide [2].

2.2 Open AT® GTi Plug-In

The Open AT® SDK v3.14 supports the Open AT® GTi v290 Plug-In, usable to design graphical applications.

For more information, please refer to Open AT® GTi documentation [4] and [5].

3 Open AT® v6.57c Firmware

3.1 Delivery

The Open AT® Firmware v6.57c is delivered on the SDK for all Open AT® compatible Wireless CPU®s.

Firmware version is delivered in separate directories according to the respective countries (as described below).

Country	Firmware delivery directory
China mainland	Firmware\China
India	Firmware\India
South Asia	Firmware\South Asia
All other countries	Firmware\Other Countries

3.2 Corrections

Please refer to Open AT® Firmware v6.57c full Release Note (see the document [3]) for more information on AT commands related new features and corrections.

4 Open AT[®] IDE v1.02 Update

4.1 Introduction to Open AT[®] IDE v1.02

Now built on Eclipse™, this IDE allows any Open AT[®] Developer to select between either Visual.net or Eclipse™ framework to develop its Open AT[®] applications.

5 Open AT® OS v3.13 Update

5.1 Open AT® OS ADL API Update

5.1.1 Corrections

Id	Severity	Description (What/When)	Interface Change
CUS32421	2	An Open AT® application which subscribes to the call service has no way to handle the '+CIEV: 5,1' event on an outgoing call.	No
CUS33954/ CUS34330	1	When you open a second SPI bus on a previously open SPI block, the opening stage seems to be good but in reality the second bus is not opened and if you try to read or write on it, an error -61 is returned.	No
CUS36664	2	The Wireless CPU® resets, when concatenated AT commands are used because of a release of memory space not allocated.	No
CUS37071	2	When up to 2000 A&D cells are created by an application (whatever are the cells' sizes), the adl_adGetCellList function will lead to a Wireless CPU® watchdog reset.	No
CUS37147	2	When the adl_callSetup or adl_callSetupExt functions are used with a phone number longer than 25 characters, the application behaviour becomes unstable. The call cannot be established.	No
CUS37799	2	ADL is not currently supporting the ATQ1 mode; this mode is mandatory to keep an ascendant compatibility with old external applications using only some basic AT commands.	Yes

6 Plug-Ins Update

6.1 Open AT[®] TCP/IP and Internet Plug-Ins

For more information, please refer to Open AT[®] WIP Plug-in Internal Release Note [6].

6.2 Open AT[®] GTi Plug-In

For more information, please refer to Open AT[®] GTi documentation [5].

7 Restrictions & Known Problems

7.1 Known Problems

The Open AT® OS v3.13, IDE v1.02, SDK v3.14 known problems are as follows:

Id	Description (What/When)
ANO28112	In few cases, the GCC C compiler should generate an "strb r3, [sp]" instruction, which is forbidden by the ARM assembler in Thumb mode. A workaround may be found by modifying the C code in order to change the generated assembler one.
CUS27641	An application can not use the "%f" sprintf format with GCC compiler, otherwise the Wireless CPU® will reset.
CUS29602	If an ADL application which subscribes to the Call service is running, if an external application uses one of the ATD/ATA/ATH commands on the UART2, responses are sent on the UART1.
ANO32203	In ADL GPRS service, PDP Header & Data compression options have to be configured in the setup structure.
ANO30624	When 2 timers with the same duration are started successively, the expiration of the second one is received before the first one.
CUS30631	An application subscribes to a fixed size A&D cell, and writes data in it. If the cell is not finalized and a reset is performed, the remaining writable space will be wrong.
ANO30832	+CFUN=1/+WOPEN=1 command response is not received on UART2 with an enabled Open AT application.
ANO31001	After performing a GPRS connection with an external application, if an Open AT® application uses adl_atCmdCreate on this port, responses will never be received.
ANO31386	Basic samples await a response of +WSTR, but it arrives intermediately.
CUS32002/ CUS32003	Interworking problems when receiving an SMS, and a call is released from the remote part.
CUS32006	It is not possible to filter all AT commands when FCM, Call and/or SIM services are running.
CUS32427	An application using the ADL Call service will never receive the NEW_ID event if a second call occurs while first one is already running.
ANO32671	When the RAM is fragmented, if ADL tries to make a too large adl_memGet, in certain cases the Wireless CPU® will be reset by the watchdog.
ANO33284	When sending a large amount of concatenated commands on the serial link, the Wireless CPU® resets after some time.
ANO34708	If an application starts to read backtraces, the application must read all backtraces, or else it is impossible to retrieve all backtraces.

