

CY920 Regulatory Compliance Information

Revision 0.2
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This document covers the Regulatory Compliance information which will be part of the datasheet and related documents shared with customers.

1.1 Antenna Considerations:

Table 1-1 provides the list of antennas along with the manufacturer and part number details.

**TABLE 1-1:
ANTENNA LIST**

| SI No | Manufacturer | Part Number | Antenna Type | Peak Gain ⁽²⁾ |
|-------|--------------|--|----------------|--|
| 1 | WALSIN | PI_RFDPA870920IMLB301_V01 | Dipole Antenna | 1.84 dBi/ 2.4 GHz |
| 2 | WALSIN | PI_RFDPA870920IMLB301_V01 | Dipole Antenna | 3.26 dBi/LB, 2.13dBi/ MB-Ext, 1.55 dBi/ UB 5GHz |
| 3 | WALSIN | PI_RFDPA870930IMLB301_V01 | Dipole Antenna | 1.10 dBi/ 2.4 GHz |
| 4 | WALSIN | PI_RFDPA870930IMLB301_V01 | Dipole Antenna | 1.88 dBi/LB, 2.41 dBi/ MB-Ext, 2.77 dBi/ UB 5GHz |
| 5 | WALSIN | RFDPA870930IMAB301 | Dipole Antenna | 1.2 dBi/ 2.4 GHz |
| 6 | WALSIN | RFDPA870945IMAB301 | Dipole Antenna | 1.16 dBi/ 2.4 GHz |
| 7 | WALSIN | RFDPA870900SBAB801* + RFCBA100630SA6B301 | Dipole Antenna | 0.7 dBi/ 2.4GHz |
| 8 | WALSIN | RFDPA870900SBAB801* + RFCBA100645SA6B301 | Dipole Antenna | 0.1 dBi/2.4GHz |
| 9 | WALSIN | RFDPA870933IMLB301 | Dipole Antenna | 1.32 dBi/ 2.4 GHz |
| 10 | WALSIN | RFDPA870933IMLB301 | Dipole Antenna | 1.53 dBi/LB, 1.92dBi/ MB-Ext, 2.64 dBi/ UB 5GHz |

Note 1: * The antenna connector is reverse SMA type.

Note 2: LB = Lower Band; MB-Ext = Middle Band Extended; UB = Upper band [5GHz bands]

Table 1-2 provides the antennas to be used for the various SKUs as per Table 1-1.

TABLE 1-2: ANTENNAS FOR VARIOUS SKUs

| Configuration Code | Antenna List (SI No.) |
|--------------------|-------------------------------|
| CY920-A | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 |
| CY920-B | — |
| CY920-C | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 |

Note 1: The antenna list for CY920-B SKU will be provided in the future revisions of this document.

1.2 CY920 Usage Guidelines under Modular Approval

The CY920 module has received Limited Module Approval (LMA) from FCC and IC as the module does not have complete built-in power regulator circuit. For leveraging the modular approval, Microchip recommends that customers must follow the supply voltage requirements provided in the datasheet and follow the power supply design guidelines described in Appendix B of the datasheet Appendix B: "Power Supply Requirement for Leveraging Modular Approval".

The product manufacturer must ensure that the power supply recommendations are followed, and the RF behavior adheres the FCC or TCB certification requirements when the module is installed in the final Host product. The product manufacturer should work with their test house for confirming the RF behavior with FCC or TCB.

APPENDIX A: CERTIFICATION NOTICES

Federal Communications Commission Interference Statement

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, uses, 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 that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Caution:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

Labeling Requirements

This device complies with Part 15 of the FCC Rules. The operation is subject to the following two conditions: the device may not cause harmful interference, and the device must accept any interference received, including interferences that may cause undesired operations.

RF Exposure Warning

This equipment must be installed and operated in accordance with provided instructions. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

Information for the OEMs or Integrators

The following statement must be included in all versions of this document supplied to OEMs or integrators, but should not be distributed to the end user.

"This device is intended for OEM or integrators only. Please see the full Grant of Equipment document for other restrictions. This device must be operated and used with a locally approved Access ".

Information to be Supplied to the End User by the OEM or Integrator

The following regulatory and safety notices must be published in all documentation supplied to the end user of the product or system, incorporating an adapter in compliance with local regulations.

