

# QSG161: Wireless Xpress BGX13P22GA Expansion Kit Quick-Start Guide

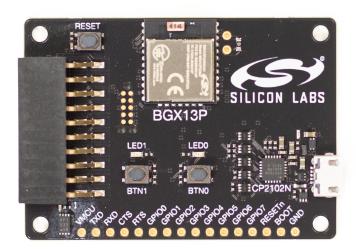


The Wireless Xpress BGX13P Expansion Kit is an excellent way to get started with *Bluetooth*® Xpress connectivity for Silicon Labs MCUs.

The BGX13P is quickly configured and can communicate with mobile devices or other Bluetooth Xpress modules. This document demonstrates configuring the Bluetooth Xpress module and communicating with the device via a mobile phone application.

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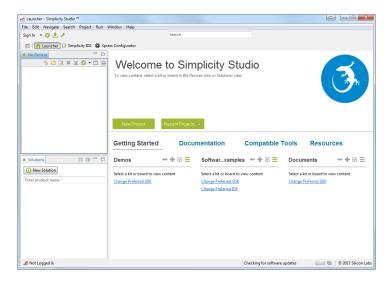


# 1. Getting Started

## **Install Simplicity Studio**

Simplicity Studio is a free software suite needed to start developing your application.

1. Download the latest version of Simplicity Studio from the Silicon Labs website: http://www.silabs.com/simplicity-studio.



#### **Install Device Drivers**

The drivers allow the expansion kit to communicate with Simplicity Studio over a serial COM port connection.

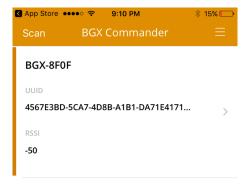
- Download the latest version of the CP210x VCP drivers: https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers.
- 2. Unzip the folder and run the installer.



## **Install BGX Commander**

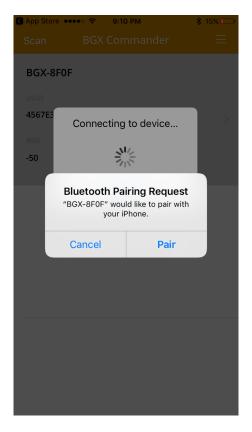
BGX Commander is a mobile application for Apple and Android devices that can communicate with Bluetooth Xpress modules.

1. Download from the Apple App Store: https://itunes.apple.com/us/app/bgxcommander/id1350920514?mt=8 or from Google Play: https://play.google.com/store/apps/details?id=com.silabs.bgxcommander



## **Connect Your Device**

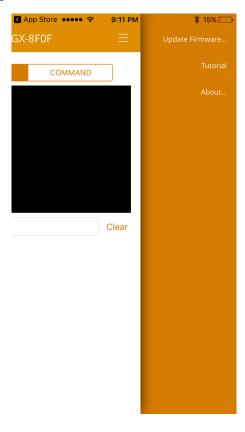
- 1. Provide power to the board by connecting the USB connector to the PC using the provided USB cable.
- 2. Open the BGX Commander application and press [scan].
- 3. A device named [BGX-####] should appear. Select the device to connect.



# **Update Firmware**

The BGX Commander application can upgrade the device's firmware over bluetooth. Update the firmware now to ensure that the Bluetooth Xpress module is running the latest version.

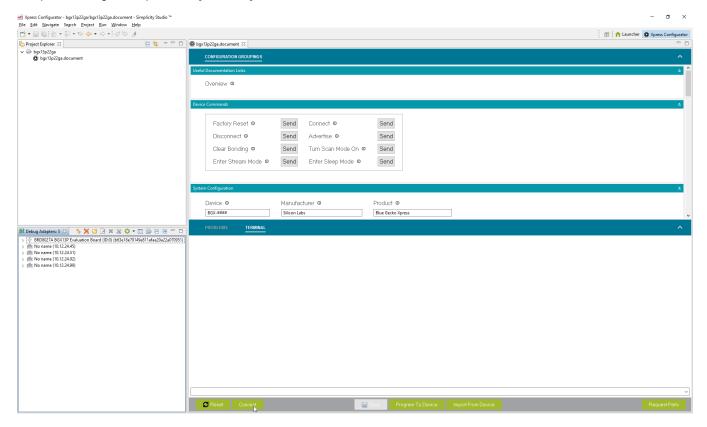
- 1. While still connected to the Bluetooth Xpress module, tap the menu icon located at the top-right corner of the application.
- 2. Tap [Update Firmware] to begin the upgrade.



