

I2C-USB Bridge Quick Start

Associated Project: Yes
Associated Part Family: CY8C4894
Software Version: PSoC Designer™ v. 4.3
Associated Application Notes: AN2352

Step 1. List of Contents

- I2C-USB Bridge



- I²C Slave Demonstration Board

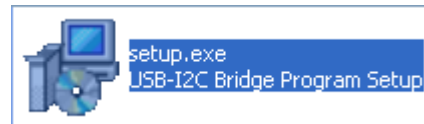


- USB Mini B Cable
- Supporting Software CD-ROM
- Quick Start Guide

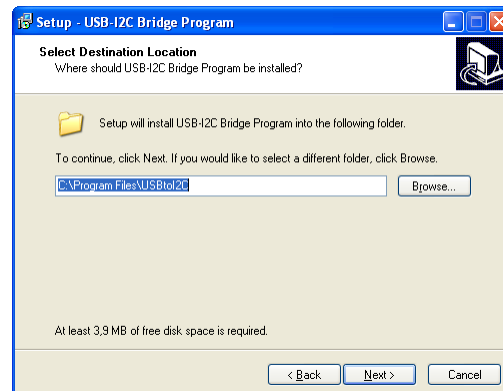
Step 2. Software Installation

1. Insert CD into CD-ROM drive.

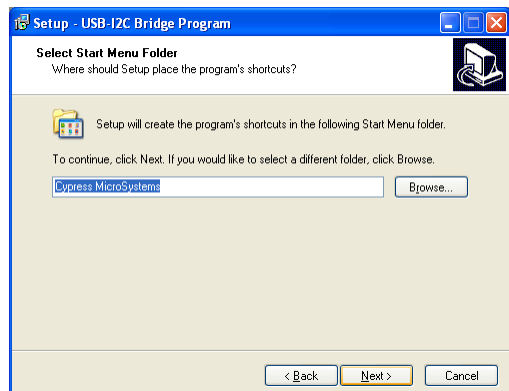
2. Run "Setup..."



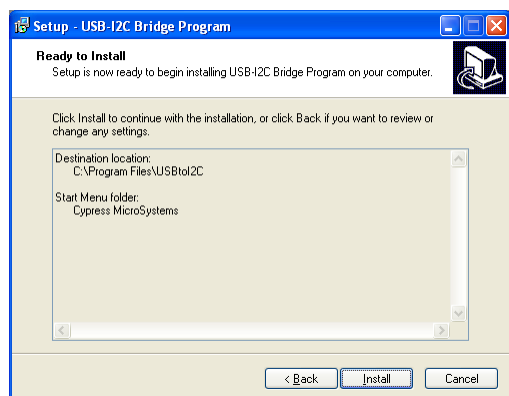
3. Click the **Next** button.



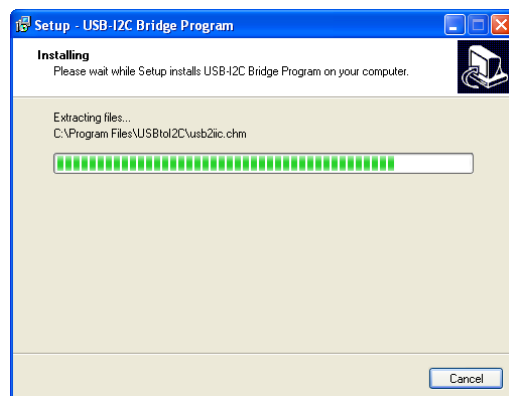
4. Click the **Next** button.



5. Click the **Install** button.



6. Wait until program installation finishes.



7. Click the **Finish** button.

Installation is complete. The Program icon is located under the Start Menu >> All Programs >> Cypress MicroSystems.

Step 3. Connect Bridge to PC

1. Run the "I2C-USB Bridge" program.



Note For help using the program interface, refer to the electronic help file by pressing F1 within the GUI window.

2. Connect bridge to PC using USB cable.

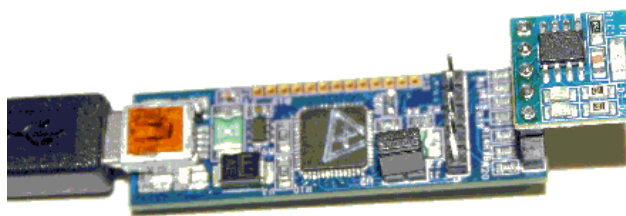


The green LED on the bridge board will light. The connected bridge appears in the list of connected bridges.

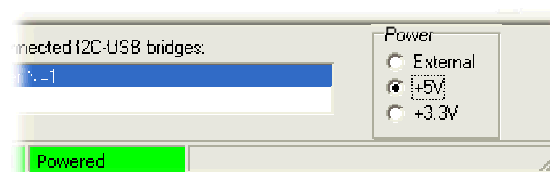


Step 4. Connect Demonstration Board to Bridge

1. Connect I²C Slave Demonstration Board to bridge.

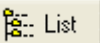


2. Select +5V as power supply to the board.



The yellow LED on the bridge board will light up.



