VTOOLSD™

VtoolsD Windows Device Driver Development Kit Version 3.0

Vireo Software

Vireo Software, Inc.

30 Monument Square, Suite 135
Concord, MA 01742 USA
Phone: +1 978-369-3380
Fax: +1 978-318-6946
E-mail: info@vireo.com
           support@vireo.com
Website: http://www.vireo.com

Introduction

To facilitate rapid development of PCI Designs using the Xilinx LogiCORE PCI Interface, Vireo is providing the VtoolsD Windows Device Driver Development Kit. This kit includes an interactive GUI Wizard that allows the creation of a drive driver framework with a few simple selection and mouse clicks. Both the Microsoft Visual C++ 4.2 and later and the Borland C++ 4.x and later compilers are supported. Provided at no extra cost with the Xilinx PCI Design Kit, is a full-featured, fully functional version of VtoolsD licensed for prototyping drivers and testing them with the HotPCI board.

Support

Support for VtoolsD is provided only from Vireo. See Vireo's home page for contact information and other details.

Features

- Windows 95, 98, 3.X Support
- VtoolsD Interface
- Works with MS or Borland C/C++ compilers
- More than 50 sample drivers
  - Over 2 dozen example drivers written in C
  - Over 1 dozen example drivers written in C++
- Detailed on-line and printed documentation

- C and C++ system interfaces
- C Run Time Library
- C++ Class Library
- Includes complete source code for all libraries
- Thunks and wraps for every VMM/ VxD service and handler
- Microsoft DDK components bundled with VtoolsD for Windows 95
- Debug kernel executables and symbol tables
- WDEB386 system-level debugger for VxDs
- More than 1900 online help topic pages
- DDK documentation and help files
- Supports Driver Access Architecture (DAA)
- QuickVxD Wizard for quick device driver framework development.
- Driver Access Architecture (DAA) supports portability between Windows NT, Windows 95, Windows 98, and Win32 Driver Model (WDM)
- Complete access to over 900 interfaces from C/C++
- More than 60 classes designed for VxD operation
- More than 80 ANSI-compatible C Run Time Library functions
- Driver::Monitor™ - monitor driver activity without a debugger.
- QuickVxD source code generator - a VxD Wizard
- Microsoft and Borland compiler support
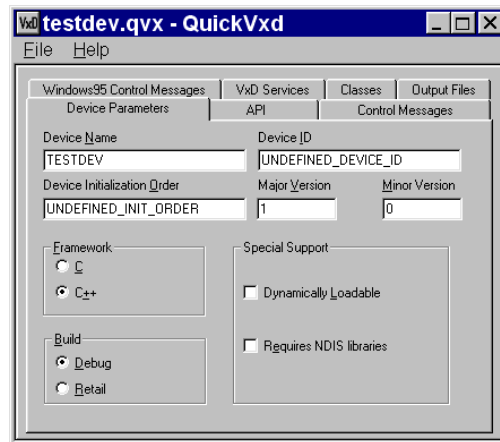- Dynamic VxD Loader
- VxD Viewer

Figure 1:   VtoolsD™ QuickVxD GUI

Description

VtoolsD is the easiest and fastest way to build Virtual Device Drivers (VxDs) for Microsoft Windows. Designed for both novice and experienced VxD developers, VtoolsD provides the comprehensive C or C++ solution for all VxD development challenges. Shipping since July 1994, VtoolsD is a mature, professional product used by thousands of developers world wide.

VtoolsD supports all of the system interfaces that the Microsoft DDK provides, plus an additional set of services provided by the VtoolsD libraries. VtoolsD can be used to write any kind of VxD, and makes that easier than it would be using the DDK.

Driver::Works implements Vireo's Device Access Architecture (DAA) interfaces. Using DAA, device driver source code can be easily ported between Windows 95, Windows 98, and all versions of Windows NT. Drivers written with DAA provide optimal performance on each platform while at the same time offering a common set of objects and interfaces that provide source code portability with no limitations or overhead.

The Driver::Monitor tool, shown in Figure 2, provides a unique workbench for loading, testing, tracing, and unloading your device driver.

VtoolsD requires either MSVC++ 4.2 or later or the Borland C++ 4.X and later compilers. The Microsoft DDK is not required to use VtoolsD.

Licensing

The version of VtoolsD, included in the Xilinx PCI Design Kit, is fully functional and includes all libraries and software. It is licensed for use in driver development and prototyping only. Vireo offers Xilinx PCI customers the opportunity to purchase a royalty-free distribution license. Contact Vireo for pricing and details.

Vireo provides free bug fixes available for immediate download. Timely new versions provide support for a new compiler versions, and operating system revisions. Vireo also provides new examples and bug fixes on a regular basis.
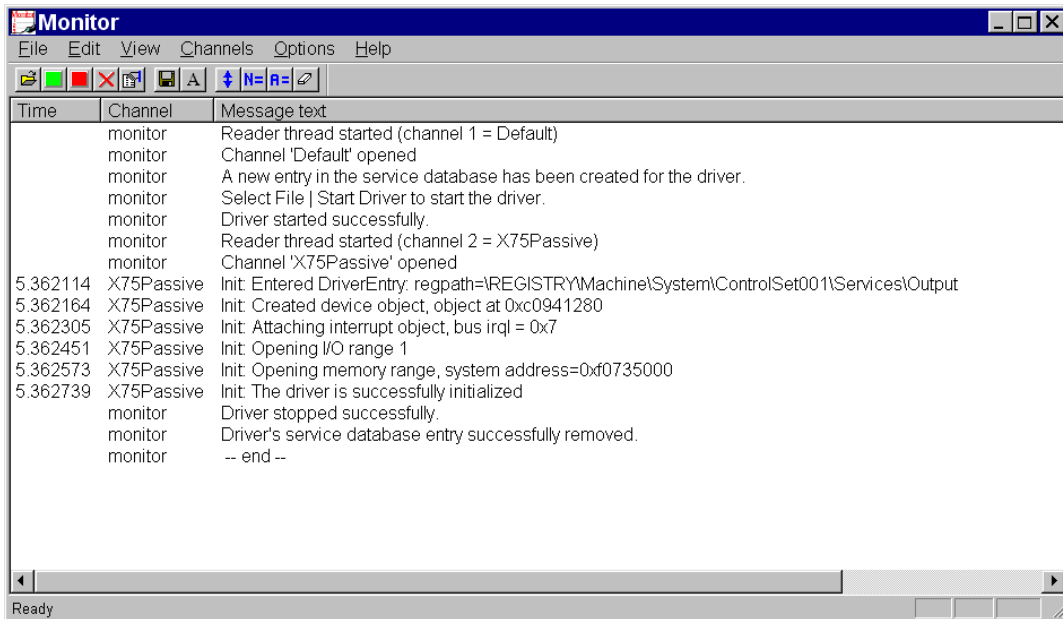
Technical support on this product is available *only* through Vireo Software Inc.

Figure 2: Driver::Monitor Interface