

## **QCARD7280 Module Integrator Instruction**

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## **Revision history**

Revision	Date	Description
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## 1 Introduction

This document provides information regulatory information and process required for a host product that integrates the QCARD7280 module. It addresses both using the QCARD7280 module in a host product and obtaining certifications/authorizations for the specific markets.

Confidential design guidelines are available to QCARD7280 customers via the Qualcomm<sup>®</sup> CreatePoint system. Contact your Qualcomm account manager and/or customer engineer representative to request support.

**CAUTION:** Noncompliance to regulatory guidance may invalidate the module certifications/authorizations.

The OEM integrator is responsible for system-level EMI/EMC, RF exposure and product safety testing and certifications that apply to the host system in countries where the system will be marketed.

NOTE: The Qualcomm modular certifications described in this document only apply to radio conformance for the QCARD7280 module. Additional test and certification requirements may be applicable at the host level.

## 2 Product Overview

The highly integrated QCARD7280 modules provide the fundamental building blocks for the notebook compute in addition to a 3G/4G/5G Wi-Fi and Bluetooth radios.

### The QCARD7280 has below listed baseline regulatory certification variants:

- Chrome and Windows OS module for WWAN (5G FR2/FR1/4G/3G) + Wi-Fi/BT
  - □ Regulatory Model: QCARD7280N2
  - □ FCC ID:J9CQCARD7280N2
- Chrome and Windows OS module for WWAN (5G FR1/4G/3G) + Wi-Fi/BT
  - □ Regulatory Model: QCARD7280N
  - □ FCC ID:J9CQCARD7280N
  - □ IC: 2723A-QCARD7280N
- Chrome and Windows OS module Wi-Fi / BT only
  - □ Regulatory Model: QCARD7280F
  - □ FCC ID:J9CQCARD7280F
  - □ IC: 2723A-QCARD7280F

Table 2-1 QCARD7280 Variant model numbers

Model Name	os	Mode	CPU
QCARD7280N2	Chrome	WWAN + WLAN	2.4GHz
QCARD7280N-3	Chrome	WWAN +WLAN	2.4GHz
QCARD7280N-1	Windows	WWAN + WLAN	2.4GHz
QCARD7280P-3	Chrome	WLAN	2.xGHz
QCARD7280P-1	Windows	WLAN	2.xGHz

NOTE: OEM/ODM Integrator must complete a FCC and IC ID change per according to FCC 47 CFR § 2.933 and ISED RSP-100 Section 11.5 rules to use a unique FCC and IC ID under the OEM/ODM Integrator's FCC grantee code. Contact your Qualcomm account manager and /or customer engineer representative to request support.

## **3** Available Global Modular Approvals from Qualcomm

Module host certification is limited to those countries in which Qualcomm has obtained radio modular approvals. For devices that require RF exposure assessment at the host level due to portable user conditions, a host level assessment is required along with completion of applicable regulatory certification process for the host device.

To access the current list of certified countries, review documentation in the Qualcomm CreatePoint system.

**NOTE:** If integrators do not have access to the Qualcomm CreatePoint system, contact your Qualcomm account representative to request access to the country list and modular certificates.

**NOTE:** OEM integrators must apply for their own radio certification for each country where the system will be sold if a modular certification for that country is not available from Qualcomm.

## **4** Integrated Product Test and Certification Requirements

Integrators must adhere to test guidance provided in FCC KDB 996369 D04 available at this website: https://apps.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?switch=P&id=44637

- 1. The module has been approved for the rule parts defined in Table 4-1. Host device must be tested for Part15B compliance.
- 2. Radiated emissions testing should be tested per KDB 996369 with all transmitters active and transmitting at max transmit power. A Qualcomm account representative can assist with making test tools available as needed.
- 3. The recommended method of test is to use a call box simulator for WWAN where the UE is configured for maximum transmit power. For WLAN testing, if an access point is not available for mission mode testing, Qualcomm test tools can be used to configure the WLAN modem for maximum transmit power and the desired mode/frequency of operation.
- If a memory variant is utilized, limited WWAN and Wi-Fi transmitter testing should be completed to ensure equivalent compliance. The following testing must be completed at a minimum
  - Limited unlicensed band edge measurement and unwanted radiated spurious emissions
  - Radiated emissions in FCC Part 15.205 restricted bands during Wi-Fi and BT operation
  - □ Limited WWAN radiated emissions
  - □ Part 15B testing

NOTE: Data can be leveraged from the part of Part 15B and radiated emissions referenced above to address continued compliance with the variant memory.

