

CP2112 HID USB to SMBus/I²C EVALUATION KIT QUICK-START GUIDE

The CP2112 HID USB to SMBus/I²C smart-interface family provides a simple solution for connecting I²C peripheral-based designs to USB using a minimum of components and PCB space without needing to install or certify a driver. The CP2112 devices include a USB 2.0 full-speed function controller, USB transceiver, oscillator, One-Time Programmable ROM, and one SMBus/I²C interface.

- The CP2112 Evaluation Kit contains the following:
- CP2112 evaluation board (pictured)
 - USB cable
 - DVD
 - Quick Start Guide (this document)



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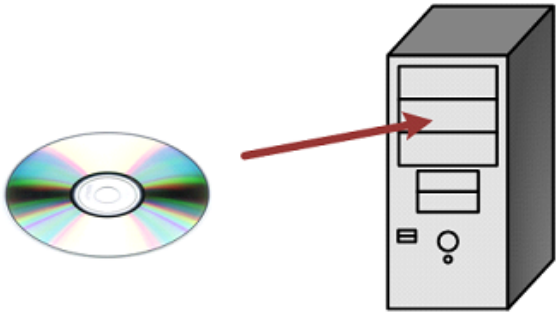
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User's use of this EVB/Kit is conditioned upon acceptance of the foregoing conditions. If User is unwilling to accept these conditions, User may request a refund and return the EVB/Kit to Silicon Labs in its original condition, unopened, with the original packaging and all documentation to:

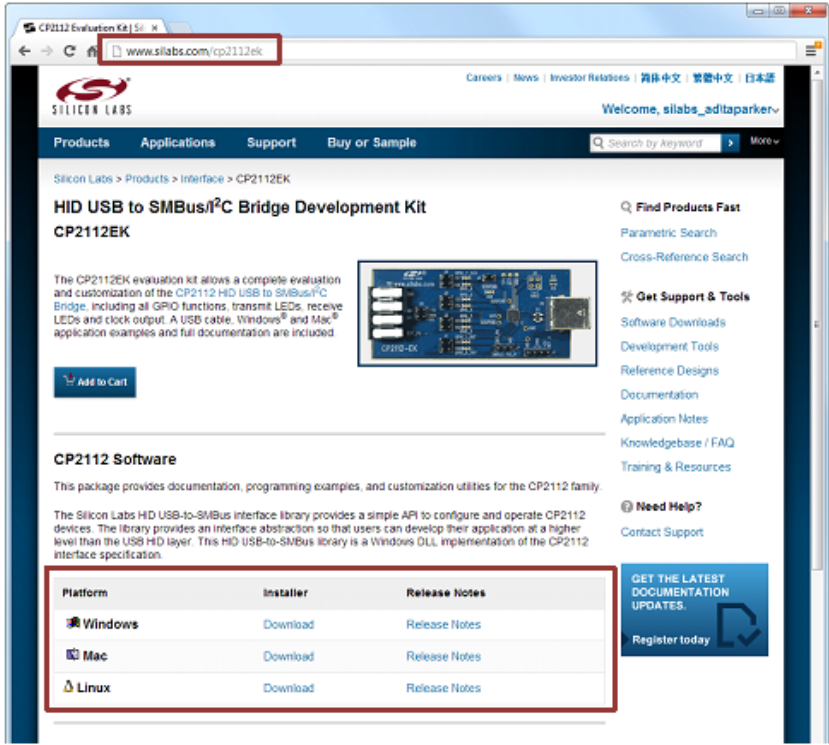
Mailing Address:
400 W. Cesar Chavez
Austin, TX 78701

A. Getting Started

1 Insert the DVD included in the kit to install the CP2112-related software. The latest version of this installer can also be downloaded from the website by navigating to www.silabs.com/CP2112EK and clicking on the **Download** link for the appropriate operating system.

