

The FOXI™ interface provides a fiber-optic connection between a PCI-based host computer or workstation and one or more VXI mainframes. It provides a high-throughput, deterministic data acquisition and control system.

V122 FOXI PCI Host Adapter



Part of the high-speed FOXI fiber-optic interface bus system

FEATURES

- Provides a PCI interface for the FOXI interface bus system
- Priced competitively with other VXI interface methods
- Uses fiber-optic highway transmission
- Provides full throughput with a 2 km maximum distance between fiber-optic nodes
- Exhibits 10 Mbyte/s highway throughput and 20 Mbyte/s PCI DMA burst rate
- Supports up to 126 V120 controllers on a single highway

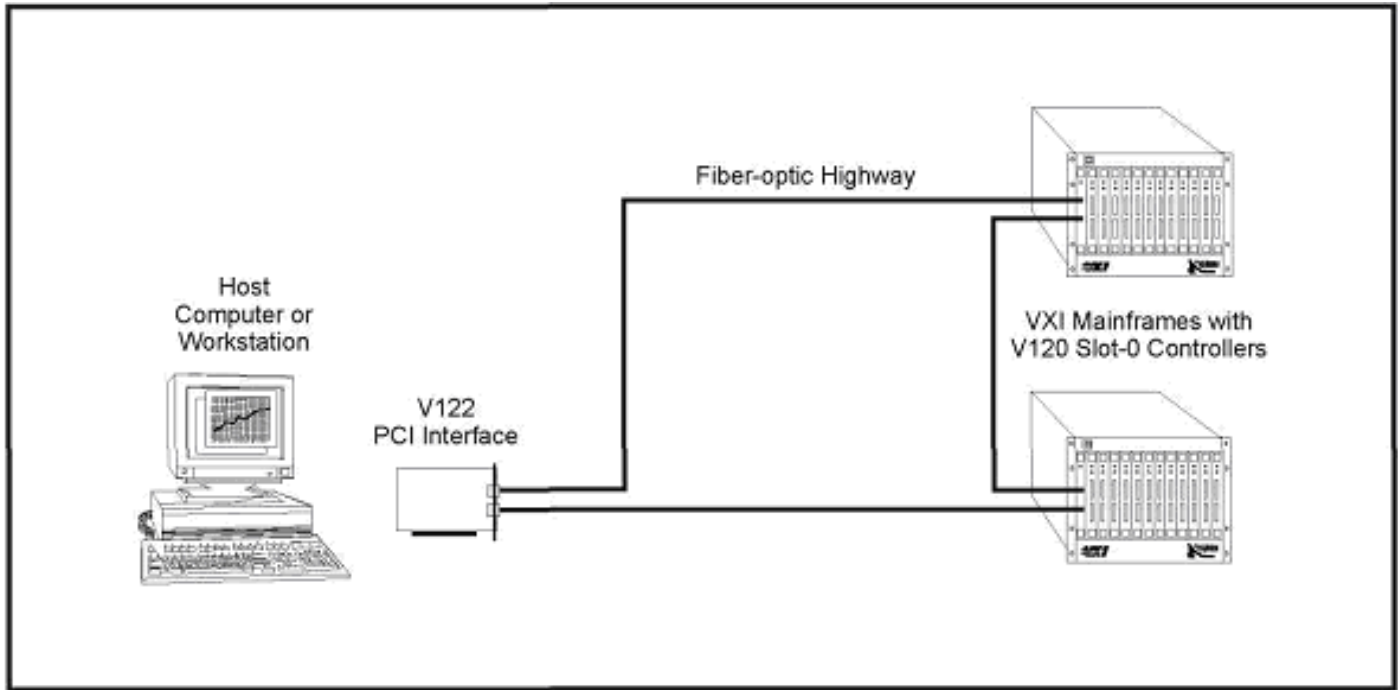
GENERAL DESCRIPTION

The FOXI™ interface provides a fiber-optic connection between a PCI-based host computer or workstation and one or more VXI mainframes. It provides a high-throughput, deterministic data acquisition and control system. A complete FOXI system includes a V122 FOXI Host Adapter, up to 126 V120 VXI Slot-0 controllers and a fiber-optic highway. The system supports distances between nodes up to 2 km (6560 ft) with an I/O throughput to 10 Mbytes/s.

The V122 FOXI Host Adapter is a single PCI (Peripheral Component Interface) card which provides the interface between the PCI bus and the FOXI highway. Communication between this adapter and the host computer is via a 32-bit data path that is used to configure the system and initiate highway operations. A DMA (direct memory access) mechanism is incorporated to transfer data over the highway using 32-bit data transfers. The V122 supports PCI DMA transfers, yielding a 20 Mbytes/s burst transfer rate.

Data transfers to and from a VXI mainframe are executed in a pipeline mode. These transfers will occur at the full 10 Mbyte/s highway speed if both the source and destination can maintain the data rate. The V122 contains a 2048-word FIFO memory that stores asynchronous demand messages received from a V120 Slot-0 controller. These demand messages are generated from an interrupt in a VXI chassis. The demand data identifies the chassis that sourced the demand message as well as the source of the interrupt.

A Typical FOXI Highway Configuration



POWER REQUIREMENTS

+5 volts: 4.2 A



RELATED PRODUCTS

Model V120	FOXI VXI Slot-0 Controller
Model 5802-Lxyz	Cable—50 μ m Fiber-optic
Model 5802-Nxyz	Cable—62.5 μ m Fiber-optic
Model AC 10	DAQ Director Software for Windows NT
Model AL10-NPA1	VXIplug&play-compliant FOXI Software Library with Driver for Windows NT

ORDERING INFORMATION

MODEL	DESCRIPTION
V122-AA11	FOXI PCI Host Adapter

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