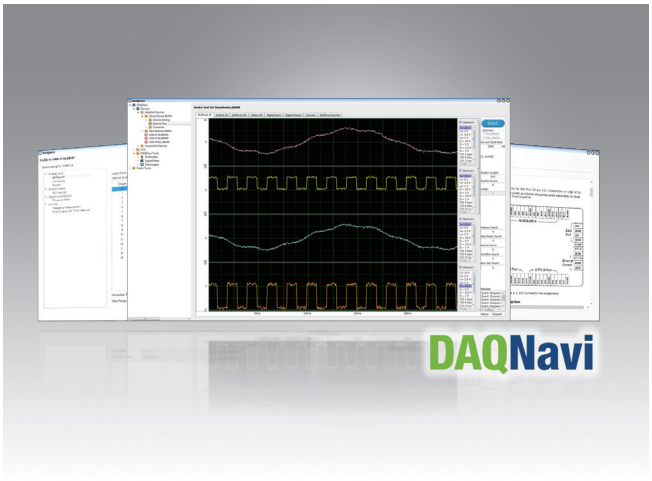
DAQNavi / SDK

Software Development Package for Advantech DAQ Products



Features

- Supports multiple operating systems including Windows (32-bit and 64-bit), Linux
- Supports common-used development environment including Visual C/C++, Borland C Builder, Visual Basic .NET, Visual C#, Delphi, Java, VB, LabVIEW
- Supports Advantech PCI Express, PCI, PC/104, PCI-104, USB DAQ devices
- Integrated utility environment (Advantech Navigator) for device functionality testing without programming
- Able to generate a simulator device in utility to program and run application without real hardware device
- Pre-defined scenario application examples with source code to shorten programming learning and development time
- Express VI and Polymorphic VIs for both beginner and advanced programming in LabVIEW environment
- Comprehensive documentations and tutorials for hardware specifications, wiring, example code and SDK programming

Introduction

DAQNavi is a comprehensive software package, for programmers to develop their application programs using Advantech DAQ boards or devices. This integrated software package includes drivers, SDK, tutorial and utility. With the user-friendly design, even the beginner can quickly get familiar with how to utilize DAQ hardware and write programs through the intuitive "Advantech Navigator" utility environment. Many example codes for different development environment dramatically decrease users' programming time and effort.

You can go to http://www.advantech.com/daqnavi for more information about Advantech DAQNavi.

Feature Details

Multiple Operating System Support

DAQNavi supports many popular operating systems (OS) used in automation applications. For different OSs, API functions will be the same, so users can simply install the driver without modifying their program again when migrating between two different OSs.

DAQNavi supports latest Windows system up to Windows 10. (both 32-bit and 64-bit). Besides Windows operating system, Linux is famous for its openness and flexibility. DAQNavi software package also supports Linux OS distributions including Ubuntu, Fedora, Debian and, Redhat. For other distributions, please contact Advantech local branch/support for more information.

.NET Support

DAQNavi offers a series of .NET Component objects, that you can benefit from platform-unified feature with the latest .NET technology. Users can simply drag and drop the .NET Components within .NET programming environment, such as Microsoft Visual C# and VB .NET. An intuitive window (called "DAQNavi Wizard") will pop-up, and user can perform all configurations by sequence. Programmers also can choose writing code manually with the .NET Component, to have a more flexible object calling. With Advantech CSCL technology, engineers can do the similar programming in Native environment such as Visual C++.

LabVIEW Support

LabVIEW is one popular graphical development environment used for measurement and automation. For LabVIEW user, DAQNavi offer two options for programming: Express VI and Polymorphic VI. DAQNavi Express VI for LabVIEW helps user quickly complete his LabVIEW without extra wiring. When the user drags the Express VI on LabVIEW Block Diagram, a pop-up intuitive wizard window will appear and user can perform hardware parameter configurations. After that, the programming is done. So it is similar to the .NET control used in Microsoft Visual Studio environment, suitable for programming beginners. As for the Polymorphic VI, users can use several VIs and wiring to build more complex program.

C/C++, Qt, ActiveX and Java Support

DAQNavi also offers C++ Class Library (for VC++ and Borland C++ Builder) and ActiveX (for Visual Basic, Delphi and BCB) for Native programming environment with the same calling interface as .NET Class Library. With DAQNavi Java Class Library, user can develop Java program to across different platforms (including Windows and Linux) by means of Java engine.

Device Support

DAQNavi supports all Advantech PCI Express, PCI, PC-104, and PCI-104 cards, as well as all USB DAQ devices.

Intuitive Utility

DAQNavi delivers one integrated easy-to-use and powerful utility, called Advantech Navigator. Within the Navigator, engineers can quickly start configuration and function testing for all Advantech DAQ devices, without any programming. Related user manuals are also displayed in the same environment. Besides, to help shorten development time, Advantech offers a series of DAQ applications examples (called "scenarios" in the Advantech Navigator). So programmers can refer to its source code and develop their application based on it, as well as the wiring information. Without a DAQ device at hand, engineers can generate a simulated device and use that device for programming and testing. Except for device testing, Navigator also offers complete documentation to describe how to use DAQNavi SDK to program in various development environments. Moreover, video tutorials for how to create applications in different development environments are available.