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Find the *Abaco Systems / Condor Engineering PCI-1553-M* at our website: *Click HERE*

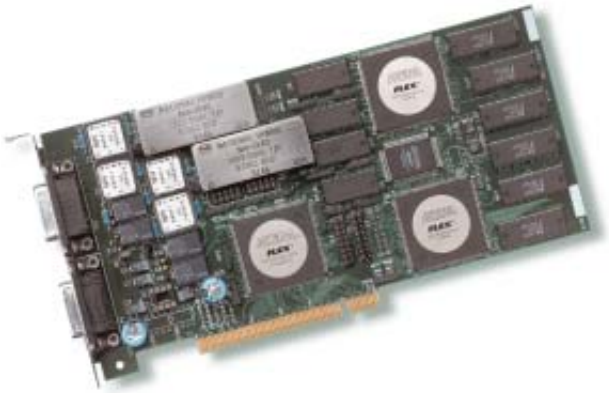
1553

Interface for PCI

PCI-1553

FEATURES

- Simultaneous Bus Controller, 31 Remote Terminals and Bus Monitor
- Easy-to-use *BusTools*/1553 Windows-based GUI bus analyzer is available
- Advanced, high-level software API libraries
- 1 or 2 independent MIL-STD-1553 dual-redundant channels
- Multi-function and single-function versions
- Conditional BC branching on real-time message data or status
- Aperiodic message insertion
- Real-time bus playback with RT edit mode
- I/O triggering and error injection/detection
- 1 Mbyte shared RAM per channel
- Supports MIL-STD-1553A and B Notice II
- MacAir support available
- Variable output voltage



The PCI-1553 provides the highest level of performance and flexibility for MIL-STD-1553A/B or MacAir protocols on the PCI bus. The PCI-1553 is integrated with powerful software that reduces development time. All databus functionality is supported from our advanced API (Application Programming Interface). Standard features include real-time bus playback (with ability to edit out RTs), aperiodic message insertion, error injection/detection, conditional BC branching, 45-bit timetags and "Oneshot" BC operation. Provides host software synchronization to pulses from external timing sources (IRIG, GPS, etc). The Bus Monitor mode provides 100% bus monitoring of fully loaded 1553 or MacAir buses.

Multi-function Interfaces

One or two multi-function interfaces are available on a single PCI board. They can operate simultaneously as a BC, up to 31 RTs and as a BM. It can emulate an entire dual-redundant channel internally, eliminating the need for external hardware to simulate missing nodes.

Single-function Interfaces

The PCI-1553 can provide one or two single-function interfaces with all the features and functionality of the multi-function versions, but only one major operational mode is enabled at a time - emulating either a Bus Controller or 31 Remote Terminals or Bus Monitor.

Software

Included with the PCI-1553 is Condor's flexible, high-level API which supports up to 10 independent 1553 channels. Windows XP, 2000, Me, NT, 98, 95, Linux, VxWorks, LabWindows/CVI, Visual Basic and source code support is provided. LabVIEW and Solaris support are optionally available. *BusTools*/1553, Condor's GUI bus analysis, simulation and data logging solution for 1553, is available. Condor's high performance and intuitive software solutions provide complete and simplified access to MIL-STD-1553 functionality for development, integration, test, embedded and maintenance applications.

FANUC | CONDOR ENGINEERING

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1553 Interface for PCI

PCI-1553

SPECIFICATIONS

Physical

- 3/4 length desktop PCI card (8.4" x 4.2")

Environmental

- Operating temperature range: 0°C to +70°C

Software

- API - Includes high-level API libraries for Windows XP, 2000, Me, NT, 98, 95, Linux, VxWorks, LabWindows/CVI and Visual Basic
  - Source code API library provided
- GUI - Optional *BusTools*/1553 GUI bus analyzer
- LabVIEW - Support optional
- Solaris - Support optional

On-board Shared RAM

- 1 Mbyte (per dual-redundant channel)

Connections

- Programmable direct or transformer coupling
- Input and output triggers
- Transition cabling to 1553 cable jacks included

Multi-function Operational Modes

- Simultaneous BC, 31 RTs and BM

Single-function Operational Modes

- BC or 31 RTs or BM

Power (two channels, 50% duty cycle)

- + 5 VDC:1.5 A
- + 12 VDC: 222 mA
- - 12 VDC: 50 mA

PCI Signal Compatibility

- 5V Signaling

Warranty: 3 year limited hardware warranty

AVAILABLE CONFIGURATIONS

PCI-1553-M	MIL-STD-1553B multi-function, single channel PCI interface board
PCI-1553-MM	MIL-STD-1553B multi-function, two channel PCI interface board
PCI-1553-S	MIL-STD-1553B single-function, single channel PCI interface board
PCI-1553-SS	MIL-STD-1553B single-function, two channel PCI interface board

Optional Software

BusTools/1553	MIL-STD-1553 Bus Analysis, Simulation & Data Logging software for Windows (multi-function boards only)
LV-1553	LabVIEW support for PCI-1553
SL-1553	Solaris support for PCI-1553

DESCRIPTION

Bus Controller

- Programmable control over:
  - Major and minor frame content and timing
  - Intermessage gap times
  - Response time-out and late response
- Modify messages, data or setup while card is running
- Insert aperiodic messages into a running BC list
- "Oneshot" mode for simplified BC operation
- Conditional message sequencing based on real-time message data or status
- Selectable interrupt generation and status messages
  - Full range of system conditions
  - All detected errors
- Full error detection
  - Invalid word
  - Bit count error
  - High word
  - Low word
  - Inverted sync
  - Manchester
  - Late response
  - Early response
  - No response
  - Incorrect RT address
  - Parity error
- Extensive programmable error injection (on a per word basis)
- Synchronize BC operation to external time source

Remote Terminal

- Multiple RT simulation (up to 31 RTs)
- Programmable error injection (on a per word basis)
- Modify data, status words or setup while card is running
- Programmable message content (linked message buffers)
- Interrupts can be generated on a per message basis upon End of Message and error conditions

Bus Monitor

- Capture 100% fully loaded bus traffic with:
  - Time-tagging
  - Word status
  - RT response time
  - Error status
  - Message status
- Interrupts can be selected by RT/SA/WC
- Extensive filtering and triggering options
  - By individual RT/subaddress
  - Transmit, receive or broadcast mode codes
  - Internal or external triggering
  - Trigger output on user specified data
- Real-time bus playback with RT edit mode
- 45-bit, microsecond resolution timetagging
- Host software synchronization to external timing sources

A channel is a dual-redundant A/B pair.
See our on-line Military Products Configuration Guide for available configurations.
http://www.condoreng.com

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