- 5. RF Exposure must be addressed at the host level for all "portable" products where users are less than 20cm from the device during normal operation (i.e. SAR testing is required) in accordance with FCC KDB 447498. Host product manufactures must provide all required documentation to the end user.
- 6. Antennas must follow the guidelines defined in Section 7.
- In the US, either a Class II Permissive Change or new equipment authorization is required.
  Data can be leveraged from FCC ID:J9CQCARD7280N2, FCC ID:J9CQCARD7280N or FCC ID:J9CQCARD7280P per FCC KDB 484596.

Table 4-1 47CFR Rules Parts Addressed in Modular Certification

Band	Applicable FCC Rule Part
Band 5	47CFR47 Part 22
Band 2	47CFR47 Part 24
Band 46	47CFR47 Part 15 Subpart E
Other 3GPP Bands	47CFR47 Part 27
Wi-Fi 2.4 GHz	47CFR47 Part 15.247
Bluetooth 2.4 GHz	47CFR47 Part 15.247
Wi-Fi 5GHz 6GHz	47CFR47 Part 15 Subpart E
Receive Mode	47CFR47 Part 15 Subpart B
Test Standards	ANSI C63.10 (Unlicensed) ANSI C63.26 (Licensed)
Module Guidance	KDB Publication 996369
WWAN KDBs	e de

# **5** Additional Regulatory Conformance Testing and/or Submissions Required by the Integrator

Global modular certifications only apply to radio conformance for the Module.

- The OEM integrator is responsible for any additional system-level EMI/EMC and product safety testing and certifications that apply in the U.S. and other countries where the host system is containing the Module.
- These system-level EMC tests are done with the Module installed and included in the scope of the submission.

Modular radio certification is not possible in some countries.

- For these countries, OEM integrators must ensure radio certification for the end system is obtained before placing the product on the market.
- The current list of applicable countries is provided by Qualcomm.

For questions, additional regulatory conformance testing information, and/or related submissions, contact your Qualcomm account representative.

## 6 Compliant/Allowable Tx Power File

For unlicensed Wi-Fi and Bluetooth. Transmit power settings are programmed in the board-data file and Non-ViolentNV file (NVM file) in the software. The software image is installed at the time of manufacture of the system.

WWAN calibration items are stored in the Nonvolatile ("NV") memory and calibrated during module manufacturing process.

The Module can also be configured to modified transmit power for RF exposure compliance. Contact your Qualcomm account representative for details as need.

**CAUTION:** For US 6GHz. This module is under control Low-power indoor access point and Standard power Access Point, And can adjust a transmitter's output power based on access point categories which to connected (for example. Module transmit power/PSD will be limited to low power indoor compliant power when connect to LPI AP). This function is auto controlled by software.

## **7** Allowable Antennas to Use with the Radio Module

The module is certified for use only with certain antennas described in this chapter.

- For 2.4GHz/5GHz/6GHz unlicensed band: Allowed antenna type: PIFA and MONOPOLE
- End host product must use integrated antenna that antenna is integrated in host mechanical housing.

Table 7-1 Allowed maximum gain (dBi), including antenna cable loss

Frequency	PIFA type (dBi)	MONOPOLE type (dBi)	Max. gain (dBi) for Japan and Korea antenna filing/listing
2.4 GHz	3.53 (H or V)	3.22 (H or V)	3.53 (H or V)
5.150-5.250 GHz	3.06 (H or V)	3.35 (H or V)	3.35 (H or V)
5.250-5.350 GHz	3.07 (H or V)	3.42 (H or V)	3.42 (H or V)
5.470-5.725 GHz	4.81 (H or V)	4.77 (H or V)	4.81 (H or V)
5.725-5.850 GHz	4.2 (H or V)	4.72 (H or V)	4.72 (H or V)
5.850-5.895 GHz	5.09 (H or V)	4.71 (H or V)	5.09 (H or V)
5.925-6.425 GHz	5.14 (H or V)	4.75 (H or V)	5.14 (H or V)
6.425-6.525 GHz	5.09 (H or V)	4.29 (H or V)	5.09 (H or V)
6.525-6.875 GHz	5.16 (H or V)	4.81 (H or V)	5.16 (H or V)
6.875-7.125 GHz	5.12 (H or V)	4.74 (H or V)	5.12 (H or V)

