



RELEASE NOTE

6.57 Open AT[®] FW

Revision: 002
Date: November 2006



wavecom[®]
Make it wireless

6.57 Open AT[®] FW Release Note

657_09gg.v13

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Version: **002**

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Table of Contents

1	Introduction	6
1.1	Scope of this Document	6
1.2	Audience for this Document	6
1.3	Release Feature List	6
1.3.1	Main Features Reminder	6
1.3.2	New Key Features	7
1.4	Important Upgrade Information	7
1.5	Dedicated Versions for Specific Markets	7
1.5.1	New Product Introduction	7
1.5.2	Dedicated Version	7
1.5.3	Storage & Marking	8
1.5.4	Availability	8
1.5.5	Warning	8
1.5.6	Firmware Behavior	8
2	Related Documents	9
3	Abbreviations and Definitions	10
4	Hardware Compatibility	11
4.1	Wireless CPU Compatibility	11
4.2	Wireless CPU Description	11
5	Firmware Release Description	12
5.1	Release Identification	12
5.2	Released Files & Download Processes	12
5.2.1	X-Modem Download Mode	13
5.2.1.1	X-Modem configuration required for download	13
5.2.1.2	Common Files required for download	13
5.2.1.3	Download procedure	14
5.2.1.4	Specific GPS Files (only for Q2501B series)	14
5.2.2	DwlWin Download Mode	14
5.2.2.1	DWLWin configuration required for download	14
5.2.2.2	Common Files required for download	15
5.2.2.3	Download procedure	15
5.2.2.4	Specific GPS Files (only for Q2501B series)	15
5.3	Software Tools Version	16
6	Firmware Description	17
6.1	Validated Corrections/Improvement	17
6.2	Other Interface Changes	23
6.2.1	New Default Value for Audio Parameters	23
6.2.2	Phonebook Selected by Default	23

November 20, 2006

6.3	New Features	23
6.3.1	New Q24 Series Wireless CPUs Management	23
6.3.2	ENS	23
6.3.3	7 Cells Timing Advance	23
6.3.4	Open AT® GTi Plug-In	23
6.3.5	I2C Hard	23
6.3.6	Management SIM 1,8/3/5V	24
6.3.7	Wavecom TCP/IP and Internet Protocol Plug-Ins Compatibility	24
6.3.8	SIM Holder	24
6.3.9	DAC Management	24
6.4	Additional Information	25
6.4.1	Start-up Time	25
6.4.1.1	AT available start-up time	25
6.4.1.2	OAT start-up time	25
6.5	Certification Compliance	25
6.5.1	GCF-CC & PTCRB	26
6.6	Restrictions	26
6.6.1	Common to all Wireless CPUs	26
6.6.2	Specific to M1306B Modem	28

1 Introduction

1.1 Scope of this Document

The scope of this document is the **6.57 Open AT® FW** release description for Wireless CPU new **Q24 series (Q24 Classic, Q24 Plus, Q24 Extended and Q24 Auto), Q2406B, Q2426B and Q2501B** series.

1.2 Audience for this Document

This Release note may be distributed to all direct and indirect customers and will be posted on the corporate web site under the Support/Private area.

1.3 Release Feature List

1.3.1 Main Features Reminder

Main Features list	FW version
	6.57
Multiple UART management	X
Extended SMS Storage: up to 99 in Flash	X
Extended Phone Book Management (Name, 5 numbers, address, e-mail, group)	X
Low Power consumption for the Wireless CPU with disconnected mode (Radio and protocol stack off: but Open AT® Application running)	X
Interruption PIN Management	X
GPS Management (Q2501B only)	X
Extended characters	X
SIM Speed Enhancement default activation	X
Specific Country Lock implementation	X
Activation of battery charging on Q2501B	X
Long phonebook numbers management	X
Update of AT+WTONE (2 frequencies allowed)	X
STK Setup Call function	X
SPI Management	X
Interface change : AT+WMFM	X
Over The Air firmware upgrade capability	X

Main Features list	FW version
	6.57
Fast Charging Mode	X
Control +CSQ unsolicited response frequency	X
Control +WBCI unsolicited response frequency	X
GSM 27.010 multiplexing on UART1 or UART2	X
Easy Data Logging	X
Bluetooth SAP Client	X
Open AT® MIPS Enhancement	X

1.3.2 New Key Features

Key Features list	FW version
	6.57
New Q24 series Wireless CPUs management	X
ENS (Enhanced Network Selection)	X
7 Cells Timing Advance	X
Open® AT GTI (Open AT® Plug-In)	X
I2C hard	X
Management SIM 1,8/3/5V	X
Wavecom TCP/IP and Internet Protocol Plug-Ins Compatibility	X
SIM holder	X
DAC management API for Q2501B Wireless CPUs	X

For more details on these features please refer to Chapter 6.3.

1.4 Important Upgrade Information

To upgrade from versions before X5x (X41b, X43), it is **MANDATORY** to follow the procedure as explained in the Chapter 5.2.1.2.2 for Xmodem procedure and Chapter 5.2.2.2.2 for DWLWin procedure.

1.5 Dedicated Versions for Specific Markets

1.5.1 New Product Introduction

For specific market requirements, additional “country dedicated” of Wireless CPU versions have been launched.

1.5.2 Dedicated Version

As these products are tailored for dedicated countries, they are locked to only function with the selected countries available carriers. These products will not be compatible with the previous FW versions on the branch (refer to Chapter 5.1). Obviously Wavecom will perform maintenance on these products in the same way as it has done on other products.

1.5.3 Storage & Marking

For dedicated countries versions, the FW Configuration of this version includes the mention "CCx" in the Product Code file, where x indicates the Country.

The FW configuration will only appear on the pizza box. Special attention is required to manage the storage of this FW configuration as it is the only way to distinguish the product.

1.5.4 Availability

FW versions available on the Wavecom web site are only for no-dedicated products.

