



SWI9X15C 5.0

Customer Release Notes

Document number	4115982
Rev	R01.15
Date	2018/03/01

Document History

Rev XX.YY	Date YYYY/MM/DD	Updates	Author
01.00	2014/05/30	Creation	KW
01.01	2014/06/20	Updates from internal review	KW
01.02	2014/06/27	Add missing point releases	KW
01.03	2014/07/24	Add SWI9X15C 5.0 Release 13	RK
01.04	2014/09/27	Add SWI9X15C 5.0 Release 9.1, 11.1, 12.1	KW
01.05	2014/10/17	Add SWI9X15C 5.0 Release 14, 14.1	KW
01.06	2014/10/21	Add SWI9X15C 5.0 Release 11.2	KW
01.07	2015/02/11	Add SWI9X15C 5.0 Release 15	KW
01.08	2015/03/11	Update SWI9X15C 5.0 Release 15	KW
01.09	2015/07/10	Add SWI9X15C 5.0 Release 16	KW
01.10	2015/8/18	Add SWI9X15C 5.0 Release 17	EM
01.11	2015/10/13	Add SWI9X15C 5.0 Release 18	XW
01.12	2015/10/15	Add SWI9X15C 5.0 Release 19	XW
01.13	2016/03/29	Add SWI9X15C 5.0 Release 20	KW
01.14	2017/10/27	Add SWI9X15C 5.0 Release 21	KW
01.15	2018/03/01	Add SWI9X15C 5.0 Release 15.2	QZeng

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1 Introduction

1.1 Scope of this document

This document describes changes in the SWI9X15C 5.0 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
No new features	

2 Abbreviations and definitions

Abbreviation/Acronym	Definitions
AT	Access Terminal, Attention
IMS	IP Multimedia Subsystem, Internet Multimedia System
MBIM	Mobile Broadband Interface Model
OMA	Open Mobile Alliance
OMADM	OMA Device Management
QMI	Qualcomm MSM Interface, Qualcomm Modem Interface
SMS	Short Message Service

3 Related documentation

Ref. #	Doc. #	Document title

4 Compatibility

Hardware compatibility

Product compatibility list
EM7305 / MC7305 / MC7304
EM7330 / MC7330
EM7355 / MC7355 / MC7354 / MC7354B / MC7350
EM8805 / MC8805

5 SWI9X15C 5.0 Release 21

This section describes changes since the previous major release.

5.1 Software Release Description

5.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.78.00
Application	SWI9X15C_05.05.78.00
Date of generation	2017/09/17 00:43:17
Binary Size	34.0 MB (compressed)
IMEI SV	22
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

5.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	Build 4728	
Skylight	None	
Linux Drivers	None	
Linux SDK	None	

5.1.3 Released Files and Download Processes

Download Option	Files
Windows	Various PRI packages only. No PCOEM driver package provided.
CWE/NVU files	Various PRI packages

5.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

5.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
QTI9X1545-865	Qualcomm patches	Add Qualcomm M9615ACETWMLZD45342215.1.116329.1 -CR 756542: Fix crash in WCDMA when coming back into coverage -CR 972759: Fix rare crash in GNSS due to memory exhaustion -Various: Fixes for boot reliability at very cold temperatures -CR 1032374: Fix for ASN1C vulnerability (CVE-2016-5080) -CR 944591: Fix issue with AT+CPOL?	System
QTI9X1545-854	Fix crash if PCO bit is set	Fix crash if Operator Reserved PCO bit was set via QMI_WDS_GET_RUNTIME_SETTINGS_MSG but PCO is not available	System
QTI9X1545-643	Subnet configuration	Add support for SUBNETMSKENABLE customization for different subnet configurations	System
QTI9X1545-517	Crash in low signal level	Fix rare crash observed in low signal conditions	System
QTI9X1545-802	IMSI SV	Increase IMEI SV to 22	System
QTI9X1545-862 QTI9X1545-509	Packet prioritization on dedicated bearer	Fix issue where UL packets were not being prioritized on a dedicated bearer compared to the default bearer	Data
QTI9X1545-814	Quadrooter	Fix for Quadrooter vulnerability (CVE-2016-2503, CVE-2016-2504, CVE-2016-2059, CVE-2016-5340)	Security
QTI9X1545-856	Failed MIP data connection	Fix handling of IPv6 address in CDMA MIP call	CDMA
QTI9X1545-811	Crash on incoming SMS	Fix crash if more than 255 SMS are received	SMS
QTI9X1545-755	Incorrect hex data in SMS Text mode	Fix issue with incorrect hexadecimal data received with SMS text mode when on LTE	SMS
QTI9X1545-859	Invalid failure code for AT!GPSSTATUS?	Fix uninitialized variable causing a random cause code value to be displayed	AT / GNSS
QTI9X1545-805	Time zone and DST	Fix issue where AT!UTCTIME was not properly saving time zone and DST information	AT
QTI9X1545-833	USSD coding schemes	Handle additional coding schemes in AT+CUUSD	AT
QTI9X1545-827	RSSI value does not change in CDMA	CDMA RSSI was not being dynamically updated when queried via AT!GSTATUS?	AT
QTI9X1545-348	AT!CELLLOCK	Add support for AT!CELLLOCK to lock UE to a specific cell	AT
QTI9X1545-627	Blank name in AT+COPS=?	Fix issue where AT+COPS=? may show blank network names	AT
QTI9X1545-748	Carrier name truncated	Fix issue where carrier name is truncated for QMI_NAS_GET_HOME_NETWORK_MSG	QMI
QTI9X1545-513	Per-PDN channel rate	Update QMI_WDS_SWI_GET_CURRENT_IP_CHANNEL_RATE to return per PDN channel rate	QMI
QTI9X1545-514	Provide PRI information	Update QMI_DMS_SWI_GET_CWE_PKGS_INFO to provide carrier PRI name and version	QMI
QTI9X1545-818	QMI for Cell Lock	Add QMI_NAS_SWI_SET_CHANNEL_LOCK to support SLQSNASSwiSetChannelLock() API	QMI



ID	Title	Description	Impacted Domain
QTI9X1545-826	OMADM Bootstrap	Add support to process out-of-order OMADM bootstrap messages	AT&T
QTI9X1545-819	OMADM Reliability	Fix for occasional SSL handshake failure on OMADM server	AT&T
QTI9X1545-850	Add support for IPv6 OMADM	Add support for OMADM connections over IPv6	Verizon
QTI9X1545-849	Update OMADM Manufacturer code	Update OMADM Manufacturer from "Sierra Wireless Inc" to "Sierra Wireless"	Verizon
QTI9X1545-815	Application ID and Password	Add support for SUPL Application ID and Password	Verizon

6 SWI9X15C 5.0 Release 20

This section describes changes since the previous major release.

6.1 Software Release Description

6.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.67.00
Application	SWI9X15C_05.05.67.00
Date of generation	2016/03/11 14:58:53
Binary Size	33.1 MB (compressed)
IMEI SV	21
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

6.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	None	
Windows SDK	None	
Skylight	Build 4378	
Linux Drivers	S2.25 / N2.34	
Linux SDK	SLQS 03.03.11	

6.1.3 Released Files and Download Processes

Download Option	Files
Windows	Various PRI packages only. No PCOEM driver package provided.
CWE/NVU files	Various PRI packages

Template #:	4124005	Revision:	03.07
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6.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

6.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
80518	AT+SWICOPS	Add support for custom AT command to provide signal strength of surrounding networks	AT

7 SWI9X15C 5.0 Release 19

This section describes changes since the previous major release.

