

# IIB-1553-CPCI

The IIB-1553-CPCI is an intelligent interface card providing full MIL-STD-1553 test, simulation and bus analysis capability for the CompactPCI bus, with 1553A, 1553B, McAir and STANAG 3838 capability on a single card. The IIB-1553-CPCI 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 comprehensive 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 dual redundant 1553 interface. 2 Mbytes of dual ported RAM are supplied as standard. The board is supplied with C drivers in source code and Windows menu driven software.

## SPECIFICATIONS

### General Specifications

- MIL-STD-1553A/B, STANAG 3838 compatible
- McAir compatible
- 2 Mbytes Dual Port RAM (all modes)
- 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

PCI: Slave, 32 Bit data  
Memory Space: 2 Mbytes  
Interrupts: IRQA#

### Power

Total > 15 Watts  
+5v +/- 5% 900 mAmps  
+12V +/- 5% 50 mAmps

### Physical Characteristics

Dimensions 160mm x 100mm  
Weight 435 grams

### Environmental

Operating Temp. 0 – 50°C  
Storage Temp. -20 – 70°C  
Humidity 5% – 95% Noncondensing  
MTBF (MIL 217F) 103,234 hrs at 25°C (GB).

### Software Support

C drivers in source code  
Windows menu software (WinNT, Win95)  
RT Production Test Plan (full protocol)

### Order Codes

1U10940G01 MIL-STD-1553 for CompactPCI Bus

## Contact Information

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