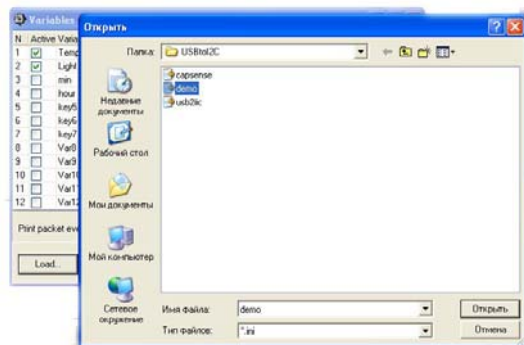
3. Click the  List button.
4. The bridge will find I²C Slave Demonstration Board at 0x00 address.

Device List	Address
8 Bit	00
7 Bit	00

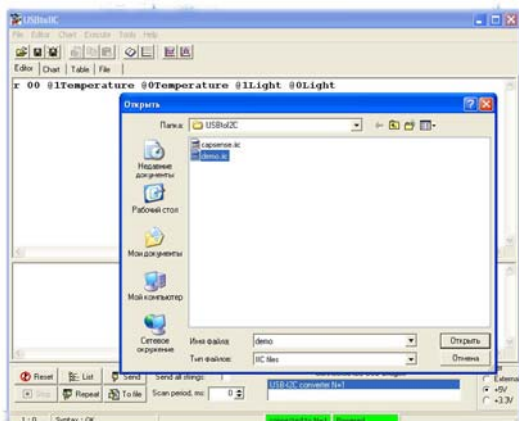
Step 5. Run Demonstration Board Test

The demonstration board has built-in temperature sensor and photodiode, of which measurement results are sent over I²C.

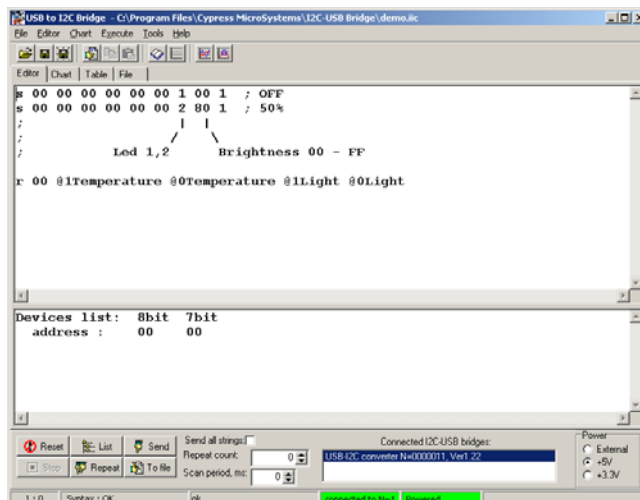
1. Open the “Data Settings” dialog box from the Chart menu, load the *demo.ini* file, and click the **Ok** button.




2. Click the  button. Load the *demo.iic* file.




3. The first two lines in the *demo.iic* file show how to control the LEDs on the board. Position the cursor in the first line and press **[Enter]** to send the command. Repeat for the second line.



4. Click in the last line, which reads data from the device and then click the  Repeat button. At this time, the program will scan the demonstration board.
5. Click the “Chart” tab to view changing demonstration board variables.



6. Click the  Stop button to stop scanning.
7. Click the “Table” tab to view the values of the demonstration board variables.

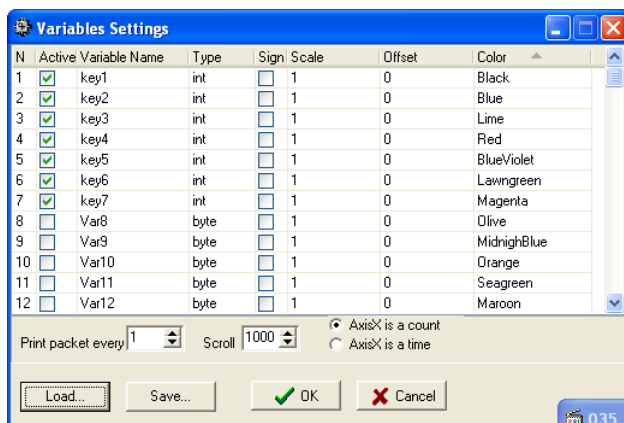
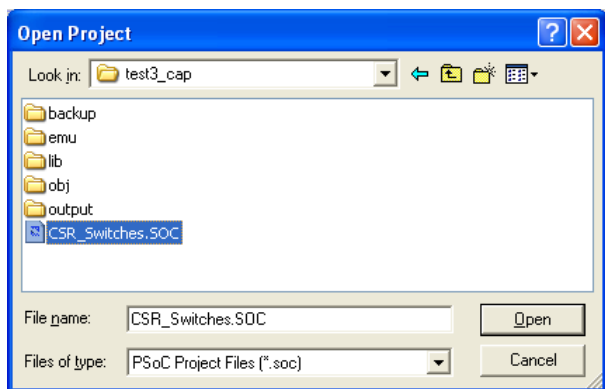
Step 6. (Optional) Example with CY3212-CapSense Training Board