■ For WWAN licensed bands:

Table 7-2 Allowed maximum gain (dBi), including antenna cable loss

		US FCC	Canada IC	CE	TW NCC	Japan	AU
Technologies	Band	Antenna Gain (dBi)	Antenna Gain (dBi)	Antenna Gain (dBi)	Antenna Gain (dBi)	Antenna Gain (dBi)	Antenna Gain (dBi)
	1			8.3	2.2	2.38	8.2
WCDMA	2	2.3	2.3				
	4	2.1	2.1				
	5	0	0				4.5

Gain (dBi)         Gain (d	AU	Japan	TW NCC	CE	Canada IC	US FCC		
8	Antenna Gain (dBi)	Gain	Gain	Gain	Gain	Gain	Band	Technologies
THE    19		0.85					6	
LTE  1	4.8	0.85	0.85	4.9			8	
LTE  2 2.3 2.3 7.8 2.06 2.06 7  4 2.1 2.1		0.85					19	
LTE    3	8.2	2.38	2.2	8.3			1	
LTE    A					2.3	2.3	2	
LTE    5	7.7	2.06	2.06	7.8			3	
THE    The state of the state o			9		2.1	2.1	4	
LTE    8	4.5				5	0	5	
LTE    12	8.4		3	8.5	1		7	
LTE    13	4.8	0.85	0.85	4.9			8	
LTE    14			2		-0.5	-0.5	12	
LTE  18				130	-0.2	-0.2	13	
LTE  19 20 4.6 25 2.3 2.3 26 0 0 0 0.85 28 3.9 0.85 0.85 29 30 -1.3 -1.3 32 34 8.5 0 38 1 1 5.7 3 2.38 40 5.7 2.16 5				10		-0.2	14	
LTE  20		0.85		X X			18	
LTE  25		0.85		000	J . C		19	
LTE  26 0 0 0 0.85  28 3.9 0.85 0.85  29 30 -1.3 -1.3  32 34 8.5 0  38 1 1 5.7 3 5  39 2.38  40 5.7 2.16 5				4.6	20,0		20	
LTE  26 0 0 0 0.85  28 3.9 0.85 0.85  29 30 -1.3 -1.3  32 34 8.5 0  38 1 1 5.7 3 5  39 2.38  40 5.7 2.16 5				oll.	2.3	2.3	25	
28     3.9     0.85     0.85       29     30     -1.3     -1.3       32     34     8.5     0       38     1     1     5.7     3       39     2.38       40     5.7     2.16     5		0.85			-(0' A. ' (			
29       30     -1.3       32     -1.3       34     8.5       38     1       1     5.7       39     2.38       40     5.7       20     5.7       20     5.7       20     5.7	3.8	0.85	0.85	3.9	8 X	20/3		LTE
30     -1.3     -1.3       32     34     8.5     0       38     1     1     5.7     3       39     2.38       40     5.7     2.16     5					266	600		
32     8.5     0       38     1     1     5.7     3     5       39     2.38       40     5.7     2.16     5					-1.3	-1.3		
34     8.5     0       38     1     1     5.7     3     5       39     2.38       40     5.7     2.16     5						The same of the sa		
38     1     1     5.7     3     5       39     2.38       40     5.7     2.16     5		0		8.5				
39 2.38 40 5.7 2.16	5.7		3		1	1		
40 5.7 2.16		2.38						
	5.7			5.7				
41   1   5.7   3   2.27		2.27	3	5.7	1	1	41	
	5.7							
43 8.5								
46				3.0				
48 -2.2						-2.2		
66 2.1 2.1					2 1			
71 -1 -1								
	5.7		3	5.7				
40 5.7 5	5.7					•		
LTE - PC2 41 1 1 5.7 3			3		1	1		LTE - PC2
	5.7				·	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '		
n1 83 22 238 8	8.2	2 38	22					
NR 5G Sub6 n2 2.3 2.3		2.00		0.0	2.3	2.3		NR 5G Sub6