In order to obtain Firmware versions for updating the products dedicated to specific countries, contact your Wavecom technical support.

1.5.5 Warning

Standard 6.57 firmware not tuned for dedicated countries must not be used on Wireless CPUs that are dedicated to a specific country, due to incompatibility occurs. In this case, the message BAD SOFTWARE is displayed (refer to the "AT Command Interface Guide" for more information on this message). This can be rectified by re-downloading a compatible version.

1.5.6 Firmware Behavior

The specific country lock feature is aimed at locking a Wireless CPU use to a pre-determined list of countries.

⇒ The use of Wireless CPUs for no-allowed countries is forbidden. If this is attempted, the message "**SIM NOT ALLOWED FOR THIS MODULE**" is sent, the Wireless CPU reset and AT SIM commands are no possible.

⇒ Wireless CPU upgrade by using a specific country lock version is irreversible. Effectively, all Wireless CPU upgrades performed by using such a version cannot use previous firmware versions. If this is attempted, a message "**BAD SOFTWARE**" will be displayed.

2 Related Documents

[1]	AT Commands Interface Guide for revision 6.57	WM_ASW_OAT_UGD_00044-004
[2]	Specific Bluetooth AT Commands Interface Guide	WM_ASW_BLU_UGD_001
[3]	Q2501 : Specific GPS AT commands Interface Guide (X55)	WM_RNASW_Q2501_UGD_001

3 Abbreviations and Definitions

STK : SIM Toolkit
UGD: User Guide
WM : Wavecom
FW : Firmware

4 Hardware Compatibility

4.1 Wireless CPU Compatibility

6.57 Open AT® Firmware Version	Wireless CPU compatibility list
6.57	New Q24 series Q2406B Q2426B Q2501B

4.2 Wireless CPU Description

Wireless CPU	Description	OneC AMR	Flash size (Mb)	RAM size (Mb)	UFL	MMS	SIM Holder	Gps	Gsm 850	Gsm 1900	Gsm 900	Gsm 1800	Gprs
Q2406B	Q2406B	N	32	4	N	N	N	N	N	N	Y	Y	Y
Q2426B	Q2426B	Y	32	4	N	N	N	N	Y	Y	N	N	Y
Q2501B	Q2501B	N	32	4	N	N	N	Y	N	N	Y	Y	Y
Q24CL001	Q24 Classic	Y	32	16	N	N	N	N	Y	Y	Y	Y	N
Q24CL002	Q24 Classic HR Codec	N	32	16	N	N	N	N	Y	Y	Y	Y	N
Q24CL003	Q24 Classic with SIM holder	Y	32	16	N	N	Y	N	Y	Y	Y	Y	N
Q24CL004	Q24 Classic HR w. SIM holder	N	32	16	N	N	Y	N	Y	Y	Y	Y	N
Q24PL001	Q24 Plus	Y	32	16	N	N	N	N	Y	Y	Y	Y	Y
Q24PL002	Q24 Plus HR codec	N	32	16	N	N	N	N	Y	Y	Y	Y	Y
Q24PL003	Q24 Plus with Sim holder	Y	32	16	N	N	Y	N	Y	Y	Y	Y	Y
Q24PL004	Q24 Plus HR w. Sim holder	N	32	16	N	N	Y	N	Y	Y	Y	Y	Y
Q24PL005	Q24 Plus AMR dual-band US	Y	32	16	N	N	N	N	Y	Y	N	N	Y
Q24PL006	Q24 Plus w. Sim hold dual-band US	Y	32	16	N	N	Y	N	Y	Y	N	N	Y
Q24EX001	Q24 Extended	Y	32	4	N	N	N	N	Y	Y	Y	Y	Y
Q24EX002	Q24 Extended HR	N	32	4	N	N	N	N	Y	Y	Y	Y	Y
Q24AU001	Q24 Auto with MMS	Y	32	4	N	Y	N	N	Y	Y	Y	Y	Y
Q24AU002	Q24 Auto with UFL	Y	32	4	Y	N	N	N	Y	Y	Y	Y	Y
Q24AU003	Q24 Auto with MMS	N	32	4	N	Y	N	N	Y	Y	Y	Y	Y

5 Firmware Release Description

5.1 Release Identification

New Q24, Q2406B, Q2426B, Q2501B - Series	
Date of generation	October 27, 2006
Firmware identification	657_09gm.Q24CL001
	657_09gm.Q24CL002
	657_09gm.Q24CL003
	657_09gm.Q24CL004
	657_09gg.Q24PL001
	657_09gg.Q24PL002
	657_09gg.Q24PL003
	657_09gg.Q24PL004
	657_09gg.Q24PL005
	657_09gg.Q24PL006
	657_09gg.Q2501B
	657_09gg.Q2406B
	657_09gg.Q2426B
	657_09gg.Q24EX001
	657_09gg.Q24EX002
	657_09gg.Q24AU001
657_09gg.Q24AU002	
657_09gg.Q24AU003	
IMEISV	19
Checksum	6.57 0x32 9F F0 2E
Open AT® version	V3.12
Xmodem downloader	V2.1B
Previous Official Release on the Branch	6.55

5.2 Released Files & Download Processes

This section describes the files that need to be downloaded on the Wireless CPU either with DwlWin tool or with HyperTerminal software.

5.2.1 X-Modem Download Mode

5.2.1.1 X-Modem configuration required for download

In order to download the FW by using the X-Modem protocol, the following configurations and conditions have to be set:

- Create an Hyper Terminal connection on COM port with following parameters:
 - *Bit/Second* **115200**
 - *Data Bit* **8**
 - *Parity* **None**
 - *Bit Stop* **1**
 - *Flow Control* **Hardware**
- A version of AT firmware must be already downloaded on the Wireless CPU

Warning: Activating the Hardware Flow Control is mandatory when downloading via X-Modem, otherwise download may fail.

