

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

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

1553

Interface for PMC

PMC-1553

FEATURES

- Multi-function Features
  - Simultaneous Bus Controller, 31 Remote Terminals, or Bus Monitor
- Single-function Features
  - Bus Controller, 31 Remote Terminals, or Bus Monitor
- Bus Controller - BC
  - BC->RT, RT->BC, RT->RT
  - Mode Codes, Broadcast and single-shot messaging
  - Programmable time delays
  - Major/ Minor frames
  - Real-time conditional branching
  - Two aperiodic messaging methods
- Remote Terminal - RT
  - RT data wrapping
  - Multiple RT buffers
  - Dynamic Bus Control
  - Automatic Mode Code and status bit responses
  - Programmable response time
- Bus Monitor - BM
  - Full error detection
  - Multiple monitoring methods
  - 45-bit time-tagging
  - Adv. interrupts and triggers
- Architecture
  - BC & RT error injection/ detection
  - DYNAMIC architecture
  - BC & RT link list structures
  - 1 Mbyte RAM per channel
  - Direct & transformer coupling
  - Onboard diagnostic bus
  - Environmental options
- Software Support
  - Advanced, high-level API
  - Source code included
  - BusTools Analyzer supported



The PMC-1553 provides the highest level of performance and flexibility for MIL-STD-1553A/ B in the PMC form factor. The PMC-1553 is integrated with powerful software that reduces development time. All 1553 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 a fully loaded 1553 bus.

Multi-function Interface

The PMC-1553-M provides a multifunction 1553 interface that can operate simultaneously as a BC, up to 31 RTs and as a BM. It can completely emulate an entire dual-redundant 1553 channel internally, eliminating the need for external hardware to simulate missing nodes.

Single-function Interface

The PMC-1553-S is a single-function interface with all the features and functionality of the multi-function version, but only one major operational mode is enabled at a time. This interface functions as either a Bus Controller or 31 Remote Terminals or Bus Monitor.

Software

Included with the PMC-1553 is Condor's easy-to-use, flexible, high-level API which supports up to 10 independent MIL-STD-1553 channels. Source code and Windows XP, 2000, Me, NT, 98, 95, VxWorks, Linux, LabWindows/ CVI and Visual Basic support is provided. LabVIEW support, Solaris support and BusTools/ 1553, Condor's GUI bus analysis and simulation solution for 1553, are optionally 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.

101 W. Anapamu Street, Santa Barbara, CA 93101
Tel 805.965.8000 Fax 805.963.9630

1553 Interface for PMC

PMC-1553

SPECIFICATIONS

Physical

- Single PMC card (74mm x 149mm)

Environmental

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

Software

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

Connections

- Direct or transformer coupling
- Input and output triggers
- Jumper selectable front panel or P14 I/ O connections
- 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 (50% duty cycle)

- +5 VDC: 1.4 A

On-board Shared RAM

- 1 Mbyte (per dual-redundant channel)

PCI Signal Compatibility

- 5V Signaling

Warranty: 3 year limited hardware warranty

AVAILABLE CONFIGURATIONS

PMC-1553-M	MIL-STD-1553 multi-function PMC Module
PMC-1553-S	MIL-STD-1553 single-function PMC Module
-Y suffix	Ruggedized, temperature screened option (-37°C to +85°C)

Optional Software

BusTools/ 1553	MIL-STD-1553 Bus Analysis, Simulation & Data Logging software for Windows (multi-function boards only)
LV-1553	LabVIEW support for PMC-1553
VxW-1553	VxWorks support for PMC-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 injections (on a per word basis)
- Synchronize BC operation to external time source

Remote Terminal

- Multiple RT simulation (up to 31 RTs)
- Programmable message content (linked message buffers)
- Modify data, status words or setup while card is running
- Programmable error injection (on a per word basis)
- 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

See our on-line Military Products Configuration Guide for available configurations.
http:/ / www.condoreng.com

©2006 GE Fanuc Embedded Systems. All rights reserved. Printed in the USA. BusTools/ ARINC™ is a trademark of Condor Engineering, Inc. All other trademarks are the property of their respective owners. Specifications may change without notice. PMC-1553 4/ 06

101 W. Anapamu Street, Santa Barbara, CA 93101
Tel 805.965.8000 ▫ Fax 805.963.9630

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP