

# BQP-2300

## PCI-Based Qbus Adapter for FutureVAX



The BQP-2300 works with *Logical's* PCI-based option modules to allow users to migrate from a Qbus system to a PCI-based system while maintaining their investment in software and user equipment. The BQP-2300 can be used with *FutureVAX* for a complete plug-and-play solution.

The BQP-2300 installs into a single PCI slot and connects to one or more PCI-based Qbus option modules by way of a top-edge flat ribbon connector. Each option module requires a single PCI slot and only requires DC power from the slot. A BQP-2300 can support up to 10 option modules all of which must be installed in the same system.

Each option module contains a specific function such as DRQ3B, DRV11-WA, DRV11-J, or IEQ11 interface. All modules are software and hardware compatible with Digital Equipment Corporation controllers for plug-and-play operation. Available options are:

DRQ3B  
IEEE-488/ IEC 625  
DRV11-WA  
DRV11-J

**Provides a migration path.** The BQP-2300 allows users of Qbus systems to migrate to high performance PCI systems thus eliminating their existing Qbus equipment without loss of function or performance.

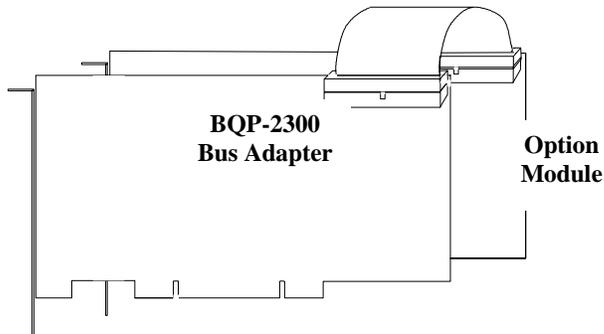
**Improves performance.** The BQP-2300 allows use of new technology PCI-based processors and peripherals, providing significantly higher performance than older systems.

**Reduces maintenance costs.** The BQP-2300 allows users to reduce their existing maintenance costs for out-of-date, unsupportable hardware by using new technology with full hardware and software compatibility.

**Easy to install.** The BQP-2300 occupies a single PCI slot and is simply daisy-chained to one or multiple option modules.

**Provides full Qbus Support.** The BQP-2300 supports both PIO and DMA Qbus data transfers as well as providing support for all four Qbus interrupt levels:

- \* Qbus PIO data transfers including DATI, DATO, DATOB, DATIO, and DATIOB.
- \* Qbus DMA data transfers including data word input, data word output, and data byte output.
- \* Interrupt levels: BIRQ4, BIRQ5, BIRQ6, and BIRQ7.



## Description

### PIO Transfers

The BQP-2300 supports the five types of Qbus PIO data transfers including DATI, DATO, DATOB, DATIO, and DATIOB. The entire Qbus address space is available for access by the PCI host.

### DMA Transfers

The BQP-2300 provides full compatibility with the three types of Qbus DMA data transfers including data word input, data word output, and data byte output. Single and multiple data transfers are supported.

### Interrupts

The BQP-2300 passes Qbus interrupts to the host for service if interrupts are enabled by the host and the interrupts are higher priority than the priority established under software control. The BQP-2300 stores the 10-bit interrupt vector in an internal register that is referenced by the host to determine the interrupt service requested.

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## Specifications

### Physical Dimensions

PCI Controller PCI short card, +5 volt only, measuring 6.88 in by 4.20 in (17.46 cm by 10.67 cm)

Interconnect Cable 50-pin flat ribbon cable

### Electrical

Power Required:  
5.0 volts 1.0 amp  
3.3 volts Not used

### PCI Local Bus

Signaling Universal, +3.3V & +5 V  
Addr/Data 32-bit  
Clock Rate 33 MHz  
Compliance 2.1

### Environmental

Operating Conditions:  
Temperature 5° to 50° C (41° to 122° F)  
Relative Humidity 20% to 80% noncondensing

Storage Conditions:  
Temperature -40° to 66° C (-40° to 150° F)  
Relative Humidity 10% to 95% noncondensing

## Ordering Information

### Bus Adapter

BQP-2300-AA PCI Qbus adapter with owners manual.

### Option Modules

DQP-1100-AA PCI DRV11-WA option module with ribbon cable and owners manual.

DQP-1400-AA PCI DRV11-J option module with ribbon cable and owners manual.

DQP-1500-AA PCI DRQ3B option module with ribbon cable and owners manual.

DQP-1501-AA PCI Combo DRQ3B/DRPI optional module with ribbon cable and owners manual.

DQP-3100-AA PCI IEE488, IEC625 option module with ribbon cable and owners manual.

