

MiniBoard by Nano River Technologies!

Welcome to MiniBoard from Nano River Technologies! We trust that this board will be a valuable asset in the development or test of your own electronics.

... Nano River Technologies development team

Overview

MiniBoard is an interface adapter designed for controlling any test system incorporating I2C, SPI or general purpose IOs (GPIO). Today, usage of these protocols is extremely widespread including electronics for telecommunications, portable electronics and medical electronics to give some examples.

MiniBoard is simply connected to the system under test using one or more of the available interfaces. MiniBoard accepts USB commands from the host PC and then implements the necessary bus protocol for I2C, SPI or GPIO as required. The connection back to the host PC is via a standard USB cable and provides all power requirements of the MiniBoard.

The host PC includes the necessary driver and DLL to implement the high level commands so that the user can rapidly develop his/her own custom applications.

Typical applications are written in C/C++ or Visual C++. Users have therefore the choice of developing GUI style control applications or non-Windows batch style control – depending on what is required.

MiniBoard comes with a rich set of example applications and documentation making custom applications an extremely simple process even for those with little programming knowledge.

Documentation

MiniBoard comes with the following documentation. All have been installed during the installation process.

- MiniBoard Users Guide
- MiniBoard API Specification
- MiniBoard Application Examples



Application Examples

In order to rapidly develop your own user applications. A mixture of C/C++ and Visual C++ example applications have been included in the installation.

- Windows GPIO Application Example
- Windows I2C Application Example
- Command based (DOS-like) I2C Application Example
- Windows EEPROM Programmer Example

Support

Most questions relating to installation and usage of the MiniBoard are available from our web-site.

www.nanorivertech.com

If however you have further questions, then please do not hesitate to contact us via email.

support@nanorivertech.com

For sales questions and requests please contact:

sales@nanorivertech.com

LibUSB OpenSource USB Driver

MiniBoard from Nano River Technologies utilises the OpenSource LibUSB-Win32 USB driver.

The LibUSB-Win32 library (DLL) is distributed under the terms of the GNU Lesser General Public License (LGPL). All other components (drivers, services, installer) are distributed under the terms of the GNU General Public License (GPL). This license combination explicitly allows the use of this library in commercial, non Open Source applications.

There has been no modification to the library or other components of LibUSB-Win32. The complete source can be downloaded from:

Link:	http://libusb-win32.sourceforge.net/#links
Installer:	libusb-win32-filter-bin-0.1.12.1.exe
Version:	March 20, 2007



Disclaimer

Nano River Technologies Miniboard has been designed specifically for test purposes. It is not designed or guaranteed for integration into user's products. Nano River Technologies takes no responsibility should the user choose to integrate Miniboard into products. Nano River Technologies takes no responsibility for damage caused through use of the MiniBoard.

Warranty

If the MiniBoard has not performed to your satisfaction, you can simply return the undamaged unit within a 30 day period and your money will be promptly returned. Refund will not include shipment costs. This warranty applies to normal use and care and is void in the case the product is misused, damaged or repaired by someone other than Nano River Technologies.

Installation File Structure

```

MiniBoardInstaller_0.1.x
|
+-- Readme.pdf                      (this file)
|
+-- MiniBoardUserGuide_ver_Feb09.pdf (Users Guide)
|
+-- MiniBoardAPI_ver_Feb09.pdf       (API Specification)
|
+-- MiniBoardApplicationExamples_ver_Feb09.pdf (Documentation for the application examples)
|
+-- EEPROMProgrammerApplication.exe  (EEPROM Programmer Application Example)
|
+-- GPIOWindowsApplication.exe       (GPIO Application Example)
|
+-- IICCommandToolApplication.exe    (IIC Command Tool Application Example)
|
+-- IICWindowsApplication.exe        (IIC Windows Application)
|
+-- MiniBoard_x86.inf                (MiniBoard Driver setup file)
|
+-- vcredist_x86.exe                 (Microsoft Visual C++ 2008 Redistributable)
|
+-- libusb.exe                       (LibUSB-Win Open Source USB driver installer)
|
+-- libusb0.dll                     (Dynamic library for LibUSB-Win Open Source)
|
+-- libusb0.sys                      (System file for LibUSB-Win Open Source)
|
+-- COPYING_GPL.txt                  (License file for GNU General Public License for
|                                     the LibUSB-Win USB driver)
|
+-- COPYING_LGPL.txt                 (License file for GNU Lesser General Public License
|                                     for the LibUSB-Win USB driver)
|
+-- NanoRiverTech.ico                (Icon used in the start menu)
|
+-- unins000.exe                     (MiniBoard Un-installer)
|
+-- Applications
|   |
|   +-- Visual C++
|   |   |
|   |   +-- GPIOWindowsApplication (These are all the files needed to compile the GPIO
|   |   |                               Application)
|   |   |
|   |   +-- IICWindowsApplication  (These are all the files needed to compile the IIC
|   |   |                               Windows Application)
|   |   |
|   |   +-- IICCommandToolApplication (These are all the files needed to compile the IIC
|   |   |                               Command Tool Application)
|   |   |
|   |   +-- EEPROMProgrammerApplication (These are all the files needed to compile the EEPROM
|   |   |                               Programmer Application)

```