7.1 Software Release Description

7.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.66.00
Application	SWI9X15C_05.05.66.00
Date of generation	2015/10/08 08:36:28
Binary Size	33.1 MB (compressed)
IMEI SV	21
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

7.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	None	
Windows SDK	None	
Skylight	Build 4378	
Linux Drivers	S2.25 / N2.34	
Linux SDK	SLQS 03.03.11	

7.1.3 Released Files and Download Processes

Download Option	Files
Windows	Various PRI packages only. No PCOEM driver package provided.
CWE/NVU files	Various PRI packages

7.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

7.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
80518	STK	Fix !STKC operation for UICC with proactive command capability.	SIM
84877	Add Qualcomm fixes	CR 472638 Allowed CSG lists are not updated, if there is only one valid PLMN with a CSG ID CR 515327 GCF CSG test case 34.123-1 12.2.2.7e failure	System

8 SWI9X15C 5.0 Release 18

This section describes changes since the previous major release.

8.1 Software Release Description

8.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.65.00
Application	SWI9X15C_05.05.65.00
Date of generation	2015/10/08 08:36:28
Binary Size	33.1 MB (compressed)
IMEI SV	21
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

8.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	None	
Windows SDK	None	
Skylight	Build 4378	
Linux Drivers	S2.25 / N2.34	
Linux SDK	SLQS 03.03.11	

8.1.3 Released Files and Download Processes

Download Option	Files
Windows	Various PRI packages only. No PCOEM driver package provided.



Download Option	Files
CWE/NVU files	Various PRI packages

8.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

8.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
83100	USB enumeration	Fix modem rare crash issue during USB enumeration stress test	Stability
82521	Sprint Requirement	Remove password protect for \$DEBUG	Sprint
83425	SVN	Increase SVN to 21	System
83400	Add a QMI command to support querying current bearer channel rate	Add support for QMI_WDS_SWI_GET_CURRENT_IP_CHANNEL_RATE	System

9 SWI9X15C 5.0 Release 17

This section describes changes since the previous major release.

9.1 Software Release Description

9.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.64.00
Application	SWI9X15C_05.05.64.00
Date of generation	2015/07/25 02:10:00
Binary Size	33.1 MB (compressed)
IMEI SV	21
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

9.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	None	
Windows SDK	None	
Skylight	Build 4294	
Linux Drivers	S2.24 / N2.32	
Linux SDK	SLQS 03.03.09	

Template #:	4124005	Revision:	03.07
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9.1.3 Released Files and Download Processes

Download Option	Files
Windows	Various PRI packages only. No PCOEM driver package provided.
CWE/NVU files	Various PRI packages

9.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

9.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
82489	MC7354B	Update NV backup list for B26	System
82463	MC7354B	Fix temperature returned by AT!PCTEMP	System



10 SW4I9X15C 5.0 Release 16

This section describes changes since the previous major release.

10.1 Software Release Description

10.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.63.01
Application	SWI9X15C_05.05.63.01
Date of generation	2015/07/02 11:04:50
Binary Size	33.9 MB (compressed)
IMEI SV	21
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

10.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	None	
Windows SDK	None	
Skylight	Build 4294	
Linux Drivers	S2.24 / N2.32	
Linux SDK	SLQS 03.03.09	

10.1.3 Released Files and Download Processes

Download Option	Files
Windows	Various PRI packages only. No PCOEM driver package provided.
CWE/NVU files	Various PRI packages

10.1.4 Limitations

This release does not have AT&T RPM feature enabled and therefore is not suitable for certification at AT&T.

10.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
18668	MC7354B	Add initial support for MC7354B	System
18643	ESN corruption	Prevent pESN from being overwritten with CSIM pESN during image switch	Sprint
17990	Preserve Class 2 and Class 3 APNs	Preserve Class 2 and 3 APN's across Factory Reset	Verizon



ID	Title	Description	Impacted Domain
16679	Verizon Data Retry	Support Verizon Data Retry functionality	Verizon
18265	IMEI SV	Increment IMEI SV to 21	System
17676	Update AT!SELRAT	Fix issue where AT!SELRAT returns error after manually selected a PLMN	AT
80374	AT to configure eHRPD profiles	Added custom AT+CGXCONT to access 3GPP2 profiles	AT
80469	Reset of counters in QOS_READ_DATA_STATS	Fix issue where QOS_READ_DATA_STATS does not reset Tx packet count after session is disconnected	QMI
18816	External antenna select	Fix external antenna select GPIO operation on EM/MC7330	RF

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11 SWI9X15C 5.0 Release 15.2

This section describes changes since the previous point release.

11.1 Software Release Description

11.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.58.05
Application	SWI9X15C_05.05.58.05
Date of generation	2017/09/25 01:53:06
Binary Size	33.0 MB (compressed)
IMEI SV	19
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

11.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	None	
Windows SDK	None	
Skylight	Build 4248	
Linux Drivers	S2.22 / N2.29	
Linux SDK	SLQS 03.03.06	

11.1.3 Released Files and Download Processes

Download Option	Files
Windows	Various PRI packages only. No PCOEM driver package provided.
CWE/NVU files	Various PRI packages

11.1.4 Limitations

This release does not have AT&T RPM feature enabled and therefore is not suitable for certification at AT&T.

11.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
QT19X 1545-854	Modem crashes after activating data session	Fix the Qualcomm bug that modem crashes when Operator reserved PCO is set for QMI command QMI_WDS_GET_RUNTIME_SETTINGS_REQ	Stability



ID	Title	Description	Impacted Domain
QT19X 1545- 853	Add support for OMADM connections via IPv6	Add the feature to support OMADM over IPV6	Verizon
QT19X 1545- 852	Change OMADM manufacturer node	Change the manufacturer name from "Sierra Wireless Inc." to "Sierra Wireless" under the request of Verizon	Verizon
QT19X 1545- 815	Add an AT command to set Application ID and password for Verizon SUPL	Add the AT command GNSSAPPINFO to set Application ID and password for Verizon SUPL	GNSS



12 SWI9X15C 5.0 Release 15.1

This section describes changes since the previous point release.

12.1 Software Release Description

12.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.58.01
Application	SWI9X15C_05.05.58.01
Date of generation	2015/03/05 00:02:40
Binary Size	33.9 MB (compressed)
IMEI SV	19
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

12.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	None	
Windows SDK	None	
Skylight	Build 4248	
Linux Drivers	S2.22 / N2.29	
Linux SDK	SLQS 03.03.06	

12.1.3 Released Files and Download Processes

Download Option	Files
Windows	Various PRI packages only. No PCOEM driver package provided.
CWE/NVU files	Various PRI packages

12.1.4 Limitations

This release does not have AT&T RPM feature enabled and therefore is not suitable for certification at AT&T.

12.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
16679	Verizon Data Retry	Support Verizon Data Retry functionality	Verizon
16686	IMEI SV	Increment IMEI SV to 19	System



13 SWI9X15C 5.0 Release 15

This section describes changes since the previous major release.

