

QUICK REFERENCE GUIDE

Measurement Studio™ Visual C++ Class Hierarchy Chart

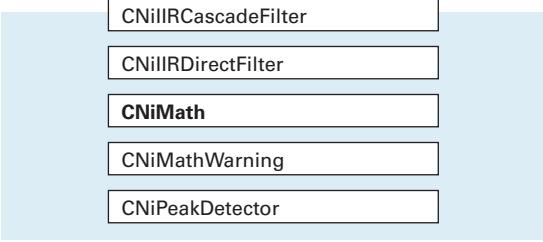
Measurement Studio is an integrated suite of measurement and automation tools and class libraries for Microsoft Visual Studio .NET 2003, Visual Studio 2005, and Visual Studio 2008. Measurement Studio dramatically reduces application development time with wizards, simplified data networking, and ActiveX user interface controls. Code designers interactively define reusable acquisition tasks and automatically generate code. Advanced analysis libraries and rich object-oriented hardware APIs for performing tasks such as data acquisition and instrument control—enable the development of sophisticated measurement applications.

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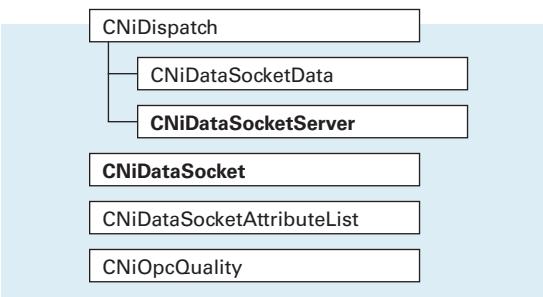
Analysis

The Analysis class library includes classes that you can use to perform signal generation, frequency and time domain analysis, windowing, digital filtering, curve fitting, statistics, waveform measurements, and linear algebra.



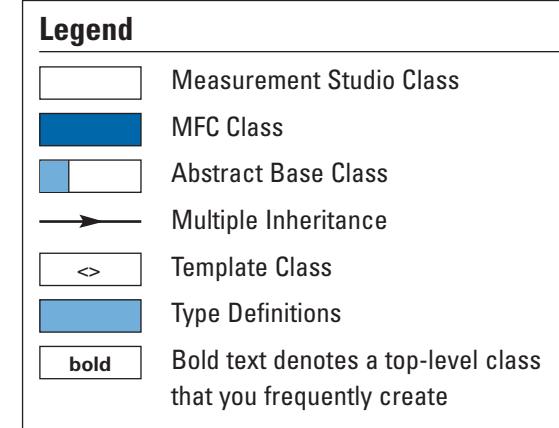
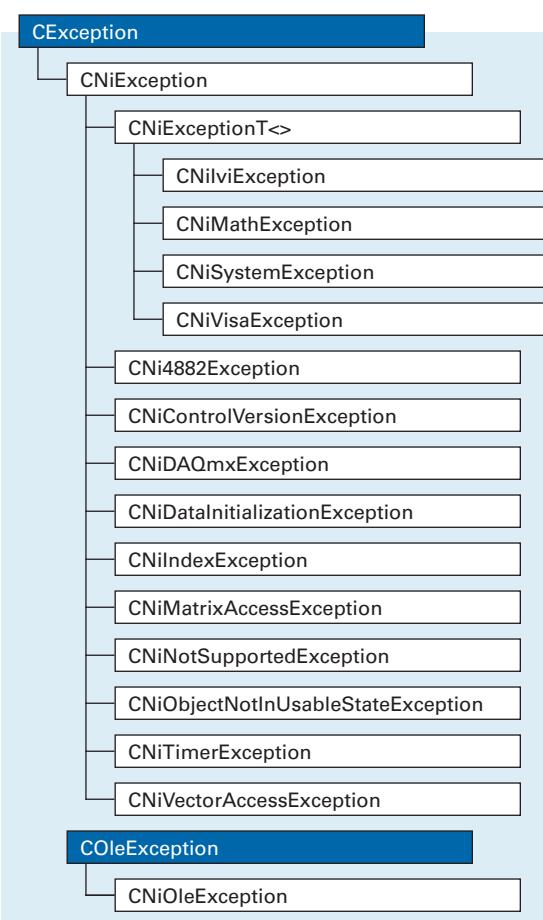
DataSocket

The DataSocket class library includes a set of classes that encapsulates the NI-DataSocket interfaces, which simplify the exchange of data between clients and servers across a wide variety of transport protocols.



