

QSG136: CP2102N Mini Evaluation Kit

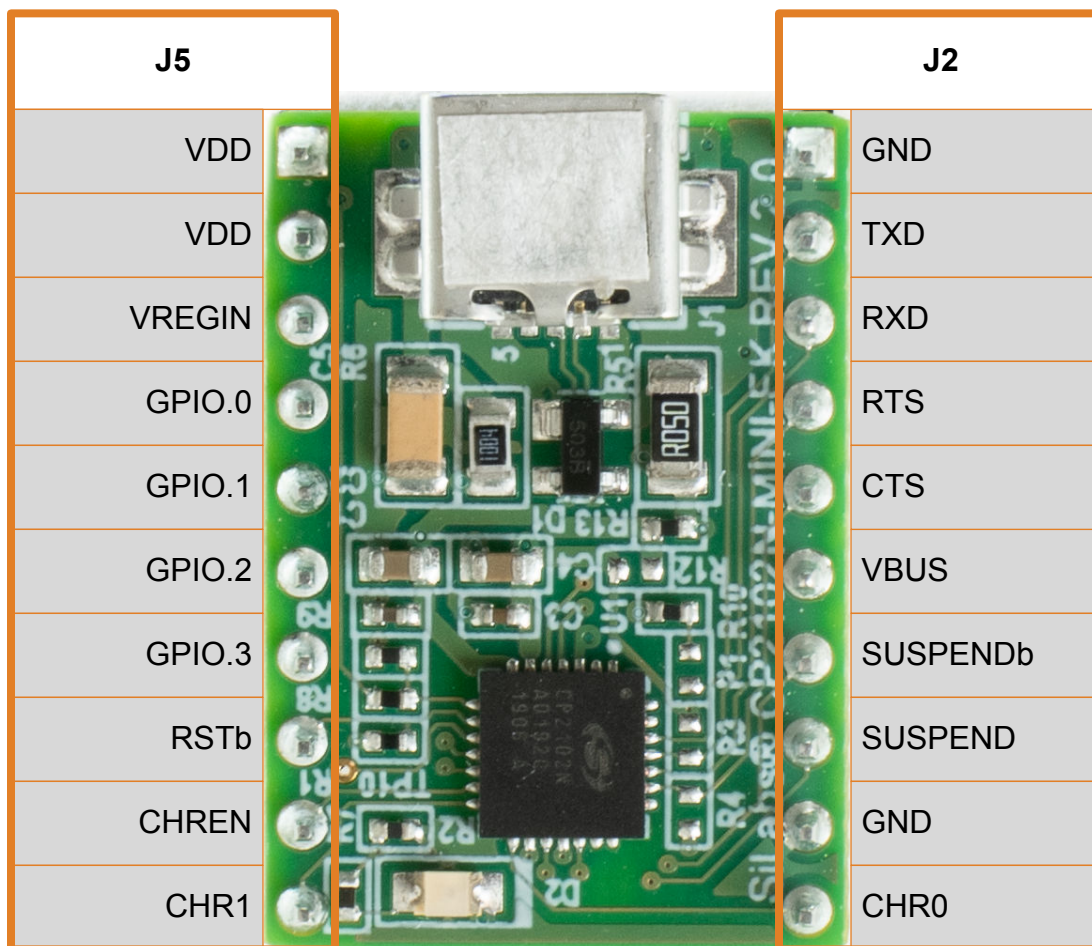
Quick-Start Guide

The CP2102N-MINIEK kit is designed to showcase the various features of the CP2102N USBXpress® devices.

These highly-integrated USB-to-UART bridge controllers provide a simple solution for updating RS-232 designs to USB using a minimum of components and PCB space. By eliminating the need for complex firmware and driver development, the CP2102N devices enable quick USB connectivity with minimal development effort.

