

Ezcheck Vision Library

Quick Start

Sep. 2011 Version 1.0

Using EzCheck Vision Library

This document will guide users to install and use the EzCheck Vision Library step by step. The EzCheck Vision Library contains EzCheck Utility, EzCheck Vision Library User Manual, and all of the necessary files to develop projects in both "Borland C++ Builder" and "Visual C++".

1.Install EzCheck Vision Library

Users can get the EzCheck Vision Library installation file from CD-ROM or web page:

EzCheck_Install_v*.*.*.exe ("v*.*.*" refers to the version number of EzCheck).

Web page link :

http://www.icpdas.com.tw/product/solutions/software/development_tools/ezch eck/ezcheck_introduction.html

Download link :

http://ftp.icpdas.com/pub/cd/EzCheck/

The status of executing the installer :



Figure 1.The EzCheck installation welcome screen. The current version is 1.0.0 as shown in the screen.

EzCheck Vision Library Setup	
Ready to Install the Program The wizard is ready to begin installation.	
Click Install to begin the installation.	
If you want to review or change any of your ins the wizard.	tallation settings, click Back. Click Cancel to exit
InstallShield	< <u>B</u> ack [] Cancel

Figure 2.Confirm the EzCheck installation to the computer.

EzCheck Vision Library Setup	×
Setup Status	NZ.
EzCheck Vision Library Setup is performing the requested operations.	
Installing	
C:\\EzCheck for VC\Samples\Gauge_Measure\core.dll	
31%	
InstallShield	
	Cancel

Figure 3. The installer is copying the files of EzCheck into the computer. The default path is "C:\ICPDAS\EzCheck Vision Library".

EzCheck Vision Library Sett	φ.
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed EzCheck Vision Library. Click Finish to exit the wizard.
	< Back Finish Cancel

Figure 4. The EzCheck has successfully installed.

After installation, users can find all the associated files of EzCheck Vision Library in the folder "C:\ICPDAS\EzCheck Vision Library".

Folder contents:

EzCheck for BCB •

This folder includes the associated files of EzCheck Vision Library to develop projects in Borland C++ Builder 6.0.

- ♦ Libs : The lib files for project development.
- ♦ Dlls : The dll files for project executing.

- ♦ Includes : The header files for project development.
- \diamond Sample : The sample programs of BCB.
- EzCheck for VC

This folder includes the associated files of EzCheck Vision Library to develop projects in Visual C++ 6.0.

- ♦ Libs : The lib files for project development.
- ♦ Dlls : The dll files for project executing.
- ♦ Includes : The header files for project development.
- ♦ Sample : The sample programs of VC.
- EzCheck Document
 - This folder includes this Quick Start and the user manual.
- EzCheck Utility

This folder includes the associated files of EzCheck Utility.

2.Using EzCheck Vision Library in Borland C++ Builder 6.0

This chapter will guide users to setup the development environment in Borland C++ Builder 6.0 for EzCheck Vision Library application.

- (1) Open a new project.
- (2) Set the including file paths.

Project Options for Pro	vject1.exe 🛛 🔀
Version Info Forms Applicatio Pascal Linker	Packages Tasm CodeGuard n Compiler Advanced Compiler C++ Advanced Linker Directories/Conditionals
Directories	\$(BCB)\Lib;D:\Program Files\Borland\CBuilder 💌
Library path: Debug source path:	D:\Program Files\Borland\CBuilder6\Projects;1
Intermediate output:	.\obj
<u>F</u> inal output: BPI/LIB output:	
- Conditionals	
<u>C</u> onditional defines:	WIN32 <u> </u>
Aliases Unit <u>a</u> liases:	
T Default	OK Cancel <u>H</u> elp

Figure 5. The interface for path setting in BCB.

> Set the including path of header files.

Project->Options->Directories/Conditionals->Include path · Add "C:\ICPDAS\EzCheck Vision Library\EzCheck for BCB\Includes" path into Include paths.

Directories	
Ordered list of Inc	lude paths:
\$(BCB)\Lib D:\Program Files \$(BCB)\include \$(BCB)\include	NBorland\CBuilder6\Projects
C:\ICPDAS\EzC	heck Vision Library\EzCheck for BCB\Includes
Greyed items der	note invalid path.
C:\ICPDAS\EzC	heck Vision Library\EzCheck for BCB\Incluc
Replace	Add Delete Invalid Paths
	OK Cancel Help

Figure 6.Add the path for BCB header files.

Set the including path of lib files.

Project->Options->Directories/Conditionals->Library path • Add "C:\ICPDAS\EzCheck Vision Library\EzCheck for BCB\Libs" path into Library paths.

