



SWI9X30C 2.0

Customer Release Notes

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Document History

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01.04	2015/07/24	Added Release 7	AV
01.05	2015/08/14	Added Release 8	AV
01.06	2015/09/18	Added Release 8.1	AV
01.07	2015/09/25	Added Release 9	AV
01.08	2015/11/06	Added Release 10	AV
01.09	2015/12/04	Added Release 10.1	AV
01.10	2015/12/09	Added Release 10.2	AV
01.11	2016/01/15	Added Release 11	AV
01.12	2016/02/12	Added Release 12	AV
01.13	2016/03/04	Removed Pre-commercial releases	AV
01.14	2016/03/15	Added Release 13	AV
01.15	2016/04/01	Added Release 14	AV/IM

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1 Introduction

1.1 Scope of this document

This document describes changes in the SWI9X30C 2.0 line of firmware.

1.2 Audience of this document

These release notes may be distributed to all direct and indirect customers.

1.3 New Features / Enhancements

Feature	Description
See Individual Releases below.	

2 Abbreviations and definitions

Abbreviation/Acronym	Definitions
AT	Access Terminal, Attention
FTM	Factory Test Mode
IMS	IP Multimedia Subsystem, Internet Multimedia System
IMSW	Image Switch
MBIM	Mobile Broadband Interface Model
OMA	Open Mobile Alliance
OMADM	OMA Device Management
OoS	Out of Service
PC	Power Control
PDN	Packet Data Network
QMI	Qualcomm MSM Interface, Qualcomm Modem Interface
SMS	Short Message Service
WoWWAN	Wake on WWAN
UI	User Interface

3 Related documentation

Ref. #	Doc. #	Document title

4 Compatibility

Hardware compatibility

Product compatibility list
EM7455
MC7455
EM7430
MC7430

5 SWI9X30C 2.0 Release 14

This section describes changes since the previous major release.

5.1 Software Release Description

5.1.1 Release identification

Component	Revision
Boot loader	SWI9X30C_02.14.03.00
Application	SWI9X30C_02.14.03.00
Date of generation	2016/03/28 14:34:14
Binary Size	61.3MB (compressed binary)
IMEI SV	6
Qualcomm Stack Version	MDM9635M.LE.3.0.c2-000010130-STD.PROD-1
Supported H/W	EM7455, MC7455, EM7430, MC7430

5.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	B4492	
Skylight	B4477	
Linux QMI SDK	03.03.15	

5.1.3 Released Files and Download Processes

Download Option	Files
Windows	B4492 Driver Installer
CWE/NVU files	Build4490 FW PRI Package

5.2 Software Changes Description

5.2.1 Validated Corrections / Improvements

This section presents all corrections or improvements integrated in this release.



ID	Title	Description	Impacted Domain
89985	Add Qualcomm Stack MDM9635M.LE.3.0.c2-000010130-STD.PROD-1	Add Qualcomm Stack MDM9635M.LE.3.0.c2-000010130-STD.PROD-1: - CR 848684, 859452: Cannot activate LTE-CA in certain scenarios - CR 916525: UE fails reselection when serving cell is not provided with a dedicated priority - CR 826809: BIP doesn't work in a DUAL SIM device set to single standby	SYSTEM
89903	Module crash with AT+CPBR=1	Module crashes after repeatedly issuing: AT+CPBR=1	AT
89557	Data Connection on Windows 10	Changing "IP TYPE" via Windows 10 UI does not take effect with SINGLEAPN	DATA
89666	Image Switching enhancement	Fixed issue when switching images for carriers that span multiple countries.	IMSW
90095	LED blink pattern glitches	Fixed LED blink pattern glitches	LED
89725	LED Blink Pattern	LED not working with Roaming SIM, and coming out of AT+CFUN=0	LED
90089	FOTA Update	Fixed FOTA update for Sprint	LWM2M / FOTA
87674	Embedded Device type	Added support for Embedded Device type for MBIM	MBIM
88840	Sprint SPA OMADM	Add Sprint SPA OMADM Nodes	OMADM
89948	Increase IMEI SV	Increased IMEI SV to 6	PTCRB
85036	TDSCDMA SAR configuration	Add ability to configure TDSCDMA SAR via AT and QMI commands	RF
89611	Transmitter ON GPIO support	Add support for TX ON status via GPIO	RF
89812	Antenna Selection	Fixed external antenna selection lines for MC	RF
89808	Wake on WWAN PIN	Wake on WWAN PIN was turning on for longer than configured value.	WoWWAN

5.3 Known Issues

This section presents all known issues in this release.

