

1.2 Pre-programmed BLE and Zigbee Application Demo Software

The WBZ451 Curiosity Board is equipped with pre-programmed software that demonstrates two commonly used BLE and Zigbee use case in a single application. These applications include BLE Sensor monitoring and BLE Lighting control, as well as Zigbee Lighting control and monitoring.

The preprogrammed software implements a fully functional BLE Temperature sensor. The temperature sensor data from Curiosity's on-board temperature sensor is regularly read and can be accessed through advertising information (for example, temperature data, ON/OFF state), which does not require a connection. Additionally, the data is updated periodically after a BLE connection is established.

The pre-programmed software also implements full BLE control for the RGB LED populated on the Curiosity Board. Once connected, the user can control the LED's brightness, color, and ON/OFF state via BLE.

The following demo experience can be used based on the use case scenario :

1. [BLE only Demo Experience](#)
2. [Zigbee only Demo Experience](#)
3. [Multiprotocol \(BLE+Zigbee\) Demo Experience](#)