KIT CONTENTS

- CP2102N USB-to-UART Bridge Mini Evaluation Board
- Getting Started card



1. Getting Started

1. Download and Install the Latest Virtual COM Port (VCP) Drivers.

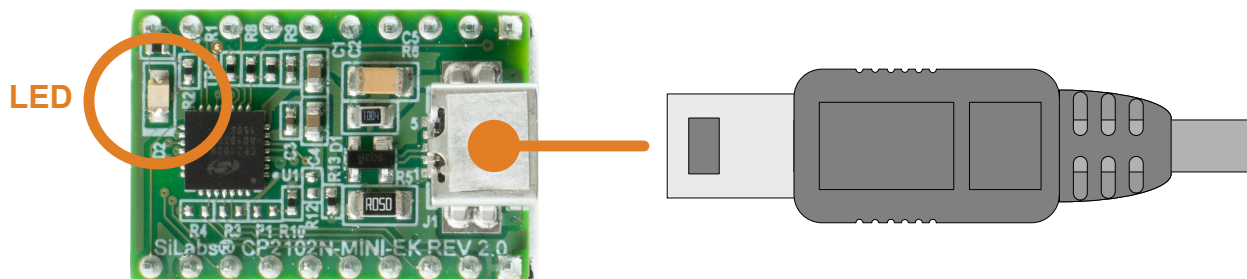
The Virtual COM Port (VCP) drivers enable the CP2102N to appear as a standard COM port. Download the latest version of drivers from the Silicon Labs website:

<http://www.silabs.com/vcpdrivers>

In most cases, select the default option without serial enumeration.

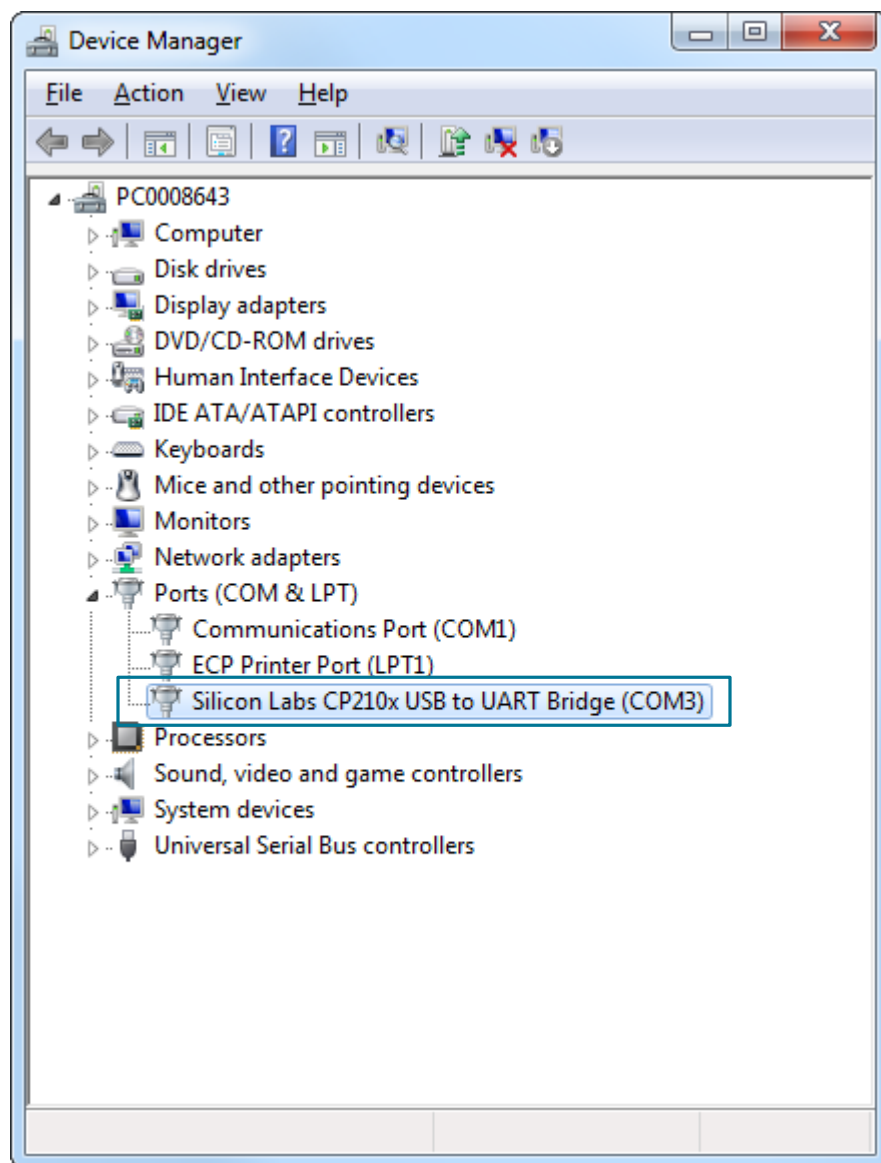
2. Set Up Your Kit.

