Bit Error Rate Test Set

packetBERT[TM] PB200

packetBERT PB200

Features

❯ **Specs**

This product is discontinued.
View alternative products.

CHARACTERISTICS

GENERATOR

Clock -
External clock input:

Frequency: DC to 200 MHz.
Amplitude: 0.5 to 5.0 V p-p.
Connector: BNC.
Termination select: 50 Ohm to -2 V, +3 V, AC or GND.
Input range: ECL, TTL, PECL compatible.
Threshold resolution: 10 mV step.

External clock reference input:

Frequency: 10 MHz, ±100 ppm maximum.
Amplitude: 0.5 to 2.0 V p-p, AC coupled.
Termination: 50 Ohm.
Connector: BNC.

Internal synthesized clock source:

Frequency: 1 Hz to 200 MHz.
Resolution: 1 Hz.
Accuracy: 10 ppm.

BURST clock:

Programmable gap: 16 Kbits maximum, 8-Bit resolution.

Pattern Generator -
PRBS: $2^N - 1$, N = 31, 23, 15, 11, 10, 9, 7.
Programmable word: 256 Kbits maximum, 8-Bit resolution.
Mark density: PRBS 2^{10} 1 (1/8, 1/4, 1/2, 3/4, 7/8).
Mixed mode frame: 256 Kbits maximum, 8-Bit resolution.
Error injection:

Error: Single, Rate, External (TTL).
Field select: Overhead, payload or both.
Error rates: Error rate of 10^{-n}, n = 3, 4, 5, 6, 7.

Outputs -
Data and clock outputs:

Format: NRZ.
Configurations: Differential (True/Complement).
Source impedance: 50 Ohm.
Connector: BNC.
Amplitude: 0.5 V to 2.0 V, 10 mV step.

Offset, 50 Ohm to GND: -2.0 V to +1.8, 10 mV step
(termination to 50 Ohm will increase the range for PECL).
Data delay range: ±1.0 ns, 20 ps resolution.
Rise/fall time: 300 ps typical, 500 ps maximum (20 to 80%).

Pattern sync output:

Signal level: 250 mV$_{p-p}$ into 50 Ohm load.

Auxiliary -
Data inhibit input: ECL, 50 Ohm to -2 V, BNC.
Clock disable input: ECL, 50 Ohm to -2 V, BNC.

ANALYZER

Data and Clock -
Data and clock inputs:

Clock input: External or internal from generator.
Data polarity: True/invert selectable.
Input mode select: Single-ended or differential.
Termination select: 50 Ohm to -2 V, +3 V, AC or GND.
Input range: ECL, TTL, PECL compatible.
Threshold resolution: 10 mV step.
Threshold resolution: 10 mV step.

Synchronization -
Auto search: Clock and data threshold, clock and data timing
skew, data pattern and polarity.

Measurements -
Frequency: 1 Hz to 200 MHz.
Bit errors: Window, Totalize, Timed Test, Simultaneous 1's, 0's
and All Errors.
BER test field: Overhead, payload or both.
Propagation delay: Up to 128 Kbits.
Eye-width: Up to 32 ns.

Reference Data Patterns -
Identical to Pattern Generator but independent.
Startup delay: 0 to 64 Kbits programmable.

Auxiliary Signals (BNC Connectors) -
Error count inhibit input: ECL, 50 Ohm to -2 V.
Error detect output: RZ, TTL, 50 Ohm source.
Analyzer clock disable: ECL, 50 Ohm to -2 V.
Data delay output: ECL, 50 Ohm source.

Common Characteristics

Pattern -
Controls: Start/Stop, Pause/Resume or Single Step.
Save/Load:

Floppy disk: 3.5 in.
Internal storage: 2 Mbits.

Pattern Editor Software requires PC running Windows 3.1 or
above.

Remote Interface -

GPIB: IEEE 488.2 compatible.
RS-232C: DB9 connector.
Parallel printer: DB25 connector.
Monitor: DB15, VGA Analog Output.

Environmental -
Operating temperature: 5 to 40°C.
Storage temperature: -10 to 60°C.
Meets European Community EMC Directive 89/336/EEC for
electromagnetic compatibility.

Safety -
UL1244, CSA231, EN61010-1, IEC61010-1.

Power -
AC line: 100 to 120 V AC, 200 to 240 V AC.
Power consumption: 300 W maximum.

Physical Characteristics

Dimensions	mm	in.
Height	203.2	8
Width	355.6	14
Depth	508	20
Weight	**kg**	**lbs.**
Net	13.6	30

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> **Specs**

Product(s) complies with IEEE Standard 488.2-1987.

Tektronix Measurement products are manufactured in ISO registered facilities.

CE

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