

EXC-1553VME/MCH & EXC-1553VXI/MCH

The EXC-1553VME/MCH and EXC-1553VXI/MCH are multichannel (up to 8) MIL-STD-1553 interface boards for VME and VXI systems. Each channel is Dual Redundant and supports both 1553A and 1553B protocols. Each channel provides Bus Controller, Remote Terminal (Single RT), Bus Monitor, and Remote Terminal Concurrent Bus Monitor operation. The user controls the operation of each channel by accessing dedicated memory-mapped control registers and 32K x 16 RAM.

General Features

- ◆ Supports up to eight 1553A/B channels
- ◆ 32K x 16 dual-port RAM (per channel)
- ◆ Operates as BC, RT, BM, RT/Concurrent BM
- ◆ Polling or Interrupt Driven
- ◆ Built in Test (BIT) capability



Bus Controller

- ◆ Programmable Automatic Retry
- ◆ Major and minor frames
- ◆ Programmable Intermessage Gap
- ◆ Advanced message control features

Remote Terminal

- ◆ Single RT
- ◆ Message Illegalization
- ◆ Double buffering of data
- ◆ 16 bit Time tag

Bus Monitor

- ◆ Monitor all or selected messages
- ◆ 16 bit Time tag

Software Support

- ◆ C drivers with source code based on NI-VISA specifications
- ◆ Additional software may be available on our website

Physical Characteristics

- ◆ Dimensions: 160mm x 233mm (B size) or 340mm x 233mm (C size, including RFI/EMI shield)
- ◆ Weight (/MCH-2): 410g

Operation Environment

- ◆ Temperature: 0°–70°C standard temperature
-40° to +85°C extended temperature (optional)

- ◆ Humidity: 5%–90% noncondensing
- ◆ MTBF (/MCH-2): 93,300 hours at 25°C, G_F

Host Interface

- ◆ VMEbus compliance: Slave A16, A24/A32: D16
- ◆ Interrupts: IRQ 1 – 7
- ◆ VXI compliance: Register based
- ◆ Memory space occupied: 256K x 16 @A24/A32
64 bytes @A16
- ◆ Power (/MCH-2): +5V ±5% @ 2.2A (50% duty cycle)

Ordering Information

- ◆ EXC-1553VME/MCH-x
Multi-channel 1553 interface for VME (B size)
- ◆ EXC-1553VXI/MCH-x
Multi-channel 1553 interface for VXI (C size)

Note: “x” specifies the number of MIL-STD-1553 channels required (up to 8)

- ◆ Additional Options:
 - E Extended temperature
 - 001 With conformal coating



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These specifications are subject to change without notification



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