- a. Provide power to the board by connecting the mini USB connector to the PC using a mini USB cable (not provided). When a connection has been established successfully, the LED (marked in the picture) lights up.



3. Detect Your Device.

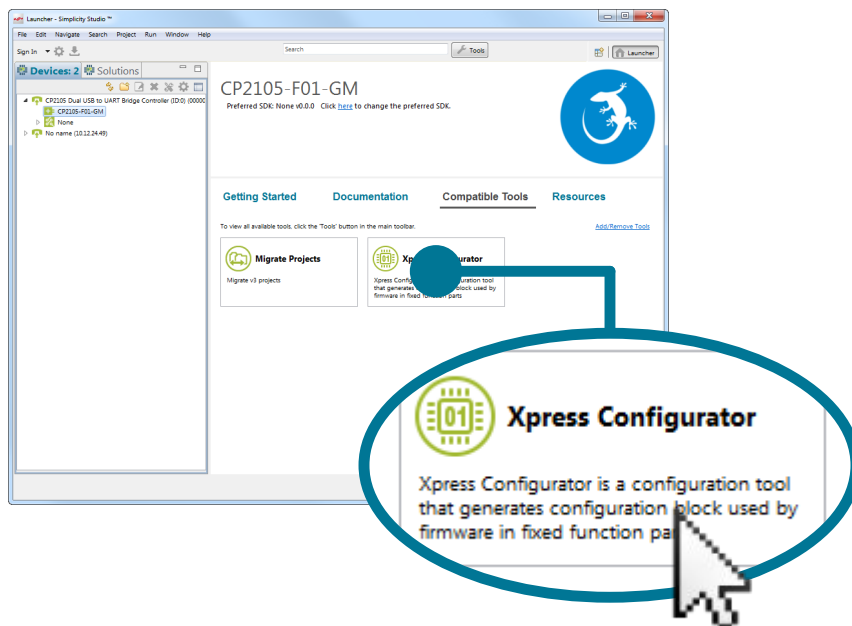
The CP2102N device will appear as a COM port in Device Manager in Windows. As a virtual COM port, the CP210x functions identically to a real COM port from the reference point of both the host application and the serial device, and it can support serial device control requests defined in the Microsoft Win32® Communications API.



