DT-Open Layers for .NET

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Powerful .NET-Compliant Class Library for Data Translation Hardware

- Simple-to-use programming interface for all USB and PCI hardware.
- Full support for Visual Basic.NET and Visual C# and compatible with other .NET languages.
- **Extensive example program support** and documentation included.
- **Easily configure** all subsystem parameters.
- Reduce debug time with thorough error detection and reporting as well as explicit and meaningful error messages.
- Built using managed code, virtually eliminating memory leaks and providing type safety, bounds checking, and exception handling.
- **DT-Display for .NET included** to plot data acquired from the Data Translation hardware.

The Software

DT-Open Layers for .NET Class Library is a native .NET collection of object-oriented classes for developing test and measurement applications in Microsoft Visual Studio 2003 and 2005. It provides a powerful yet simple-to-use programming interface to all Data Translation USB and PCI hardware.

Class Library Elements

The DT-Open Layers for .NET Class Library contains four elements:

- Classes: These define the I/O operations that can be performed using properties, methods, and events. There are over 20 classes provided.
 Examples: AnalogInputSubsystem, AnalogOutputSubsystem, etc.
- Delegates: These are used to call userspecified methods when a specific event occurs.

Examples: BufferDoneHandler, InterruptOnChangeHandler, etc.

Enumerations: These are used to define the values of properties and arguments

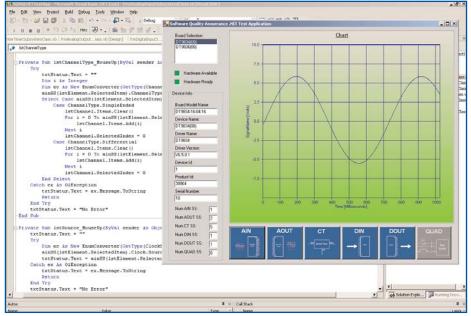


Figure 1. With DT-Open Layers for .NET Class Library, you can create flexible programs in Visual C# and Visual Basic .NET.

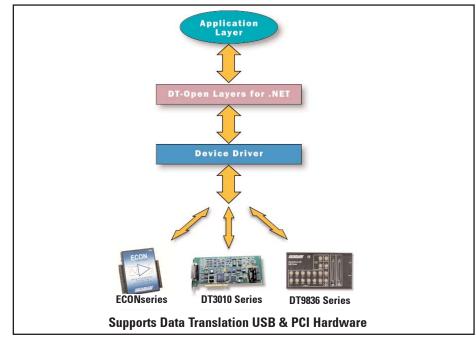
used in methods. Examples: ChannelType, ClockSource, CounterMode, etc.

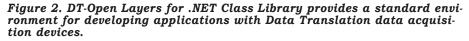
Structures: These are used to return specific information about DT-Open Layers devices.
Energy Logical ID

Examples: Vendor ID, Board ID, Product ID, etc.

Open Architecture Protects Your Investment

The library is fully compatible with the DT-Open Layers standard for developing integrated, modular application programs under Windows. Therefore, you can add support for a new data acquisition device at any time. Just add the new device driver, modify your code to incorporate the features of the new device, and then





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BUS: PCI, USB

Class Library

recompile the code. Any existing code remains unchanged so your time investment is not lost. Your code is completely portable to any other Data Translation data acquisition device.

Applications written in the original DT-Open Layers SDK environment may require modification to comply fully with this new .NET environment.

DT-Display for .NET

DT-Display for .NET is included with the DT-Open Layers for .NET Class Library. DT-Display for .NET is a general-purpose, high-performance .NET control for displaying signals. It can be programmed interactively at design time or programatically.at run-time. It allows you to plot data acquired from a Data Translation device. Example programs on how to use the control are included.

Supported Languages

DT-Open Layers for .NET supports programs written in Visual Basic.NET and Visual C#.NET with a full complement of example programs and documentation. Other .NET languages are also compatible with the DT-Open Layers environment but are not supported with examples. Either way, you can program in the language that best suits your application.

Support

As you develop your application, application engineers are available during normal business hours to assist you with your development. In addition, our extensive on-line Knowledgebase is available 24 hours a day on our web site at www.datatranslation.com. You can also request complimentary support via email or fax at any time.

Ordering Information

The DT-Open Layers for .NET library is delivered at no cost on the Omni CD or ECON Series CD with the purchase of a Data Translation hardware device. It can also be downloaded from our Technical Support web site.

Click here for a list and Help file on sample programs.

Click here for user manual with detailed information on library calls.

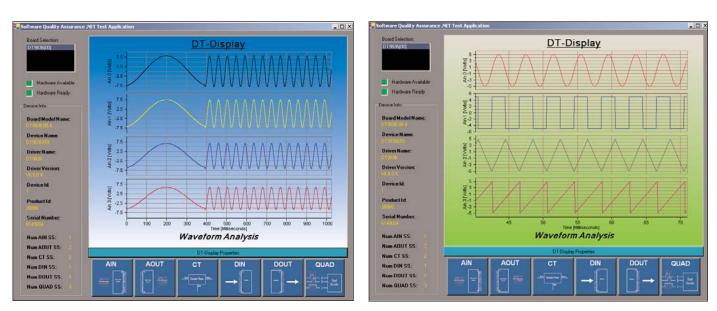


Figure 3. DT-Display is an easy-to-use, general purpose, high performance .NET control for displaying signals. It is included on the Omni CD at no charge.