13.1 Software Release Description

13.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.58.00
Application	SWI9X15C_05.05.58.00
Date of generation	2015/03/04 21:30:23
Binary Size	33.9 MB (compressed)
IMEI SV	18
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

13.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	None	
Windows SDK	None	
Skylight	Build 4248	
Linux Drivers	S2.22 / N2.29	
Linux SDK	SLQS 03.03.06	

13.1.3 Released Files and Download Processes

Download Option	Files
Windows	Various PRI packages only. No PCOEM driver package provided.
CWE/NVU files	Various PRI packages

13.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

13.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
17721	Add Qualcomm fixes	CR 534525 – Fix rare crash where LTE Serving Cell measurement was not properly cleaned up	System

ID	Title	Description	Impacted Domain
17721	Add Qualcomm fixes	CR 781607 – Race condition processing ARP entry timeout Add CRs noted as critical by Verizon and AT&T	System
17521	Add Qualcomm fixes	CR 641564 – Save GPS position on power cycle to assist future TTFF CR 698818 – Fix for 3GPP 34.123-1 TC 12.9.7d	System
17437	Add Qualcomm fixes	CR 605926 - Allow dynamic enable/disable of IMS Add CRs noted as critical by Verizon and AT&T	System
17286	Add Qualcomm fixes	CR 521273 - Fix intermittent IMS registration failure	System
17106	Add Qualcomm fixes	CR 709554 - Improve IPv6 throughput for fragmented packets	System
16915	Add Qualcomm fixes	CR 494448 – Fix crash in PBM observed during SIM insertion	System
16834	Add Qualcomm fixes	Add CRs noted as critical by AT&T	System
15896	IMEI SV	Increment IMEI SVN to 18	System
17285	Subnet mask generation	Apply Qualcomm App Note changes for subnet mask generation to avoid potential conflict with broadcast address	System
17185	Upgradable TS.25	Fix issues with feature allowing update of TS.25 list via downloadable file	System
17345	TS.25	Update TS25 list to 2014-Dec-15	System
16996	EPC Capability flag	Add customization to disable EPC Capability flag when LTE bands are disabled	System
17917	Data connectivity after upgrade	Fix intermittent issue where data connectivity does not work after firmware upgrade	Stability
16793	Delay on PWR OFF	Fix rare race condition on EM modules where PWR OFF switch is not immediately acted upon if device enters USB Selective Suspend at the same time	Stability
17183	Bad Block Management	Add support to dynamically handle and mark a block as bad when loading a new firmware image	Stability
17555	Stuck in boot	Fix rare/intermittent issue where device incorrectly goes to bootloader after reset	Stability
17186	Ping failure	Fix rare scenario where inter-processor pipe is not initialized properly, which can manifest as a ping failure or Skylight displaying “Not Activated”	Stability



ID	Title	Description	Impacted Domain
17901	SIM-based Image Switching failure	Fix issue where SIM-based Image Switching from Sprint to other carriers may fail	Sprint
16840	SMS on Windows 8	Fix SMS operation over Windows 8 for Sprint	Sprint
16841	SMS error on Sprint	Fix errors in READ and DELETE operations for SMS using Sprint SIM	Sprint
16961	SPC-triggered reset	Reset module when max SPC is reached	Sprint
16984	SMS display enhancement	Add support for Latin encoding format for SMS	Verizon
16991	GMSS Type 2 TC 8.1 and 8.2	Fix for GMSS Type 2 TC 8.1 and 8.2	Verizon
17514	Connection timers	Add support for OMA nodes MAX_CONN_T, MAX_CONN, and WAIT_TIME	Verizon
17502	SIP timers	Update data format for OMA nodes SIPT1, SIPTf, SIPT2	Verizon
17822	Win 10 IPv4v6	Fix data connectivity issue for IPv4v6 contexts in Windows 10	MBIM
16472	Win 8 MBIM	Adjust MBIM context type for APNs that are not routable to internet	MBIM
16026	Add support for AT!LTEINFO	Add AT command for customer to obtain LTE Neighbour information	AT
17485	Selectively filter QoS QMI indications	Add customization to allow selective filtering of QMI QOS indications	QMI
14839	Add QMI to retrieve statistics for each QoS flow	Add support for QMI_QOS_SWI_READ_DATA_STATISTIC	QMI
16536	Add QMI to retrieve statistics for Rm interface	Add support for QMI_WDS_SWI_RM_TRANSFER_STATISTICS	QMI
16574	Add QMI to capture NAS OTA messages	Add support for QMI_NAS_SWI_INDICATION_REGISTER and QMI_NAS_SWI_OTA_MESSAGE_IND	QMI
16709	Protection against EFS corruption	Add EFS corruption detection algorithm enhancements	EFS
16866	DPR pin pull-up	Fix pin pull-up on EM8805 hardware	DPR
16781	GPS Hot Start	Improvement of GPS TTFF performance across power cycles	GPS
17342	GPS Almanac	Update default GPS Almanac table	GPS
16365	GPS Keepalive	Fix issue where GPS Keepalive sentence is sent over NMEA even when GPS is disabled	GPS

Template #:	4124005	Revision:	03.07
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14 SWI9X15C 5.0 Release 14.1

This section describes changes since the previous point release.

14.1 Software Release Description

14.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.47.01
Application	SWI9X15C_05.05.47.01
Date of generation	2014/10/06 23:17:42
Binary Size	33.9 MB (compressed)
IMEI SV	17
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

14.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	None	
Windows SDK	None	
Skylight	Build 4202	
Linux Drivers	S2.20 / N2.26	
Linux SDK	SLQS 03.03.04	

14.1.3 Released Files and Download Processes

Download Option	Files
Windows	Various PRI packages only. No PCOEM driver package provided.
CWE/NVU files	Various PRI packages

14.1.4 Limitations

This release does not have AT&T RPM feature enabled and therefore is not suitable for certification at AT&T.

14.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
16679	Verizon Data Retry	Support Verizon Data Retry functionality	Verizon
16686	IMEI SV	Increment IMEI SV to 17	System



15 SWI9X15C 5.0 Release 14

This section describes changes since the previous major release.

15.1 Software Release Description

15.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.47.00
Application	SWI9X15C_05.05.47.00
Date of generation	2014/09/25 08:39:40
Binary Size	33.9 MB (compressed)
IMEI SV	16
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

15.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	None	
Windows SDK	None	
Skylight	Build 4202	
Linux Drivers	S2.20 / N2.26	
Linux SDK	SLQS 03.03.04	

15.1.3 Released Files and Download Processes

Download Option	Files
Windows	Various PRI packages only. No PCOEM driver package provided.
CWE/NVU files	Various PRI packages

15.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

15.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
16498	Add Qualcomm fixes	CR 718573 - Fix crash in IPv4 call when malformed IPv6 header is received	System