5.2.1.2 Common Files required for download

5.2.1.2.1 Upgrade from X.5x versions to 6.57

The file to download depends on the HW platform. This file has the following name:

- **657_full_<Wireless CPU_Type>.dwl**

The content of this file is the following:

- 6.57 binary version,
- Common E2P configuration (w.dwl file),
- E2P configuration specific to <Wireless CPU_Type> Wireless CPU.

Example: 657_full_q2406b.dwl is the file to download on a Wireless CPU Q2406B.

5.2.1.2.2 Upgrade from X.4x versions to 6.57

To upgrade from versions before X5x (X41b, X43), it is **MANDATORY** to download the following file instead of *X57_full_<Wireless CPU_Type>.dwl*:

- **657_full_A&D_init_<Wireless CPU_Type>.dwl**

This file includes the file **dota.dwl** which initializes the DOTA memory parameters.

If this file is not used, the Wireless CPU may fall in a wrong state, which is indicated by the error "Fault 04". To recover from this state, it is **MANDATORY** to use the DWLWin procedure (see Chapter 5.2.2.5).

For other upgrade procedures, the file **657_full_A&D_init_<Wireless CPU_Type>.dwl** must **NOT** be used, otherwise data stored in the DOTA memory may be erased.

5.2.1.3 Download procedure

The following procedure has to be performed in order to download the FW in the Wireless CPU:

- Connect the Starter Kit on this COM port and start the Wireless CPU.
- Enter "at<CR>" on the Hyper Terminal windows. Wireless CPU has to answer:
"OK"
- Check the current downloader (dwl) on the Wireless CPU side. It must be the same or compatible to the embedded one in the new binary (see the Xmodem downloader version in the table paragraph 5.1).

Note: To recall the current dwl version, enter "at+wdwl?<CR>" on the Hyper terminal. The Wireless CPU answers:

"+WDWL: V<downloader version>"

If existing downloader is not the good one, the new downloader has to be reloaded first. In order to download it, use the following process and select "dwl.dwl" as file to download. When download is completed and the Wireless CPU has been reset, repeat the following procedure to download the new AT binary.

- Enter "at+wdwl<CR>" to start the download. Wireless CPU has to answer:

"+WDWL: 0
|||||....."

- Enter menu "Transfer/Send a file"
- Select protocol: "1k Xmodem"
- Select the *dwl* file to download.
- Validate so that the download starts.
- When new characters "█" are received, the download is finished.
- Reset the Wireless CPU by using the command "AT+CFUN=1" and wait for the "OK" answer.

5.2.1.4 Specific GPS Files (only for Q2501B series)

Not applicable (the GPS file can only be downloaded by using the DWLWin tool).

5.2.2 DwlWin Download Mode

5.2.2.1 DWLWin configuration required for download

Before launching the download process, the DWLWin tool has to be configured as following:

- Select CPU type field according to the Wireless CPU series:
 - **WISMO 2-3** For Q24X6B series Wireless CPUs
 - **Q2501** For Q2501B Wireless CPU
 - **Q24NG** For new Q24 series Wireless CPUs
- Select "Erase objects" and "Erase Customization Files" options

5.2.2.2 Common Files required for download

5.2.2.2.1 Upgrade from X.5x versions to 6.57

The E2P parameters to download depend on the HW platform. For this reason, two files must be downloaded for E2P parameters:

- **pro-dwl.wpb** (Binary)
- **w.e2p** (Generic E2P file)
- **<Wireless CPU><FlashType>.e2p** (Wireless CPU specific E2P file)
For example: 'q2406b.e2p' for Q2406 Wireless CPU with flash type B (32/4)

Warning: All these files must be downloaded at the same time.

5.2.2.2.2 Upgrade from X.4x versions to 6.57

To upgrade from versions before X5x (X41b, X43), it is **MANDATORY** to download the file **dota.e2p** in addition to the common files. Hence, the files to download in this case are:

- **pro-dwl.wpb** (Binary)
- **w.e2p** (Generic E2P file)
- **<Wireless CPU><FlashType>.e2p** (Wireless CPU specific E2P file)
- **dota.e2p**

The file **dota.e2p** initializes the DOTA memory parameters.

If this file is not used, the Wireless CPU may fall in a wrong state, which is indicated by the error "Fault 04". Downloading **dota.e2p** file only is enough to recover from this state.

For other upgrade procedures, the file **dota.e2p** must **NOT** be used, otherwise data stored in the DOTA memory may be erased.

5.2.2.3 Download procedure

Refer to "DWLWin Help" provided in the "DWLWin tool".

5.2.2.4 Specific GPS Files (only for Q2501B series)

The GPS following file must be downloaded for the Q2501B Wireless CPU version:

- **<CodeSoft>_300-gps.wpb** (GPS binary file)

Warning: According to the restriction ANO36398, after a download session with DWLWin, a hardware reset is mandatory.

5.3 Software Tools Version

This section gives the last Wavecom tools versions.

S/W Tools Name	Version
DwlWin Downloader	v.4.1.1.0
Target Monitoring Tool (TMT)	V2.9.4
TMT Workspace	B57n09gx.v13 64k.wks

6 Firmware Description

The *Severity* values have the following meaning:

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

6.1 Validated Corrections/Improvement

This section gives the list of all corrections or improvements integrated in the 6.57 version from the 6.55 version.

Items are sorted by Impacted Domain and Sub Domain.