2. Resources

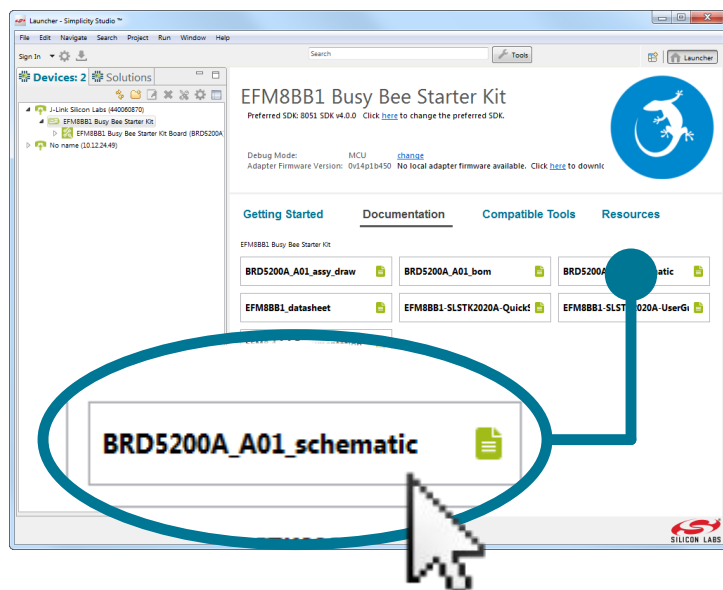
Xpress Configurator

The various GPIO and other features of the CP2102N can be configured using the **Xpress Configurator** tool within Simplicity Studio (<http://www.silabs.com/simplicity-studio>). Documentation for Xpress Configurator can be found in *AN721: CP210x Device Customization Guide*, which can be found on the Silicon Labs website (www.silabs.com/interface-appnotes) or within Simplicity Studio using the **[Getting Started]>[Application Notes]** area of the launcher.



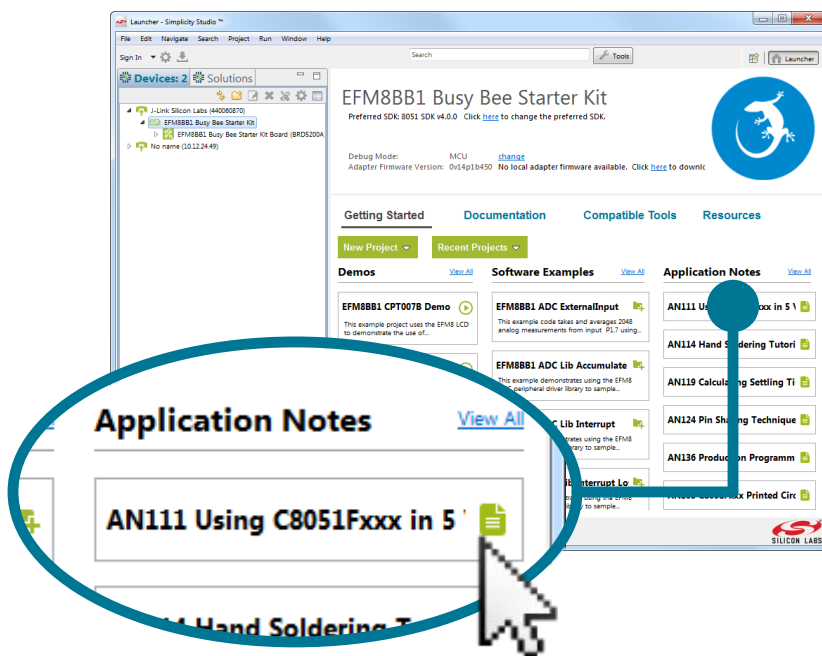
Kit Documentation and User's Guide

Kit documentation like the schematic and detailed board description can be found using the **[Documentation]** area of the launcher. The User's Guide will be a valuable document to reference while using the device.