ID	Title	Description	Impacted Domain

6 SWI9X30C 2.0 Release 13

This section describes changes since the previous major release.

6.1 Software Release Description

6.1.1 Release identification

Component	Revision
Boot loader	SWI9X30C_02.13.01.00
Application	SWI9X30C_02.13.01.00
Date of generation	2016/03/07 21:28:34
Binary Size	61.3MB (compressed binary)
IMEI SV	5
Qualcomm Stack Version	MDM9635M.LE.3.0.c2-000010127-STD.PROD-1
Supported H/W	EM7455, MC7455, EM7430, MC7430

6.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	B4473	
Skylight	B4477	
Linux QMI SDK	03.03.15	

6.1.3 Released Files and Download Processes

Download Option	Files
Windows	B4473 Driver Installer
CWE/NVU files	Build4481 FW PRI Package

6.2 Software Changes Description

6.2.1 Validated Corrections / Improvements

This section presents all corrections or improvements integrated in this release.



ID	Title	Description	Impacted Domain
89474	Add Qualcomm Stack MDM9635M.LE.3.0.c2-000010127-STD.PROD-1	Add Qualcomm Stack MDM9635M.LE.3.0.c2-000010127-STD.PROD-1: - CR 881101: Restoring LTE band values back to defaults if RRC message does not contain band info - CR 842022: Added support for BCS-1 for 7+28 CA combo - CR 843496: Fixed crash during MO OTDOA positioning	SYSTEM
89025	Update AT!SELRAT and AT!BAND	Update AT!SELRAT and AT!BAND for TDSCDMA	AT
88669	DHCPv4 Client Configuration and Lease Status	Add support for DHCPv4 Client Configuration and Lease Status	DHCP / QMI
85533	NMEA output rate	In USB 3.0, fixed an issue where NMEA sentences would not be reported if the output rate was set to more than 5 seconds.	GNSS
87475	AT!GPSCOLDSTART	End all GPS sessions if AT!GPSCOLDSTART is entered	GNSS
88357	FW SIM based image switching	FW SIM based image switching not working for PIN locked SIMs	IMSW
87187	AT+LED	[Sprint] Add support for AT+LED	LED / AT
89137	LED Configurability	Add support for LED Configurability	LED
85666	AirVantage LWM2M Objects	Added support for AirVantage LWM2M Reset Counters	LWM2M
87452 / 87453	Add Sprint OMADM features	Add Sprint OMADM features	OMADM
88716	OMADM FOTA	Added support for OMADM FOTA	OMADM
89233 / 88363	Power loss SMS and Detach	Improvements to Power Loss SMS and Detach feature	PC
85798	Add QMI object to indicate a reboot is pending	Added QMI_DMS_SWI_GET_RESET_INFO	QMI
88674	USB Stability	Improved USB Stability over long term reset test	USB
86639	Improve USB Enumeration time	Improve USB Enumeration time by 2 seconds	USB

6.3 Known Issues

This section presents all known issues in this release.

ID	Title	Description	Impacted Domain
89812	Antenna Selection	External Antenna Selection lines not working for MC products	RF

7 SWI9X30C 2.0 Release 12

This section describes changes since the previous major release.

7.1 Software Release Description

7.1.1 Release identification

Component	Revision
Boot loader	SWI9X30C_02.11.03.00
Application	SWI9X30C_02.11.03.00
Date of generation	2016/02/09 13:51:57
Binary Size	61.2MB (compressed binary)
IMEI SV	5
Qualcomm Stack Version	MDM9635M.LE.3.0.c2-000010120-STD.PROD-1
Supported H/W	EM7455, MC7455, EM7430, MC7430

7.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	B4452	
Skylight	B4432	
Linux QMI SDK	03.03.14	

7.1.3 Released Files and Download Processes

Download Option	Files
Windows	B4452 Driver Installer
CWE/NVU files	Build4455 FW PRI Package

7.2 Software Changes Description

7.2.1 Validated Corrections / Improvements

This section presents all corrections or improvements integrated in this release.