Id	Description (What / When)	Impacted Domain	Impacted Sub Domain	Severity
34447	In dedicated mode, No TA shall be retrieved for neighbour cells and TA for Serving MUST be the last measured one	AT	OTHER	1
ANO34807	Module resets when GID parameter is missing in double quotes for AT+WLCK command.	AT	OTHER	1
CUS35345	+WSVN accepts value above 98 whereas the higher value should be 98.	AT	OTHER	1
30366	After a GPS stop (AT+WGPSM=0,0), Antenna is not correctly powered off .Because of that consumption is too high	AT	OTHER	1
31701	Board traps when SMS ends with 0x0D and cumulated precisely 160 chars (= max) with some SIM	AT	OTHER	1
30410	GPS UART speed cannot be changed using AT+WGPSCONF=1,<baudrate> command. This results on an incorrect speed setting.	AT	OTHER	1
32572	If CPHS sim card, at+cops=? command answer wrong PLMN names	AT	OTHER	1
33815	Impossible to use remote SIM, +CME ERROR 13 received when trying to use remote SIM	AT	OTHER	1
32027	Reading all phonebook entries in flash on one uart and reading all SMS in flash on another uart at same time can block one uart. All entries on each uart should be read	AT	OTHER	1
31267	Reset when stopping NMEA indications on uart1	AT	OTHER	1
30670	When 4 logical channels are opened using CMUX command and GSMdata call is performed on one of the logical channels, CONNECT response is missing on that channel.	AT	OTHER	1
32752	When Airplane mode is set using AT+WBHV=1,1 command the module registers and then deregisters to the network. Module shouldn't register to the network.	AT	OTHER	1
ANO34665	Command at+wbcm=? should answer OK only.	AT	OTHER	2
CUS35270	The tone duration for DTMF cannot be modified through	AT	OTHER	2

Id	Description (What / When)	Impacted Domain	Impacted Sub Domain	Severity
	OpenAT® Application.			
CUS36045	When one IO is used by SIM voltage feature, the precedent appears reserved from Open at	AT	OTHER	2
33393	After an Open AT application, which has subscribed for +WBCI indications, is stopped, AT+WBCM command from the external application returns +CME ERROR: 552	AT	OTHER	2
33295	AT+CLCC displays incorrect name field for numbers not present in the phonebook while multiple calls are in progress.	AT	OTHER	2
32684	AT+COPS=? returns an empty name for the 5 digits PLMN when the previous PLMN listed is of 6 digits	AT	OTHER	2
34172	Different PLMN name is displayed for MCC-MNC combination when MCCs match and MNCs are different for E-ONS.	AT	OTHER	2
33711	The intermediate response CONNECT is not received as a response for AT+CGATA command when an OAT application is running	AT	OTHER	2
31091	Voice call can not be disconnected from the receiver side, when ProComm is used or when disconnection is tried by lowering the DTR.	AT	OTHER	2
31170	When a call is setup with a number having 'P' modifier at the beginning, call fails with a CEER error cause 96. This does not allow to setup a call if 'p' modifier is used	AT	OTHER	2
31173	When an Open-AT application is running, there is no way to enable the Wavecom Muxtiplexing protocol on the serial link (AT+WMUX=1 command has no effect)...	AT	OTHER	2
30275	When AT+WBHV=1,1 is set the module cannot be switched off using AT+CPOF command.	AT	OTHER	2
ANO34671	When SIM is removed and re-inserted, AT+CPIN results in CME ERROR: 10 or CME ERROR: 13 and module gets blocked.	AT	OTHER	2
33710	When USSD is sent in hexadecimal format with character set "HEX", +CUSD: 4 is returned	AT	OTHER	2
32495	When WMUX is enabled and AT+CFUN=1 command is issued, OK and +WIND: 3 indications are displayed before WMUX is re-initialized. This causes incorrect behaviour in external applications	AT	OTHER	2
33187	When AT+WIMEI? command is executed consecutively for 20-25 times, the module resets.	AT	OTHER	2
27473	Manual guide is not consistent against CALA supported	AT	OTHER	3
28266	When Puk1 is burned & CHV1 is still available , it's impossible to enter the PIN code using AT+CPIN=<pin> command	AT	OTHER	3
CUS35125	The "AT+CSCB" command returns "+CMS ERROR: 302" with a HUTCH PREPAID Pink Sim Card when Cell Broadcast Message Identifier feature is not allocated and activated in the SIM Service table (SST).	AT	OTHER	3
27081	Add a new command AT+WERR to get Sw1Sw2 error code from SIM when receiving a SIM_ERROR_IND	AT	OTHER	3
32682	AT+WOPN command does not display the PLMN names when a wild card character is used.	AT	OTHER	3

Id	Description (What / When)	Impacted Domain	Impacted Sub Domain	Severity
27361	If SIM_PRES feature is deactivated and SIM card is removed during a GPRS session, GPRS session is not ended. GPRS session should be ended.	AT	OTHER	3
32399	Minimum battery level should be handle dynamically: so 3.3V for Q24XX and 3.4V for Q2501B	AT	OTHER	3
31195	The default value of AT+WDR command is set to +WDR: 2,1 (Half rate for data calls is allowed) though Wavecom module does not support Half-rate for data calls.	AT	OTHER	3
31840	The module reset and returns back Trace when AT+CFUN=0 command is given just after detaching GPRS using CGATT command	AT	OTHER	3
31174	With a running Open-AT application, if serial link configuration commands are concatenated with the AT&W one (Eg. AT+IFC=0,0;&W), the new configuration will not be stored in E2P memory.	AT	OTHER	3
ANO34837	Test 27.22.4.2.7 seq 7.1 failed: bad terminal response in case of response for a "Get Inkey" with help information required by user	AT	STK	1
ANO34838	Test 27.22.4.3.5 seq 5.1 failed : the field "default text" is not displayed in a Get Input	AT	STK	1
ANO34869	Test 27.22.4.8.1seq 1.1: test failed, at the last proactive command from the SIM, the module should display +STGI:"" to indicate that all is removed from the menu system.	AT	STK	2
34009	AT+CPBN command gives wrong responses after a message is read	AT	PHONEBOOK	2
31039	Module returns CME ERROR:13 on making a call with SIM that doesn't have alpha field	AT	PHONEBOOK	2
31169	When the module is reset immediately after writing multiple phonebook entries few of the entries are lost.	AT	PHONEBOOK	2
31196	When an AT command is sent immediately after WIND: 4 is received (due to FDN feature deactivation), an error +CME ERROR: 515 is returned by the module.	AT	PHONEBOOK	3
28602	On a specific Orange UK SIM card, it's impossible to read a received SMS status report with location 1	AT	SMS	1
32951	When a SMS tries to be sent in PDU mode with a too long PDU data, the module resets. The module should returned a +CMS ERROR and should not reset	AT	SMS	1
32754	On resetting the module, the value of the CNMI parameter saved by command AT+CSAS is not retained.	AT	SMS	2
31330	A SMS that is received when the module is powered off is by default stored in SIM even though the storage area has been selected as ME using AT+CPMS command.	AT	SMS	3
32733	Improper validation for Data Coding Scheme performed while handling DCS value is set using AT+CSMP command.	AT	SMS	3
32384	When AT+CMGS command is executed and <ESC> character is given after the text is entered, two OK responses are received. This happens when Open AT application is running in the background	AT	SMS	3
ANO34755	When the destination address contains blank spaces while	AT	SMS	3