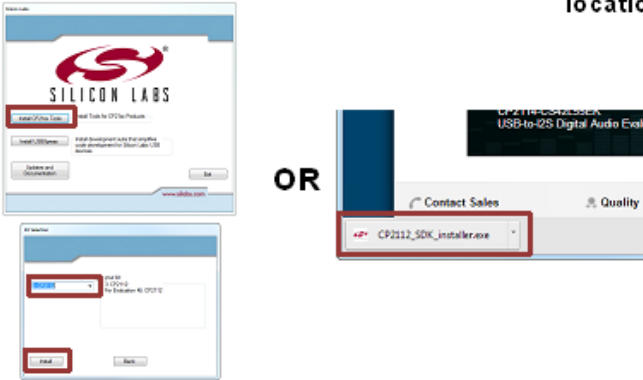


OR



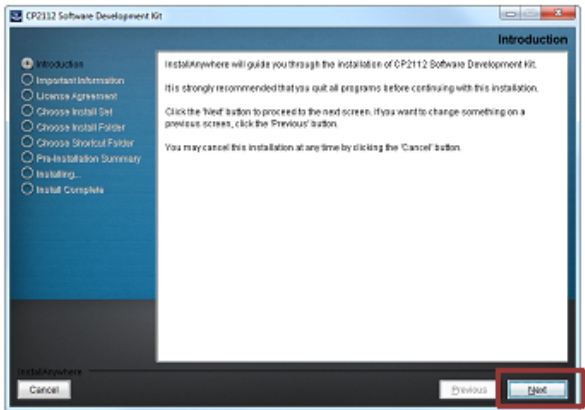
<http://www.silabs.com/CP2112EK>

2 Inserting the DVD will open the kit's selection screen. Navigate the menus to launch the correct installer. If downloading the installer from the website, run the installer from the download location.



Note: Windows installation process shown.

3 Click on **Next**, accept the license agreement, and complete the installer steps. The installer may prompt to restart the PC when installation completes.



4

Connect the CP2112 evaluation board to a PC as shown using the USB cable. Connect three wires from the terminal (TB1) connector or the header (H1) on the evaluation board to the target device for ground, SDA, and SCL.

5

The CP2112 device will appear as an HID device in Device Manager in Windows. As an HID device, the CP2112 can be accessed using standard Windows USB HID functions. Silicon Labs provides a DLL with the CP2112 install package to simplify this process.

6

The red Suspend LED will turn on when the board is properly connected to the PC.

7

Open the CP2112 HID SMBus Example through the Start menu. The default installation directory for this software is `C:\SiliconLabs\MCU\CP2112_SDK\Software\HidSmbusExample\Windows`.

Start → All Programs → Silicon Labs → CP2112 Software Development Kit → CP2112 HID SMBus Example

8

In the **HID SMBus Example** application, connect to the device using the **Connect** button and change the settings in the **Configuration** tab as needed for target device compatibility.

9

Click on the **Data Transfer** tab to transfer data between the target device and the PC. Add data to the **Data to Write** text box, then click the **Write Request** button to send the data. Click the **Read Response** button to read the data or current device status.

B. Relevant Documentation

Application Notes:
www.silabs.com/interface-annotes

- **AN721:** CP210X/CP211X Device Customization Guide
- **AN496:** CP2112 HID-to-SMBus API Specification
- **AN495:** CP2112 Interface Specification

Device Information:
<http://www.silabs.com/smartinterface>

Data Sheets:

<http://www.silabs.com/smartinterface> → HID USB to SMBus/I²C Bridge → Documentation tab → Data Sheet section

Users Guides

<http://www.silabs.com/smartinterface> → HID USB to SMBus/I²C Bridge → Documentation tab → User Guides section

MCU Knowledge Base:

www.silabs.com → Support → Knowledge Base

Contact an Applications Engineer:

www.silabs.com → Support → Contact Technical Support

Quality Documents:

www.silabs.com/quality