		US FCC	Canada IC	CE	TW NCC	Japan	AU
Technologies	Band	Antenna Gain (dBi)	Antenna Gain (dBi)	Antenna Gain (dBi)	Antenna Gain (dBi)	Antenna Gain (dBi)	Antenna Gain (dBi)
	n3			7.8	2.06	2.06	7.7
	n5	0	0				
	n7		1	8.5	3		8.4
	n8			4.9	0.85	0.85	4.8
	n20			4.6			
	n25	2.3	2.3				
	n28			3.9	0.85	0.85	3.8
	n38	1	1	5.7	3		
	n40			5.7	, XS	2.16	5.7
	n41	1		5.7	3	2.27	
	n48	-2.2		20	2		
	n66	2.1	2.1				
	n70	2.1		10			
	n71	-1	-1	X O			
	n77	1.8		5.7		2.13	
	n78		NO 6	5.7	2.13	2.13	5.7
	n79			OTT		2.16	
ND 50 0 10	n40	3	11 65 M.	5.7			5.7
	n41	1500	8' 0K"	5.7	3		
NR 5G Sub6 - PC2	n77	1.8	~ SS	5.7			
1 02	n78	20.0	\$ P	5.7	2.13		5.7
	n79						

саитюм: This module is tested per the relevant FCC KDB and applicable measurement procedure that indicates testing should be performed under the conductive test method and cabinet-emission measurement by a termination matching the norminal impedance of the antenna.

- Unlicensed 2.4GHz/5/6GHz radio compliance: KDB 558074 and KDB 789033 with reference to ANSI C63.10.
- Licensed radio: KDB 971168, KDB 941225, and to ANSI 63.26.

**САЦТІОN:** Use of other antenna types or the same type of antenna but with higher gain than listed in Table 7-1 and Table 7-2 is not allowed without additional testing and appropriate FCC approval. See more detail in Antenna changes in FCC KDB 178919 Permissive Change Policy.

Unlicensed band, use of similar type antennas may only require a Class I Permission Change to confirm that the performance is the same or better, i.e., lower. Only an equivalent type of antenna can be used without additional testing/submission. Contact your Qualcomm account representative for additional guidance if you choose different antenna types or higher gain antennas in the end system. Examples of antennas Not considered equivalent to PIFA:

- Dipole/monopole
- PCB trace
- Patch
- Chip antennas

## 7.1 Antenna filing process in Japan, Korea and Taiwan

Regulatory agencies in Japan, Korea, and Taiwan require submission of antenna specification sheets for all antenna models used with the Qualcomm module. This notification process must be followed by the integrator before the original product launch and each time new host systems with new antenna models are launched.

### 7.1.1 Notification of all antenna models to be used with the Module

For training on the notification process and submitting antenna specifications, send an email to: <a href="mailto:qca.ant@qti.Qualcomm.com">qca.ant@qti.Qualcomm.com</a>

# 8 Antenna Placement Inside the Host System and RF Exposure

The FCC and regulatory bodies of other countries impose strict conditions and limitations on the RF exposure levels of end products. Acceptable RF exposure levels for the Module depend on the following:

- Transmit power
- Location of the transmitting antenna(s) inside the host system
- Expected separation of the transmitting antennas to the end user

OEM integrators must take great care to ensure that each host system complies with the applicable RF exposure requirements.

#### For Mobile devices

The antenna-to-user separation distance must be greater than 20 cm.

