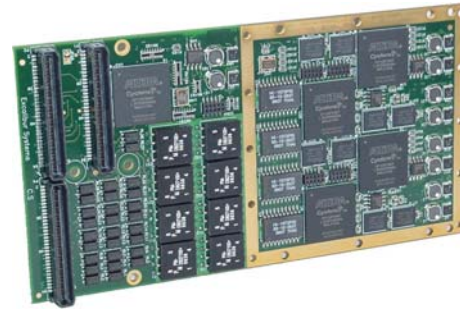


# EXC-1553[cc]PMC/Px

The EXC-1553PMC/Px and EXC-1553ccPMC/Px are intelligent, MIL-STD-1553 interface boards for [cc]PMC systems. The EXC-1553[cc]PMC/Px is available with up to four independent 1553 channels, and provides a complete solution for developing and testing 1553 interfaces and performing system simulation of the MIL-STD-1553 bus. All standard variations of the MIL-STD-1553 protocol are handled by the board. Each channel of the EXC-1553[cc]PMC/Px contains 64 KB of dual port RAM for data blocks, control registers, and look up tables. All data blocks and control registers are memory mapped and may be accessed in real-time.

## General Features

- ◆ Up to four independent 1553 A/B channels
- ◆ Single supply 5V operation
- ◆ Board setup modifiable in real-time
- ◆ Programmable Time tag resolution (RT & MON)
- ◆ Direct or Transformer Bus coupling
- ◆ Programmable Interrupts
- ◆ Time tag can be read in real-time
- ◆ IRIG B Time Code Input
- ◆ 16-bit Count Down Timer
  - Interrupt or global reset upon count down



## Channel Specifications

- ◆ Independent 1553 dual-redundant channel
- ◆ Real-time operation
- ◆ Operates as RT, BC/Concurrent-RT or Triggerable Bus Monitor
- ◆ Concurrent monitor in RT and BC/RT modes
- ◆ Multiple protocol capability (i.e. 1553A/B)

- ◆ Multiple-RT simulation (up to 32 Remote Terminals)
- ◆ Programmable broadcast mode
- ◆ Multi-mode triggerable Monitor
- ◆ Extensive interrupt features
- ◆ Service Request Processing
- ◆ On board loopback (A bus to B bus) for complete built-in test capability
- ◆ Transformer or Direct Coupled Connection
- ◆ Error injection capabilities:
  - Word Count (+/-3 words)
  - Bit Count (+/-3 bits)
  - Incorrect sync
  - Incorrect RT address
  - Incorrect parity
  - Non-contiguous data
- ◆ External Trigger Start option
- ◆ 1760 Option:
  - Checksum error detection
  - Checksum error injection
  - Header Words

## Physical Characteristics

- ◆ Dimensions: PMC or ccPMC single size
- ◆ Weight (/P4): 75g (for ccPMC)

## Operation Environment

- ◆ Temperature: 0°–70°C standard temp.  
-40° to +85°C extended temperature (optional for non-conduction cooled boards)
- ◆ Humidity: 5%–90% noncondensing
- ◆ MTBF (/P1): 209,000 hours at 25°C, Gr

## Host Interface

- ◆ PMC compliance: Target 8 / 16 bit
- ◆ Memory space occupied: 64 KB per channel
- ◆ Interrupt: INTA#
- ◆ Power (/P4): 5V @ 2,000mA (maximum)

## Software Support

- ◆ C drivers with source code
- ◆ MerlinPlus software for Windows
- ◆ Software Tools for VXWorks
- ◆ *Exalt Plus*: Excalibur Analysis Laboratory Tools (optional)
- ◆ Additional software may be available on our website

## Ordering Information

- ◆ EXC-1553PMC/Px  
Multi-channel 1553 Interface for PMC (up to 4 channels)
- ◆ EXC-1553ccPMC/Px  
Multi-channel 1553 Interface for ccPMC (up to 4 channels)

**Note:** "x" specifies the number of channels required

- ◆ Additional Options:
 

M	Monitor only (/PxM)
-1760	1760 protocol support
-E	Extended temperature option (for non-conduction cooled boards)
-001	With conformal coating

*These specifications are subject to change without notification*



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