ID	Title	Description	Impacted Domain
88366	Add Qualcomm Stack MDM9635M.LE.3.0.c2-000010120-STD.PROD-1	Add Qualcomm Stack MDM9635M.LE.3.0.c2-000010120-STD.PROD-1: - CR 955594: Fixed data transfer issue when using 2 RMNET interfaces. - CR 938261: [GCF] Fix for LTE-RRM case 8.3.3 - CR 902412: SIM is being powered down when upon receiving an invalid APDU in ICC mode for SELECT command - CR 951450: In certain scenarios fixed AT and NMEA indications when USB is suspended	SYSTEM
87891 / 88123	Improve reset sequence	Improve reliability of reset sequence observed during long term testing	SYSTEM
88000	Increase IMEI SV	Increased IMEI SV to 5	PTCRB
86959	Modem crash after AT&V command	Modem crash after AT&V command	AT
87189 / 83539 / 87188 / 87191 / 87186	Sprint AT commands	Add support for Sprint AT commands	AT
84394	Update AT!SELRAT	Add TDSCDMA support for AT!SELRAT	AT
87584	Fixed AT!GPSLBSAPN	AT!GPSLBSAPN was not taking affect	AT
85577	FTM TX power configuration in WCDMA and LTE	Add support for FTM TX power configuration in WCDMA and LTE	FTM
85477	Update gpsOneXTRA HTTP request	Update gpsOneXTRA HTTP header to comply with Qualcomm's guidance.	GNSS
82401	Restart GPS Session when transitioning from LPM to ONLINE	If NMEA port is open, restart GPS Session when transitioning from LPM to ONLINE	GNSS
83612	Image Switching enhancement	Add support to carriers that span multiple countries.	IMSW
85718	Image Switching enhancement	Modem resets twice when upgrading FW+PRI and the target firmware is already available in the modem	IMSW
88079 / 87738 / 79089	LED Enhancements	Add support for LED blink patterns.	LED
88310	Update revision string to include Carrier PRI for AirVantage LWM2M	Update revision string to include Carrier PRI for AirVantage LWM2M	LWM2M
86584	Add support for AirVantage LWM2M QMI messages	Add support for AirVantage LWM2M QMI messages	LWM2M
87670 / 87263	Fixed FOTA update failure	Fixed FOTA update via LWM2M	LWM2M / FOTA
88001	OMADM SyncML Message update	Add TargetRef field to SyncML message for Verizon	OMADM
85125	Sprint OMADM	Add support for Sprint OMADM	OMADM
87802	Add support for OMA polling	Add support for OMA polling	OMADM
85610	Power down SMS	Add support to send an SMS when power failure is reported by host through W_DISABLE Pin	PC

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ID	Title	Description	Impacted Domain
88362	UE incorrectly release existing PDP Context	On a Windows platform, the UE releases the existing PDP Context when going OoS within 30 seconds.	PDN
88407	Update QMI_NAS_GET_LTE_CPHY_CA_INFO	Bands 28, 29, 30 and 32 are not correctly reported in QMI_NAS_GET_LTE_CPHY_CA_INFO	QMI
87283	Update QMI_NAS_SWI_MODEM_STATUS	LTE band 28 is incorrectly reported in QMI_NAS_SWI_MODEM_STATUS as 45	QMI
87725	LTE B41 Attach failure	Observed attach failures in low signal environment for LTE B41	RF
87403	Improved signal strength reporting	Improved signal strength reporting to the host	UI

7.3 Known Issues

This section presents all known issues in this release.

ID	Title	Description	Impacted Domain

8 SWI9X30C 2.0 Release 11

This section describes changes since the previous major release.

8.1 Software Release Description

8.1.1 Release identification

Component	Revision
Boot loader	SWI9X30C_02.08.02.00
Application	SWI9X30C_02.08.02.00
Date of generation	2016/01/06 20:38:53
Binary Size	61.2MB (compressed binary)
IMEI SV	4
Qualcomm Stack Version	MDM9635M.LE.3.0.c2-000010114-STD.PROD-1
Supported H/W	EM7455, MC7455, EM7430, MC7430

8.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	B4437	
Skylight	B4429	
Linux QMI SDK	03.03.13	

8.1.3 Released Files and Download Processes

Download Option	Files
Windows	B4437 Driver Installer
CWE/NVU files	Build4440 FW PRI Package

8.2 Software Changes Description

8.2.1 Validated Corrections / Improvements

This section presents all corrections or improvements integrated in this release.