**САUTION**: Failure to adhere to these separation/spacing rules will invalidate the FCC certification for the module.

- This separation is measured between the closest point of each transmitting antenna inside the host device to the point of contact by the user or nearby person outside of the host device
- For notebooks/netbooks/laptops with antenna(s) in the display section, the LCD is opened 90 degrees/perpendicular to the keyboard. The separation distance is then measured from the nearest point of each transmitting antenna to the bottom of the host

**NOTE:** When one or more of these conditions cannot be met for a particular host system, additional testing is required to secure the necessary certifications for the system.

Contact your Qualcomm account representative with any questions regarding compliance for host system(s) with these restrictions.

NOTE: These restrictions do not apply to a receive-only antenna.

## **9** Simultaneous Transmission with Other Integrated or Plug-In Radios

The FCC imposes conditions and limitations when additional radio(s) are co-located in the same host system as the Qualcomm Module with capability to transmit simultaneously.

- Co-locating other radios, such as an integrated or plug-in wireless WAN/cellular radio with the Qualcomm wireless LAN module requires additional evaluation and possible submission for authorization from the FCC.
- The rules are highly dependent on the characteristics of the particular radios that are colocated and simultaneously transmitting.
  - The OEM integrator should seek guidance from a knowledgeable test lab or consultant to determine if additional testing and FCC certification is required.
  - □ In this case, failure to evaluate and follow the required FCC procedures will invalidate the FCC certification of the Module and end system.

Detailed rules from the FCC are described in various Knowledge Database (KDB) publications and can be found using the following instructions:

- 1. To download the FCC rules for co-located radios:
  - a. https://apps.fcc.gov/oetcf/kdb/index.cfm
  - b. Key 616217 in the 'publication number' search box
  - c. Download the latest applicable version of the KDB 616217 document.
- 2. For expert advice regarding co-location rules, the recommendation is to contact an FCC-approved Telecommunication Certification Body (TCB):
  - a. https://apps.fcc.gov/oetcf/kdb/index.cfm
  - b. Choose your country and or state from the pull-down list
  - c. Scroll through the search results and choose a TCB contact from which to seek advice.
- Contact your Qualcomm account representative with any questions regarding compliance of the host system(s) with the above restrictions.

## 10 Module May Not Be Installed by End Users

FCC rules require that the Module be installed in host systems at the factory by the OEM integrator.

- End users of the system may not install the Module.
- The host product user instructions must not advise the end user on how to access or remove the Module.
- Additional FCC authorization/filing is needed to allow end user installation of radio modules.

If modules are provided to end users for installation in the host, a two-way authentication protocol is required to limit the Module to operate only with authorized host systems.

For more details, refer to FCC KDB 996393 found at https://apps.fcc.gov/oetcf/kdb/index.cfm I.

## 11 Required Labeling on the Outside of the Host

#### 11.1 FCC and ISED

The FCC and ISED requires a label on the outside of the host system visible to the end user. Example wording is:

Contains:
FCC ID: XXX-XXXXXX

Contains:
IC: XXXX-XXXXXXX

(Replace X's with actual IDs in Section 2)

The FCC requires a logo signifying emissions compliance on the outside of the host system.

Additional options are available for placement of the FCC label on the host. Refer to the FCC Knowledge Database KDB 784748 found at https://apps.fcc.gov/oetcf/kdb/index.cfm.

## 11.2 European Community Radio Equipment Directive (RED)

The European Community RED (Radio Equipment Directive) requires the CE Marking shown as follows on the outside of the host AND on the outside of the shipping container/packaging. A module level RED certification is not provided for the QCARD7280 RED certification must be addressed for the host product.



Note: Where XXXX represent Notify Body Code

The European Community RE Directive also requires the following note to consumers <u>on the</u> outside of the shipping container/packaging:

NOTE: The Integrator is expected to translate the text in this Section into the appropriate local languages for the European countries in which the product will be marketed or sold.



The full text of the RED is located at:

http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32014L0053

### 11.3 Taiwan NCC

11.3.1 For host system use QCARD7280P (WIFI SKU). The NCC requires a label on the outside of the host system visible to the end user.

Example wording is:

本產品內含射頻模組 《CC XX xx LP yyy Z z

(See NCC certificate for NCC approval number)

11.3.2 For host system use QCARD7280 (WWAN+WIFI SKU). The NCC requires host system to obtain a unique NCC certificate and approval number. QCARD7280 NCC certificate maybe leveraged during host system NCC certification process.

