

# Release Notes for PIC® LightBlue® Explorer Demo on GitHub

## What is the PIC® LightBlue® Explorer Demo?

PIC® LightBlue® Explorer Demo is a solution which showcases the PIC®-BLE board utilizing an onboard RN4870 module and PIC16LF18456. PIC® LightBlue® Explorer Demo interfaces with the LightBlue® Explorer mobile application via a custom Microchip profile. Via the application, sensor, LED and pushbutton information is read from the PIC®-BLE board along with serial communication functionality.

## What's New

### 1.1.0 – Support for configuring the project in MCC

#### Addition of mc3 config file to the project

Feature

- The mc3 config file is added to the project which would provide the capability to configure and generate code from MCC.

*Note: In the event project configuration is changed in MCC the merge window would appear and it is recommended to check the differences before merging. In order to overwrite the user edits in MCC generated code, right click on “Generate” in “Project Resources” window of MCC to choose “Force Update on All”.*

### 1.0.2 – Refactoring and bug fix

Improvements

- API call refactor in “LIGHTBLUE\_service.c”

Bugfix

- Corrected issue where push button data was not being received due to incorrect pin mapping.

## System Requirements

- MPLAB® X IDE v5.45 or later
- XC8 compiler v2.30 or later
- MPLAB® Code Configurator v4.1.0 or later

## Hardware

- [PIC®-BLE Development Board](#)
- Components:
  - RN4870 BLE Module
  - ATECC608A (pre-provisioned) Cryptoauthentication™ device

- MCP9844 precision temperature sensor
- BMA253 3-Axial Acceleration Sensor
- SST25PF040C 4Mbit Serial Flash with SuperFlash® Technology
- 1x push button
- 3x LEDs

## Known Issues

- Apostrophe character sent from LightBlue® application on iOS devices does not print properly.
  - Linked to iOS smart punctuation feature.
- The “RN487X\_Delay” API’s definition in rn487x\_interface.c file might cause a compilation error.

Workaround:

1. In MPLAB X IDE, navigate to Source Files -> MCC Generated Files -> rn487x
2. Open the rn487x\_interface.c file
3. Replace the *return DELAY\_milliseconds(delayCount);* line in the function definition with *DELAY\_milliseconds(delayCount);*

## Documentation Support

- [PIC16F18456 - 8-bit Microcontrollers \(microchip.com\)](http://www.microchip.com/16f18456)
- [ATECC608A - Crypto Authentication \(microchip.com\)](http://www.microchip.com/atecc608a)
- [RN4870/71 Bluetooth® Low Energy Module User's Guide \(microchip.com\)](http://www.microchip.com/rn487071)
- [RN4870 - Bluetooth® Module \(microchip.com\)](http://www.microchip.com/rn4870)
- [PIC®-BLE Development Board \(microchip.com\)](http://www.microchip.com/pic-ble)

## Customer Support

### The Microchip Web Site

Microchip provides online support via our web site at <http://www.microchip.com>. This web site is used as a means to make files and information easily available to customers. Accessible by using your favorite Internet browser, the web site contains the following information:

- Product Support – Data sheets and errata, application notes and sample programs, design resources, user’s guides and hardware support documents, latest software releases and archived software
- General Technical Support – Frequently Asked Questions (FAQs), technical support requests, online discussion groups/forums (<http://forum.microchip.com>), Microchip consultant program member listing
- Business of Microchip – Product selector and ordering guides, latest Microchip press releases, listing of seminars and events, listings of Microchip sales offices, distributors and factory representatives

### Additional Support

Users of Microchip products can receive assistance through several channels:

- Distributor or Representative

- Local Sales Office
- Field Application Engineering (FAE)
- Technical Support

Customers should contact their distributor, representative or field application engineer (FAE) for support. Local sales offices are also available to help customers. A listing of sales offices and locations is available on our web site.

Technical support is available through the web site at: <http://support.microchip.com>.