

EasyI2C™ - Low Cost, Professional Grade I2C Protocol Analyzer

Thanks for purchasing EasyI2C™! We're certain it will give you rapid insight into whatever type of I2C-related tasks you encounter. First, a quick reminder:

☹ Please exercise caution when connecting EasyI2C™ to any device that is mains-powered (not floating). You could cause severe damage to your computer, the device under test, the EasyI2C™ Analyzer, or yourself !!

CONNECTIONS

- Connect GND (pin 3), SDA (pin 4) and SCL (pin 5) to the bus you want to analyze.
- If the logic-high level of the connected bus is above 3.3V, please add a jumper between pins 1 and 2; this will adjust the voltage detection levels of EasyI2C™.
- Pin 1 is USB +5V power, and is available to power your target circuit. (This is passed through from USB.)
- Pin 2 is regulated 3.1V, and can be used to power your target circuit (up to 20mA).
- Pins 6, 7 and 8 are not used at this time and should be left disconnected.
- Use a standard Type A to Type B USB cable to connect EasyI2C™ to your computer. A USB 2.0 connection is recommended for correct operation, especially at 400KHz bus speeds.

SOFTWARE

The EasyI2C™ Windows™ application is easy to install, and easy to use. Simply double-click the EasyI2C.exe application icon and it will start up; no complex installation is required. EasyI2C™ requires Microsoft .NET 2.0 or higher to be installed. Note that a DLL file will be created in the current directory when the EasyI2C™ application is started; this is required for operation.

If an EasyI2C™ module is plugged in, it should be listed in the Module window; if not, plug it in, wait a couple of seconds, and click SCAN to refresh the list. When you see your module listed, simply click on it (if there's only one module available, it is auto-selected for you). When you are ready to begin monitoring, just click the START button (or press the 'S' key). A couple of messages will appear in the Results window, and bus activity is now being tracked. Pressing the STOP button will stop the tracking. If you wish to save the captured bus activity, you must click the "Save Log" button before re-starting monitoring. Pressing 'C' at any time will clear the results from the window.

More than one EasyI2C™ can be used simultaneously on the same computer. You can start up several instances of the EasyI2C™ software and use a different module with each one. Modules which are currently active with another instance of the EasyI2C™ application will not appear in the Module list if the SCAN button is clicked or if a new application instance is started.

The application allows you to choose whether you want to always see the latest activity or not. Checking the box labeled "Always show the latest results (auto-scroll)" will cause the activity window to automatically scroll. Displaying continuous bus activity can be taxing even on the fastest computer, and will cause the window to lag behind. When collecting continuous bus activity, it is recommended to leave Auto-Scroll disabled, especially if running on a slower computer.

EasyI2C™ also tracks the approximate gap between the end of one transaction, and the start of the next one. This is displayed as part of the START log entry. For Re-Starts, the time is not updated (as there was no STOP).

EasyI2C™ does not use internal pull-up resistors, so it won't load down your target circuit.

Check back at www.easyi2c.com for application updates from time to time, and your feedback is always welcome!