ID	Title	Description	Impacted Domain
16471	Add Qualcomm fixes	Add CRs noted as critical by Verizon and AT&T Add CRs noted as critical by AT&T	System
15896	Add Qualcomm fixes	CR 519099 - Fix slow memory leak in QMI interface when marking unread SMS as read	System
15726	Add Qualcomm fixes	CR 425035 - Fix rare ePHICH decode failures	System
16363	Add Qualcomm fixes	CR 700641 - Fix to avoid spin_lock() deadlock	System
12668	Upgradable TS.25	Allow update of TS.25 list via downloadable file	System
16217	TS.25	Update TS25 list to 2014-Aug-11	System
16231	Module enumerates with default USB descriptor	Detect and recover from scenario where configuration data was missing in the bootloader, leading to the device enumerating with default USB descriptor information	System
16013	FOTA processing optimization	Performance optimization when processing differential FOTA images	System
16096	IMEI SVN	Increment IMEI SVN to 16	System
16372	Update band disablement functionality	Bands disabled in customer PRI were not taking effect until the customer made a new band selection	System
15786	Reset commands do not return OK	Reset commands do not return responses before device resets	System
16156	Recovery from EFS corruption	Enhance existing algorithms to recover from EFS corruption	Stability
15602	'Watchdog startup timeout' crash	Increase timeout to avoid occasional 'Watchdog startup timeout' crash during firmware upgrade	Stability
15350	'Fatal exception in interrupt' crash	Fix rare crash after multiple power cycles when using USB configuration with multiple network interfaces	Stability
14360	'nvreadasyncblock' crash	Prevent non-synchronized task startup to ensure low-level service tasks are started before application tasks	Stability
15471	Yellow Bang Error Code 43	Fix rare memory corruption issue seen on one customer platform during S4 reboot stress testing	Stability
14201	Improve image rejection	Reject SPKG for WP7 and AR7 product families	Stability
16301	Add support for Aeris	Add support for Aeris	Aeris
15214	IPv6 large ping response	Fix specific customer issue where large IPv6 ping reply failed because Neighbor Solicitation message was not passed to host	Data
15762	Windows 8 Image Switching	For MBIM interface, report ONLINE when in LPM because of image mismatch, to avoid image switching interface in VANUI from being hidden	MBIM
16409	Add QMI to retrieve EPS Bearer ID	Add support for QMI_WDS_GET_PKT_SRVC_STATUS_MSG	QMI
16573	Update QMI to enable crash logging	Add optional TLV to clear crash info after retrieval in QMI_DMS_SWI_GET/SET_CRASH_ACTION	QMI
15401	AT&T ODIS	Add interface support for AT&T ODIS	AT / QMI
14377	Return OK after +CGSN	Return OK after +CGSN	AT

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ID	Title	Description	Impacted Domain
16125	AT!GPSXTRAINITDNLD fails	AT!GPSXTRAINITDNLD fails because invalid time is injected	AT
16214	Update default XTRA servers	Qualcomm is migrating their XTRA servers for increased reliability and performance	GNSS



16 SWI9X15C 5.0 Release 13

This section describes changes since the previous major release.

16.1 Software Release Description

16.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.42.00
Application	SWI9X15C_05.05.42.00
Date of generation	2014/07/16 18:41:28
Binary Size	33.9 MB (compressed)
IMEI SV	14
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

16.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	None	
Windows SDK	None	
Skylight	Build 4140	
Linux Drivers	S2.19 / N2.24	
Linux SDK	SLQS 03.03.01	

16.1.3 Released Files and Download Processes

Download Option	Files
Windows	Various PRI packages only. No PCOEM driver package provided.
CWE/NVU files	Various PRI packages

16.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

16.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
15697	Fix memory leak during SMS read	Fix memory leak leading to memory pool exhaustion after a large number of received SMS	Stability
14858	Software reset reliability	Fix occasional failure to complete software reset	Stability
15420	Fix rare freeing of NULL pointer	Fix rare freeing of NULL pointer during manual network selection	Stability

ID	Title	Description	Impacted Domain
15399	Firmware version reported over MBIM	Provide extended FW version string in MBIM message	MBIM
15722	Add QMI to enable crash logging	Add support for QMI_DMS_SWI_GET/SET_CRASH_ACTION	QMI
14757	Add AT commands for Sprint requirements	Add +FUMO, +PRL, and +OMADM	AT
15353	Fix input validation for AT\$MDN	Validate input parameters for \$MDN	AT
15190	Update LTE attach profile change behaviour	Improve handling of rapid consecutive profile changes, and fix reporting of an LTE attach failure cause in QMI	LTE
15528	Allow 0-length profile name	Add support for 0-length profile name in QMI_WDS_PROFILE_MODIFY_SETTINGS	QMI
15596	Fix validation of multiple PRL updates	Fix validation of multiple PRL updates received OTA within a single software reset cycle	CDMA

17 SWI9X15C 5.0 Release 12.1

This section describes changes since the previous point release.

17.1 Software Release Description

17.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.39.02
Application	SWI9X15C_05.05.39.02
Date of generation	2014/06/19 16:48:58
Binary Size	33.9 MB (compressed)
IMEI SV	14
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

17.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	Build 4150	
Windows SDK	Build 4143	
Skylight	Build 4140	
Linux Drivers	S2.18 / N2.24	
Linux SDK	SLQS 03.03.01	

17.1.3 Released Files and Download Processes

Download Option	Files
Windows	Install Build 4150
CWE/NVU files	Various PRI packages

17.1.4 Limitations

This release does not have AT&T RPM feature enabled and therefore is not suitable for certification at AT&T.

17.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
15415	Fix handling of large customer PRI	Vodafone PRI was exceeding a size limit	System



18 SWI9X15C 5.0 Release 12

This section describes changes since the previous major release.

18.1 Software Release Description

18.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.39.00
Application	SWI9X15C_05.05.39.00
Date of generation	2014/06/14 13:21:08
Binary Size	33.9 MB (compressed)
IMEI SV	14
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

18.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	Build 4142	
Windows SDK	Build 4143	
Skylight	Build 4140	
Linux Drivers	S2.18 / N2.24	
Linux SDK	SLQS 03.03.01	

18.1.3 Released Files and Download Processes

Download Option	Files
Windows	Install Build 4143
CWE/NVU files	Various PRI packages

18.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

18.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
15305	Add Qualcomm fixes	CR 610125, 670986 - Missing some ETWS primary messages in WCDMA CR 662589 - GPS fix lost and cannot recover during long term tracking CR 518927 - UE camped on wrong PLMN when powered up in manual selection mode after Steering of Roaming based on SIM-OTA	System
15226	IMEI SVN	Increment IMEI SVN to 14	System
15264	TS.25	Update TS25 list to 2014-Jun-02	System
15032	Add support for market-specific PRI settings	For carriers that have multiple markets with different requirements, add a mechanism to apply market-specific configuration settings	System
14302	Fix rare yellow bang EC 10 on Win8	Occasionally, a timing issue is observed on power up where the device data class was not reliably provided to Win8 MBIM interface.	Stability
14604	Update APN IPv6 type properly for CIDC operation	Update APN IPv6 type properly for CIDC operation	Sprint
15072	OMADM Band Class Service	Reboot following change of OMADM Band Class Service	Sprint
15100	QMI_WDS_SWI_PROFILE_CHANGE notification for Sprint OMA	Add QMI_WDS_SWI_PROFILE_CHANGE notification for Sprint OMA scenarios	Sprint
15148	LPM offline reason	Report offline reason when in LPM due to image preference mismatch	QMI
15158	Report LPM on image mismatch	Properly report LPM when image mismatch occurs	QMI
07949	QMI_DMS_SWI_GET_CRASH_INFO	Add support for QMI_DMS_SWI_GET_CRASH_INFO	QMI

19 SWI9X15C 5.0 Release 11.2

This section describes changes since the previous point release.