"The host system must be labelled with: Contains FCC ID:ZQO-CY920'X' and IC: 2581A-CY920'X', FCC ID displayed on the label.

The letter shown in Ordering Guide Part Number column should be substituted for 'X'. For example, for the CY920-C module, the label text should be "Contains FCC ID:ZQO-CY920C"and "IC: 2581A-CY920C. The label text should be updated according to the table shown in the "[Ordering Guide](#)" section of the datasheet.

Japan

This device operation in the 5.15 GHz to 5.35 GHz frequency range is restricted to indoor use. Final product shall be labelled "For Indoor use only."

Canada, Industry Canada (IC) Notices

This Class B digital apparatus complies with Canadian ICES-003 and RSS-210.

Operation is subject to the following two conditions: the device may not cause interference, and the device must accept any interference, including interference that may cause undesired operation of the device. This radio transmitter 'IC: 2581A-CY920'X' has been approved by Industry Canada to operate with the antenna types listed in [Table](#) with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

RF Exposure Information

The radiated output power of the wireless device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner that the potential for human contact during normal operation is minimized.

This device has been evaluated and shown compliant with the IC radio frequency exposure limits under mobile exposure conditions. (antennas are greater than 20cm from a person's body).

This device has been certified for use in Canada. Status of the listing in the Industry Canada's Radio Equipment List (REL) can be found at the following locations:
<http://www.ic.gc.ca/app/sitt/reitel/srch/nwRdSrch.do?lang=eng>

Additional Canadian information on RF exposure can be found at the following location:
<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html>

Caution:

Applicable to LE-LAN device only: This device is restricted to indoor use when operating in the 5.15 GHz to 5.25 GHz frequency band. Industry Canada requires this product to be used indoors for frequency range 5.15 to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

Canada, avis d'Industry Canada (IC)

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-210. Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

Cet émetteur radio 'IC: 2581A-CY920'X' a été approuvé par Industrie Canada pour fonctionner avec les types d'antennes énumérés dans le tableau 7-2 avec le gain maximal admissible et impédance d'antenne requise pour chaque type d'antenne indiqué. Types d'antennes n'est pas inclus dans cette liste, ayant un gain supérieur au gain maximal indiqué pour ce type, sont strictement interdits pour une utilisation avec cet appareil.

Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par l'appareil de sans fil Dell est inférieure à la limite d'exposition aux fréquences radio d'Industry Canada (IC). Utilisez l'appareil de sans fil Dell de façon à minimiser les contacts humains lors du fonctionnement normal.

Ce périphérique a également été évalué et démontré conforme aux limites d'exposition aux RF d'IC dans des conditions d'exposition à des appareils mobiles (les antennes se situent à moins de 20 cm du corps d'une personne).

Ce périphérique est homologué pour l'utilisation au Canada. Pour consulter l'entrée correspondant à l'appareil dans la liste d'équipement radio (REL - Radio Equipment List) d'Industry Canada rendez-vous sur: <http://www.ic.gc.ca/app/sitt/reitel/srch/nwRdSrch.do?lang=eng>
Pour des informations supplémentaires concernant l'exposition aux RF au Canada rendez-vous sur: <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html>

Caution:

Prudence (ce n'est applicable qu'aux dispositif LE-LAN): Ce dispositif est limité à une utilisation en intérieur à cause de son fonctionnement dans la gamme 5.15 GHz à 5.25 GHz. Industrie Canada exige que ce produit est utilisé à l'intérieur pour la gamme de fréquence de 5,15 à 5,25 GHz pour réduire les risques d'interférence nuisible à la co-canal systèmes mobiles par satellite.

Taiwan – NCC Statement:

The low-power radio-frequency devices must not be altered by changing the frequency, enhancing emission power, adding external antenna, and modification of original design characteristic as well as function.

The operation of the low-power radio-frequency devices is subject to the conditions that no harmful interference is caused. The user must stop operating the device immediately should harmful interference is caused and shall not resume until the condition causing the harmful interference has been corrected.

Moreover, the interference must be accepted that may be caused by the operation of an authorised communications, or ISM equipment.

End Product Labeling:

This transmitter module is authorized only for use in device where the antenna may be installed such that 20cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following:

"Contains  CCXXxxYYyyyZzW"

Device operation, if available in 5.25 – 5.35GHz frequency range, is restricted to indoor use only, Outdoor operations in the 5250~5350MHz is prohibited.