CP2102 to CP2102N Migration Guide

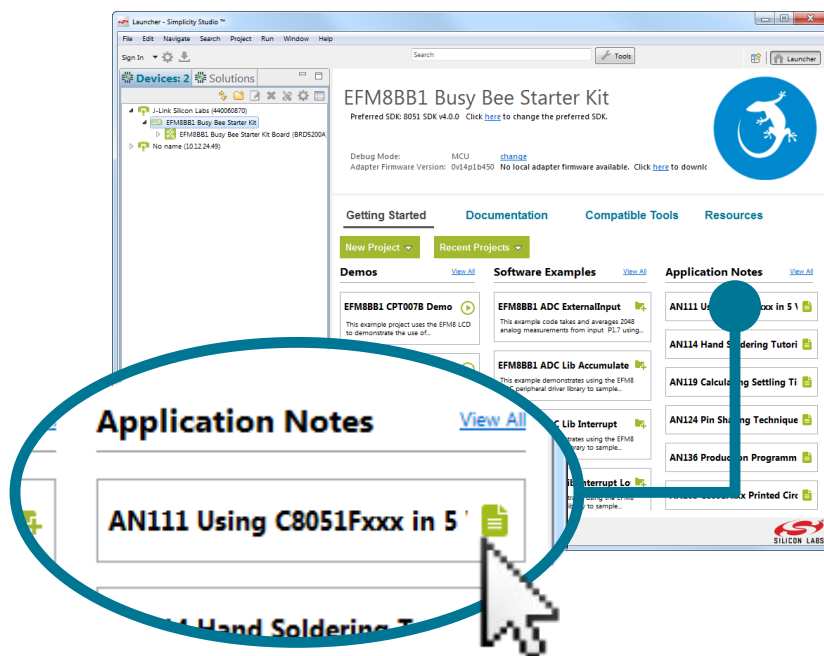
Migrating a product from the CP2102 to the CP2102N? View *AN976: Migrating from a CP2102 to a CP2102N* for more information on differences and similarities between these products. This document can be found on the Silicon Labs website (www.silabs.com/interface-appnotes) or within Simplicity Studio using the [Getting Started]>[Application Notes] area of the launcher.



Other Application Notes

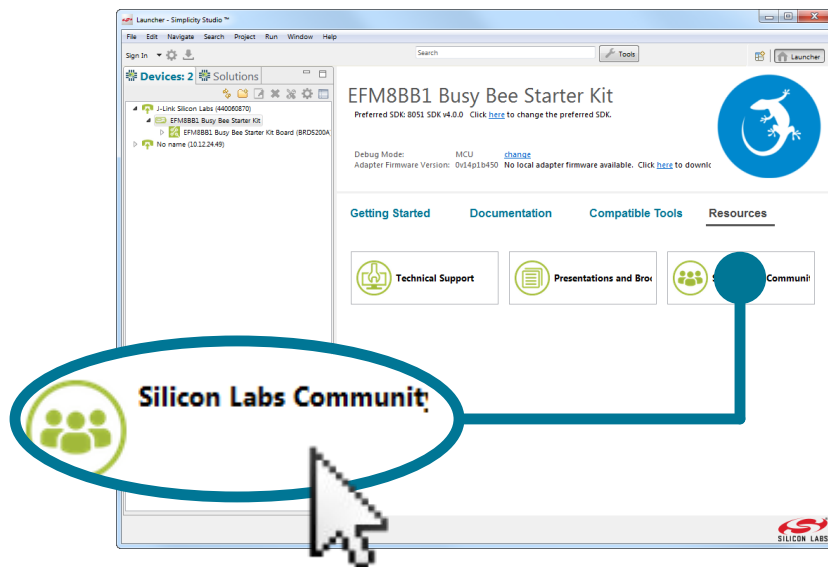
Application Notes can be accessed on the Silicon Labs website (www.silabs.com/interface-appnotes) or within Simplicity Studio using the [Getting Started]>[Application Notes] area of the launcher. Some application notes that are available are as follows:

- **AN721: CP210x Device Customization Guide**—This application note guides developers through the configuration process of USBXpress devices using Simplicity Studio [Xpress Configurator].
- **AN220: USB Driver Customization**—This document and accompanying software enable the customization of the CP210x Virtual COM Port (VCP) and USBXpress drivers.
- **AN197: Serial Communications Guide for CP210x**—This document describes recommendations for communicating with USBXpress CP210x devices using the Virtual COM Port (VCP) driver.



Community and Support

Have a question? Visit the community by clicking the [Resources]>[Silicon Labs Community] area of the launcher.



3. Revision History

Revision 0.1

October, 2016

- Initial revision.

Revision 0.2

December, 2019

- Updated Revision History format.
- Updated images throughout to reflect hardware revision 2.0.
- Corrected error in pinout diagram on front page kit diagram.

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Simplicity Studio™4



Simplicity Studio

One-click access to MCU and wireless tools, documentation, software, source code libraries & more. Available for Windows, Mac and Linux!



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