### 11.4 Other countries

Refer to *QCARD7280/QCARD7280P- Label Document* (80-11139-9) in the Qualcomm CreatePoint System for complete instructions.



## 12 Required Labeling on the Module

### 12.1 FCC and ISED labeling on the Module

The Integrator must ensure that the FCC ID and IC ID (as indicated in Section 2) is presented on the Module along with other country certification numbers and logos as described in this section.

NOTE: The Module ODM should ensure FCC ID and IC ID is permanently presented on the module at the time of the Module manufacturing. However, the PCOEM must ensure the Module label is complete, correct, and applicable for all countries where the host system will be imported, marketed, or sold.

NOTE: QCARD7280/QCARD7280P labels must be etched into the lid and the lid installation must follow specific guidelines.

## 12.2 Rest of the world labeling on the Module

The Integrator must ensure the Module includes a global regulatory label with certification numbers and logos for all target countries.

- The system integrator is responsible for confirming the final regulatory label on the radio Module contains all required certification IDs for all countries in which the system will be marketed or sold
- It is recommended that the PCOEM implement a review and sign-off process and change control process with the Module ODM to ensure the Module label meets the PCOEM requirements

Contact your Qualcomm account representative with any questions regarding module labeling.

## **13** Required Regulatory Wording for User Manual/Installation Manual

The integrator must include text in the user manual meeting the regulators requirements. The text in the following sections or similar wording should be used.

NOTE: Text in red font must be replaced.

## 13.1 FCC compliance information

#### **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:

The 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**

#### **Radiation Exposure Statement**

The product complies with the FCC portable RF exposure limit set forth for an uncontrolled environment and is safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user's body or by setting the device to lower output power if such function is available.

### **FCC 6GHz statement**

Prohibited for control of or Communications with unmanned aircraft systems, including drones.

## 13.2 Industry Canada Notices

This device complies with Canadian RSS-247.

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-247 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.

NOTE: For 5GHz and/or when co-located with 5 GHz transmitters, the following statements should be provided in the user information

#### Caution:

- (i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and
- (iii) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate.
- (iv) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

#### **Avertissement:**

Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment :

- (i) les dispositifs fonctionnant dans la bande 5 150-5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- (ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5 250-5 350 MHz et 5 470-5 725 MHz doit se conformer à la limite de p.i.r.e.;
- (iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5 725-5 825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.
- (iv) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

#### **RF Exposure Statement**

Radiation Exposure Statement:

The product complies with the Canada portable RF exposure limit set forth for an uncontrolled environment and is safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user's body or by setting the device to lower output power if such function is available.

## 13.3 European Community (RED) user manual wording and declaration

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

### **Europe – EU Declaration of Conformity**



Marking by this symbol indicates compliance with the Essential Requirements of the RED of the European Union (2014/53/EU). This equipment meets the following conformance standards:

EN 300 328, EN 301 893, EN 301 489-17, EN 60950-1, EN 62311

Česky [Czech]	[COMPANY NAME] tímto prohlašuje, že tento Radiolan je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 2014/53/EU.
da Dansk [Danish]	Undertegnede [COMPANY NAME] erklærer herved, at følgende udstyr Radiolan overholder de væsentlige krav og øvrige relevante krav i direktiv 2014/53/EU.
de Deutsch [German]	Hiermit erklärt <i>[COMPANY NAME]</i> dass sich das Gerät Radiolan in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 2014/53/EU befindet.
et Eesti [Estonian]	Käesolevaga kinnitab [COMPANY NAME] seadme Radiolan vastavust direktiivi 2014/53/EU 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 2014/53/EU.
Español [Spanish]	Por medio de la presente <i>[COMPANY NAME]</i> declara que el Radiolan cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 2014/53/EU.
el Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ [COMPANY NAME] ΔΗΛΩΝΕΙ ΟΤΙ Radiolan ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 2014/53/ΕU.
fr Français [French]	Par la présente <i>[COMPANY NAME]</i> déclare que l'appareil Radiolan est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 2014/53/EU.
Íslenska [Icelandic]	Hér með lýsir <i>[COMPANY NAME]</i> yfir því að Radiolan er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 2014/53/EU.

