

Qualcomm Technologies, Inc.





SWOC-T

Integrator's Manual

80-P8867-5 Rev. B

November 10, 2016

${\bf Confidential\ and\ Proprietary-Qualcomm\ Technologies,\ Inc.}$

NO PUBLIC DISCLOSURE PERMITTED: Please report postings of this document on public servers or websites to: DocCtrlAgent@qualcomm.com.

Restricted Distribution: Not to be distributed to anyone who is not an employee of either Qualcomm Technologies, Inc. or its affiliated companies without the express approval of Qualcomm Configuration Management.

Not to be used, copied, reproduced, or modified in whole or in part, nor its contents revealed in any manner to others without the express written permission of Qualcomm Technologies, Inc.

Qualcomm is a trademark of Qualcomm Incorporated, registered in the United States and other countries. Other product and brand names may be trademarks or registered trademarks of their respective owners.

This technical data may be subject to U.S. and international export, re-export, or transfer ("export") laws. Diversion contrary to U.S. and international law is strictly prohibited.

Qualcomm Technologies, Inc. 5775 Morehouse Drive San Diego, CA 92121 U.S.A.

Revision history

Revision	Date	Description
Α	November 2016	Initial release
В	November 2016	Removed 5 GHz notice Updated 20 cm RF exposure separation distance



Contents

1 Introduction	4
2 Applicable Module	5
3 Available Global Modular Approvals	6
4 Additional Regulatory Conformance Testing and/or Submissions Required by the Integrator	7
5 Compliant and Allowable Tx Power Settings Programmed into EEPROM	8
6 Allowable Antennas to Use with the Radio Module	9
7 Label Information	10
8 Required Regulatory Wording for User Manual and Installation Manual	
8.1 FCC compliance information	11
8.3 European Community (R&TTE) user manual wording and declaration	
8.4 European Community (R&TTE) Declaration of Conformity for System	
8.5 Taiwan user manual wording	14
8.6 Korea user manual wording	15
Tables	
Table 8-1 EU declaration of conformity	13
Table 8-2 Restrictions for use of 2.4 GHz frequencies in European Community countries	

1 Introduction

This document describes the steps that the OEM integrator must follow when designing and manufacturing a system utilizing a Qualcomm[®] design radio SWOC-T module (referred to in this document as the "Module").

Failure to follow the instructions in this document may invalidate the FCC certification and authorization of the Module for use in the U.S. and in other countries.

The Qualcomm modular certifications described in this document apply only to radio conformance for the Module. The OEM integrator is responsible for all system-level EMI/EMC and product safety testing and certification that applies to the host system in the U.S. and other countries where the system will be marketed or sold.

2 Applicable Module

- Part name SWOC-T
- FCC ID J9CSWOC-T
- IC 2723A-SWOCT

3 Available Global Modular Approvals

Module certification is limited to those countries for which Qualcomm has obtained radio modular approvals. Integrators can access the current list of certified countries via the following ways:

■ Log on to the Qualcomm CreatePoint system and search for the regulatory document under chip model SWOC-T.

Or, if you do not have access to the Qualcomm CreatePoint system, then:

 Contact your Qualcomm account representative to request access to the country list and modular certificates.

OEM integrators must receive their own radio certification for any country in which the system will be sold if a modular certification for that country is not available from Qualcomm.

4 Additional Regulatory Conformance Testing and/or Submissions Required by the Integrator

The global modular certifications apply to radio conformance for the Module only.

The OEM integrator is responsible for additional system-level EMI/EMC and product safety testing and certification that applies in the U.S. and other countries to the host system containing the Module. This includes, but is not limited to, Federal Communications Commission (FCC) Part 15 Class B Digital Emissions, China CCC, Taiwan BSMI, Korea KC, ETSI EN 301 489-17, and others.

These system-level EMC tests are to be done with the Module installed and included in the scope of the submission.

Modular radio certification is not possible in some countries. For such countries, OEM integrators must ensure radio certification for the end system is obtained, before placing the product on the market. A current list of applicable countries can be provided by Qualcomm.

Contact your Qualcomm account representative if you have questions about the additional regulatory conformance testing and/or related submissions.

5 Compliant and Allowable Tx Power Settings Programmed into EEPROM

The board data file contains the transmit power settings that are to be programmed into the Module during original manufacturing, as well as the board data file from the software.

The board data information is provided by Qualcomm. Contact your Qualcomm account representative for details about the board data file.

NOTE: Programming higher values than those provided in the board data file will invalidate all radio certifications for the Module.

6 Allowable Antennas to Use with the Radio Module

The allowed maximum gain (dBi), including antenna cable loss is 0 dBi.

WARNING: Use of a higher gain antenna than 0 dBi is not allowed without additional testing and appropriate FCC approval.



7 Label Information

The SWOC-T module is integrated with a display screen and supports the e-label per FCC KDB784748 D02 requirements:

\https://apps.fcc.gov/kdb/GetAttachment.html?id=KvMvDHtHyDtJ4FB3x0mEwA%3D%3D.

The SWOC-T e-label provides regulatory information. Qualcomm offers software that allows integration of the Module to fully comply with the FCC e-label requirements.

Regulatory Information:

FCC ID is J9CSWOC-T

IC: 2723A-SWOCT

Model Name: SWOC-T

Integrators must be aware of the following FCC e-labeling requirements for the end products to ensure absolute compliance.

For access to the required information on the e-label:

- 1. Users must be able to access the information without requiring special access codes or permissions and, in all cases, the information must be accessible in no more than three steps in a device's menu.
- 2. Devices must not require special accessories or supplemental plugins (e.g., the installation of a SIM/USIM card) to access the information.
- 3. Users must be provided specific instructions on how to access the information. The instructions must be included in the user's manual, operating instructions, insert in the packaging materials, or other similar means. Alternately, the access information may be available on the product-related website with instructions on how to access the website provided in the packaging material.

