UIS

User Manual

ZBM-220

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Certification Notices

FCC Compliance 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 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 of f 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 party responsible for compliance could void the user's authority to operate the equipment.

Labeling requirements
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.

FCC RF Radiation Exposure Statement:
This equipment must be installed and operated in accordance with provided instructions and the antenna(s) 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 and Integrators

The following statement must be included with all versions of this document supplied to an OEM or integrator, but should not be distributed to the end user.

This device is intended for OEM 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 point.

Information To Be Supplied to the End User by the OEM or Integrator

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

Host system must be labeled with "Contains FCC ID:XBTZBM-220, FCC ID displayed on the label. The label text should be updated according to the table shown in Ordering Guide section of this document.

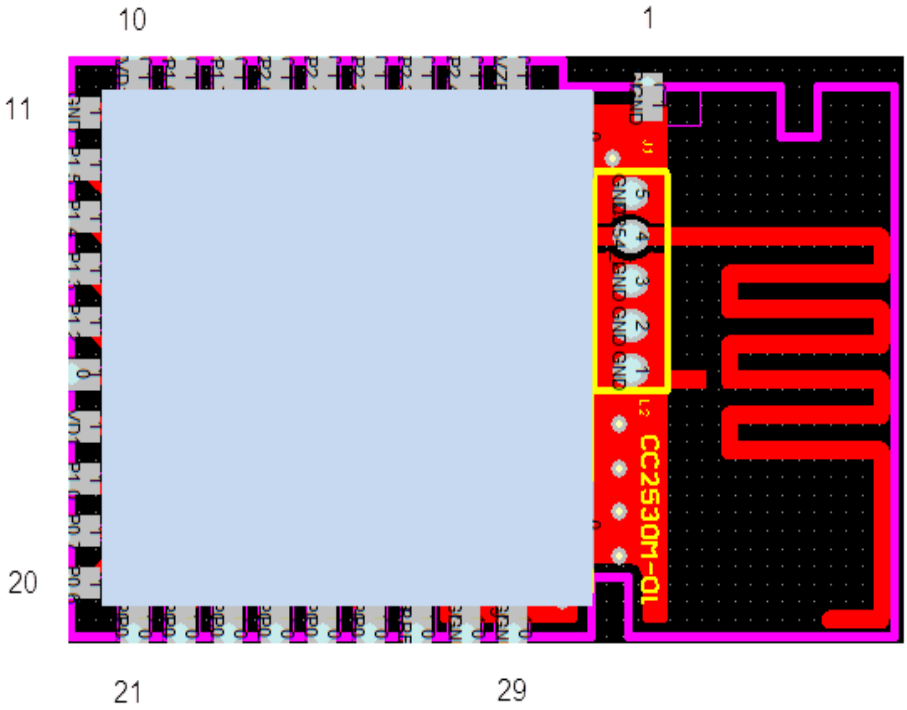
1. Overview

ZMB-220 is a wireless communication modem based on IEEE802.15.4, which can be widely used in home automation and security, automatic meter reading, factory automation, toys and so on.

2. SPECIFICATION

General Specification	
Specification	2.4-GHz IEEE 802.15.4 Compliant RF Transceiver
Transmit Frequency	2405MHz to 2480MHz
Modulation	OQPSK
Programmable Output Power	Up to 4.5 dBm
Operation Voltage	2.0V~3.6V
Environmental	
Operating Temperature	-10°C to 70°C
Storage Temperature	-40°C to 85°C
Humidity	90% RH Max., Non-Condensing
Mechanical Specification	
Dimension (WxHxD, mm)	26.2 x 2.0 x 16.5

3. Pin Assignment



Pin	Name	Description	Direction
1	GND	Power Ground	I
2	AVDD	DC input(+2.0 ~3.6V)	I
3	P2_4/XOSC32K_Q1	Port 2.4/32.768 kHz XOSC	I/O
4	P2_3/XOSC32K_Q2	Port 2.3/32.768 kHz XOSC	I/O
5	P2_2	Port 2.2	I/O
6	P2_1	Port 2.1	I/O
7	P2_0	Port 2.0	I/O
8	P1_7	Port 1.7	I/O
9	P1_6	Port 1.6	I/O
10	VDD	DC input(+2.0 ~3.6V)	I
11	GND	Power Ground	I
12	P1_5	Port 1.5	I/O
13	P1_4	Port 1.4	I/O
14	P1_3	Port 1.3	I/O
15	P1_2	Port 1.2	I/O
16	P1_1	Port 1.1 – 20-mA drive capability	I/O
17	VDD	DC input(+2.0 ~3.6V)	I
18	P1_0	Port 1.0 – 20-mA drive capability	I/O
19	P0_7	Port 0.7	I/O
20	P0_6	Port 0.6	I/O
21	P0_5	Port 0.5	I/O
22	P0_4	Port 0.4	I/O
23	P0_3	Port 0.3	I/O
24	P0_2	Port 0.2	I/O
25	P0_1	Port 0.1	I/O
26	P0_0	Port 0.0	I/O
27	RESET_N	Reset, active-low	I
28	GND	Power Ground	I
29	GND	Power Ground	I