

BCIT

Bus Characterization and Integrity Toolset

Applications

- Wire/ Cable Troubleshooting
- Bus Health Diagnosis
- Bus Performance Monitoring

Description

The BCIT (Bus Characterization and Integrity Toolset) provides two vital cable and bus maintenance features wrapped into a single tool. Bus Characterization provides data bus health monitoring for message quality, loading, and terminal response on a powered avionics system. Bus Integrity testing provides electrical analysis of cable networks via a high performance Time Domain Reflectometer.

Features

Common Features

- Windows Graphical Interface for set-up and analysis.
- Setup and control via Ethernet (10/100 Base-T) TCP/IP
- Removable Hard Disk and memory write protection for classified environments.

Bus Monitor Features

- Database allows for pre-configured displays
- Color coded dynamic displays provide intuitive fault indications
- Simultaneous health monitoring of up to 4 fully loaded 1553 dual redundant buses (physical connection to 8 bus stubs)
- Run-Time Bus statistics provides Bus loading and health monitoring

Time Domain Reflectometer Features

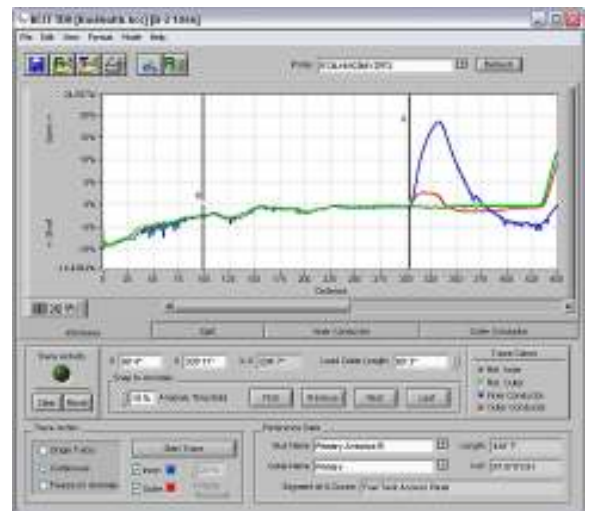
- Cable testing for twisted pair MIL-STD-1553 cabling to check for opens, shorts, and faulty shields
- Database driven for reference data and historical test data



BCIT Toolset



Bus Monitor Screen



TDR Screen

Benefits

- End-to-end test of MIL-STD-1553 Data Networks using a single tool
- Data cataloging provides comparative analysis
- Bus Monitor aids in capturing faults impacting bus protocol, such as faulty stubs or terminals
- TDR Triggered mode aids in finding intermittent faults by capturing data only when anomaly occurs

Specifications

Platform	SystemTrace® STX by ITCN Inc.
Architecture	3U PXI
Rugged Unit Size	18" x 9" x 15.5" (LxWxH) 40 lbs.
Semi-Rugged Size	20" x 9" x 12.5" (LxWxH) 40 lbs.
Software Compatibility	BCIT User Interface and SystemTrace® (Bus Monitor Only)
TDR Resolution	+/- 6 inches
TDR Max Cable Length	1000' (twisted pair)
TDR Interface	BJ-75 Trompeter, Triaxial
Bus Monitor 1553 Interface	Holt Integrated Circuits HI-1567CDI (Receive Only)
Bus Monitor Physical Interface	BJ-75 Trompeter, Triaxial, Transformer or Direct Coupled
Bus Monitor Error Detection	Manchester Encoding Error, Parity Error, Bit Count High, Bit Count Low, Inverted Sync, Interword Gap, Word Count High, Word Count Low, Terminal Address Error, Early Response, Status Word Exception, Alternate Bus Superseding Commands, Both Bus Transmit, Reserved Mode Code, RT No Response
Bus Monitor Performance Statistics	Per second counts of: Number of Messages, Bus Loading, and Data Duty Cycle. Available in cumulative total and per RT number.
Bus Monitor Error Statistics	Per second counts of: Bit Errors, Message Errors, Untracked Data, and Protocol Errors. Errors are decoded to indicate problem areas. Available per RT and cumulative totals.

Note: All specifications are subject to change without notice. Windows® is a trademark of the Microsoft Corporation.

Ordering Information:

Model:	Description:
BCIT-1553	Rugged BCIT Unit
BCIT-1553-SR	Semi-Rugged BCIT Unit

Contact ITCN's sales staff for detailed information about our test equipment and services at 800-439-4039, or visit our website at www.itcninc.com.



Semi-Rugged Unit

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