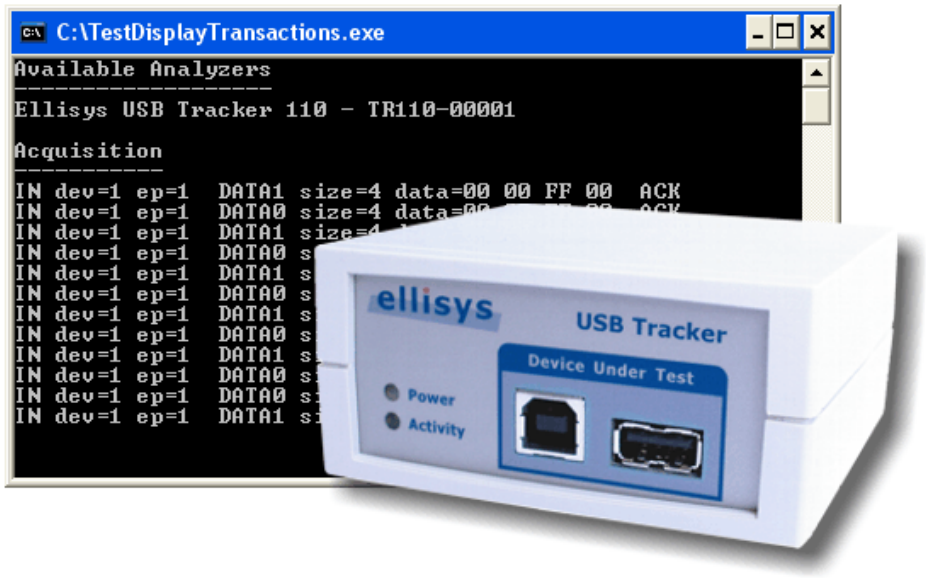
Ellisys USB Analysis SDK

Getting Started Guide



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Chapter 1: Overview

1.1 Introduction

The USB Analysis Software Development Kit is written in C++. This programming language offers uncompromised performance for the most demanding developers.

You will find more information about the installation and the use of the development kit in addition to a Troubleshooting Guide at the end of this document.

Chapter 2: Using the native C++ version

2.1 Introduction

The native C++ version of the USB Analysis Software Development Kit is compatible with Visual Studio 2005. Samples are provided with the project files which are compatible with these environments.

2.2 SDK Libraries

The SDK libraries are provided for Microsoft Visual Studio 6.0 and above. They are compiled with the DLL (*Dynamic Link Library*) version of CRT (*C runtime*).

The directory called ***Lib*** contains the various SDK libraries. Several versions are available which are compliant with the Visual C++ version used. The libraries called *usbdkXX.lib*, where XX represents the Visual C++ version number, contain all the SDK definitions. The following table shows the relationship between the Visual C++ version number and its trade name:

Version	Trade name of Visual C++
80	Visual Studio 2005 (Visual C++ 8.0)

The ***UsbAnalysis.h*** file available in the *Inc* directory contains the pre-processor directives enabling automatic selection of the correct version of the SDK library compliant with the Visual C++ version detected. The following table shows the library version used that is compliant with the Visual C++ version:

VC++	Library	Runtime Library	CRT
8.0 debug	Usbdk80d.lib	Multi-threaded Debug DLL	MSVCRTd.DLL
8.0 release	Usbdk80.lib	Multi-threaded	MSVCRT.LIB
8.0 debug	Usbdk80x64d.lib	Multi-threaded Debug DLL	MSVCRTd.DLL
8.0 release	Usbdk80x64.lib	Multi-threaded	MSVCRT.LIB

2.3 Provided Samples

The SDK samples are available in the *Samples* directory. Project files are provided for Microsoft Visual Studio 2005. The files are named according to the Visual C++ version:

Visual C++	Solution file	Project file
8.0	Sample_vc80.sln	Sample_vc80.vcproj

2.4 Configuring a new Visual C++ Project

When creating a new project using the USB Analysis SDK, it is essential to make sure that the executable uses the *Multi-threaded Debug DLL* version of CRT (see Figure 1). It is also preferable to add the SDK ***Inc*** and ***Lib*** directories to the paths used by the project (see Figure 2 and Figure 3).