19.1 Software Release Description

19.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.37.01
Application	SWI9X15C_05.05.37.01
Date of generation	2014/09/18 21:43:33
Binary Size	33.9 MB (compressed)
IMEI SV	14
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

19.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	Build 4150	
Windows SDK	Build 4125	
Skylight	Build 4130	
Linux Drivers	S2.18 / N2.24	
Linux SDK	SLQS 03.03.01	

19.1.3 Released Files and Download Processes

Download Option	Files
Windows	Install Build 4150
CWE/NVU files	Various PRI packages

19.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

19.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
16301	Add support for Aeris	Add support for Aeris	Aeris



20 SWI9X15C 5.0 Release 11.1

This section describes changes since the previous point release.

20.1 Software Release Description

20.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.37.00
Application	SWI9X15C_05.05.37.00
Date of generation	2014/06/11 13:35:43
Binary Size	33.9 MB (compressed)
IMEI SV	14
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

20.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	Build 4150	
Windows SDK	Build 4125	
Skylight	Build 4130	
Linux Drivers	S2.18 / N2.24	
Linux SDK	SLQS 03.03.01	

20.1.3 Released Files and Download Processes

Download Option	Files
Windows	Install Build 4150
CWE/NVU files	Various PRI packages

20.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

20.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
15226	IMEI SVN	Increment IMEI SVN to 14	System
15264	TS.25	Update TS25 list to 2014-Jun-02	System
14604	Update APN IPv6 type properly for CIDC operation	Update APN IPv6 type properly for CIDC operation	Sprint



ID	Title	Description	Impacted Domain
15072	OMADM Band Class Service	Reboot following change of OMADM Band Class Service	Sprint
15100	QMI_WDS_SWI_PROFILE_CHANGE notification for Sprint OMA	Add QMI_WDS_SWI_PROFILE_CHANGE notification for Sprint OMA scenarios	Sprint
07949	QMI_DMS_SWI_GET_CRASH_INFO	Add support for QMI_DMS_SWI_GET_CRASH_INFO	QMI



21 SWI9X15C 5.0 Release 11

This section describes changes since the previous major release.

21.1 Software Release Description

21.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.35.00
Application	SWI9X15C_05.05.35.00
Date of generation	2014/05/29 15:46:52
Binary Size	33.9 MB (compressed)
IMEI SV	12
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

21.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	Build 4127	
Windows SDK	Build 4125	
Skylight	Build 4130	
Linux Drivers	S2.18 / N2.24	
Linux SDK	SLQS 03.03.01	

21.1.3 Released Files and Download Processes

Download Option	Files
Windows	Install Build 4125
CWE/NVU files	Various PRI packages

21.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

21.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
14792	Fix crash after receiving multiple packets on port 7275	Port 7275 is assigned by IANA for GPS SUPL. If non-SUPL data was received by the device on that port, a memory leak was occurring.	System

ID	Title	Description	Impacted Domain
14880	Update maximum allowed SPC attempts	Update for Sprint requirement GTR-CDMA-00283: The Device MUST power off if an incorrect subsidy lock is entered into the Device on two consecutive attempts.	Sprint
14446	Fix HDR Packet Error Rate in QMI_NAS_SWI_NETWORK_DEBUG	Fix incorrect integer division, causing an error rate of 0 to be commonly provided to the host	Sprint
14904	ERI values 0 and 1 reversed in AT\$ERI response	Values provided were not compliant to TSB-58A	Sprint
14056	Suppress NOT_INITIALIZED subscriber ready state after PIN unlock	A timing issue was occasionally causing a NOT_INITIALIZED message to be sent to the host after PIN unlock. Although technically correct, this was causing a customer application to crash.	MBIM
14059	Send Failure result when START_NETWORK_INTERFACE fails due to SINGLEAPNSWITCH timeout	If SINGLEAPNSWITCH customization was enabled and device was configured for Windows 8.1 MPDP, the START_NETWORK_INTERFACE response was not returned to the host in some scenarios. This was causing the Windows 8.1 VANUI to wait forever for the response.	MBIM
15004	Fix structure length in QMI_QOS_SWI_READ_EXTRA_APN_PARAMS	Two extra bytes were incorrectly being sent at the end of the QMI packet.	QMI
15088	Port/update various QMI messages from legacy products	Add QMI_NAS_SWI_HDR_PERSONALITY Add QMI_NAS_SWI_PROT_SUBTYPE Add QMI_DMS_SWI_GET_FSN Update QMI_DMS_SWI_GET_CUST_FEATURES for GPSLPM TLV Update to show average 1x data rate in QMI_WDS_GET_CURRENT_CHANNEL_RATE because instantaneous data rate is not available	QMI
14855	Update package string sent to FOTA server	For devices using image switching, the package name is updated to more accurately reflect the active image and configuration	OMADM
14371	Stop all GPS activity when GPSENABLE customization is disabled	Previously, the GPSENABLE customization only affected the AT command interface. It is now updated to enable/disable GPS on all interfaces	GPS

22 SWI9X15C 5.0 Release 10

This section describes changes since the previous major release.

22.1 Software Release Description

22.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.30.00
Application	SWI9X15C_05.05.30.00
Date of generation	2014/05/01 16:32:44
Binary Size	33.9 MB (compressed)
IMEI SV	12
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

22.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	Build 4105	
Windows SDK	Build 4110	
Skylight	Build 4106	
Linux Drivers	S2.17 / N2.24	
Linux SDK	SLQS 03.03.01	

22.1.3 Released Files and Download Processes

Download Option	Files
Windows	Install Build 4105
CWE/NVU files	Various PRI packages

22.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

22.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
14636	Add Qualcomm Fixes	<p>CR 547371 - Crash on buffer overrun when configuring the autoconnect settings through QMI WDS message. (Formal delivery of previous changes)</p> <p>CR 640209 - GPS should de-register UP/DOWN event callback functions with Data service, before de-allocating them. (Formal delivery of previous changes)</p> <p>CR 502579 - When remote wakeup is issued by the device during USB bus suspend + USB low-power mode state, the D- line raises to 3 volts and then drops to 1.5 volts. The remote wakeup operation succeeds, but this signaling pattern is not compatible with the USB specification.</p> <p>CR 514368 - USB bus remote wakeup failure on network interface (Formal delivery of previous changes)</p> <p>CR 489047 – Device enumeration failure after multiple suspend/resume cycles without disconnecting USB cable (Formal delivery of previous changes)</p>	System
13773	Fix rare crash when repeatedly activating and deactivating packet data session	Fix memory leak where IP filter was not always deregistered after deactivating data session	System
14491	Occasional slow device reset with Vdd Min	Fix issue where processor may re-enter power save mode rather than immediately resetting the device	System
14656	Device Detail Management Object	Update Module Host Device Reporting in the Device Detail Management Object to 13340 v5.5 specification	AT&T
14054	No SIM full Pop-up	Fix issue where device configured with SMS storage on SIM only (rather than SIM+NV) will not send SMS Full indication on MBIM interface	Orange
14865	Prevent USB from becoming stuck in SS during RTN Reset	Fix issue where QMI response to the host is stuck on the device because the processor has entered power save mode	Sprint
14773	Ensure GetDefaultProfileNum contains updated values after CIDC	Ensure the cached values for the default attach profile are updated after CIDC session, rather than requiring a power cycle to take effect	Sprint
14777	Modify notification logic for HFA no-coverage scenarios	Fix issue where spurious HFA notification was sent to the host when out of coverage	Sprint
14493	Fix SCRTN	Update the scope of SCRTN Restore	Sprint
14602	Fix AT\$RTN to power cycle device	Power cycle modem after AT\$RTN as per Sprint Requirements	Sprint
14638	Disable LTE correctly in some non-LTE SELRAT selections	Fix issue where AT!SELRAT=0F and AT!SELRAT=10 were not properly disabling LTE	AT
14579	Update TS.25 list	Updated TS.25 (formerly SE.13) list to March 10, 2014	AT/QMI
13754	Fix empty PLMN name in manual scan	Fix empty PLMN name returned in manual network scan results for serving cell	QMI
14320	QMI_NAS_GET_SERVING_SYSTEM	Fix empty PLMN name in QMI_NAS_GET_SERVING_SYSTEM	QMI



