

Cellular Devices Technical Approval Notification

To Mike Cihra,
M2M Services & Platforms, Telstra Innovation
Products & Marketing

Gary Yuen, Benoit Bouju,
Sierra Wireless

Cc Chris Kyritsis,
M2M Services & Platforms, Telstra Innovation
Products & Marketing

From Steve Vodicka
Wireless Devices and Applications

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Telstra Wireless
Network & Access Technologies
Product Solutions Engineering
Wireless Devices and Applications


Level 9, 18 Smith St
Parramatta NSW 2150
Australia

Telephone +61 2 9865 4686
Facsimile +61 2 9865 4709

Mobile +61 418 209 921

Insert 0 for +61 within Australia

Approval Type	Full
Nature of Approval	Hardware update of approved module
Product Type	PCI Express Embedded Module
Manufacturer	Sierra Wireless
Model	SL8084 
Telstra Product line	To be determined by the end-product integrating the module
Firmware/Bootloader version (and SVN)	S3_0_0_1BAP(SVN:08)
Hardware Version	SPRV and FSN: CEH1492042130
AT command to display modem firmware and Hardware revision	Firmware version: ATI Hardware version: AT! BSMCCHECK?
Connection Manager Software Version Win7, Vista and Windows XP	To be determined by the end-product integrating the module Used Sierra Aircard Watcher R11.3.1107.2 Build 3138 for testing purpose only
Receiver Type (1,2,3,hybrid,3i) Rake : Diversity Only : Type1 Equalizer Only/ Grake : Type 2 'Diversity Equalizer'/GRake2 : Type 3 'Diversity equalizer with interference awareness': Type 3i	Type 2 (Rx Equal Only)
Integrated Antenna Assessment	
Data Device Coverage Performance Rating	To be determined by the end-product integrating the module
Internal antenna characteristics	To be determined by the end-product integrating the module
External Antenna Connector Type	Standard SMA Female Connector

International Roaming Suitability	Dual Band UMTS (850, 2100 MHz) Quad Band GSM (850, 900, 1800, 1900 MHz) Support for UMTS roaming in Europe. UMTS roaming support to USA limited to areas of 850 coverage only.
Locked to Telstra Network	To be determined by the end-product integrating the module Current setting is device is not locked to Telstra
Additional Device Specifications	 2400058_SL808X_PT S_v2.zip
Device Accessories	To be determined by the end-product integrating the module
Firmware Upgrade procedure	One click tool
User Interface (UI) Upgrade procedure	To be determined by the end-product integrating the module
Main features of this device	<ul style="list-style-type: none"> • HSDPA Category 6 (3.6 Mbps Network Peak) • HSUPA Not Applicable (UMTS R99) • Data – NDIS interface and UART Serial Connection • SMS • Voice • Standalone GPS
Other comments	This release accounts for the update in hardware and firmware of Sierra Wireless SL8084 module required due to the change in internal flash memory. This approval is applicable for SL8084 only. SL8085 (Data-only and non GPS variant) will no longer be supported.

Main Device Strengths Noted


SL8084 supports AMR WB voice codec which enhances the voice quality




Main Device Weaknesses Noted

Doesn't support RX Diversity.

Paul Coburn Director Product Solutions Engineering	Approval Date 30/01/2013
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MAIN FEATURE SUMMARY	
Type approval designation	Air Prime SL8084
A-tick number	Not provided
TA Codes (TAC) – List All	35689004
Declared Specific Absorption Rate (SAR)	Radiated tests (SAR, effective radiated power, and spurious harmonics) are dependant on the antenna configuration and must be done on the end-product integrating the module.
Size	Length: 30 mm Width: 25 mm Thickness: 2.40 mm (nominal) Weight: approximately 3.5g
Environmental Operating temperature	Operating temperature ranges -30 C to +70 C
Lead Free, RoHS Compliant Packaging	Yes
UE HS-DSCH Category (Maximum downlink speed)	HSDPA Category 6 (3.6 Mbps network peak)
UE HSUPA Category (Maximum uplink speed)	UMTS R99 only
Mobile Station Modem Version	QSC6270 for SL8084
Qualcomm Stack Version	2.1.20
Radio Processor model	QSC6270 for SL8084
Memory type and size (NAND/NOR Flash)	1Gb (128M x8) NAND Flash + 512Mb (32M x16) Mobile DDR SDRAM
Supports external memory	To be determined by the end-product integrating the module
Operating Systems Supported	x32/x64 Windows 7, Vista (SP2), XP(SP3)
Connection Manager Software Version	To be determined by the end-product integrating the module
Network Adapter Interface	Yes
Modem Interface	No
Driver version	NDIS: 6.20.0.17 (NDIS 5)
Windows XP/Vista/7- 32-bit/64-bit	NDIS:6.20.0.18 (NDIS 6.2)
Standalone Driver Package	Build3138
Zero-Install Plug 'n' Play support	Not Applicable
Software Development Kit (SDK)	Yes
Windows Compatibility Centre Listed	Yes
http://www.microsoft.com/windows/compatibility/windows-7/en-us/Default.aspx?type=Software	
Microsoft WHQL certified drivers	Yes
Driver version Linux	V1.26_1740(for Kernel version 2.6.20 to 2.6.31 + 2.6.33 + 2.6.34) (Not Tested) V3.2_1740 (for Kernel 2.6.32 + 2.6.35 to 2.6.38 + 3.0.x) (Not Tested)
Status Indicator LEDs (Power, 2G, 3G, Roaming)	To be determined by the end-product integrating the module
HSDPA / W-CDMA Air interfaces	Dual band UMTS: 850/2100 MHz
EDGE/GSM Air Interfaces	Quad band E-GPRS/GSM 850/900/1800/1900 MHz
Multimode Support	Yes
Supports Voice	Yes (Tested via AT command)
Supports SMS	Yes
Supports GPS	Yes
Supports AGPS	Yes in general, however Telstra AGPS implementation is Not supported for this approval.
Receiver Equalization	Yes
Dual antenna Receiver Diversity	No
3GPP FDD compliance	WCDMA: Release 5
WCDMA power class	3
EDGE Power	E2
GSM Power Class	850/900 Class 4, 1800/1900 Class 1
Multi-slot (E)GPRS Class 12, & Class B Type 1 MT	GPRS(Class 10) and EGPRS (Class 12)
Supported Quality of Service Classes (Streaming, Background and Interactive)	Yes
SupportsEFR	Yes
SupportsHR	Yes
SupportsAMR	Yes

