

# IIB-1553-VXI-4C

The IIB-1553-VXI-4C is an intelligent interface card which provides 4 independent channels for full MIL-STD-1553 test, simulation and bus analysis functions on the VXI bus. All 1553A, 1553B, McAir and STANAG 3838 variants are supported. Each independent channel may be operated as a concurrent Bus Controller (BC) and up to 31 Remote Terminals (RT) with a windowed Bus Monitor (BM), or as a stand-alone Chronological Bus Monitor (CBM) 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. Each channel provides a variable amplitude dual redundant 1553 interface, 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 per channel
- 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**

Device Type: VXI Register Based Instrument.  
VXI Interface: Slave A24 or A32, D16  
Memory Space: 2 Mbytes per channel  
Interrupts: Two Vectored VXI Interrupts.

### **Power**

+5v +/- 5%	3.60 Amps
+12V +/- 5%	370 mAmps
-12V +/- 5%	15 mAmps

### **Physical Characteristics**

Module Size:	"C" size, one slot wide.
Weight	1550 grams (3.4 lbs).

### **Environmental**

Operating Temp.	0 – 50°C
Storage Temp.	-20 – 70°C
Humidity	5% – 95% Noncondensing
MTBF (MIL 217F)	86,932 hrs at 20°C (Gb)

### **Software Support**

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

### **Order Codes**

1U10936G01	IIB-1553-VXI-4C
------------	-----------------

## **Contact Information**

Technical & Sales queries: [support@western-av.com](mailto:support@western-av.com)

Phone: 353-61-472233

Fax: 353-61-471675

Web-site: <http://www.western-av.com>