ID	Title	Description	Impacted Domain
14503	QMI_QOS_SWI_READ_EXTRA_APN_PARAMS	Fix QMI_QOS_SWI_READ_EXTRA_APN_PARAMS to match Sierra specification	QMI
14052	Configurable MBIM Custom Dataclass	Add support for configurable MBIM Custom Dataclass via PRI	MBIM

23 SWI9X15C 5.0 Release 9.1

This section describes changes since the previous point release.

23.1 Software Release Description

23.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.26.02
Application	SWI9X15C_05.05.26.02
Date of generation	2014/08/07 21:13:26
Binary Size	33.9 MB (compressed)
IMEI SV	15
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

23.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	Build 4099	
Windows SDK	Build 4100	
Skylight	Build 4094	
Linux Drivers	S2.17 / N2.23	
Linux SDK	SLQS 03.03.00	

23.1.3 Released Files and Download Processes

Download Option	Files
Windows	Install Build 4099
CWE/NVU files	Various PRI packages

23.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

23.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
13773	Fix rare crash when repeatedly activating and deactivating packet data session	Fix memory leak where IP filter was not always deregistered after deactivating data session	System
16096	IMEI SVN	Increment IMEI SVN to 15	System

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24 SWI9X15C 5.0 Release 9

This section describes changes since the previous major release.

24.1 Software Release Description

24.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.26.00
Application	SWI9X15C_05.05.26.00
Date of generation	2014/04/02 18:24:16
Binary Size	33.9 MB (compressed)
IMEI SV	12
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

24.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	Build 4099	
Windows SDK	Build 4100	
Skylight	Build 4094	
Linux Drivers	S2.17 / N2.23	
Linux SDK	SLQS 03.03.00	

24.1.3 Released Files and Download Processes

Download Option	Files
Windows	Install Build 4099
CWE/NVU files	Various PRI packages

24.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

24.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
14426	Add Qualcomm 4.5.34 SBA #10	CR 569628 - Avoid dropping loopback packets by ensuring packet validation is only done when path is configured with IP filtering. The change is needed to pass 36.523-1 TC 7.3.3.2 and 7.3.3.4: Cipherring and decipherring / Correct functionality of EPS UP encryption algorithms	System
14351	Add Qualcomm 4.5.34 SBA #9	CR 543006 - Support for PLI - NMR EUTRAN Intra Freq Only. Changes to measurement report packing to comply with "C6-130158 - 31.124 Rel.11" - Test case for PLI Intra NMR only (E-UTRAN). The change is needed to pass TC: 27.22.4.15.1/15 PROVIDE LOCAL INFORMATION, E-UTRAN Intra-Frequency Measurements CR 630771 – Fix memory leak in QMI_DMS_GET_PRL_VER_REQ_MSG CR 607391 - Improper decoding of PHICH under certain network loading CR 627291 - Improve GPS frequency tracking at low temperature	System
14288	Add Qualcomm 4.5.34 SBA #8	Add various fixes from AT&T Feb 2014 Critical CR list	System
14260	Fix occasional scenario where device fails enter USB suspend	Fix USB stall which prevents the device from suspending the USB bus	System
13793	Fix issues with Sprint RTN reset	Fix issues with Sprint RTN reset on SWI9X15C_05 baseline	Sprint
14238	Fix crash with command AT+CSIM=?	Fix crash with command AT+CSIM=? when PCSCDISABLE customization has bit 2 enabled	AT
14135	Add support for QMI_NAS_SWI_GET_CQI	Add support for QMI_NAS_SWI_GET_CQI for the host to retrieve CQI information	QMI
12983	Add Support for QXDM over MBIM	Add support to capture QXDM logs over the MBIM interface	MBIM
13758	Fix crash from UDP packet on port 7275	GPS SUPL code was incorrectly intercepting UDP data packets, even when SUPL was not active	Data
14282	GPS DC Bias	Fix DC Bias control on GPS Antenna port	GPS

25 SWI9X15C 5.0 Release 8

This section describes changes since the previous major release.

25.1 Software Release Description

25.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.22.00
Application	SWI9X15C_05.05.22.00
Date of generation	2014/03/12 17:45:54
Binary Size	33.9 MB (compressed)
IMEI SV	12
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

25.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Driver Package	Build 4085	
Windows SDK	Build 4086	
Watcher	Build 4083	
Linux Drivers	S2.17 / N2.23	
Linux SDK	SLQS 03.03.00	

25.1.3 Released Files and Download Processes

Download Option	Files
Windows	Install Build 4085
CWE/NVU files	Various PRI packages



25.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

25.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
14145	Add Qualcomm 4.5.34 SBA #7	CR 581101 – WCDMA channel rates reported to host are not included for extended bit rate as per the spec CR 609757 – Required for AT&T test case LTE-BTR-1-7612 CR 624896 – Fix occasional STALL on USB interface	System
13925	Add Qualcomm 4.5.34 SBA #6	CR 481688 – Add support for AT&T RPM (formal delivery of previous changes) CR 609755, 590421 – Required for AT&T test case LTE-BTR-1-7612 CR 513630, 600125, 601418, 216895 – From AT&T February Critical CR list CR 589828 – Fix issue where temperature compensation was not applied to first LTE PRACH burst CR 608687 – Fix network name display in Windows 8 for Closed Subscriber Group (CSG/Femtocell) networks	System
14183	IMEI SV	Increment IMEI SV to 12	System
12961	AT&T OMADM Host Device Reporting	Add Support for Module Host Device Reporting in the Device Detail Management Object (AT&T CDR-DVM-4532)	OMADM
12966	AT&T OMADM Operating System Details	Add Support for Operating System Details in the Device Detail Management Object (AT&T CDR-DVM-4533)	OMADM
13599	QMI_NAS_SWI_NETWORK_DEBUG	Add QMI object to support Sprint ##debug requirements	QMI
13598	QMI_WDS_SWI_PROFILE_CHANGE	Add QMI object to notify the host if a profile is updated by the system	QMI
13976	QMI_SWIOMA_DM_SET_SETTINGS modifies check interval	API for QMI_SWIOMA_DM_SET_SETTINGS was inadvertently setting update check interval to 100 seconds	QMI
13636	Profile created at the wrong index	Linux QMI SDK profile creation was using the next available index rather than the requested index	QMI
14117	Verizon AT+VZWAPNE	Update AT+VZWAPNE to update the default eHRPD profile (0) if profile 3 is changed	AT
13759	AT+CSCA	Fix AT+CSCA to properly handle '+' in the SMSC address	AT

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ID	Title	Description	Impacted Domain
14030	AT!GPSLOC?	Correct the HEPE value reported in AT!GPSLOC?	AT
09715	AT!GPSNMEACONFIG	Fix NMEA output when AT!GPSNMEACONFIG is set to Disabled	AT
13678	SINGLEAPNSWITCH customization	If a profile is changed via AT commands, it was not triggering a reattach (as expected by the SINGLEAPNSWITCH customization)	AT
13441	Fujitsu request to ignore MBIM shutdown	Ignore MBIM_MHOSTSHUTDOWN when in Fujitsu Clearsure mode	Fujitsu Clearsure

26 SWI9X15C 5.0 Release 7.2

This section describes changes since the previous point release.