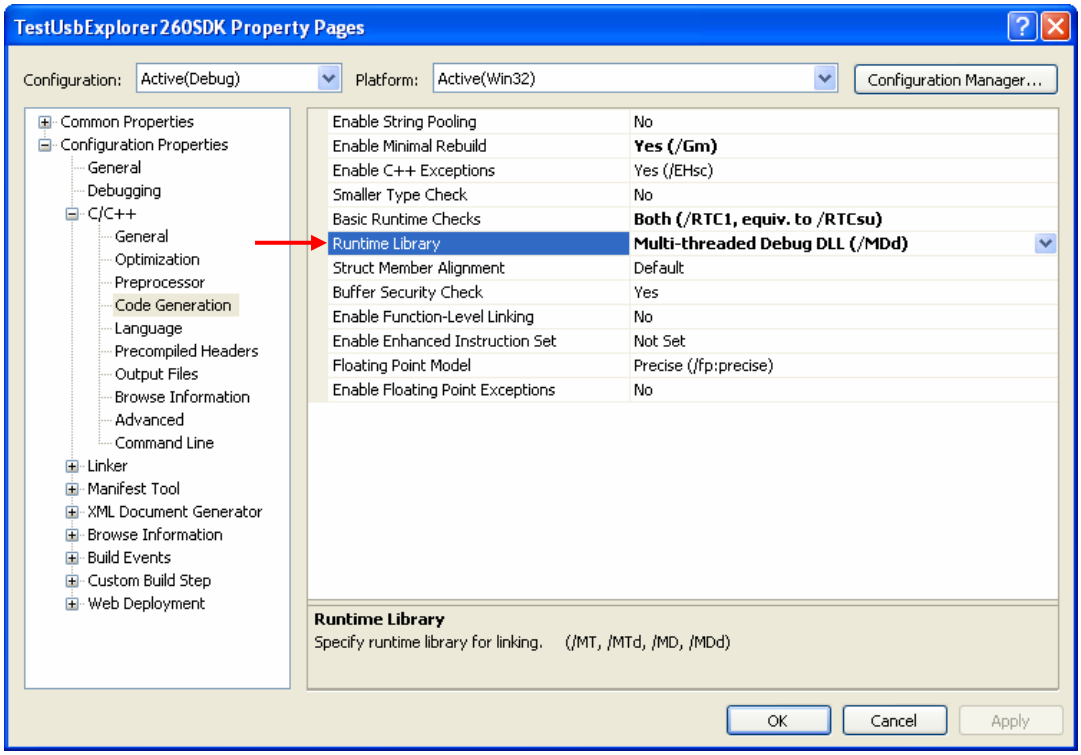

Figure 1 - Runtime library

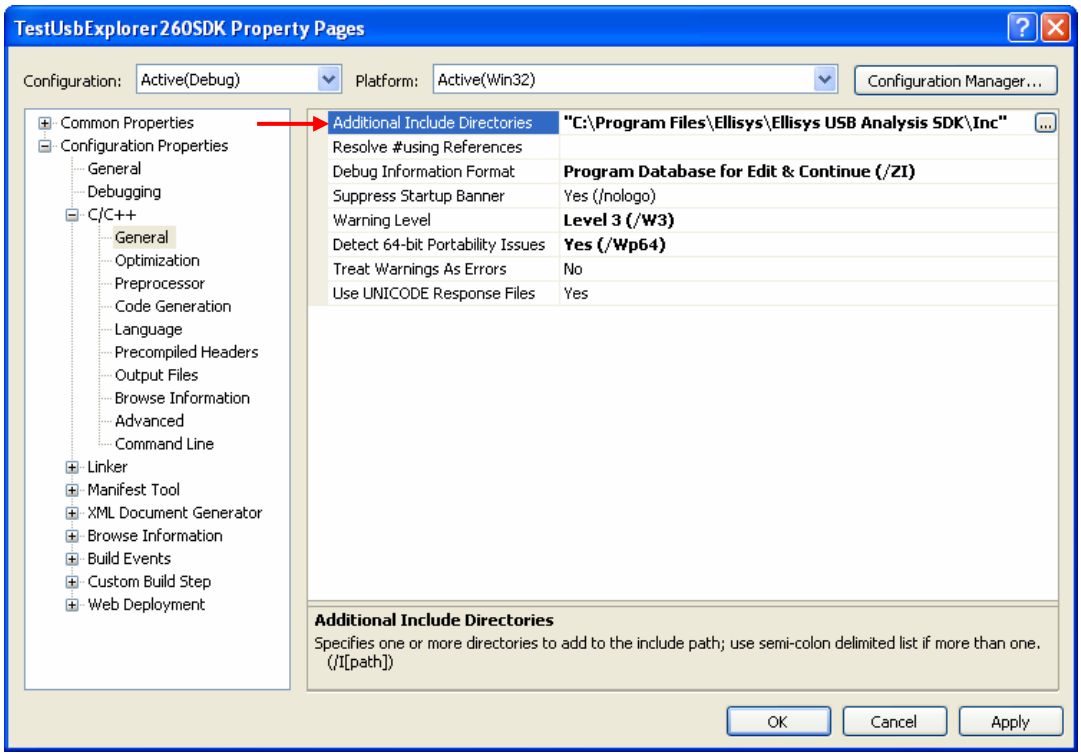

Figure 2 - Additional Include Directories

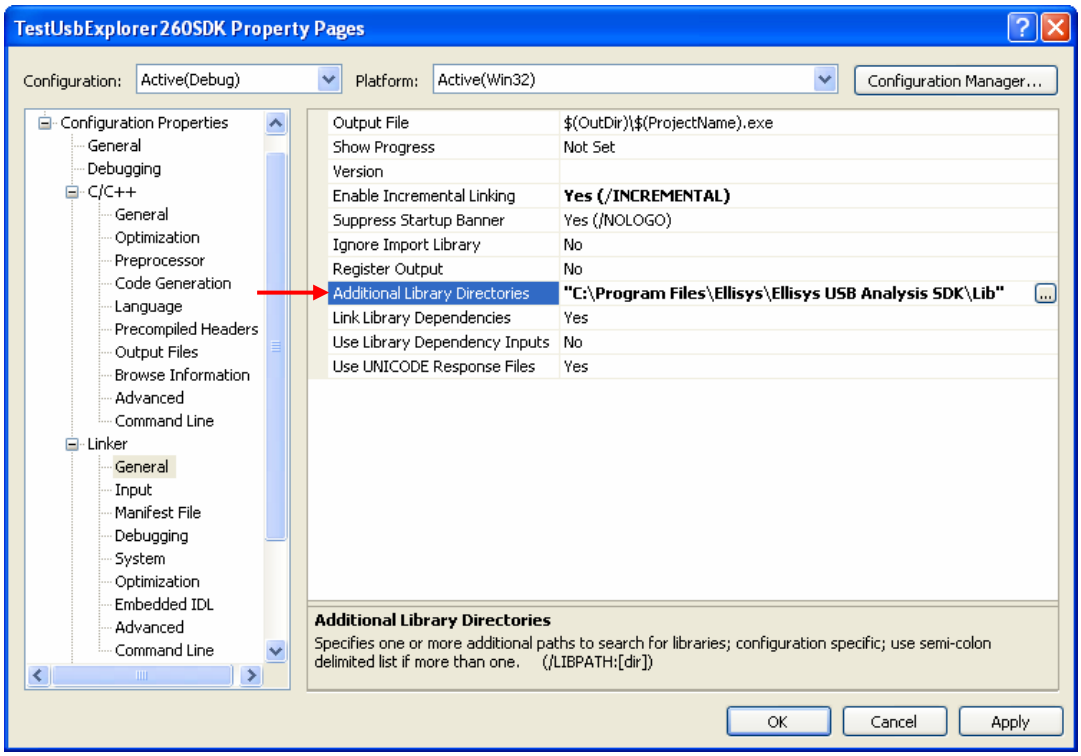

Figure 3 - Additional Library Directories

2.5 To find out more

To find out more, please refer to the SDK reference manual available in Microsoft Help format. If you cannot read the CHM files, a free help viewer program is available as a download from Microsoft at the following address:
http://msdn.microsoft.com/library/default.asp?url=/library/en-us/htmlhelp/html/hwMicrosoftHTMLHelpDownloads.asp

The samples provided are an excellent starting point for understanding the basic functionality of the development kit.

Chapter 3: Troubleshooting

3.1 Compiling

When I try to compile my program the compiler indicates that a header file is missing.

Check that you have added the path to the SDK *Inc* directory in your project as specified in Chapter 2.4 *Configuring a new Visual C++.*

When I try to compile my program the compiler indicates that a library file is missing.

Check that you have added the path to the SDK *Lib* directory in your project as specified in Chapter 2.4 *Configuring a new Visual C++.*

When I try to compile my program the linker alerts me to a large number of errors.

Check that you are using the *Multi-threaded Debug DLL* version of the *Runtime Library* as specified in Chapter 2.4 *Configuring a new Visual C++.*

3.2 General

I cannot read the CHM file from the SDK reference manual.

The Microsoft Help Viewer program is required to view CHM files. It is available as a download at the following address:
http://msdn.microsoft.com/library/default.asp?url=/library/en-us/htmlhelp/html/hwMicrosoftHTMLHelpDownloads.asp