



Contact: Suzanne Toomey
Public/Media Relations Coordinator
Phone: (440) 703-2304
Fax: (440) 439-4093

Release Type: Software
Release Date: Immediate
Web: www.iotech.com
E-mail: sToomey@iotech.com

New Linux Driver for IOtech's PCI & cPCI Multifunction DAQ I/O Boards

Supports IOtech's popular DaqBoard/2000 & DaqBoard/2000c series of DAQ plug-in boards

CLEVELAND, August 23, 2002—IOtech, Inc., today made available—for immediate and free download from its web site—DaqX-Linux software. DaqX-Linux is a new Linux driver for its popular DaqBoard/2000™ (PCI) and DaqBoard/2000c™ (cPCI) series of DAQ I/O boards. Designed for use with version 2.4x releases of the Linux kernel (Debian Gnu/Linux2.4, RedHat Linux 7.x, and SuSE 7.x) this driver addresses the need for an economical “open source” development platform. Now OEMs, scientists, and engineers can more economically leverage the full performance benefits of the two most commercially popular PC busses (PCI/cPCI) and the two leading plug-in board offerings (DaqBoard/2000 and DaqBoard/2000c).

IOtech's DaqX-Linux driver provides developers with a powerful new tool for creating royalty-free applications. Its two-tier architecture is composed of:

DaqX API Library

IOtech's DaqX-library for Linux is functionally equivalent to the DaqX driver for Windows. This allows for easy migration from Windows to Linux or from the Linux environment to Windows based applications with a minimum of effort. Also, extensive example applications are available for which follow that of their Windows-based equivalents.

Kernel Driver Module

IOtech's Kernel Driver Module for the DaqBoard/2000 Series products is fully optimized for PCI operation. The driver minimizes CPU utilization by creating a PC-RAM based device FIFO using bus mastered DMA for all data transfer processes. Since the data transfers are handled in this manner the CPU is virtually unused to manage the data transfer process—freeing it for application-specific tasks.

In order to provide a complete solution, the DaqX-Linux driver also supports the entire line of over 20 DBK series signal conditioning and termination boards and modules. These optional boards and modules measure temperature (RTD and TC), V, current and strain while supporting channel expansion up to 256 analog channels and 192 digital channels.

Planned functional enhancements for the Linux driver includes support for real-time extensions, integrated networking, and non-x86 CPU support.

About IOtech

IOtech produces data acquisition hardware and software for use in PC-based test & measurement and industrial automation systems. Its products are used in research and manufacturing facilities and are sold throughout the world. IOtech, Inc. is located at 25971 Cannon Road, Cleveland, Ohio, 44146; telephone: (440) 439-4091; fax: (440) 439-4093; E-mail: sales@iotech.com; World Wide Web: www.iotech.com.

Frequently Asked Questions

1. Did IOtech write the DaqX-Linux driver?

Yes. Written to the same standards as IOtech windows based drivers.

2. Will IOtech support application development for the DaqX-Linux driver?

Yes. The Linux based DaqX API shares the same documentation and technical support as does the Windows based DaqX API. A Programmer's Guide with sample programs and source code is also available.

3. Is it easy to port Windows-based applications?

With a few small exceptions the Linux based API is the same as the Windows based IOtech DaqX API, so issues related to porting applications are minimized. Remember, any Windows application will have to be modified and/or rebuilt using Linux development tools. However, the algorithms and DaqX API calls do not need modification.

4. Can I expect a Linux-based application to run any faster than its MS-Windows-based equivalent?

Benchmark testing has shown no reportable difference between performance of equivalent applications running on equivalent PC hardware.

5. Will IOtech support non-x86 platforms?

There are no current plans for this development.

6. Does IOtech support real time extensions for Linux?

This is a future product development. Contact factory for more information.

DaqBoard/2000 and DaqBoard/2000c Series are trademarks of IOtech, Inc.