Exception

The Exception classes describe various exceptions that Measurement Studio Visual C++ libraries generate. The exception classes are defined in various Measurement Studio Visual C++ class libraries.

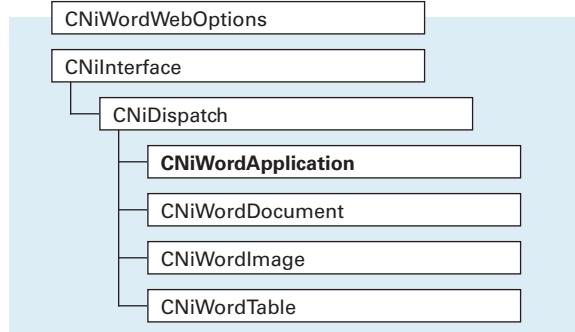


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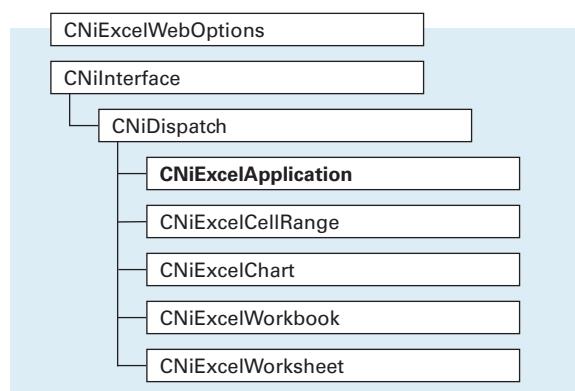
Microsoft Word

The Microsoft Word class library includes a set of classes that encapsulates the ActiveX Automation interface to the Microsoft Word application. Use this class library to create or open Word documents, add tables and images, modify a document's appearance, and close the Word application. Measurement Studio support for Visual Studio 2008 does not include the Microsoft Word class library.



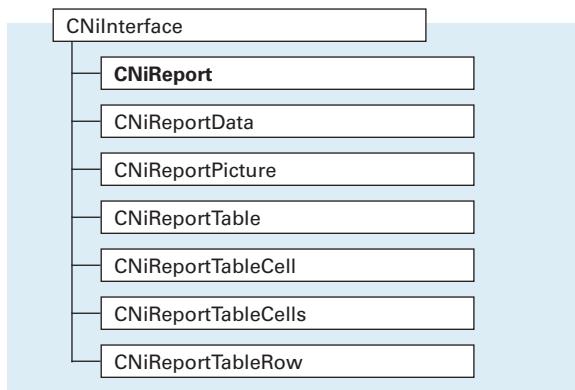
Microsoft Excel

The Microsoft Excel class library includes a set of classes that encapsulates the ActiveX Automation interface to the Microsoft Excel application. Use this class library to create and open Excel worksheets and workbooks, create graphs, import images, and format your spreadsheets using formulas and functions. Measurement Studio support for Visual Studio 2008 does not include the Microsoft Excel class library.