Open AT® SDK v3.14 Release Note Restrictions & Known Problems

Id	Description (What/When)
ANO34986	With the Ping GPRS sample, if more than 256 ping packets are required, the counter of packets restarts from 1 and endless loops.
ANO34992	On the ADL_FCM_EVENT_V24_AT_MODE_EXT event (with a port different than UART1), even if the handler returns FALSE, the port is switched to AT mode, instead of staying in Data mode.
ANO35041	RTK exception backtraces are stored (without any Wireless CPU® reset) when performing a GSM data call with the corresponding ADL FCM flow subscribed.
ANO35043	ADL_RET_ERR_UNKNOWN_HDL is never returned by adl_dacUnsubscribe.
ANO35071	When installing the Open AT® SDK, on some PC configurations, if something goes wrong during the already installed components detection (an error message is displayed); but the components can then be selected and the setup process continues normally.
ANO35411	If an external application uses a basic concatenated command (eg. at&fe0q0v1) including &F, Z or &W commands, it is not possible to modify anymore the AT+CREG and AT+CGREG commands state without the Wireless CPU® reset.
ANO35561	Sending some concatenated commands in a specific sequence, the responses returned by the Wireless CPU® are not in the good order.
ANO35997	Displayed value in TMT is wrong when a "float" is passed in argument with TRACE function. Error occurs when Open AT® application is compiled with a GCC compiler.
ANO35429	When the FCM service is subscribed on one port, and the serial link state is set back to AT mode through the +++ sequence, if the ATO command is entered on any other port, the Wireless CPU® resets.
ANO35467	With the Duplex_Data sample, an adl_memRelease error occurs in full duplex mode after several call operations, if master and slave Wireless CPU® roles are reversed.
ANO35735	With the Duplex_Data sample, if the master Wireless CPU® starts a full duplex call without modifying the default data packets number, the slave Wireless CPU® does not send data packets.
ANO35795	The LCD_Game sample crashes when the AT+GAMESTART=1 command is used.
ANO35826	If some special characters are used for project name (&,) in the Wizard, the project creation fails.
ANO35828	It is impossible to use the sample LCD_clock and Game with the new Q24 series.
ANO35684	When a source file name includes a space character, this one is not correctly processed by the IDE: source file names cannot include a space character.
ANO33533	When the Open AT® SDK is installed for the first time on a computer, Start menu shortcuts do not work. Install Open AT® again solves the problem. Shortcuts can also be modified by removing the 'C:\' statement before the %WMATHOME_DOS% name.
ANO33784	AT+CMGW command freezes when used with a single digit phone number with a running Open AT® application (e.g. AT+CMGW=1).
ANO36121	After a backtrace reset, IOs reserved for SIM level shifter are not viewed from Open AT® application.

Open AT® SDK v3.14 Release Note Restrictions & Known Problems

Id	Description (What/When)
CUS27857	An Open AT® application has no way to retrieve the current state of the ATE command on each external port.
CUS29611	When an application uses the <code>adl_atSendResponse</code> function with the <code>ADL_PORT_NONE</code> port argument, unsolicited responses are sent only on the UART1 port. If the <code>ADL_PORT_UART1</code> argument is used, responses are correctly broadcasted to all ports.
CUS33029	AT+WIND command configuration is not the same according to the AT+WOPEN=0/1 state.
CUS36706	Unexpected and unsolicited +CREG & +CGREG events are sent by the Wireless CPU® when an embedded application is running and the AT&W command is used.
CUS36035	When an <code>adl_callSetup</code> is required too early after the Wireless CPU® reset (eg in the <code>adl_main</code> function), no events are received (success or failure) in the call service handler.
ANO36483	It is impossible to debug a WIP based application using RTE on eclipse platform (it is only available using Visual C++). IDE must be updated in order to manage RTE libraries either for Visual C++ environment, or for Eclipse/MinGW one.
CUS36665	When AT+CREG? is sent from an external application after subscription to this AT command, +CREG response is received twice because the AT+CREG? is automatically subscribed internally by application. Hence, there are two different subscriptions for the same command. This is an ADL limitation which is specified in chapter 2.4 "ADL limitations" in the ADL user guide.
CUS36384	Can't use GPS functionality if your Open AT® application subscribes to SPI.
ANO36794	If the user uses <code>adl_atCmdCreate</code> to send priority command, the last command is repeated as many times as <code>adl_atCmdCreate</code> functions are performed.
ANO37058	After closing the FCM port, but before the CLOSE event is received by the application, if it tries to re-open the same flow, the CLOSE event will be notified to the both handlers: the 'closing' and the 'opening' one.
ANO37743	If an application uses the SIM service with bad handler values (NULL pointers), functions return OK, but any incoming SIM event will lead to the Wireless CPU® reset.
ANO38193	The Basic sample <code>SMS_And_Recall_Flash</code> does not parse correctly received SMS, and hence never recognizes even well-formatted messages.
ANO38319	When unknown handle or NULL handle is used with <code>adl_dacUnsubscribe</code> function, then returned value is "-1" instead of "ADL_RET_ERR_UKNOWN_HDL".
ANO38408	When an Open AT® application is running, after a reset (AT+CFUN=1), +WIND: 0/13/13/14 indications are returned to external application even if this application doesn't sent AT+WIND=<value>.
CUS38686	When "ADL_TMR_TYPE_100MS" timer is subscribed, if "TimerValue" parameter is superior to "0x5E9182" value, the timer will not be set with the required value. Accordingly there is a limitation when "ADL_TMR_TYPE_100MS" timer is used.
CUS38736	The customer will not be able to use the SMS, SIM service if the response list is not provided along with the "adl_atCmdCreate" API.