26.1 Software Release Description

26.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.16.03
Application	SWI9X15C_05.05.16.03
Date of generation	2014/06/04 15:01:26
Binary Size	33.9 MB (compressed)
IMEI SV	13
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

26.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Drivers	Build 4057	
Windows SDK	Build 4063	
Watcher	Build 4083	
Linux Drivers	S2.17 / N2.23	
Linux SDK	SLQS 03.02.04	

26.1.3 Released Files and Download Processes

Download Option	Files
Windows SDK	Install Build 4063
CWE/NVU files	Various PRI packages

26.1.4 Limitations

This release does not have AT&T RPM feature enabled and therefore is not suitable for certification at AT&T.

26.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
15225	Verizon Data Retry	Fix Verizon Data Retry functionality	Verizon
15226	IMEI SV	Increment IMEI SV to 13	System

27 SWI9X15C 5.0 Release 7.1

This section describes changes since the previous point release.

27.1 Software Release Description

27.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.16.02
Application	SWI9X15C_05.05.16.02
Date of generation	2014/03/17 23:49:48
Binary Size	33.9 MB (compressed)
IMEI SV	11
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

27.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Drivers	Build 4057	
Windows SDK	Build 4063	
Watcher	Build 4083	
Linux Drivers	S2.17 / N2.23	
Linux SDK	SLQS 03.02.04	

27.1.3 Released Files and Download Processes

Download Option	Files
Windows SDK	Install Build 4063
CWE/NVU files	Various PRI packages

27.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

27.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
14196	Add Qualcomm 4.5.34 SBA #5.1	<p>CR 543006 - Support for PLI - NMR EUTRAN Intra Freq Only. Changes to measurement report packing to comply with "C6-130158 - 31.124 Rel.11" - Test case for PLI Intra NMR only (E-UTRAN). The change is needed to pass TC: 27.22.4.15.1/15 PROVIDE LOCAL INFORMATION, E-UTRAN Intra-Frequency Measurements</p> <p>CR 569628 - Avoid dropping loopback packets by ensuring packet validation is only done when path is configured with IP filtering. The change is needed to pass 36.523-1 TC 7.3.3.2 and 7.3.3.4: Cipherring and deciphering / Correct functionality of EPS UP encryption algorithms</p> <p>CR 627291 - Improve GPS frequency tracking at low temperature</p>	System
13598	QMI_WDS_SWI_PROFILE_CHANGE	Add QMI object to notify the host if a profile is updated by the system	QMI
14183	IMEI SV	Increment IMEI SV to 11	System
14282	GPS DC Bias	Fix DC Bias control on GPS Antenna port	GPS
14117	Verizon AT+VZWAPNE	Update AT+VZWAPNE to update the default eHRPD profile (0) if profile 3 is changed	AT

28 SWI9X15C 5.0 Release 7

This section describes changes since the previous major release.

28.1 Software Release Description

28.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.16.00
Application	SWI9X15C_05.05.16.00
Date of generation	2014/02/06 01:23:05
Binary Size	33.9 MB (compressed)
IMEI SV	10
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

28.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Drivers	Build 4057	
Windows SDK	Build 4063	
Watcher	Build 4060	
Linux Drivers	S2.17 / N2.23	
Linux SDK	SLQS 03.02.04	

28.1.3 Released Files and Download Processes

Download Option	Files
Windows SDK	Install Build 4063
CWE/NVU files	Various PRI packages



28.1.4 Limitations

This release does not have Verizon Data Retry feature enabled and therefore is not suitable for certification at Verizon.

28.1.5 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
13735	Add Qualcomm 4.5.34 SBA #5	CR 567278, 530771, 587913, 608259, 548149 – Fixes for AT&T DAM testing when RPM is enabled.	System
13708	Add Qualcomm 4.5.34 SBA #4	CR 565812 – AT&T DAM test case LTE-BTR-1-1830 failure CR 600031 – Fix for VZW ITS UICC failures	System
13731	Increment IMEI SVN	Previous release was PTCRB certified	System
13707	Disable NF/SRVCC if voice is disabled	Avoid reporting NF capability to the network if voice is disabled	LTE
13162	Add wbxml message logging in XML format	Sprint OMADM requirement	OMADM
12634	Crash on OMADMStartSession	Fix rare/intermittent crash when host calls OMADMStartSession	OMADM
13569	Update +VZWAPNE to also modify the eHRPD profiles	Provides a mechanism to modify eHRPD profiles and ensure they are in sync with LTE profiles.	AT
13488	Updates for MO-SMS	Updates for failures observed during Verizon ITS testing	AT
13465	Add support for AT!DAWSTXPWR	Listed in AT command doc but support was not present in firmware	AT
13400	High voltage reported to host on startup	Invalid voltage was being reported to host before the voltage had been actually read from the device.	QMI
13545	Fix custom RAT display for AT&T in some WCDMA scenarios	If MBIM interface is opened prior to the UE attaching on WCDMA, the service indication could be incorrect	MBIM
13614	Fix indication of USSD support	UE wasn't reporting USSD capability to the host over MBIM interface	MBIM

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29 SWI9X15C 5.0 Release 6

This section describes changes since the previous major release.

29.1 Software Release Description

29.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.11.00
Application	SWI9X15C_05.05.11.00
Date of generation	2014/01/08 22:36:58
Binary Size	33.8 MB (compressed)
IMEI SV	9
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

29.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Drivers	Build 4045	
Windows SDK	Build 4044	
Watcher	Build 4021	
Linux Drivers	S2.17 / N2.23	
Linux SDK	SLQS 03.02.04	

29.1.3 Released Files and Download Processes

Download Option	Files
Windows SDK	Install Build 4044
CWE/NVU files	



29.1.4 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
13313	Add Qualcomm 4.5.34 SBA #3	CR 544244 – IMS registration retry does not occur if initial registration times out. Observed during Verizon certification testing. CR 532418 – If cell change occurs before LTE Attach Complete is finished, perform new Attach Request rather than Tracking Area Update. Observed during Verizon certification testing.	System
13230	Add Qualcomm 4.5.34 SBA #2	CR 576789, 576720 – Formal version of stability fixes incorporated in prior releases. No change in functionality	System
13398 13327	Enable LTE Radio Policy Manager	AT&T LTE requirement	System
11490	Self-powered UE will crash after host restart	Fix stability issue introduced in previous release. Found during internal stability testing.	System
12670	Add support for OMADM SU CANCEL	Verizon OMADM requirement	OMADM
13364	Add AT commands : ^MODE, !GVER, !GVERBT	Add support for some commands requested by customers: AT^MODE AT!GVER AT!GVERBT	AT
12666	Add AT!GPSONLY to enable/disable GLONASS	Add support for some commands requested by customers: AT!GPSONLY	AT
13409	Fix attach state during LPM in QMI NAS	QMI message was previously reporting CS and PS states as Attached when in Low Power Mode.	QMI
12626	UE reports incorrect serving network name	Fix handling of 2-digit MNCs when comparing SIM and network PLMNs	QMI
13131	DHCP discover is not going out of modem	Add DHCP customization to allow DHCP discover to be routed to the host.	Data
12498	QMI_PDS_SET_AUTO_TRACKING_STATE cannot start tracking session	Fix scenario where auto tracking session cannot be started after a manual tracking session was completed	GPS

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30 SWI9X15C 5.0 Release 5

This section describes changes since the previous major release.

