

IIB-1553-PC104

The IIB-1553-PC104 is an intelligent interface card providing full MIL-STD-1553 test, simulation and bus analysis capability for PC compatible computers, with 1553A, 1553B, McAir and STANAG 3838 variants in one card. The IIB-1553-PC104 supports concurrent Bus Controller (BC) and up to 31 Remote Terminals (RT) with Bus Monitor (BM). An additional stand-alone Chronological Bus Monitor (CBM) facility is also provided, with powerful multi-level triggering capability. Full error injection capability is provided in BC and RT modes, with full error detection in BC, RT, BM and CBM modes. The unit provides a single, dual redundant 1553 interface. 2 Mbytes of dual ported RAM are provided. PC memory space utilised by the board is selectable. The board is supplied with C drivers in source code and Windows menu driven software as standard.

SPECIFICATIONS

General Specifications

- MIL-STD-1553A/B, STANAG 3838 compatible
- McAir compatible
- 2 Mbytes Dual Port RAM (all modes)
- Programmable interrupts
- BIT and diagnostics
- All set-ups programmable in real time
- Programmable for Direct or TX coupling
- Programmable TX amplitude
- Full error injection (BC & RT)
- Full error detection (all modes)

Bus Controller

Programmable inter-message delay
Programmable RT response time
Programmable Frame frequency
Programmable message sequencing
Messages and data changeable in real time
Acyclic message insertion
BC-RT, RT-BC, RT-RT, mode code, broadcast
Multiple data buffering, all transmitted and received messages
Full error injection / detection

Remote Terminal

Multiple RT simulation (up to 31 RT's)
All sub-addresses selectable
Selectable Broadcast mode
Programmable Mode Code sub-address
Programmable Status word
Programmable RT response time
Message time tagging (32 bit @ 500 nSec)
All active RT tables changeable in real time
Data and Status words changeable in real time

Bus Monitor

All data buffers monitored
All data time tagged (32 bit @ 10 uSec resolution)
All data available for analysis

Chronological Bus Monitor

Programmable conditional triggers and masks
Message time tagging (32 bit @ 500 nSec resolution)
Store all, store only, store after modes
Full error detection capability

Host Interface

PC compliance: AT, ISA, EISA Bus
Memory Space: 8 Kbytes – 2 Mbytes, configurable
Interrupts (4) user configurable to IRQ3 – 15

Power +5v +/- 5% 600 mAmps
 +12V +/- 5% 180 mAmps

Physical Characteristics

Dimensions 96mm x 90mm
Weight 180 grams

Environmental

Operating Temp. 0 – 50°C
Storage Temp. -20 – 70°C
Humidity 5% – 95% Noncondensing
MTBF (MIL 217F) 121,544 hrs at 25°C (GB).

Software Support

C drivers in source code
Windows menu software (Win3.x, WinNT, Win95)

Order Codes

1U11015G01 MIL-STD-1553 for PC104

Contact Information



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