Id	Description (What / When)	Impacted Domain	Impacted Sub Domain	Severity
	saving or sending message, CME ERROR: 305 is returned indicating invalid text mode parameter			
ANO35259	After a IMSI refresh (tests 27.22.4.7.2 seq2.1 and 2.2), an IMSI refresh should be sent by the Wireless CPU to the network. This IMSI refresh is not sent and the IMSI REFRESH is not made. After an IMSI REFRESH, an IMSI ATTACH should be sent to the network and the IMSI should be changed	AT	STK	1
ANO35256	During IMSI REFRESH, the EF PHASE should be read to indicate to the JAVA application embedded in the SIM card that the IMSI can be changed. Because the Wireless CPU does not read this file, the IMSI is not changed. The EF PHASE should be read and the IMSI REFRESH should work	AT	STK	1
33152	On 27.22.4.8.3.1 & 27.22.4.9.2.1 tests, the Next Action Indicator is only displayed on the first item. All items should have this field present in +STGI responses.	AT	STK	1
31708	PTCRB certification test n° 27.22.4.7.1 (sim toolkit) Seq 1.3 is failed	AT	STK	1
28549	PTCRB certification test n° 27.22.7.5 (sim toolkit). No action is possible as +STIN:99 is coming too quickly	AT	STK	1
28547	PTCRB certification test n° 27.22.7.2.2 (sim toolkit). No action is required (no +STIN:11 received !!) and the test is then Failed	AT	STK	1
32842	When camping on a new cell, the MS sent two "Event Downloads" (Location Status) to the SIM. Only one "Event Download" (Location Status) must be send.	AT	STK	1
32917	When on Manual selection, the Event Dwl (location status) always specified "Limited Service", even if the MS is attached on the network	AT	STK	1
33386	When the SIM is removed and inserted several times, the CPU resets with RTK exception.	AT	STK	1
32918	After a Switch On the MS sends to the SIM an Event Dwl (Location status) indicating 'Limited Service', even before any attempt to attach any network. It should not send this Event Dwl	AT	STK	2
32251	During STK refresh with init (no IMSI refresh) the MS sends unsolicited +CREG when it is registered yet	AT	STK	2
32840	When camping on a cell, the MS sends to the SIM an Event Download (Location Status) containing the information about the cell (MNC/MCC/LAI/CID). The CID value is wrong, it is equal to LAI value	AT	STK	2
32331	When the service disconnection is done by a signal lost, the unsolicited disconnection message is sent, but after that it's no more possible to stop the Bluetooth stack. The Bluetooth stop (AT+WBTM=0) AT command never end.	BLUETOOTH	BLUETOOTH_CORE	1
30060	It's impossible to stop the Bluetooth host stack when a APDU transfert still in progress.	BLUETOOTH	SAP	1
29254	When we use the Nokia 9300 as SAP server, we need 3 or 4 attempts to establish successfully the SAP connection.	BLUETOOTH	SAP	2
31475	Data transfer can't be performed in RLP+V42Bis mode.	DATA	RLP	2

Id	Description (What / When)	Impacted Domain	Impacted Sub Domain	Severity
30618	AT+WGPSCONF=2 returns incorrect temperature value.	DEVICE	ADC	2
33105	Impossible to transmit a FAX on CMUX port.	DEVICE	CMUX	1
31426	Mismatch between the display and the DLC number attribution	DEVICE	MUX	1
33050	If WM_BUS_SPI_LSB_FIRST parameter is used for read operation then the module crash	DEVICE	IOB	2
31351	when connected online in a HAPC /WMU X mode, none encapsulated AT commands might be considered as data flow	DEVICE	N/A	1
31384	End of Fax reception is sometimes not properly done : received FAX is seen as not complete.	DEVICE	N/A	2
31301	Setting framing to a 8N1 configuration and then the autobaud mode is allowed despite user guide specification	DEVICE	N/A	2
33110	Using TMT, radio uplink data are parsed for AT commands. Some Data are lost.	DEVICE	V24	1
31225	With autobaud synchronization previously active in command mode, if user application is dropping DTR signal while data call and data transfer towards modem is going on afterwards, there is a blocking of the UART and then any AT commands can be captured.	DEVICE	V24	1
33109	Behaviour changed from X5x>5 to X6x : IPR 0 command (Autobaud) is not applied and other values are applied on virtual port but are not relevant for physical part. This is a interfaces change.	DEVICE	V24	2
32414	When an application tries to read/write more than 520 bytes from/on the SPI or I2C bus, the modules reset.	DEVICE	V24	2
33567	Module frozen when downloading special Open AT appli on INTEL flash	DWL	OTHER	1
32598	GPO2 value switches from 0 to 1 when downloading by Xmodem	DWL	OTHER	2
32448	Using adl_adFormat API on OAT can cause a wireless CPU freeze	FLASH	DOTA	1
ANO36028	Impossible to start a call if the network allocates a TCH/H for signalling.	GSM	CC	1
32366	Incoming setup containing value X75 in field UIL2P is considered as bad.	GSM	CC	1
34281	TC 26.2.4_P4 failed	GSM	CC	1
ANO36175	TC 42.4.2.1.3 failed: mandatory for GCF & PTCRB.	GPRS	CELL_RESE L	1
33274	Reset after cell reselection in GPRS transfer mode can happen.	GPRS	CELL_RESE L	1
32847	When the SIM has for Access Class (ACC 5, 11 and 15) and the network allows the ACC 10,11 & 15, the MS should not be able to access on VPLMN.	GSM	CELL_SEL	2
ANO35033	TC 26.7.4.3.2 failed.	GSM	MM	2
ANO34700	CMU test under Test Director A_CMU_GSM_0001 Manual test : A_CC_0100 List of script CETI (modified): • CALL4.cpp • CALL7.cpp	GSM	N/A	1

