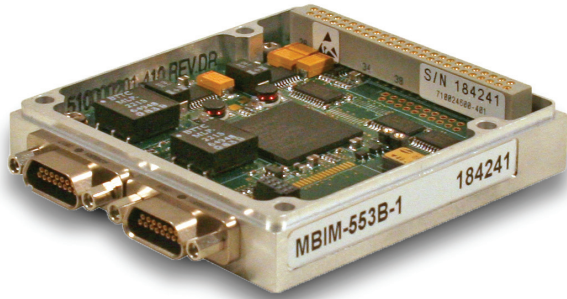


MBIM-553C-8

MIL-STD-1553 Bus Monitor Module

**CURTISS-
WRIGHT**

CURTISSWRIGHTDS.COM



Key Features

- MIL-STD-1553 Bus monitor module
- Both channels sampled independently and simultaneously
- Supports 1553A/B and MACAIR
- IRIG-106 Chapter 8 (100% data)
 - + Use MCMP-112 module in stack
- IRIG-106-96, Chapter 4 data output based on:
 - + Selected data from preprogrammed message trigger list
 - + Includes Mode Code 17 DPT extended sub-address
- Time tag on a per-message basis
 - + High, low and micro time
- Multiple modules in a single stack

Applications

- 1553 instrumentation
- Avionics Bus monitoring
- Lab test

Overview

The MBIM-553C-8 is a MIL-STD-1553 Bus monitor module for use in TTC's MEDAU/MCDAU/MnACQ/MWDAU-2000 products. Up to 1023 incoming trigger list messages are stored in local trigger list memory. All messages are triple buffered for frame coherency. The trigger list can be based on all Command Word bits plus Mode Code 17 Data Pointer Table (DPT.) The module also provides 100% of incoming data, per IRIG 106 Chapter 8 through the use of MCMP-112. The Trigger list applies to both channels simultaneously.

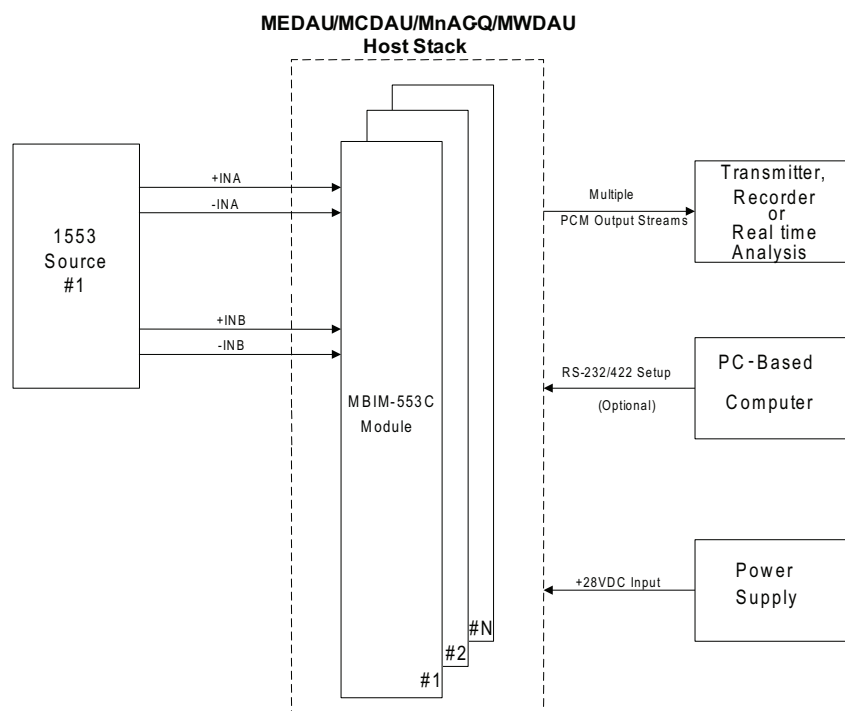


Figure 1: MBIM-553C-8 block diagram

Specifications

General

- Supply current: +15V @30mA; -15V @30mA; +5V @200mA
- Power consumption: 1.9 Watts Maximum
- Temperature
 - + Operating Temperature: -40°F to +185°F (-35°C to +85°C) (box ambient temp)
 - + Storage Temperature: -67°F to +212°F (-55°C to +100°C)

Dimensions and Mechanical

- Compatibility: Operates in any MCDAU/MEDAU/MnACQ/MWDAU-2000 series equipment
- Dimensions: (WxLxH): 2.49x 2.63x 0.40" (63.25 x 66.80 x 10.16mm)
- Weight: 1.8 ounces (50 grams) not including the mating connector
- Unit connectors: Two MDM15S
- Mating connectors: MM212-015-113-0000
- Backshells (optional): MM232-015-000-4100

Bus Monitor Specifications

- Input channels: Two independent MIL-STD-1553 Bus channels
- Input coupling: Direct or Transformer Coupling
- Response time: Programmable from 4 us to 25us in steps of 0.1us
- Compatibility: Accepts MIL-STD-1553 A or B or MACAIR
- Time tag: Time tag for the first command word in the message. Requires time module within the same stack.
- Time format: High and Low Time Programmable for BCD or Straight Binary time. Micro Time always Straight Binary time.
- Status: Provides four status bits for stale, overflow, busID, and error. Provides 16-bit activity counter indicating data traffic.
- Memory capacity: 256K x 16 used for storage of up to 1023 trigger list messages and all other non trigger list messages
- Mode code: Supports all Mode Codes and Broadcast
- Word selection: 1553 Word Selection is provided under format control

Composite Data Function

- Output: Provides composite data per IRIG-106 Chapter 8 to the backplane for data merging within the MCMP-112 module

Selected Data Function

- Output: Selected data words available for transmission under format control
- Message selection: Based on first command word of the message and Mode Code 17 DPT on both channels simultaneously. All messages are tripled buffered in local memory to assure message coherency within a frame.
- Word selection: Based on overhead format control

Ordering Information

Contact [Curtiss-Wright](https://www.curtisswright.com) for ordering information.