

JESSINIE CP2112

JESSINIE CP2112 USB to I2C Communication Module User Manual

INTRODUCTION

The JESSINIE CP2112 is a versatile USB to I2C communication module designed to facilitate seamless interaction between a host computer and I2C-compatible devices. This module offers a straightforward solution for debugging, controlling, and communicating with various I2C peripherals without the need for complex custom drivers, thanks to its standard Human Interface Device (HID) class compatibility. It integrates a USB 2.0 full-speed transceiver and an internal clock, simplifying hardware requirements.

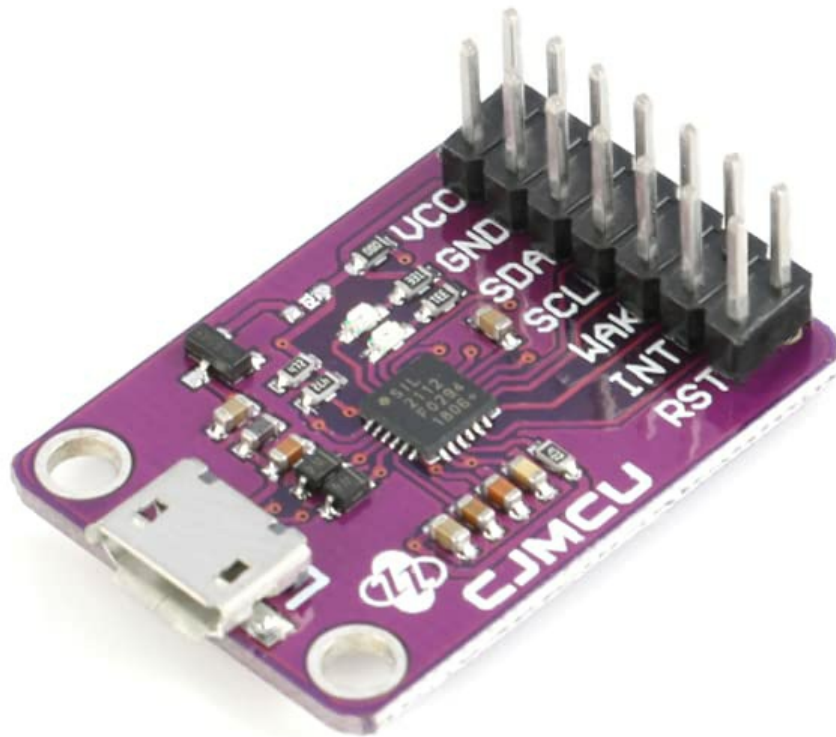


Image: The JESSINIE CP2112 USB to I2C Communication Module, shown with included pin headers for connection to a breadboard or custom circuit.

SETUP

1. **Hardware Preparation:** The CP2112 module typically comes with separate pin headers. Depending on your application, you may need to solder these headers onto the module's designated through-holes. Ensure proper soldering techniques are used to establish reliable connections.
2. **Connect to Computer:** Connect the CP2112 module to your computer using a standard Micro-USB cable. The module is USB 2.0 full-speed compatible.
3. **Driver Installation:** The CP2112 operates as a standard HID Class Device, meaning it generally does not require custom driver installation on most modern operating systems. It should be recognized automatically upon connection.
4. **Connect I2C Device:** Identify the VCC, GND, SDA, and SCL pins on the CP2112 module. Connect these to your target I2C device. Ensure correct voltage levels and pin assignments to prevent damage. The module supports 8 GPIO pins with configurable options for additional control.