MAIN FEATURE SUMMARY	
Supports AMR Wideband	Yes
Support for PPP, IP transparent/non-transparent modes	Yes
Transparent support for IPSec and VPN technology	Yes
Handover between UMTS and GSM/E-GPRS networks	Yes
Supports PAP	Yes
Supports CHAP	Yes
SIM Application toolkit	Yes
Band Selection Options (All bands, 3G-850-Only, 3G-2100-Only, 3G-850/2G900/1800, etc)	FDD Band Selection Default Setting at!band = 00 (All bands) AT!ENTERCND="A710" AT!BAND=<Index>,<Name>,<GWmask> <Index> (Index of a band set. Use the Query List command to display all supported sets): • Valid range: 0–19 <Name> (Name of the band set): • ASCII string—Up to 30 characters <GWmask> (GSM/WCDMA bands included in the set): • Format: 32-bit bitmask • Valid values: • 0000000000000080—G1800 • 0000000000000300—G900 (EGSM / GSM) • 0000000000080000—G850 • 0000000000200000—G1900 • 0000000000400000—W2100 • 0000000000800000—W1900 • 0000000004000000—W850 • 0000000008000000—W800 • 0002000000000000—W900
A separate icon is provided to indicate HSDPA download activity (in addition to WCDMA\2.5G\2G download indications)	To be determined by the end-product integrating the module
Diagnostics Monitoring tool	QXDM
IP version supported	IPV4
Multiple PDP/RAB support	No
SIM-ME interface	External USIM interface through LGA connection.
AT Interface	3GPP TS27.007 and Extended AT commands  2130616 Extended AT Commands v5.zip
GCF and PTCRB Report (date and firmware version)	Certified according to GCF-CC-3.41.0 (Performed on FW version: S2.0.0.16 on 10.6.2011)

SPECIAL CONDITIONS OR CONFIGURATIONS FOR APPROVAL	
Conditions on Future Releases	Approval is given on basis that future software upgrades will have updated SVN values and adequate change information, field tests and results declarations to Telstra as operator to assess whether additional interworking tests are required.
Basis for Approval	Compatibility status is given based on vendor's declaration. Release notes provided by Sierra Wireless.  SL808X_S3.0-Release-3_FW_Release_Notes [SL808X_S3.0-Release-3_FW_Release_Notes]
Compliance Requirements of the End Products integrating embedded module.	The end product integrating this module must comply with Australian customer equipment and safety labelling requirements for A-Tick and C-Tick as specified by the Australian Communications & Media Authority (ACMA). Radiated tests (SAR, ERP, spurious harmonics) are dependent on the antenna configuration and cannot be done by module provider. These tests can only be performed with final product.
Testing Covered	Testing has been conducted based on the change notes provided., <ul style="list-style-type: none"> • Data performance (NDIS interface) • Emergency voice calls • Device Subjective and Voice calls. • Data stability
CONDITIONS OF APPROVAL	
None	
CONDITIONS OF APPROVAL Sierra Wireless to advise vendors integrating SL808x modules of the following	
Outstanding Issues Register (Class 3 issues should be addressed in future releases or products)	 Sierra_SL808x_issues.xls [Sierra_SL808x_issues.xls]
Approved Manufacturer Firmware Customisation File	 Product_Config_SL8084_Telstra_New HW [Product_Config_SL8084_Telstra_New HW_V1.0]

Vivien Tao,

For

Steve Vodicka
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