Id	Description (What / When)	Impacted Domain	Impacted Sub Domain	Severity
	<ul style="list-style-type: none"> • CALL9.cpp • CALL19.cpp • Call_hold.cpp • Voice_MOC.cpp • Voice_MTC.cpp 			
33451	During GPRS Transfer, the MS received a polling indication from the network before a timeslot reconfiguration request. A polling response is sent in return but does not match the new allocation bitmap, and the module is reset	GPRS	OTHER	1
ANO35308	TC 26.6.5.1 failed	GSM	OTHER	1
32637	Attach nearly impossible with Non ENS SIM, if ENS activated!	GSM	PLMN_SEL	1
ANO35035	Operator PLMN list not taken account during PLMN reselection.	GSM	PLMN_SEL	1
32674	Reset if the HPLMN Scan timer is disabled before the boot Timer!	GSM	PLMN_SEL	1
32619	STK Refresh of EF HPLMN file not correctly managed.	GSM	PLMN_SEL	1
31343	A5/2 Algorithm to remove	GSM	RR	1
29570	Bad echo cancellation efficiency during voice call when NmbTaps parameter is out of range	HWL	AUDIO	3
29333	PTCRB tests 26.16.9.8 and 26.16.9.11 (AMR RATSCCH) failed	HWL	MODEM	1
28120	Not compliant for PTCRB 3.1.2	HWL	OTHER	2
ANO35419	TC 15 failed	HWL	RF	1
ANO35220	When network try to activate PDP context session from the MS and we are in automatic answer mode, the MS resets	OTHER	OTHER	3
33266	Using +CAMP, +CPUC, +CACM 3 times with a wrong PIN 2/CHV 2 code, AT+CPIN? returns +CPIN: SIM PUK instead of +CPIN: SIM PUK2 and entering PUK 2 using ATD**052*<puk2>*<pin2>*<pin2># is refused. This last command should be accepted and the PIN 2 unblocked	SIM	OTHER	1
29880	Tests 27.17.2.1.1 and 27.17.2.1.2 failed with Q3106 module	SIM	RESET	1
DEV35952	No response from the wireless CPU after AT+CFUN=1 (no AT commands, no TMT synchronization). The wireless CPU seems "frozen".	SYS	INIT	1
ANO35206	Wireless CPU does not respond when hardware reset is done during an installation while doing DOTA	SYS	OTHER	1
34335	Module completely stucked, HW reset needed	SYS	OTHER	1
32570	After typing AT+WDWL, the module is frozen and there is no NACK (0x15) character on the UART1 serial link. A few minutes later, the module resets because of a RTK exception (no more envelops). Then the Xmodem downloader starts and the NACK appear on the serial link.	SYS	OTHER	2

6.2 Other Interface Changes

6.2.1 New Default Value for Audio Parameters

The default parameters for the following AT commands +VGR, +VGT, +SIDET have been changed; the new values are listed below:

+VGR: 128

+VGT: 32

+SIDET: 1,2

6.2.2 Phonebook Selected by Default

The previously selected phonebook remains the same when the wireless CPU is switched on or reset, even if a new SIM card is inserted. However, in the case when the replacement SIM card does not contain any selected phonebook, the ADN phonebook is selected.

6.3 New Features

This section lists the new features of 6.57 Open AT® FW.

6.3.1 New Q24 Series Wireless CPUs Management

Open AT® FW 6.57 is compatible with the New Q24 series Wireless CPUs.

6.3.2 ENS

ENS stands for "Enhanced Network Selection" and is a requirement for Cingular (US carrier).

ENS works by letting the device to choose a tower (from cingular orange and Cingular blue) that has a better signal even if the network on that tower is not the "home network":

- Without the user having to do anything or even being aware of what is going on
- The user benefit is a better signal reception and better a battery life (devices stop scanning for different network)

6.3.3 7 Cells Timing Advance

7 cells TA Feature allows to provide timing advance information for the main cell and its 6 neighbour cells. For more information, refer to the +CCED command description in [1].

6.3.4 Open AT® GTi Plug-In

Open AT® GTI Plug-In enables Wavecom to seamlessly develop Graphical User Interface. This feature is validated on new Q24 series Wireless CPUs only.

6.3.5 I2C Hard

The user can access the I²C bus.

6.3.6 Management SIM 1,8/3/5V

1,8v and 3v SIM cards are managed by this firmware.

6.3.7 Wavecom TCP/IP and Internet Protocol Plug-Ins Compatibility

This firmware is compatible with the New Wavecom TCP/IP and Internet Plug-Ins.

6.3.8 SIM Holder

A new e2p parameter has been added in the e2p file of each Wireless CPU, in order to indicate if a SIM holder is available. When SIM holder is available, the feature SIM removal is deactivated, and is no more available with command AT+WFM.

