HEC Bit Error Rate Test Set

HBTS

HOLLIS ELECTRONICS COMPANY LLC

Hollis Electronics HBTS is a high speed bit error rate test set with multiple user interfaces ideal for In-Service Monitoring, End-to-End Testing and Loopback testing.

Product Hightlights:

- Generates and detects digital patterns for analyzing and trouble-shooting digital communications systems
- Programmable polynomial length and feedback taps for generation of any pseudorandom patterns up to 2^{32} –1; up to 32 taps can be used in the feedback path.
- Programmable, user defined pattern registers for long repetitive patterns up to 512 bytes in length
- Large 48-bit count and bit error count registers
- Software-Programmable bit error insertion
- Fully independent transmit and receive paths
- Detects polynomial test patterns in the presence of bit error rates up to 10^{-2}
- Serial mode clock rate is 155MHz; byte mode is 80MHz for a net 622Mbps

INTERFACES:

TIA/EIA-422/530
- DB-25

EHSSI
- TIA/EIA-612/613
- Serial Data
- Nibble Data
- 50-pin SCSI

KG-95-1
- COMSEC/TRANSEC
- NSA 87-20B
- DB-25

CONTROL:

- RS-232
- GPIB (optional)

Specifications:

Measurements
Bit Errors
Bit Error Ratio
Bit Error Rate
Sync Loss
Accumulated Sync losses
Errored Seconds
Severely Errored Seconds
Error Free Seconds
Elapsed Time

Supported Data Rate
64Kbps – 622Mbps (byte mode) in 10bps increments.

The BERT uses the latest in DDS technology to generate the clock resolution in 10Hz increments.

Test Patterns
2N-1 PRBS where N = {8 – 32}
Optional programmable polynomials can be factory installed
User defined patterns
512 byte (4096-bits) maximum
Pattern must be defined in one or more 8-bit increments.

Error Insertion
Insert Single
Continuous errors for bit errors rates from 10^{-7} to 10^{-2}

Operation Selection
TX Data Polarity
RX Data Polarity
Clock Edge

Jitter
On/Off
Uniform Distribution
Programmable peak from 0% to 10%
Programmable rate of change from 0 to 100 KHz

Reference Clock
Internal
External (10 MHz sinusoid; 0 dBm $\pm$ 3dB)

Monitoring Test Points (50 Ω)
Transmit Clock
Transmit Data
Receive Clock
Receive Data

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