



Quanta Microsystems

User Manual

USB Wireless Adapter

Model No.: UWA-C4Z

Version: v0.3

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Contents

1. Revision History	4
2. Related Documents	4
3. Overview	5
3.1. Scope.....	5
3.2. Features	5
3.3. Specification	6
3.4. Interface definition.....	7
3.5. RoHS & Green Parter Compliant	7
3.6. EMI EMC certifications.....	7

Federal Communication Commission Interference Statement

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 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 can radiate 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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This device complies with RSS-210 of the Industry Canada 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.

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.

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

1. **Revision History**

Date	Release	Author	Description
Apr 13, 2011	0.1	Jack Ong	First release
Feb 06, 2012	0.2	Jack Ong	Added Engineering Sheet
Feb 09, 2012	0.3	Jack Ong	Added Housing drawing

2. **Related Documents**

Date	Author	Document(s)

3. Overview

3.1. Scope

This document describes the specifications of ZU210 IEEE 802.15.4 RF4CE ZigBee transceivers module. The low power consumption and smaller size are suitable for consumer electronic. ZU210 also provides a cost-effective solution for short-range data links and networks.

3.2. Features

- ④ Extremely low cost
- ④ Ease of implementation
- ④ Reliable data transfer
- ④ Short range operation
- ④ Appropriate levels of security

3.3. Specification

④ Absolute Maximum Ratings

Rating	Symbol	Value	Unit
Power Supply Voltage	V_{BATT}, V_{DDINT}	-0.3 to 5.5	Vdc
Storage Temperature Range	T_{stg}	-20 to 70	°C

④ Operating condition

Rating	Symbol	Min	Typ	Max	Unit
Power Supply Voltage	V_{BATT}, V_{DDINT}	4.5	5	5.5	V_{DC}
Operation Temperature Rang	T_A	-10	25	60	°C
Operation Frequency	f	2.405		2.475	GHz

④ Characteristic (operating voltage= V_{DC} ; temperature=25°C)

Characteristic	Min	Typ	Max	Unit
DC Electrical Characteristics				
Normal mode current	---	TBD	---	mA
Idle mode current		TBD		mA
Sleep mode current		TBD		
Transmit				
Transmit Power	14	17	20	dBm
Transmit Center Frequency Tolerance	-20	0	20	ppm
Error Vector Magnitude (EVM) (over temp.)	---	15	35	%
Receiver				
Sensitivity for 1% Packet Error Rate (PER)	---	-102	-95	dBm
Maximum Input Power	-10			dBm
Channel Rejection for 1% PER (desired signal -100 dBm)				
+5 MHz (adjacent channel)	---	45	---	dB
-5 MHz (adjacent channel)	---	45	---	dB
+10 MHz (alternate channel)	---	56	---	dB
-10 MHz (alternate channel)	---	56	---	dB

3.4. Interface definition

④ Connector 4-PIN

Pin	Pin Name
4	GND
3	D+
2	D-
1	VDD

3.5. RoHS & Green Parter Compliant

ZU210 is fully compliant to RoHS & Green Parter requirement.

3.6. EMI EMC certifications

ZU210 is fully compliant with FCC regulatory requirements.