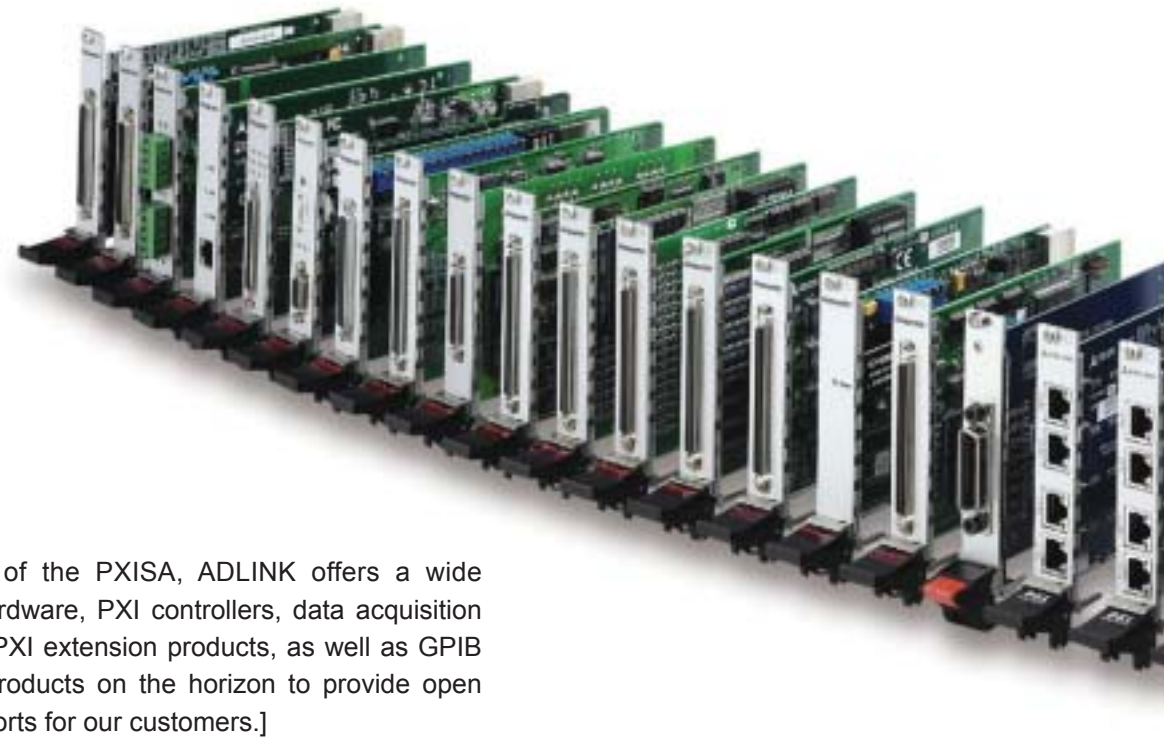
Seamless Migration to PXI



[As an executive member of the PXISA, ADLINK offers a wide selection of PXI platform hardware, PXI controllers, data acquisition solutions, PCI-PXI and PXI-PXI extension products, as well as GPIB connectivities - with more products on the horizon to provide open hardware and software supports for our customers.]

Overview

PXI (PCI eXtensions for Instrumentation) is a modular instrumentation platform designed specifically for measurement and automation applications. With PXI, you can select the modules to be integrated into a single PXI system from multiple vendors. Communication between the modules uses familiar PC-based technologies such as the 132 MB/s PCI bus, allowing high performance communication that leverages widely available software. PXI also integrates timing and synchronization into the system, so that you can pass signals between instruments for high performance and accuracy, without additional cabling.

Based on CompactPCI

The PXI specification, now at revision 2.1, leverages the CompactPCI specification, which defines a rugged form factor for PCI that offers superior mechanical integrity and easy installation and removal of hardware components. PXI products offer greater and more carefully defined levels of environmental performance required by the vibration, shock, temperature, and humidity extremes of industrial environments. PXI adds mandatory environmental testing, EMC testing, and active cooling to the CompactPCI mechanical specification to ease system integration and ensure multi-vendor interoperability. The most compelling benefit for PXI, however, is PCI's dominance in the desktop PC marketplace which is served by over 800 suppliers. The result is widespread availability of PCI-based silicon, firmware, drivers, operating systems, and software applications-all of which can be applied cost-effectively in PXI-based systems.

Tight Integration

With PXI modular instrumentation, you can easily integrate the functionalities that you need into a single system. Instrumentation, data acquisition, machine vision, motion control, and bus interface modules are only some of the many PXI devices available. Additionally, integration with other system architectures, including GPIB, Serial, and Ethernet systems is easy with PXI. Since PXI is based on standard PC technologies such as Windows and the PCI bus, integrating a PXI system to these systems is typically no different than integrating a PC to these systems. Use these system architectures when you wish to preserve a past investment in hardware, or need functionality not available in PXI.

Trigger & Synchronization

The PXI bus combines the high-speed PCI bus with timing and synchronization designed specifically for measurement and automation. The PXI trigger bus consists of 8 shared trigger bus lines, a low-skew star trigger, and a common 10 MHz system reference clock. Using these synchronization features, you can easily pass trigger, clock, and other signals between PXI modules to make the accurate, high-performance measurements that you need.