

1.1 Hardware

The WBZ451 Curiosity Board is an efficient and modular development platform that supports rapid prototyping and demonstrates the features, capabilities and interfaces of Microchip's Bluetooth® Low Energy and Zigbee RF Module (WBZ451PE).

The WBZ451 Curiosity Board:

- Offers integrated programming/debugging features using the PICkit™ On-board 4 (PKOB4) debugger interface
- Requires only a Micro USB cable to power-up and program the board
- Includes a mikroBUS™ Click™ header, which helps the users to expand the functionalities by connecting to various MikroElectronika mikroBUS Click adapter boards
- Performs rapid prototyping utilizing the Bluetooth Low Energy and Zigbee-enabled RF Module

The WBZ451 Curiosity Board supports a variety of applications:

- Wireless lighting
- Home automation or Internet of Things (IoT)
- Industrial automation
- Other Bluetooth Low Energy or Zigbee-related applications.

Features

- WBZ451 BLE+Zigbee RF Module
- USB or Battery Powered
- On-board Programmer/Debug Circuit using PKoB4 based on Microchip SAME70 MCU
- Microchip MCP73871 Li-Ion/LiPo Battery Charger with Power Path Management
- On-board USB to UART Serial Converter with HW Flow Control based on Microchip MCP2200
- mikroBUS™ Socket to Expand Functionality using MikroElectronika Click™ Adapter Boards RGB Lighting LED connected to PWM
- Reset Switch
- One User Configurable Switch
- One User LED: 32.768 kHz Crystal
- Microchip SST26VF064B, 64 Mbit External QSPI Flash
- Microchip MCP9700A, Low-Power Analog Voltage Temperature Sensor
- 10 pin ARM SWD Header for External Programmer/Debugger