Indered list of Library paths: C:\E2Check Test D:\Program Files\Borland\CBuilder6\Projects \$(BCB)\Projects\Lib \$(BCB)\Ib\obj \$(BCB)\Lib\obj		
C:\E2Check Test D:\Progerts\Lib (BCB)\Projects (BCB)\Projects\Lib (BCB)\Hb\obj (BCB)\Hb\obj (BCB)\Hb\obj (C:\ICPDAS\E2Check Vision Library\E2Check for BCB\Libs Greyed items denote invalid path. C:\ICPDAS\E2Check Vision Library\E2Check for BCB\Libs Beplace Add Delete Delete Invalid Path	Urdered list of Lib	rary paths:
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	Greyed items der C:\ICPDAS\EzC Replace	note invalid path. heck Vision Library\EzCheck for BCB\Libs

Figure 7.Add the including path of BCB lib files.

(3) Add the lib files into the project.

Project->Add to Project
· Add four lib files in "C:\ICPDAS\EzCheck Vision Library\EzCheck for BCB\Libs" folder into the project.

Add to project		? 🗙
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Figure 8.Add the lib files of BCB into project.

(4) Add "#include "EzCheck_Func.h"" in the project source code.



Figure 9.Include EzCheck_Func.h to link all functions of EzCheck Vision Library.

(5) Copy six dll files in the "C:\ICPDAS\EzCheck Vision Library\EzCheck for BCB\Dlls" folder to the project executable file folder.

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💕 eImage.dll	970 KB	應用程式擴充	2010
S EzCheck.dll	1,197 KB	應用程式擴充	2011
🔊 ImageProBcB.dll	40 KB	應用程式擴充	201
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💏 Unit1.dfm	1 KB	C++Builder Form	201
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Figure 10. Put the six dll files and executable file in the same folder

(6) Using the EzCheck Vision Library to develop the machine vision system

3.Using EzCheck Vision Library in Visual C++ 6.0

This chapter will guide users to setup the development environment in Visual C++ 6.0 for EzCheck Vision Library application.

- (1) Open a new project.
- (2) Set the including file paths.
 - > Set the including path of header files.

Tools->Options->Directories->Include files • Add "C:\ICPDAS\EzCheck Vision Library\EzCheck for VC\Includes" path into "Directories" of Include files.

Options	?) >
Editor Tabs Debug Compatibilit	ty Build Directories Source	()
Platform:	Show directories for:	
Win32	Include files	-
Directories:	🖾 🗙 🗲 🗲	
C:\Program Files\Microsoft Visual Stu C:\Program Files\Microsoft Visual Stu C:\Program Files\Microsoft Visual Stu C:\PROCRAM FILES\MiCROSOFT PLAT	diolyC980HFCINCLUDE diolyC980HFCINCLUDE diolyC980ATLINCLUDE TFORM SDKINCLUDE	
1		
	OK Cancel	



Set the including path of lib files.

Tools->Options->Directories ->Library files \circ Add "C:\ICPDAS\EzCheck Vision Library\EzCheck for VC\Libs" path into "Directories" of Library files \circ

Options	? 🛛
Editor Tabs Debug Compatibility Build	Directories Source
Platform: Show dir	ectories for:
Win32 Library	files 🔹
Directories:	👛 🗙 🛧 🗲
C:\Program Files\Microsoft Visual Studio\VC98\L C:\Program Files\Microsoft Visual Studio\VC98\L C:\PROGRAM FILEs\OPENCYLIB\VCBACKUP C:\PBOGBAM FILES\MICROSOFT PLATFOBM SD C:\ICPDAS\EZCHECK VISION LIBRARY\EZCHECK	IB AFCYLIB K FOR VCYLIBS
	OK Cancel

Figure 12. Add the including path into "Directories" of Library files.

(3) Add the lib files into the project. Project->Setting->Link->Object/library modules
· Add five lib files under "C:\ICPDAS\EzCheck Vision Library\EzCheck for VC\Libs" folder into the project.



Figure 13. Enter the lib's file names into the project.

(4) Add "#include "EzCheck_Func.h"" in the project source code.



Figure 14. Include EzCheck_Func.h to link all functions of EzCheck Vision Library.

(5) Copy six dll files in the "C:\ICPDAS\EzCheck Vision Library\EzCheck for BCB\Dlls" folder to the project executable file folder.

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💽 eImage.dll	756 KB	應用程式擴充		
💽 eBasicD11.d11	208 KB	應用程式擴充		
💽 cximagedll.dll	1,179 KB	應用程式擴充		_
core dll	1,728 KB	應用程式擴充		
🛃 Demo.exe	36 KB	應用程式		
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🗃 Demo.rc	9 KB	Resource Script		
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Figure 15. Put the six dll files and executable file in the same folder

(6) Using the EzCheck Vision Library to develop the machine vision system