This example can be used to tune the parameters of the CSR User Module and indicate CapSense measurement variables. It requires the CY3212-CapSense Training Board and programming tools.

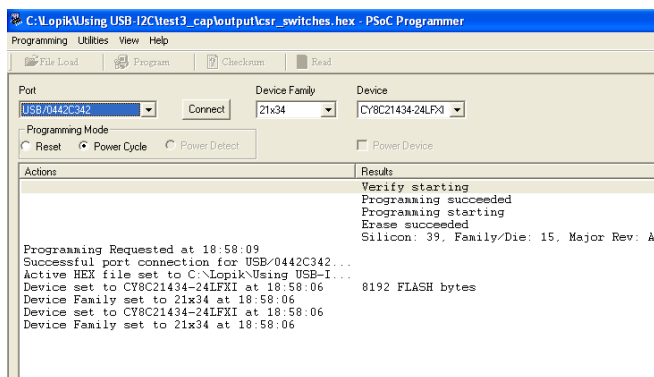
1. Copy the project from the ...\Examples\test3_cap folder on the CD-ROM to your hard drive.



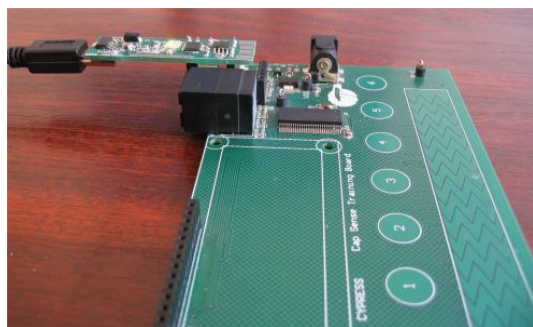
2. Start PSoC Designer™ and open the example project.



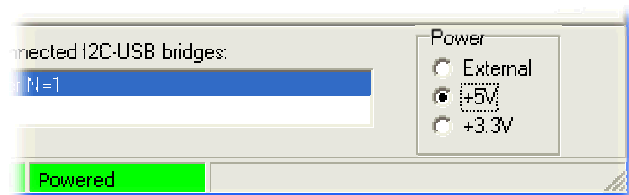
3. Inside PSoC Designer, launch PSoC Programmer to program the CapSense Training Board project device.




4. Connect the bridge to CapSense Training Board.

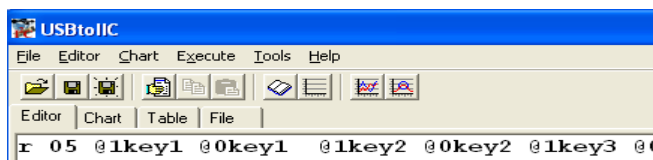


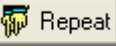
- 5. Run the "I2C-USB Bridge" program.
- 6. Select +5V as power supply to the board.

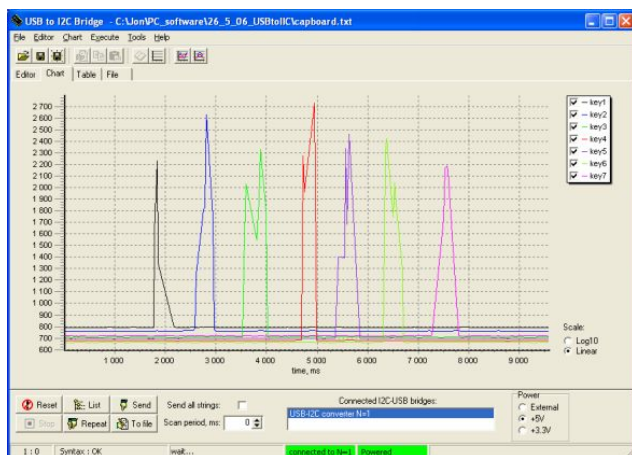


7. Open the "Data Settings" dialog box, load the capsense.ini file, and click the OK button.

8. Click the  button. Load the capsense.iic file. The command window contains the following:



- 9. Click the  Repeat button.
- 10. Click the "Chart" tab to view changed CSR User Module variables.
- 11. Touch any of the 7 CapSense buttons and see changes in the variables on the "Chart."



12. Click the  Stop button to stop scanning the CapSense Training Board.

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