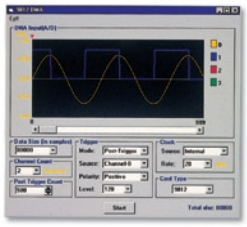
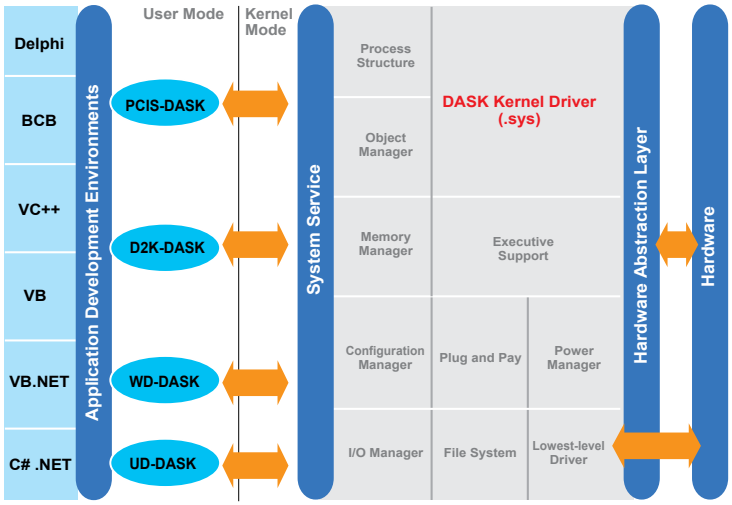
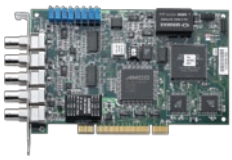
PCIS-DASK, D2K-DASK, WD-DASK, UD-DASK for Windows®

ADLINK DAQ Card Drivers for 32-/64-Bit Windows®







Features for 32-bit Windows®

- 32-bit Windows kernel drivers/libraries for data acquisition cards
- Supports 32-bit Windows 7/Vista /XP /Server 2003 and legacy Windows 98/NT/2000
- Provides full functionalities of ADLINK data acquisition cards
- Provides kernel-level event and memory mapping for complex applications
- User-defined callbacks for asynchronous data acquisition
- A new CodeCreator utility to automatically generate C code
- Complete tutorial and sample programs
- Provides header files and linkage files for
  - Microsoft Visual Basic/Visual C++
  - Borland C++Builder/Delphi
  - Microsoft Visual Basic .NET
  - Microsoft C# .NET
- Provides example programs of Microsoft Visual Basic, Visual C/C++, Visual Basic .NET, and Visual C+ .NET

Features for 64-bit Windows®

- 64-bit Windows kernel drivers/libraries for data acquisition cards
- Supports 64-bit Windows 7/Vista /XP /Server 2003
- Supports both AMD64 and Intel x86-64 architecture
- Ensures that 32-bit applications run on 64-bit editions of Windows XP, Windows Server 2003 and Windows Vista™ without modification using WOW64 subsystem

Introduction

ADLINK DASK drivers are the device drivers for custom data acquisition applications for Windows. The DASK driver libraries provide API sets for ADLINK PCI Express®, PCI, CompactPCI, PXI and USB data acquisition cards, to access full hardware functionalities, such as buffered/double-buffered data acquisition, pattern generation, digital input/output and etc. For novice users, the built-in CodeCreator utility helps you create your first program in just a few minutes. For experienced users, the DASK libraries expose some low-level functions for accessing kernel-level objects and allow you to program a complex data acquisition operation with optimal efficiency. ADLINK DASK drivers deliver great performance, reliability, and portability to your data acquisition systems.

Seamlessly Migrate to Windows 7

For Windows 7, ADLINK provides both 32-bit and 64-bit versions of kernel drivers for its full-range of DAQ cards. As previously stated, PCIS-DASK, D2K-DASK, WD-DASK, and UD-DASK also supports Windows XP and Windows Server 2003 for 64-bit Extended Systems, including AMD64 and Intel x86-64 system architectures. PCIS-DASK is Windows Kernel Driver APIs for ADLINK PCI/PCIe/cPCI Series DAQ Cards. D2K-DASK is Windows Kernel Driver APIs for ADLINK DAQ/DAQe/PXI-2000 Series. WD-DASK is Windows Kernel Driver APIs for ADLINK High-speed digitizer. UD-DASK is for ADLINK USB DAQ modules.

Microsoft requires a digital signature on all drivers starting from Windows 7 x64 Edition. By requiring signed drivers, Microsoft aims to reduce failures and improve stability by setting the spotlight on vendor responsibility with regard to driver bugs and glitches. For this reason, all ADLINK 64-bit DASK drivers are digitally-signed for Windows 7 x64 Edition that can be installed under the user-privilege model.