#### **Run Xpress Configurator**

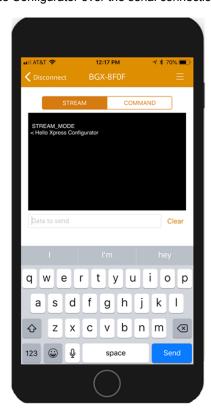
Xpress Configurator is a tool within Simplicity Studio that configures and communicates with the Bluetooth Xpress module using the USB connector.

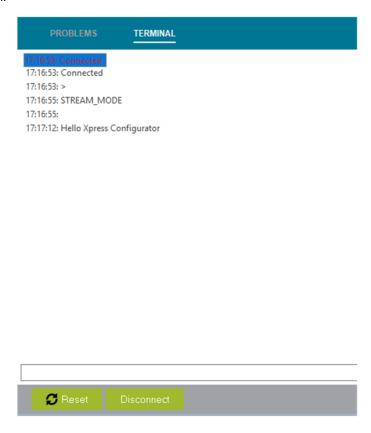
- 1. Open Simplicity Studio and create a new Xpress Configurator project: [File->New->Project->Xpress Configurator Project].
- 2. Select [BGX13P22GA] as the part number, and create the project.
- 3. In Xpress Configurator, press the [Connect] button at the bottom of the window.



#### **Communicate over Bluetooth**

With the Bluetooth Xpress module connected to Xpress Configurator, any messages sent from the BGX Commander application will be sent to Xpress Configurator over the serial connection.

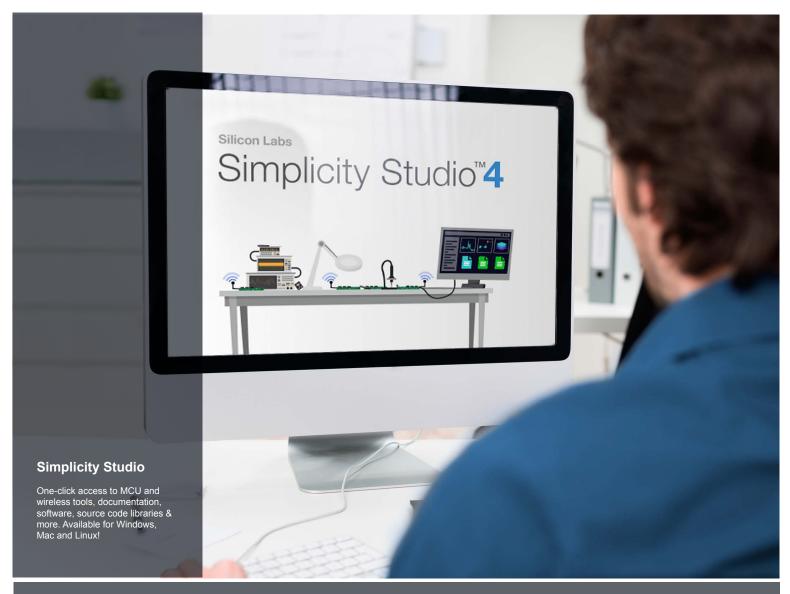




# 2. Additional Resources

For more information, review the following:

- BGX13P Datasheet
- Bluetooth Xpress API documentation
- AN1157: Developing Products Using Bluetooth Xpress
- UG369: BGX13P SLEXP8027A Kit User's Guide









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