30.1 Software Release Description

30.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.06.00
Application	SWI9X15C_05.05.06.00
Date of generation	2013/12/06 00:19:40
Binary Size	33.8 MB (compressed)
IMEI SV	9
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

30.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Drivers	Build 4027	
Windows SDK	Build 4028	
Watcher	Build 4021	
Linux Drivers	S2.16 / N2.23	
Linux SDK	SLQS 03.02.03	

30.1.3 Released Files and Download Processes

Download Option	Files
Windows SDK	Install Build 4028
CWE/NVU files	

30.1.4 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
13137	Add Qualcomm 4.5.34 SBA #1	CR 556975 – Formal version of stability fixes incorporated in previous release. No change in functionality. CR 575926 – Avoid IPv6 redial if network provides only IPv4 interface on IPv4v6 profile with no cause code	System
12901	Port SIM related commands from MC77xx	Add support for: AT!STKEVENT AT!STKEVENTLIST Fix AT+CPINC	AT
12871	Port Sierra AT+ commands from MC77xx	Add support for: AT+ECIO AT+ETFCI AT+RSCP AT+UPSC AT+USET AT+WPOWER AT+DLMOD	AT
11987	Add AT+QCI implementation	Add support for: AT+CQI	AT
13062	Fix CMGR format for 3GPP2 SMS written by AT+CMGW	Firmware was not properly handling the scenario when optional parameters were omitted from AT+CMGW	AT
13064	Fix eHRPD data connection support for AT!SCACT command	AT!SCACT was not working for eHRPD connections	AT
12724	Output value back to low after set it to output high via AT+WIOV	External Antenna Select feature was overriding GPIO setting in some instances. Fixed so GPIOs are only updated if External Antenna Select is configured/used.	AT
12776	Use the correct profile ID when SLQSCreateProfile creates a 3GPP2 profile	SLQS was creating a profile with the wrong ID	QMI
06519	Update QMI_DMS_SWI_GET_RTN_DATA stats after RTN	QMI object to obtain Sprint RTN information was not being updated properly	QMI
12616	Restore support for AT&T custom data class requirements	MBIM interface was showing 3G connection where AT&T requirements state it should be showing 4G	MBIM
13110	Fix handling of long PLMN names	If long PLMN name exceeds Windows limitation of 20 characters and the short name is empty, we provide the truncated long name	MBIM
12528	Align QCT and SWI SIM Hotswap customizations	Update SIMHOTSWAPDIS customization to align with stack changes	SIM
13127	Enable Send SS in the terminal profile	Send SS was inadvertently removed from Terminal Profile, which is not allowed per spec	STK
11526	Changeable USBID failed to change the UDPID to 68C0	Add native support for 0x68C0 PID	USB



ID	Title	Description	Impacted Domain
11090	Device disconnects during ping traffic when hardcoded IP feature is enabled	If HARDCODEDIPEN customization is enabled, an IPv6 call would be terminated after two minutes.	Data
13123	Module crashes after receiving multiple SMSs	When a specific customer feature is enabled, multiple SMS received quickly could cause a crash to occur.	SMS
13122	Multiple SMS arriving at once triggers a 10 second wake pulse	When a specific customer feature is enabled, multiple SMS received quickly could cause an incorrect wake pulse width.	SMS

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31 SWI9X15C 5.0 Release 4

This section describes changes since the previous major release.

31.1 Software Release Description

31.1.1 Release identification

Component	Revision
Boot loader	SWI9X15C_05.05.02.00
Application	SWI9X15C_05.05.02.00
Date of generation	2013/11/15 13:54:28
Binary Size	33.8 MB (compressed)
IMEI SV	9
Qualcomm Stack Version	AMSS 9x15 4.5.34 (M9615ACETWMLZD4534)

31.1.2 Software Tools Versions

S/W Tools Name	Version	Resource file
Windows Drivers	Build 3981	
Windows SDK	Build 4017	
Watcher	Build 3991	
Linux Drivers	S2.16 / N2.23	
Linux SDK	SLQS 03.02.03	

31.1.3 Released Files and Download Processes

Download Option	Files
Windows SDK	Install Build 4017
CWE/NVU files	



31.1.4 Validated Corrections / Improvements

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

ID	Title	Description	Impacted Domain
12788	Add Qualcomm 4.5.34	Update to Qualcomm M9615ACETWMLZD4534 baseline	System
12575	Update TS.25	Update TS.25 (formerly SE.13) list to October 21, 2013 release	System
11542 11999	Stability fixes	Add enhancements to avoid issues observed during host system stress testing (hibernate/suspend/reset)	System
11235	Stability fixes	Fix crash observed at startup when using some UICCs	System
12596	Stability fixes	Fix crash when disconnecting a data session when roaming and device is configured for Verizon	System
12856	Delayed reset	Fix problem where a reset issued immediately after power up would not take effect until the device had been powered for 30 seconds	System
12427	GPS antenna	Fix GPS Antenna selection customization (GPSSEL) on MC7354	System
12874	Add support for new Verizon OMADM requirements	Add support for ICCID node Add support for DateTime node Add support for VZW800 node	OMADM
12511	Data connectivity	Fix issue where data session initiated via QMI would fail after entering PIN1	QMI
09212	Network name	Fix issue where network name provided over QMI interface was not formatted properly	QMI
12406	Verizon Antenna application	Fix RSSI value returned when querying only one antenna	QMI
12118	Home Network	Fix issue where home network cannot be obtained while the device is out of service	QMI
10456	OMADM indications	Fix issue where OMADM indications were only sent to one client	QMI
12234	Update AT!SCACT for IPv6	For customers initiating data connections via AT interface, AT!SCACT will now work for IPv6	AT
11984	AT+CNUM	Fix issue where AT+CNUM was not working as expected	AT
10397	3GPP MO-SMS using UCS2	Fix failure to send SMS in UCS2 encoding	AT
12680	3GPP MT-SMS encoding	Fix issue where MT-SMS in GSM 7-bit encoding was incorrectly interpreted as ASCII 7-bit	AT
11297	3GPP2 MO-SMS	Fix failure to send 141 to 160 length SMS in 7-bit encoding	AT
10028	3GPP MO-SMS max length	Fix issue where SMS sent in PDU mode longer than the maximum allowable length would incorrectly trigger a zero-length SMS rather than returning an error	AT

32 Troubleshooting

Please contact customer service for support and debug

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33 Certification Description

None

34 Restrictions and Additional Information

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

ID	Description (What/When)	Impacted Domain
12877	BSOD during Microsoft WHCK SleepPnP IO test. Under investigation to determine whether it is a Microsoft OS, WHCK, driver, or firmware issue.	System-level WHCK