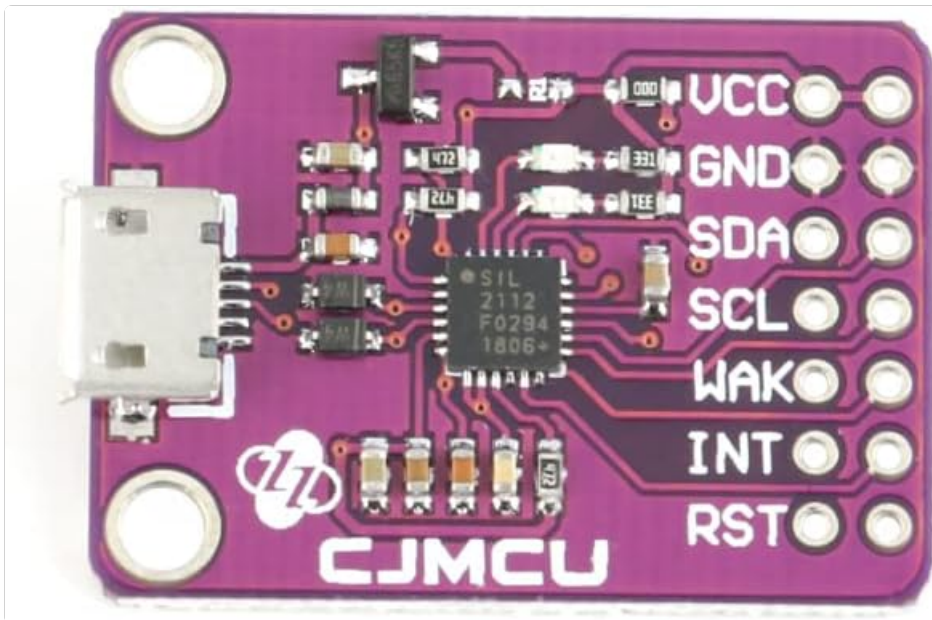


Image: A clear top-down view of the JESSINIE CP2112 module, highlighting the VCC, GND, SDA, SCL, WAK, INT, and RST pin labels, along with the Micro-USB port.

OPERATING INSTRUCTIONS

1. **Software Interface:** Utilize a compatible GUI-based configurator or software application to interact with the CP2112 module. This software allows you to send and receive I2C commands and manage the 8 GPIO pins.
2. **I2C Communication:** Through the software, you can initiate I2C read and write operations to your connected I2C device. Refer to your I2C device's datasheet for specific register addresses and command protocols.
3. **GPIO Control:** The 8 GPIO pins can be configured and controlled via the software interface. These can be used for various purposes such as interrupt handling, status indication, or controlling other components.
4. **Configuration:** All customization and configuration options for the CP2112, including I2C clock speed and GPIO settings, are accessible through the simple GUI-based configurator. This eliminates the need for complex firmware development.

MAINTENANCE

- Keep the module clean and free from dust and moisture.
- Avoid exposing the module to extreme temperatures or static electricity.
- Handle the module by its edges to prevent damage to components.
- Ensure all connections are secure before applying power.

TROUBLESHOOTING

- **Module Not Recognized:**
 - Ensure the Micro-USB cable is securely connected to both the module and the computer.
 - Try a different USB port on your computer.
 - Verify that the operating system recognizes new USB devices.
- **I2C Communication Failure:**
 - Double-check all I2C connections (SDA, SCL, VCC, GND) for correct polarity and continuity.
 - Confirm the I2C address of your target device.
 - Ensure the I2C device is powered correctly and functioning independently.
 - Check the I2C clock speed settings in your software; some devices require specific speeds.
- **Soldering Issues:** If pin headers were soldered, inspect all solder joints for cold joints, bridges, or poor connections. Re-solder if necessary.

SPECIFICATIONS

Feature	Detail
Model Number	CP2112
USB Compatibility	USB 2.0 Full Speed
I2C Interface	Yes
GPIO Pins	8 (Configurable)
Driver Requirement	Standard HID Class (No Custom Driver Required)
Input Voltage	5.25 Volts (via USB)
Current Rating	0.53 Amps
Nominal Power	2.78 Watts
Dimensions (L x W x H)	7.08 x 4.72 x 0.7 inches
Weight	0.03 Kilograms
Color	Purple

WARRANTY INFORMATION

This JESSINIE CP2112 USB to I2C Communication Module comes with a**Limited Warranty**. Please

retain your proof of purchase for any warranty claims. For specific terms and conditions, refer to the warranty documentation provided with your product or contact JESSINIE customer support.

SUPPORT

For further assistance, technical inquiries, or troubleshooting not covered in this manual, please visit the official JESSINIE store or contact their customer support channels. You can find more information and potentially updated resources at the [JESSINIE Store on Amazon](#).