Open AT® SDK v3.14 Release Note Restrictions & Known Problems

Id	Description (What/When)
CUS38746	The adl_fcmUnsubscribe () API returns incorrect value of FCM flow when called immediately after adl_fcmSubscribe() API.
CUS38792	Service SIM of ADL is not in a good state when the AT+CPIN=XXXX commands is sent by the external application too quickly. A workaround is to check the PIN status like ADL (AT+CPIN?), when +SIM PIN is received wait for 1 second in order to let ADL subscribe to SIM event and then verify the PIN code. The +CME ERROR: 811 will disappear.
ANO38869	After a "bad checksum" error during the X-modem download of a non-compressed file, the downloaded file (firmware or application) is considered as installed. But the binary is corrupted.

7.2 Open AT® TCP/IP and Internet Plug-Ins Restrictions

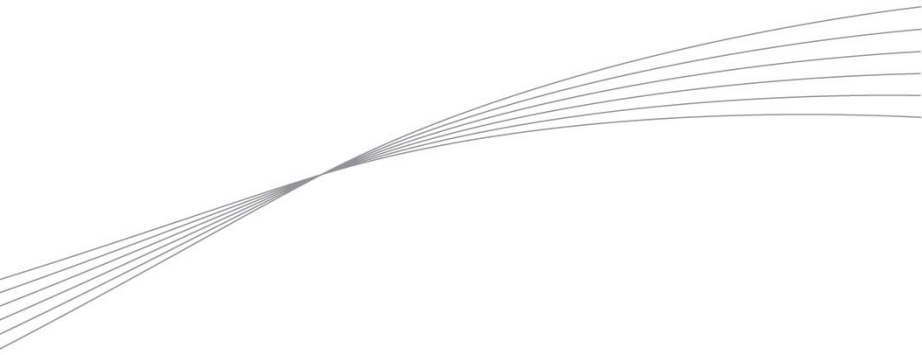
Id	Description (What / When)
ANO35261 ANO34893	When connecting 2 Wireless CPU®s (DCE) with null modem cable, and +WIND indications and echoes are enabled on the concerned serial port, then the Wireless CPU® enters in an endless loop of "watch dog" reset. It occurs with default configuration and one Open AT® application running.
ANO35165	Call events (RING indications) are not forwarded when GSM bearer is connected (even if ADL_CALL_FORWARD is called in a call service subscription).
CUS36800	Using WIP to establish IP based GPRS session with WIPlib (wip_bearerStart()), voice/data call can be managed through regular AT commands (ATD, ...). Nevertheless, even if ATH command can be applied on GSM call (command is taken into account and call is released), ATH does not get back any OK response to acknowledge the command.
ANO36397	It is impossible to debug a WIP based application using RTE on eclipse platform (it is only available using Visual C++).
DEV36499	'common' reserved sample name is displayed in the Wizard samples list (e.g. in the WIP Samples Set). It will not be displayed, since it is not a functional standalone sample.
DEV36500	With some FTP servers, e.g. ftp2.fr.netbsd.org, wip_list() API systematically fails.
DEV36774	PPP connection cannot be established between two Wireless CPU®s on Hutchinson network. The Wireless CPU® configured on server systematically resets when receiving a request from the client. Till that time, the problem has not been reproduced on other networks.
DEV36615	When 100 mails are stored in the maildrop, the getList() may result in a reset of the Wireless CPU®.

Open AT® SDK v3.14 Release Note Restrictions & Known Problems

Id	Description (What / When)
ANO35813	Depending on the parameters provided on WIP stack initialization and the memory available on customer application side, if there is no more memory free for customer application, the "WIP_NET_ERR_NO_MEM" event is not provided within WIP APIs and the Wireless CPU® resets. It can happens on stack initialization (Wip_netinitOpts(...)) or sockets allocations (wip_create(...)). A Protection exists to catch such event. It is done calling ADL function: adl_errSubscribe(adl_errorHandler). It lets the user dealing with the trap event in as adl_errorHandler function.
ANO36804	In some cases, writing on a socket already shut down doesn't cause any error.
DEV36810	When creating a socket with wip_create() just after the call of wip_close() of that socket (same address and port) , the then created socket could not function properly as desired because the socket closing needs time and is not immediate. Workaround has to ensure that the wip_create() is a little delayed from a respectively previous wip_close() call (a delay of one second is necessary).
DEV36639	HTTP client connection channel doesn't emit WIP_CEV_OPEN. User should start using the channel as and when it's created, without waiting for an OPEN event.
DEV36641	The default HTTP version setting, in HTTP client, doesn't always work. Workaround: always specify HTTP version in every request that must be HTTP/1.1.
ANO37901	Setting WIP_COPT_HTTP_VERSION option on the session channel does not change the HTTP version of requests as expected.
CUS37766	TCP Client and PING session creation systematically fails, if the IP address is a DNS entry.
DEV37418	The WIP sample application ftp_list systematically resets on execution over GPRS.

7.3 Open AT® GTi Plug-In Restrictions

For more information, please refer to Open AT® GTi documentation [5].



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