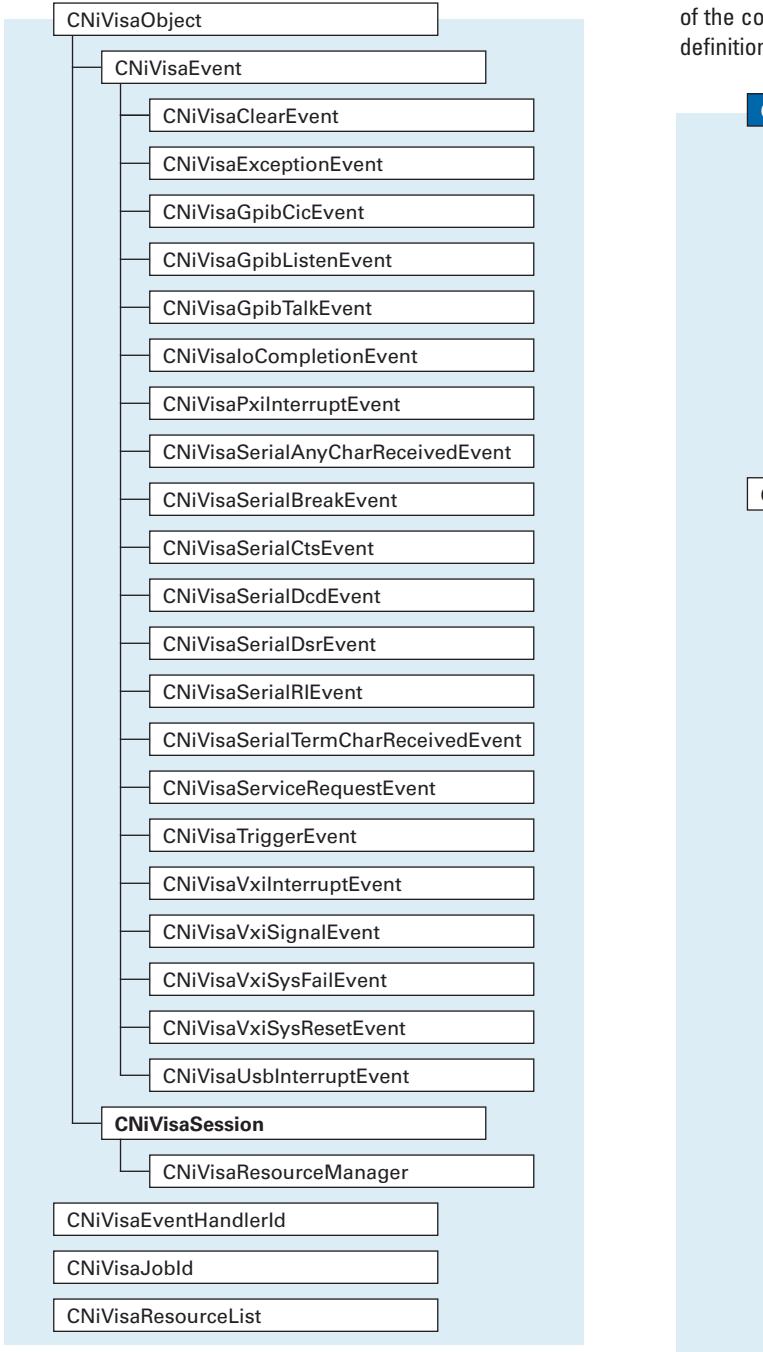
NI-Reports

The NI-Reports class library includes a set of classes that communicate with the National Instruments NI-Reports ActiveX Automation server. The NI-Reports ActiveX Automation server provides report generation, formatting, and printing functionality. Measurement Studio support for Visual Studio 2008 does not include the NI-Reports class library.



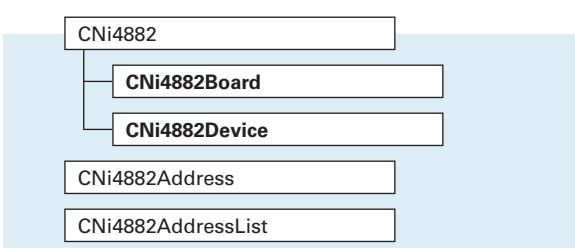
NI-VISA

The NI-VISA class library includes a set of classes that encapsulates the NI-VISA interface. Use CNiVisaSession to control an IEEE-488.2, serial, VXI, PXI, or TCP/IP device. Use CNiVisaEvent and derived classes to respond to VISA events such as triggers and interrupts.