6.3.9 DAC Management

DAC stands for Digital Audio Converter. This feature allows to convert a digital (usually binary) code to an analog signal (current, voltage or charges)

Typical uses include:

- Digital generation of audio signals (most modern audio signals are stored in digital form like MP3 and in order to be heard through speakers they must be converted into an analog signal)
- Conversion of video signals from a digital source (such as computer) to an analog form if they are to be displayed on an analog monitor

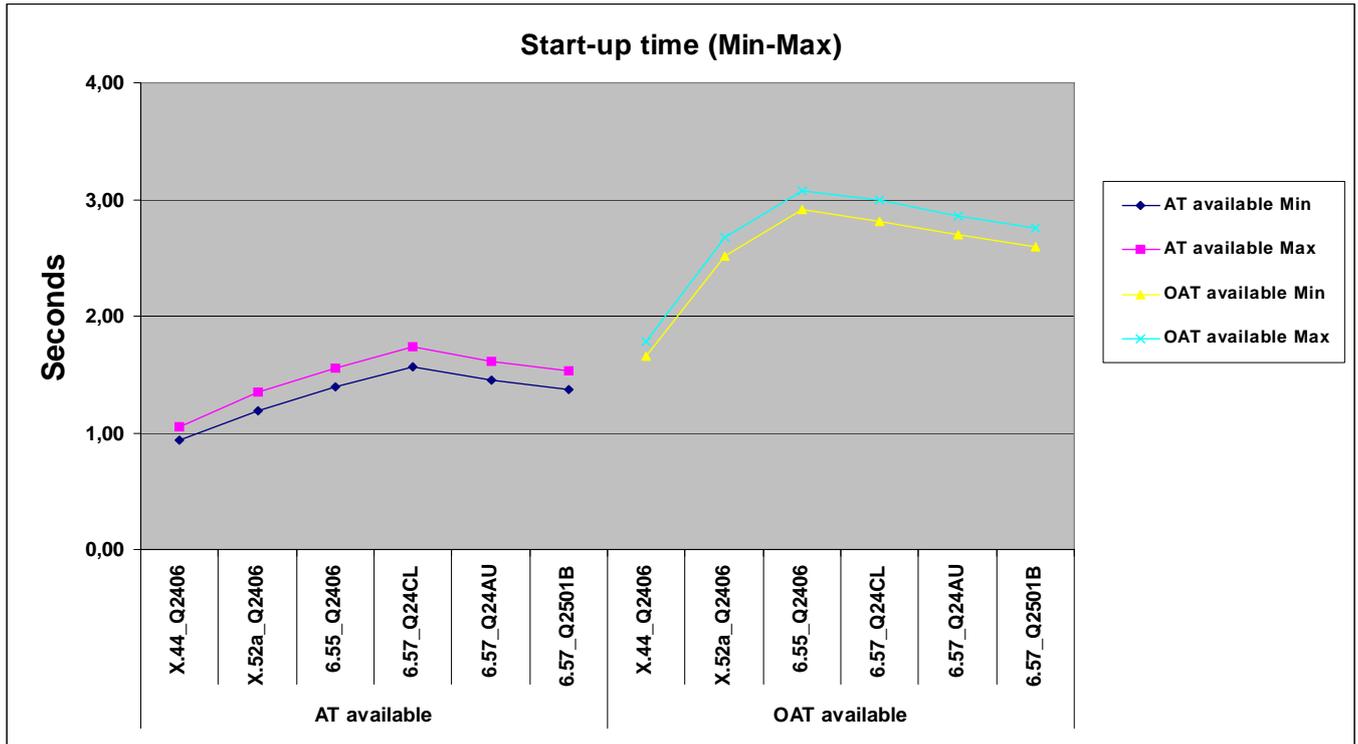
8 bit precision DAC:

- Most important characteristic is the resolution
- 8 bit DAC is designed for 256 levels

DAC can be managed by Open AT® APIs and is available for Q2501B Wireless CPU only.

6.4 Additional Information

6.4.1 Start-up Time



6.4.1.1 AT available start-up time

AT available start-up time is the time elapsed between a hardware reset and unsolicited AT response +WIND: 3 on terminal sent by the wireless CPU. The whole set of AT commands included in the wireless CPU is not available at this moment, all commands relative to SIM are still locked until SIM init complete (+WIND: 4).

6.4.1.2 OAT start-up time

OAT start-up time represent the elapsed time between reset and Open AT® application gets hand; entry point `adl_main()` has been reached by the application.

6.5 Certification Compliance

All the platforms are compliant to R&TTE EN 301 419-1 v4.1.1 and EN 301 511 v7.0.1.

6.5.1 GCF-CC & PTCRB

The following table sums up the certifications passed for this firmware version or the last version that obtained a certificate.

	GCF-CC / WM FW	PTCRB / WM FW
Q2406B	v3.23.1 / 6.57	-
Q2426B	-	V3.8.1 / 6.57
Q2501B	v3.23.1 / 6.57	-
Q24CL001	v3.23.1 / 6.57	V3.8.1 / 6.57
Q24CL002	v3.23.1 / 6.57	-
Q24CL003	v3.23.1 / 6.57	V3.8.1 / 6.57
Q24CL004	v3.23.1 / 6.57	-
Q24PL001	v3.23.1 / 6.57	V3.8.1 / 6.57
Q24PL002	v3.23.1 / 6.57	-
Q24PL003	v3.23.1 / 6.57	V3.8.1 / 6.57
Q24PL004	v3.23.1 / 6.57	-
Q24PL005	-	V3.8.1 / 6.57
Q24PL006	-	V3.8.1 / 6.57
Q24EX001	v3.23.1 / 6.57	V3.8.1 / 6.57
Q24EX002	v3.23.1 / 6.57	-
Q24AU001	v3.23.1 / 6.57	V3.8.1 / 6.57
Q24AU002	v3.23.1 / 6.57	V3.8.1 / 6.57
Q24AU003	v3.23.1 / 6.57	V3.8.1 / 6.57

6.6 Restrictions

This section lists restrictions that must be taken into account regarding the 6.57 firmware.

