

# DT335

## Low Cost, Digital I/O Board for the PCI bus

### Overview

Ideal for applications requiring control capabilities, the DT335 includes 32 digital I/O lines.

### Key Features

- 32 digital I/O lines for non-clocked monitoring or control of high channel-count applications.
- Interrupt on bit change detection for monitoring critical signals.

### Supported Operating Systems

- Windows® 10/8/7/Vista®/XP 32/64-bit

### 32 Digital I/O Channels for High Channel-Count Requirements

The DT335 provides 32 digital I/O lines, grouped into four 8-bit ports. You can program each port for either input or output. Digital outputs are capable of driving external solid-state relays (sink 24 mA and source 15 mA).

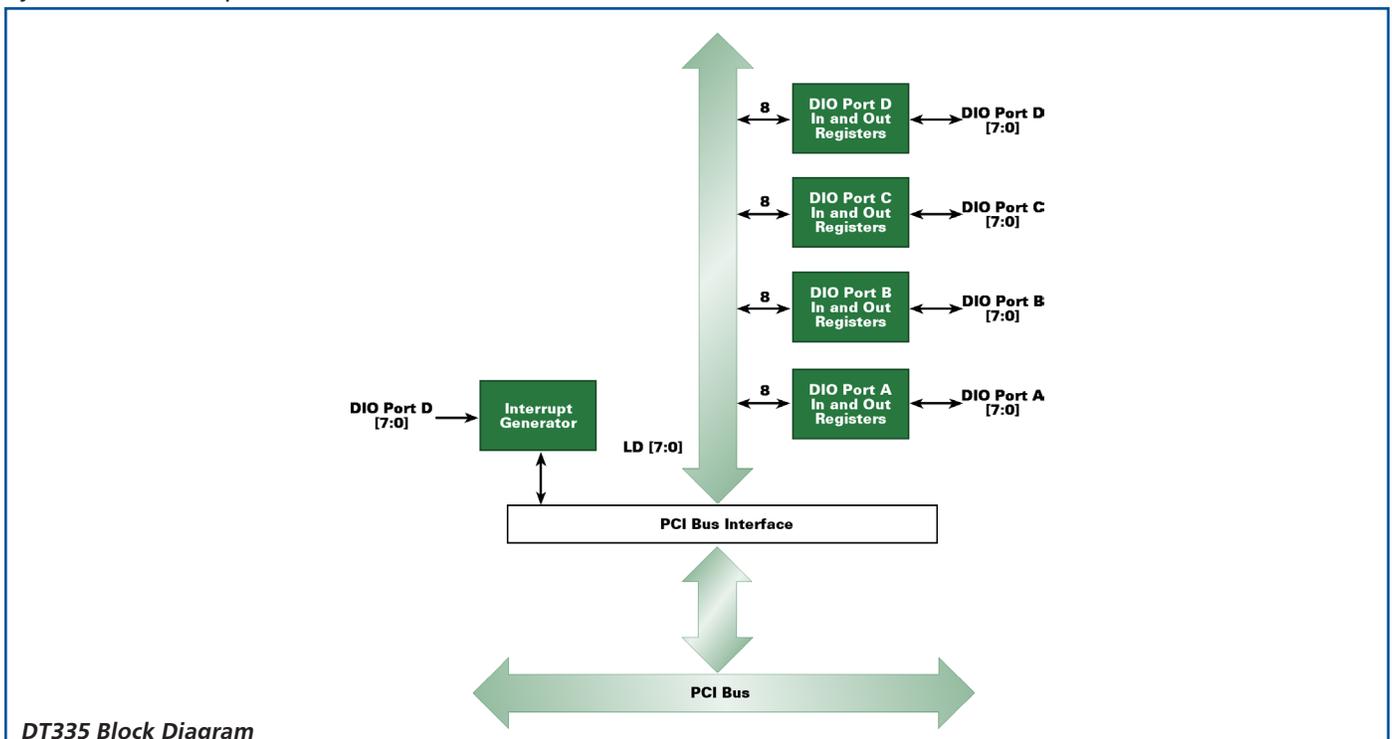
The DT335 board can generate an interrupt when any of the eight digital I/O lines corresponding to one of the 8-bit digital ports changes state. This feature is useful when you want to monitor critical signals or when you want to signal the host computer to transfer data to or from the board. You can enable the interrupts on a bit-by-bit basis on this port.



The DT335 features 32 digital I/O lines and interrupt on change.

Digital I/O Features Summary		
	Ports A, B, C	Port D
Lines per port	8 bidirectional	8 bidirectional
Lines		
Input Type	Level-sensitive	Level-sensitive
High-level Input Voltage	2.0 V minimum	2.0 V minimum
Low-level Input Voltage	0.8 V maximum	0.8 V maximum
Minimum Pulse Width	—	66 ns high and low*
Outputs		
Output Diver High Voltage	2.4 V minimum (IOH = -15 mA)	2.4 V minimum (IOH = -15 mA)
Output Drive Low Voltage	0.5 V maximum (IOL = 12 mA)	0.5 V maximum (IOL = 12 mA)
Interrupt on Bit Change Detection	No	Yes
SSR Drive	Yes	Yes

\*The minimum pulse width applies only to interrupt-on-change detection. Pulses less than the minimum may not be detected as a change.



DT335 Block Diagram

## Easy User Connections

All signals are brought out to a dedicated 68-pin connector on the backplate of the DT335 board.

## Cross-Series Compatibility

Virtually all Data Translation data acquisition boards are compatible with the DT-Open Layers Class Library. This means that if your application was developed with one of Data Translation's software products, you can easily upgrade to a new Data Translation board. Little or no reprogramming is needed.

## Software Options

The following software is available for free and provided on the Data Acquisition Omni CD:

- **Device Driver** –The device driver allows you to use the PCI DAQ board with any of the supported software packages or utilities.
- **DT-Open Layers® for .NET Class Library** – Use this class library if you want to use Visual C#® or Visual Basic® for .NET to develop application software using Visual Studio® 2003-2012; the class library complies with the DT-Open Layers standard.
- **DataAcq SDK** – Use the DataAcq SDK to use Visual Studio 6.0 and Microsoft® C or C++ to develop application software using Windows 10/8/7/Vista/XP 32/64-bit; the DataAcq SDK complies with the DT-Open Layers standard.
- **DAQ Adaptor for MATLAB** – Data Translation's DAQ Adaptor provides an interface between the MATLAB® Data Acquisition (DAQ) toolbox from The MathWorks™ and Data Translation's DT-Open Layers architecture.
- **LV-Link** – Data Translation's LV-Link is a library of VIs that enable LabVIEW™ programmers to access the data acquisition features of DT-Open Layers compliant USB and PCI devices.

## Ordering Summary

### HARDWARE

- DT335

### ACCESSORIES

- STP68 – Screw terminal panel.

### FREE SOFTWARE

The following software is available as a free download from our website:

- **LV-Link** – Access the power of Data Translation boards through LabVIEW™
- **DAQ Adaptor for MATLAB** – Access the analysis and visualization tools of MATLAB®.