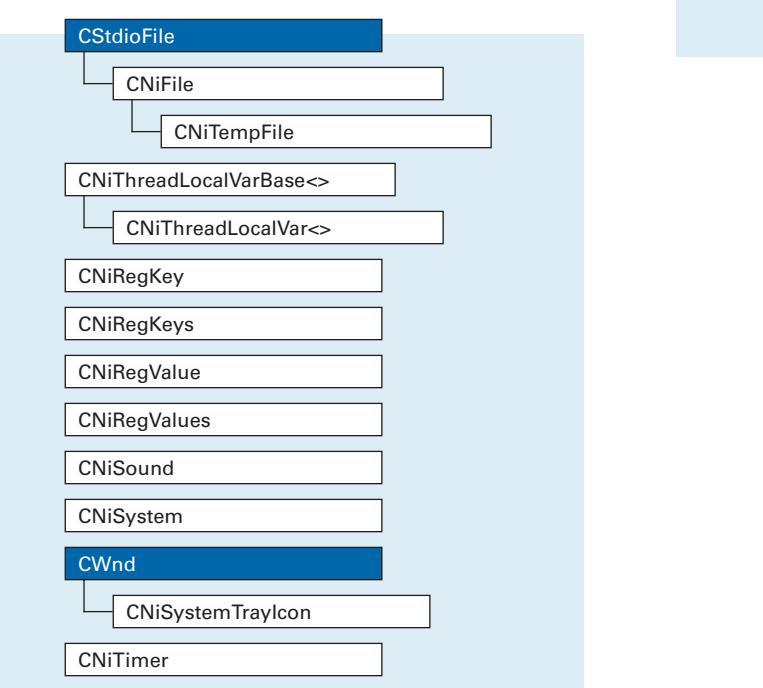
NI-488.2

The NI-488.2 class library includes a set of classes that encapsulates the NI-488.2 (GPIB) interface. Use CNi4882Device to control IEEE-488.x devices, such as oscilloscopes and digital multimeters. Use CNi4882Board to control NI-488.2 interface boards such as PCI-GPIB+.



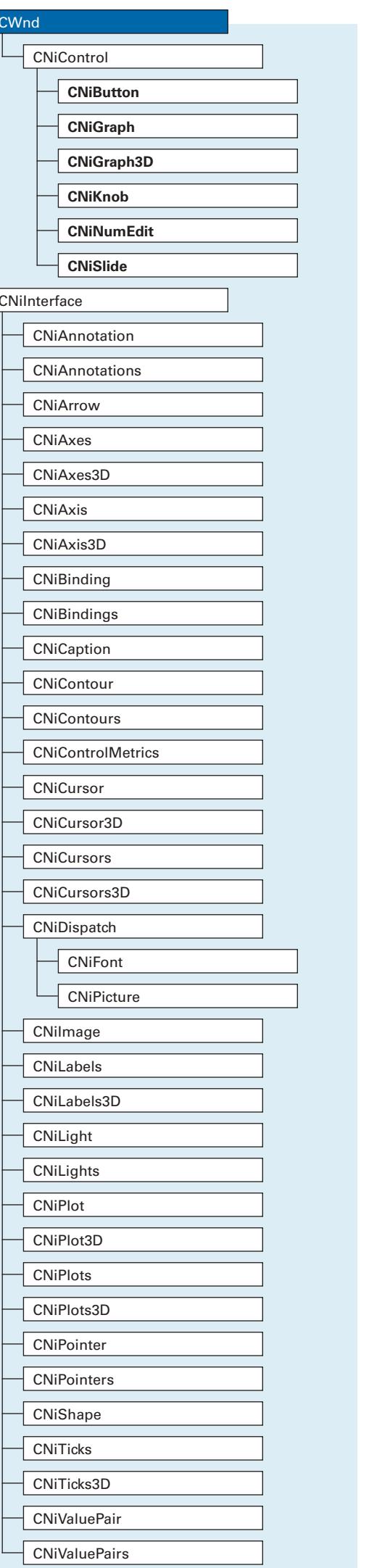
Utility

The Utility class library includes a set of classes that encapsulates various interfaces such as file I/O, asynchronous timers, sound generation, and system services.