6.6.1 Common to all Wireless CPUs

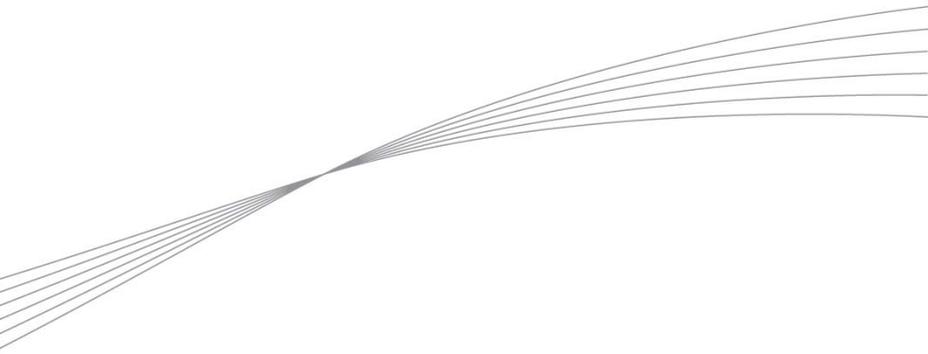
Id	Description (What / When)	Impacted Domain	Impacted Sub Domain
33081	AT+WIND command configuration is not the same according to the AT+WOPEN=0/1 state.	AT	ALL
CUS35863	For ENS feature when PLMN bit mode is set to '1' (on CSP sim file) and the PLMN selection is set to manual, then the Refresh of CSP to update the PLMN mode to '0' should put back Automatic Selection. No HPsearch timer is restarted on RR side	AT	OTHER
30764	When a command is sent several times while the treatment of the first one is not treated and when an unsolicited response is received during this treatment, at the end of the treatment the unsolicited answer is received before the OK of the first command. Normally the unsolicited response has to be returned after.	AT	OTHER
30975	A GPRS connection is performed by an external application, if an Open AT application uses adl_atCmdCreate on the same port, the CONNECT response is not detected and the command stack is blocked on this port. A full command stack leads to a reset.	AT	OTHER
31080	Autobauding is not able to resynchronize with the modem after a NO	AT	OTHER

Id	Description (What / When)	Impacted Domain	Impacted Sub Domain
	CARRIER response is received after releasing an active GSM data call.		
31496	When the module is reset after setting the GPIOs configurations, no response is received from the module and module hangs.	AT	OTHER
33716	When the SIM is extracted and inserted quickly, after several times, +WIND: 0 indication is missing and SIM insertions and extractions are no more announced with +WIND. Reproducibility: Hard.	AT	OTHER
34022	Module resets when DTR is toggled from logical CMUX port and autodial is enabled	AT	OTHER
29284	When ME phonebook is full and SIM phonebook has 127 entries, module resets immediately after entering the PIN code.	AT	PHONEBOOK
30917	At low speed (+IPR: 1200), when several phonebook entries are read, some characters are missing. All entries should be well returned by the Wireless CPU.	AT	PHONEBOOK
CUS34582	A SMS is written or stored in flash memory with data coded in PDU mode and 16bits UCS2 mode with more that 42 UCS2 characters. Reading this SMS returns a truncated SMS. All SMS data should be returned	AT	SMS
CUS34585	When a SMS, which data (UDL=0) are empty and coded in UCS2 mode, is written or stored in flash memory, reading it in PDU mode returns false data. Reading it should returns the right values	AT	SMS
30174	During sending several SMS in the same radio path, the module makes a reset	AT	SMS
33948	Last dialed list not correct via SAP	BLUETOOTH	SAP
34446	in CSD, when application tries to send more than 255 bytes in one data block, the data are not sent correctly.	DATA	OTHER
30258	when using PC cmux driver + a windows modem for application connection instead of direct COM connect to the DLCI, the flow control from PC to DLCI is less reactive and application could miss some data if its Rx buffer is not properly sized	DEVICE	N/A
34006	When you open a second SPI bus on a previously open SPI block, the opening stage seems to be good be in reality the second bus is not opened and if you try to read or write on it an error -61 is return (ERROR trace: The handle x do not accept this data format (8))	DEVICE	SPI
33708	The modem becomes unreachable after a first incoming call received just after the power on	GSM	MM
32774	USSD sequence does not succeed on some networks which do not support USSD V2	GSM	SS
ANO36141	No call possible with AMR and AEC Algo 6 at the same time.	HWL	OTHER
N/A	The latest 6.57 Open AT® FW is only available for New Q24 series Wireless CPU with Hardware Version above v3.00 (see response of AT+WHWV). It is still available for other Wireless CPUs (Q2406B, Q2501B and Q2426B).	N/A	N/A
N/A	On Wireless CPU based on One-C HR, algorithm 3 and 6 are available. With Wireless CPU based on One-C AMR, only algorithm 6 is available.	N/A	N/A
N/A	AT+WSSW returns ".Q2786B" and not ".Q24NG" values.	N/A	N/A

Id	Description (What / When)	Impacted Domain	Impacted Sub Domain
ANO35930	Specific batteries might shut down because the charging duration of pulses are sometimes too long (1s in our static configuration) whereas some battery specifications says that maximum pulse should be lower.	OTHER	OTHER
31167	When Orange Israel SIM card is inserted the module returns SIM Failure message (CME ERROR 13). All SIM related functionality is not available due to this error.	SIM	OTHER
ANO36398	No response after AT+CFUN=1, after a download session with DwlWin. Need a hardware reset	SYS	OTHER
DF	The UART2 is not available when the GPS internal mode is activated on Q2501B (see AT+WMFM chapter in the AT Command Interface Guide).	V24	OTHER

6.6.2 Specific to M1306B Modem

Id	Description (What / When)	Impacted Domain	Impacted Sub Domain
31496	When the modem is reset after setting the GPIOs configurations by using the command AT+WIOM=1023,1023, no response is received from the modem and modem hangs.	AT	OTHER



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