8 Required Regulatory Wording for User Manual and Installation Manual

The integrator must include text in the user manual to meet the regulator's requirements. The following text or similar wording should be used.

NOTE: The text in red font must be replaced.

8.1 FCC compliance information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This product does not contain any user serviceable components. Any unauthorized product changes or modifications will invalidate warranty and all applicable regulatory certifications and approvals, including authority to operate this device.

FCC Part 15 Digital Emissions Compliance

We [System Manufacturer Name, Address, Telephone], declare under our sole responsibility that the product [System Name] complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and radiates radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from the one the receiver is connected to
- Consult the dealer or an experienced radio/TV technician for help

The user may find the following booklet prepared by the Federal Communications Commission helpful:

Interference handbook

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Stock No.004-000-00345-4.

RF exposure statement

The products comply with the FCC mobile RF exposure limit set forth for an uncontrolled environment and are safe for intended operation with 20 cm separation distance.

8.2 Industry Canada notice

This device complies with Canadian RSS-210.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

RF exposure statement

This device is approved under mobile category with 20 cm separation distance.

Cet appareil est homologué en catégorie mobile avec une distance de séparation de 20 cm.

8.3 European Community (R&TTE) user manual wording and declaration

NOTE: Text in red font must be replaced with the name of the company responsible for placing the system on the European Community Market.

Marking by the above symbol indicates compliance with the Essential Requirements of the R&TTE Directive of the European Union (1999/5/EC). This equipment meets the following conformance standards:

EN300 328, EN 301 893, EN 301 489-17, EN60950, EN 62311

Table 8-1 EU declaration of conformity

Language	Standard
్క్ Česky [Czech]	[COMPANY NAME] tímto prohlašuje, že tento Radiolan je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
da Dansk [Danish]	Undertegnede [COMPANY NAME] erklærer herved, at følgende udstyr Radiolan overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
de Deutsch [German]	Hiermit erklärt [COMPANY NAME] dass sich das Gerät Radiolan in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
et Eesti [Estonian]	Käesolevaga kinnitab [COMPANY NAME] seadme Radiolan vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
en English	Hereby, [COMPANY NAME], declares that this Radiolan is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
es Español [Spanish]	Por medio de la presente [COMPANY NAME] declara que el Radiolan cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
el Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ <i>[COMPANY NAME]</i> ΔΗΛΩΝΕΙ ΟΤΙ Radiolan ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
fr Français [French]	Par la présente [COMPANY NAME] déclare que l'appareil Radiolan est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Íslenska [Icelandic]	Hér með lýsir [COMPANY NAME] yfir því að Radiolan er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
it Italiano [Italian]	Con la presente [COMPANY NAME] dichiara che questo Radiolan è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo <i>[COMPANY NAME]</i> deklarē, ka Radiolan atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo [COMPANY NAME] deklaruoja, kad šis Radiolan atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
mt Malti [Maltese]	Hawnhekk, <i>[COMPANY NAME]</i> , jiddikjara li dan Radiolan jikkonforma mal- ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
№ Magyar [Hungarian]	Alulírott, [COMPANY NAME] nyilatkozom, hogy a Radiolan megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
nl Nederlands [Dutch]	Hierbij verklaart [COMPANY NAME] dat het toestel Radiolan in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Norsk [Norwegian]	[COMPANY NAME] erklærer herved at utstyret Radiolan er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.
Pl Polski [Polish]	Niniejszym [COMPANY NAME] oświadcza, że Radiolan jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	[COMPANY NAME] declara que este Radiolan está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

Language	Standard
Slovensko [Slovenian]	[COMPANY NAME] izjavlja, da je ta Radiolan v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	[COMPANY NAME] týmto vyhlasuje, že Radiolan spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
fi Suomi [Finnish]	[COMPANY NAME] vakuuttaa täten että Radiolan tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar [COMPANY NAME] att denna Radiolan står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Table 8-2 Restrictions for use of 2.4 GHz frequencies in European Community countries

The restrictions listed follow ERC/REC 70-03(Edition of September 2011). It is recommended to check the latest edition for updated restrictions.

Country	Regulation
France	The outdoor use is limited to 10 mW e.i.r.p. within the band 2454-2483.5 MHz.
Italia	For private use, a general authorization is required if WAS/RLAN's are used outside own premises. For public use, a general authorization is required.

8.4 European Community (R&TTE) Declaration of Conformity for System

In addition to the radio conformity wording, the end integrator must also create and sign a European Declaration of Conformity (DoC) for all European directives applicable to the end product. At a minimum, this will be a DoC per the R&TTE directive covering radio, EMC, product safety and RF exposure essential requirements. The DoC must reference harmonized standards used for all radios present in the system.

Full details of R&TTE DoC requirements can be found at: http://www.ec.europa.eu/enterprise/sectors/rtte/index_en.htm

NOTE: An image of the DoC signed by the OEM integrator may be included in the user manual or a link to the DoC on the integrator's company website should be provided in the user documentation.

8.5 Taiwan user manual wording

台灣: 國家通訊傳播委員會

低功率電波輻射性電機管理辦法

第十二條經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條低功率射頻電機之使用不得影響飛航安全及干擾合法通信:經發

現有干擾現象時,應立即停用,並改善至無干擾時方得繼續使用。前項合法通信,指依電 信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波 輻射性電機設備之干擾。

在5.25-5.35秭赫(GHz)頻帶內操作之無線資訊傳輸設備,限於室內使用。(For 5GHz only)

8.6 Korea user manual wording 2016-11-10 15: A.S. A.T. Com

Korea KCC