ID	Title	Description	Impacted Domain
87356	Add Qualcomm Stack MDM9635M.LE.3.0.c2-000010114-STD.PROD-1	Add Qualcomm Stack MDM9635M.LE.3.0.c2-000010114-STD.PROD-1: - CR 949351 / 949619: USB Stability fixes - CR 791775, 922988, 929557, 823043, 860163: Critical AT&T CRs - CR 834408, 809321: [GCF] LTE-RRM case 4.2.2 - CR 946862: Verizon OMADM issue - CR 837757: Improved device stability in very long term power cycle stress testing. - CR 806781: Fixed crash if AT commands are entered immediately after power up.	SYSTEM
86579	Increase IMEI SV	Increased IMEI SV to 4	PTCRB
84544	SINGLEAPN feature	Added support for Sierra Wireless SINGLEAPN feature	DATA
85663 / 85664 / 85665 / 85662	AirVantage LWM2M Objects	Added support for various AirVantage LWM2M Objects	LWM2M
85616	MO SMS	Unable to send MO SMS if Dual SIM is enabled	SMS
84112	GNSS Reference location	Add support to report Cell Tower Reference Location if a location is not available via satellites	GNSS
82659	GPS_DISABLE PIN	Add support for the GPS_DISABLE PIN (W_DISABLE#2) to stop GPS sessions started over QMI	GNSS
82070	AT!GPSSATINFO	Update AT!GPSSATINFO to include Beidou and Galileo	GNSS / AT
85931	AT!GSTATUS	Update AT!GSTATUS to correctly report status of Carrier Aggregation when SCC is configured but not active	AT
85533 / 85533 / 86397	AT and NMEA port indications	Fixed issue where unsolicited notifications would sometimes not be delivered over the AT or NMEA port for USB 2.0, if the port was idle for greater than 5 seconds.	AT / NMEA
86674	TS.25 list	Update TS.25 list in FW to 2015/11/30	GCF / PTCRB
84520	MBIM_CID_DEVICE_CAPS	Added the ability to configure the Device Type in the MBIM_CID_DEVICE_CAPS response	MBIM
82166	LTE Reject cause over QMI	Update QMI_NAS_NETWORK_REJECT_IND to report reject cause: ESM Failure	QMI
84187	QMI_QOS_SWI_READ_DATA_STAT S TX	Fixed packet and TX packet drop counters	QMI
86541	USB 2.0	If USB 2.0 is detected, USB 3.0 support will not be included in the USB Descriptor	USB

8.3 Known Issues

This section presents all known issues in this release.

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ID	Title	Description	Impacted Domain
85533	NMEA output rate	NMEA output rate greater than 5 seconds is not supported on USB 3.0	GNSS
85718	Image Switching	The Linux SDK will report an image switch failure when only the Carrier PRI needs to be downloaded. The image switch is successful	Linux SDK

9 SWI9X30C 2.0 Release 10.2

This section describes changes since the previous major release.

9.1 Software Release Description

9.1.1 Release identification

Component	Revision
Boot loader	SWI9X30C_02.05.07.00
Application	SWI9X30C_02.05.07.00
Date of generation	2015/12/04 22:23:15
Binary Size	61.2MB (compressed binary)
IMEI SV	3
Qualcomm Stack Version	MDM9635M.LE.3.0.c2-000010108-STD.PROD-1
Supported H/W	EM7455, MC7455, EM7430, MC7430

9.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	B4427	
Skylight	B4405	
Linux QMI SDK	03.03.12	

9.1.3 Released Files and Download Processes

Download Option	Files
Windows	B4427 Driver Installer
CWE/NVU files	Build4426 FW PRI Package

9.2 Software Changes Description

9.2.1 Validated Corrections / Improvements

N/A (initial commercial release).

9.3 Known Issues

This section presents all known issues in this release.



ID	Title	Description	Impacted Domain
83752 / 83753 / 83754	USB Stability	In rare instances, module may disappear from Windows Device Manager after long term testing on some platforms.	USB
85533	NMEA output rate	NMEA output rate greater than 5 seconds is not supported	GNSS

10 Troubleshooting

Please contact customer service for support and debug

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11 Certification Description

None

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12 Restrictions and Additional Information

This section presents additional information or restrictions that must be taken into account.

ID	Description (What/When)	Impacted Domain