

IIB-1553-VXI

The IIB-1553-VXI is a message based intelligent interface card for dual redundant MIL-STD-1553 applications. It gives full MIL-STD-1553 test, simulation and bus analysis capability on the VXI bus, providing 1553A, 1553B, McAir and STANAG 3838 variants in a single card. Simultaneous Bus Controller (BC) with up to 31 Remote Terminals (RT) and Chronological Bus Monitor (CBM). 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 variable amplitude dual redundant 1553 interfaces. External trigger-in and trigger-out are provided, with both Primary and Secondary bus coupling for direct and stub bus, with access to internal 1553 bus, on the front panel. A full MATE-CIIL compliant version is also available.

SPECIFICATIONS

General Specifications

- MIL-STD-1553A/B, STANAG 3838 compatible
- McAir compatible
- 1 Mbyte Dual Port RAM (all modes)
- BIT and diagnostics
- All set-ups programmable in real time
- Direct and TX coupling on front panel
- Internal 1553 bus access on front panel
- Programmable TX amplitude
- Full error injection (BC & RT)
- Full error detection (all modes)
- External trigger-in and trigger-out
- CPU with 3 DSP's for independent operation

Bus Controller

96 Kbytes dedicated RAM for message storage
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 multiple error injection / detection

Remote Terminal

96 Kbytes dedicated RAM for message storage
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 @ 1 uSec)
All active RT tables changeable in real time
Data and Status words changeable in real time
Full multiple error injection / detection

Chronological Bus Monitor

64 Kbytes dedicated RAM for stack data storage
881 Kbyte RAM buffer for selective capture mode
External hardware trigger
Programmable conditional triggers and masks
Message time tagging (32 bit @ 1 uSec resolution)
Store all, store only, store after modes
Full multiple error detection capability

Host Interface

VXI: Revision 1.3 standard
Message based servant
Word Serial Protocol
A16, A24 Master, D16 Slave
Memory Space: 2 Mbytes
Interrupts: IRQ 1-7

Power

+5v +/- 5% 3.80 Amps
+12V +/- 5% 100 mAmps
-12V +/- 5% 50 mAmps

Physical Characteristics

Dimensions "C" size, single slot
Weight 2.35 Kgs (4 lbs)

Environmental

Operating Temp. 0 – 50°C
Storage Temp. -20 – 70°C
Humidity 5% – 95% Noncondensing
MTBF (MIL 217F) 108,932 hrs at 20°C (Gb)

Software Support

LabWindows/CVI *plug&play* drivers
LabVIEW *plug&play* drivers

Order Codes

1U10905G01 MIL-STD-1553 for VXI Bus
1U10905G04 MIL-STD-1553 (MATE-CIIL)

Contact Information

Technical & Sales queries: support@western-av.com
Phone: 353-61-472233
Fax: 353-61-471675
Web-site: <http://www.western-av.com>

