

# IIB-1553-PCI-2C

The IIB-1553-PCI-2C provides an intelligent interface card for two serial, dual redundant MIL-STD-1553 data buses and the PCI bus. The card supports 1553A, 1553B, McAir and STANAG 3838 variants on a single card. The IIB-1553-PCI-2C provides 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. Two independent variable amplitude dual redundant 1553 interfaces are provided, each with 2 Mbytes of dual ported RAM. 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)
- 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 Tx amplitude  
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% 120 mAmps

### **Physical Characteristics**

Dimensions 175mm x 107mm  
Weight 200 grams

### **Environmental**

Operating Temp. 0 – 50°C  
Storage Temp. -20 – 70°C  
Humidity 5% – 95% Noncondensing  
MTBF (MIL 217F) 87,885 hrs at 25°C (GB)

### **Software Support**

C drivers in source code  
Windows GUI software (WinNT, Win95)

### **Order Codes**

1U10986G01 MIL-STD-1553 for PCI Bus

## **Contact Information**

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