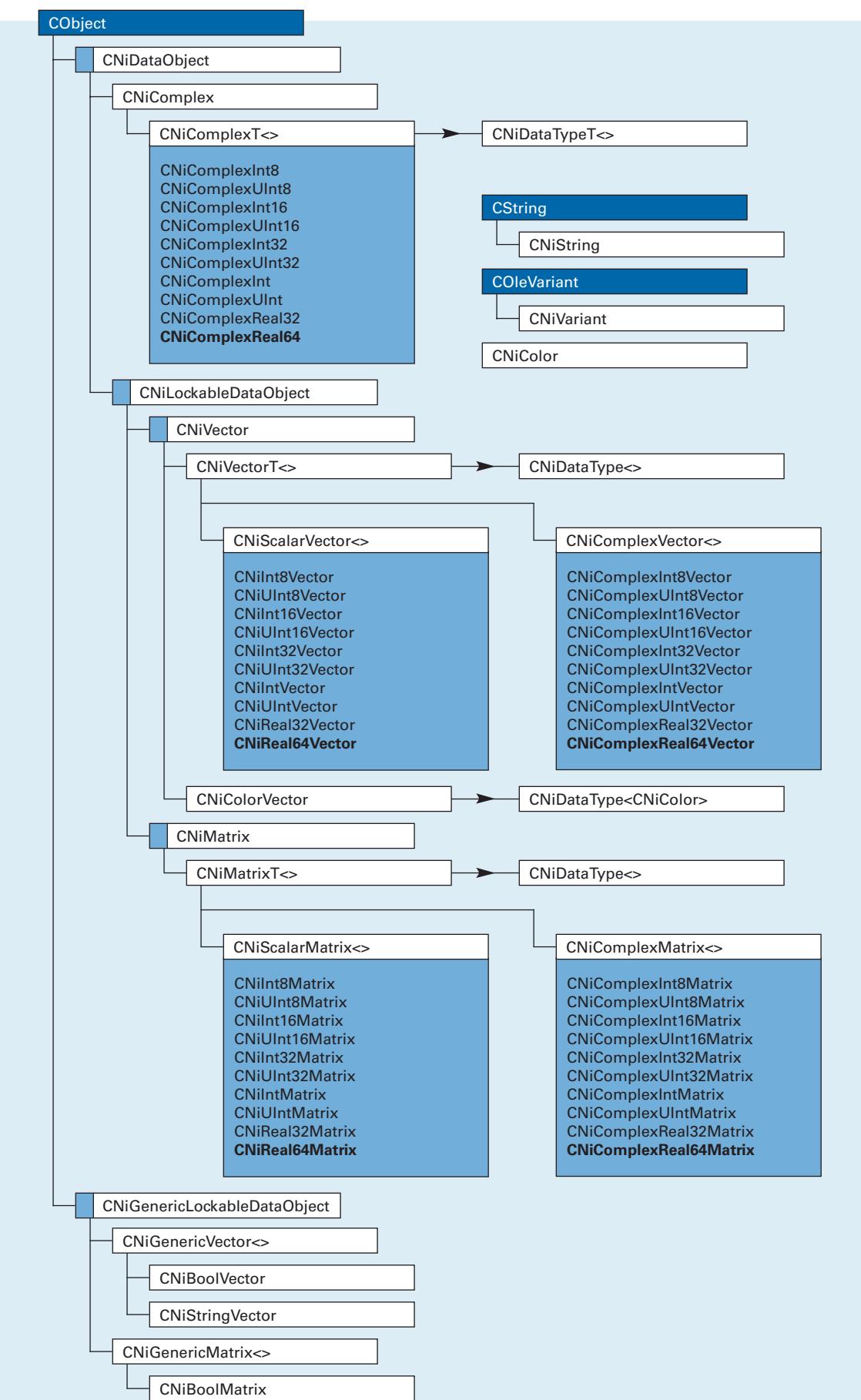
User Interface

The User Interface class library includes a set of classes that encapsulates the ActiveX user interface controls such as graph, button, slide, and knob. Objects that derive from CNiControl represent the actual instance of the control on a CDialog or CFormView. Objects that derive from COleDispatchDriver represent interfaces to subparts of the control, such as cursors, fonts, and plots. These class definitions are in the UI and 3D Graph class libraries.



Data Objects

The data objects are complex, vector, string, and matrix data types. These data objects represent a common format for exchanging data between the acquisition, analysis, and user interface portions of an application. These class definitions are in the Common class library.



NI-DAQmx

The NI-DAQmx class library includes a set of classes that you can use to communicate with and control an NI data acquisition (DAQ) device.