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 2014/53/EU.
Latviski [Latvian]	Ar šo <i>[COMPANY NAME]</i> deklarē, ka Radiolan atbilst Direktīvas 2014/53/EU būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo <i>[COMPANY NAME]</i> deklaruoja, kad šis Radiolan atitinka esminius reikalavimus ir kitas 2014/53/EU Direktyvos nuostatas.
Malti [Maltese]	Hawnhekk, <i>[COMPANY NAME]</i> , jiddikjara li dan Radiolan jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 2014/53/EU.
hu Magyar [Hungarian]	Alulírott, [COMPANY NAME] nyilatkozom, hogy a Radiolan megfelel a vonatkozó alapvető követelményeknek és az 2014/53/EU irányelv egyéb előírásainak.
Nederlands [Dutch]	Hierbij verklaart [COMPANY NAME] dat het toestel Radiolan in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 2014/53/EU.
Norsk [Norwegian]	[COMPANY NAME] erklærer herved at utstyret Radiolan er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 2014/53/EU.
Polski [Polish]	Niniejszym [COMPANY NAME] oświadcza, że Radiolan jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 2014/53/EU.
Português [Portuguese]	[COMPANY NAME] declara que este Radiolan está conforme com os requisitos essenciais e outras disposições da Directiva 2014/53/EU.
Slovensko [Slovenian]	[COMPANY NAME] izjavlja, da je ta Radiolan v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 2014/53/EU.
Sk Slovensky [Slovak]	[COMPANY NAME] týmto vyhlasuje, že Radiolan spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 2014/53/EU.
fi Suomi [Finnish]	[COMPANY NAME], vakuuttaa täten että Radiolan tyyppinen laite on direktiivin 2014/53/EU oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar <i>[COMPANY NAME]</i> att denna Radiolan står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 2014/53/EU.

## **13.4 European Community (RED) Declaration of Conformity for System**

In addition to including the radio conformity wording described in Section 12.2, 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 RED Directive covering the essential requirements.
- The DoC must reference harmonized standards used for all radios present in the system.

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.

## 13.5 Brazil user manual wording

Hosts using approved modules would be required to put label information on the product or statement in the user manual:

For QCARD7280: Este produto contém a placa QCARD7280 código de homologação Anatel 02920-21-02245

For QCARD7280P: Este produto contém a placa QCARD7280P código de homologação Anatel 02922-21-02245

Translation: This product contains the module QCARD7280 Anatel approval code 02920-21-02245

User manual statement:

Para maiores informações, consulte o site da ANATEL: www.gov.br/anatel/pt-br/

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados

Translation:

For more information, see the ANATEL website www.gov.br/anatel/pt-br/

This equipment is not entitled to protection against harmful interference and may not cause interference with duly authorized systems.

## 13.6 Taiwan user manual wording

SKU	Required regulatory statement in Host User Manual (Chinese)
QCARD7280P	<ul> <li>取得審驗證明之低功率射頻器材,非經核准,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。低功率射頻器材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。前述合法通信,指依電信管理法規定作業之無線電通信。低功率射頻器材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。</li> <li>應避免影響附近雷達系統之操作</li> </ul>
QCARD7280N	<ul> <li>取得審驗證明之低功率射頻器材,非經核准,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。低功率射頻器材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。前述合法通信,指依電信管理法規定作業之無線電通信。低功率射頻器材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。</li> <li>應避免影響附近雷達系統之操作</li> <li>減少電磁波影響,請妥適使用</li> </ul>

## 13.7 Japan user manual wording

Applicable for both QCARD7280 and QCARD7280P.

It is required to have 5GHz W52, W53 band indoor use warning provide in user manual:

5GHz band (W52,W53): Indoor use only (except communicate to high power radio)

6GHz band: Indoor use only

5GHz 帯(W52, W53)は屋内利用に限る (高出力システムと通信する場合を除く)

## 13.8 India user manual wording

No requirement to reference regulatory language in the user manual.