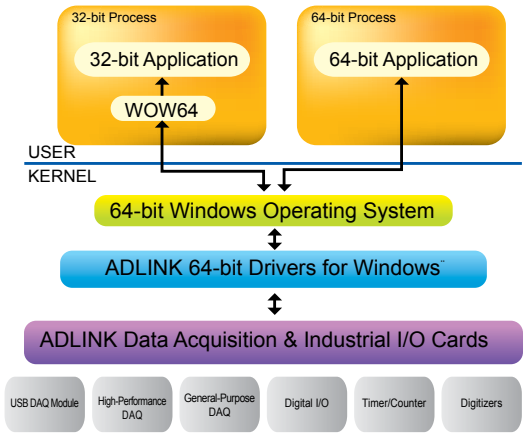
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In Windows 7, .NET Framework 3.0 and above (formerly known as WinFX) interface delivers a straightforward way to program applications on Windows 7 territory. Moreover, all existing 32-bit sample programs can function normally on the 64-bit version of Windows 7 without modifications through Microsoft WOW64 (Windows-on-Windows 64-bit) subsystem, as shown in Figure 1 below. Launched in both 32-bit or 64-bit edition, Windows 7 enables the user to choose the edition depending on their computer hardware. On a 64-bit windows system, the WOW64 translation layer can allocate as much 4 GB of RAM to 32-bit Windows applications. That gives the application the full 4 GB memory space, a significant increase for heavy computing applications.

ADLINK offers relevant kernel driver releases and software updates to ensure complete compatibility with this new and exciting operating system and provide smooth and trouble-free development of applications for data acquisition, measurement, and automation.

For more information about Windows 7 support, please visit http://www.adlinktech.com/MAPS/DASK.html

Figure 1



.NET Support

Considered one of the most significant changes to the Windows® platform, the .NET Framework brings into the operating system unified features and responsibilities that are previously provided individually by programming languages and tools from various sources.

For .NET programmers that require direct calling of ADLINK DASK DLL libraries (Native Regular DLL Form) such as PCIS-DASK, D2KDASK, WD-DASK, and UD-DASK, ADLINK provides the example programs for of Visual C# .NET and Visual Basic .NET that speed up the development of your applications in Microsoft Visual Studio .NET 2005/2008/2010.

Standardized Application Programming Interface (API)

ADLINK DASK maintains a set of consist programming interfaces across different Window platforms, and therefore provides portability between different platforms and programming languages.

In addition to basic I/O support, the DASK API also provides sophisticated build-in capability to handle memory and data buffer management. A double-buffered mode processes can be repeated endlessly to provide a stream of data to your applications.

Software Migration

ADLINK DASK is designed to maximize programming flexibility and data throughput. There is only one set of Application Programming Interface (API), so each card be programmed with the same API for the same series of products. This greatly shortens developer's learning curve if more than one type of ADLINK data acquisition cards and digitizers is used.

Data Acquisition Functions

ADLINK DASK provides full functionalities of ADLINK PCI/PCIe/cPCI Series DAQ cards, DAQ/DAQe/PXI-2000 Series DAQ cards, digitizers digitizers and USB DAQ modules.

- Single-point analog input
- Buffered data acquisition
- Double-buffered data acquisition
- Single-point analog output
- Digital I/O control
- Buffered digital I/O
- Double-buffered digital I/O
- Counter/timer I/O

Supported Modules

- **PCIS-DASK**
  6202, 6208, 6216, 6308, 7200, 7224, 7230, 7233, 7234, 7248, 7250, 7252, 7256, 7258, 7260, 7296, 7300, 7348, 7350, 7396, 7432, 7433, 7434, 7442, 7443, 7444, 7452, 8554, 9111, 9112, 9113, 9114, 9118, 9221, 9222, 9223, 9524, 9527, 9810, 9812
- **D2K-DASK**
  2005, 2006, 2010, 2016, 2020, 2022, 2204, 2205, 2206, 2208, 2213, 2214, 2501, 2502
- **WD-DASK**
  9816, 9820, 9826, 9842, 9846
- **UD-DASK**
  USB-1901/1902/1903/2401

Free Download!!

Please visit http://www.adlinktech.com/MAPS/DASK.html for more information

- **PCIS-DASK**
  ADLINK PCI/PCIe/cPCI Series DAQ Card Drivers for Windows
- **D2K-DASK**
  ADLINK DAQ/DAQe/PXI-2000 Series DAQ Card Drivers for Windows
- **WD-DASK**
  ADLINK PCI/PXI Digitizer Drivers for Windows
- **UD-DASK**
  ADLINK USB DAQ Module Drivers for Windows

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