Figure 1-1. WBZ451 Curiosity Board - Top View

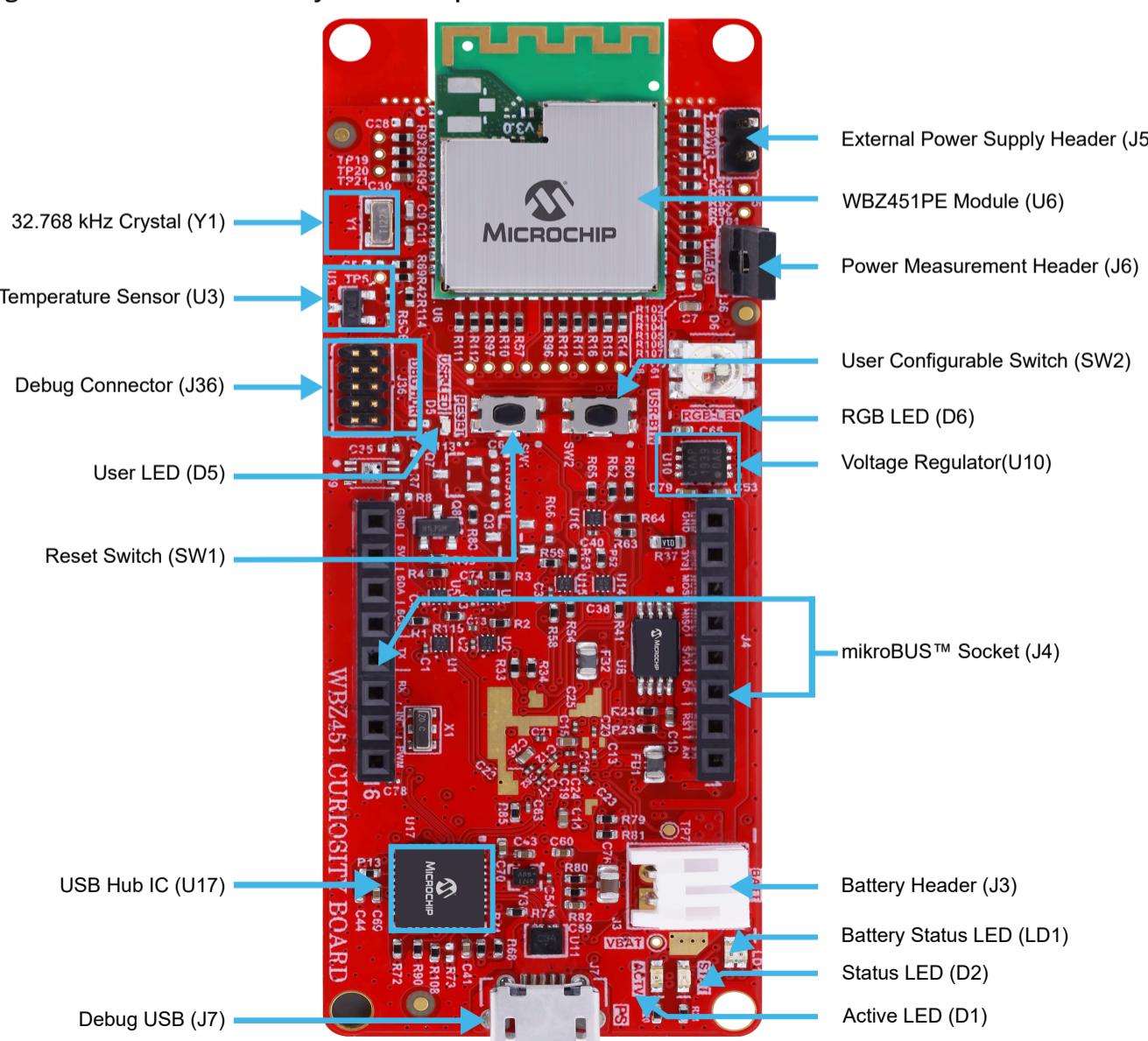
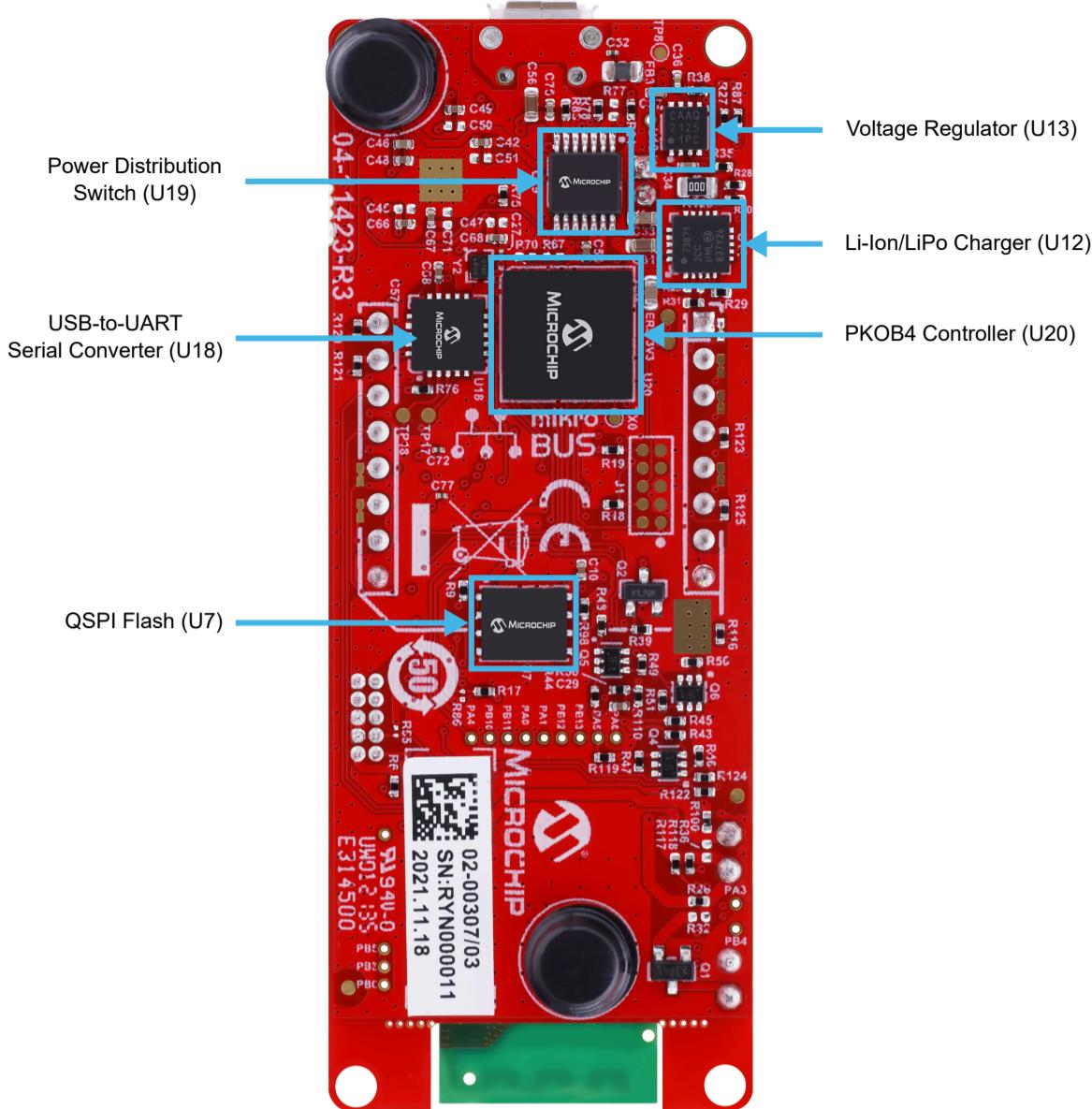


Figure 1-2. WBZ451 Curiosity Board - Bottom View



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