

# Bit Error Ratio Test (BERT)

Agilent offers the only complete portfolio of physical layer test equipment for characterizing multi-gigabit devices, during the whole design and manufacturing life cycle. Leading edge design and test efficiency is achieved by Agilent's continual innovations in all areas of digital high-speed testing.

### Pulse data generators

By stimulating high-speed ports of digital devices with precise clock and data signals, pulse data generators are a flexible tool for generating best and worst-case pulses and patterns for testing.

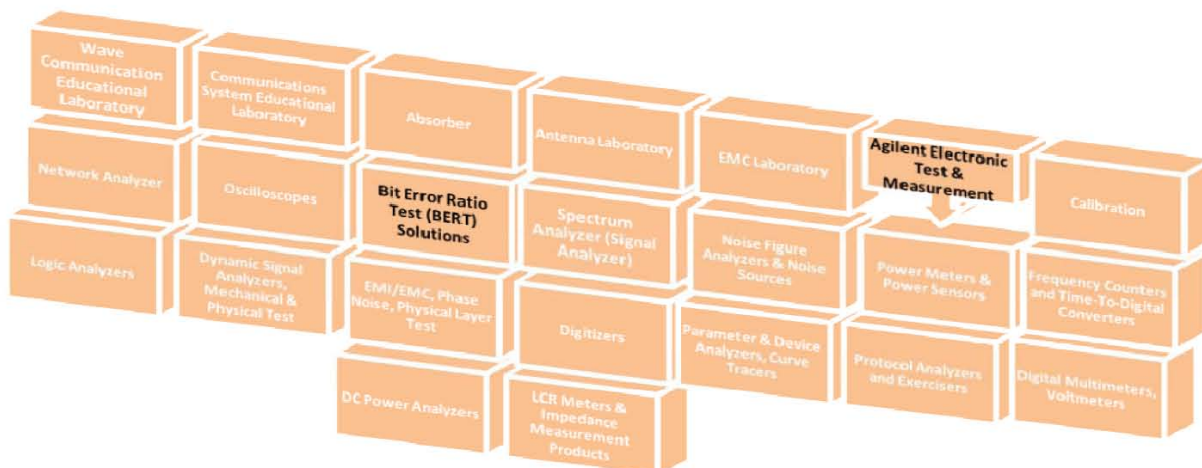
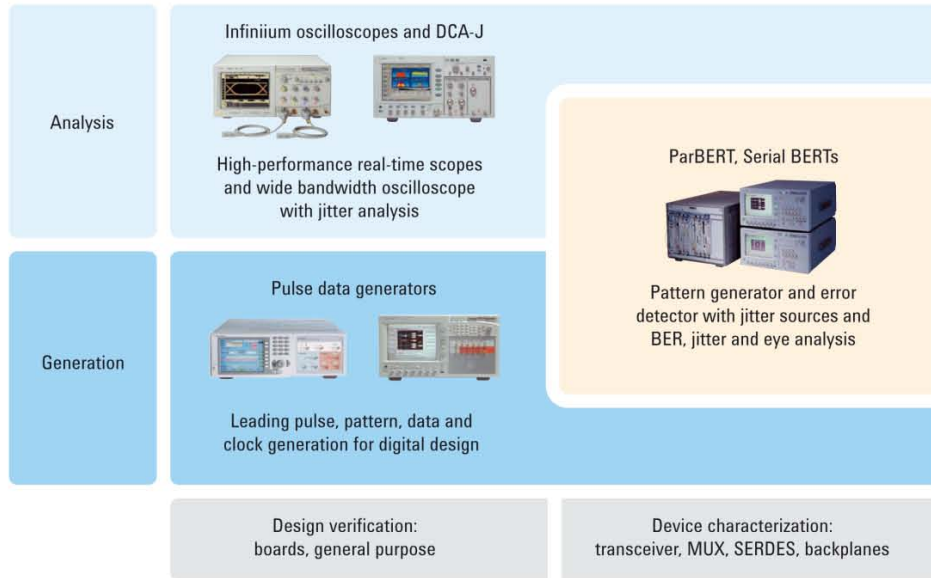
### Real-time oscilloscopes and digital communication analyzers

Real-time and sampling oscilloscopes allow quick and precise analysis of waveforms, eyes and jitter. They are suitable for all phases of design, validation and manufacturing tests of high-speed chips and boards.

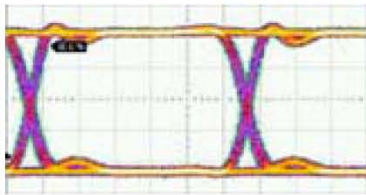
### Bit error ratio testers (BERTs)

BERTs are ideal for characterizing gigabit receivers. A BERT can inject clock and data signals on one or multiple lanes, injecting jitter for jitter tolerance testing. The error detector is used for total jitter measurements as well as eye and jitter analysis.

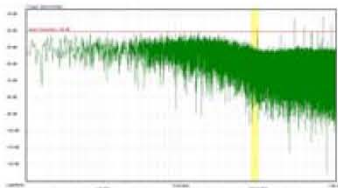
## Agilent satisfies all physical layer test needs



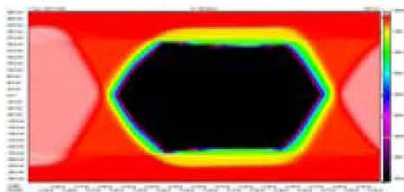
Clean Eye



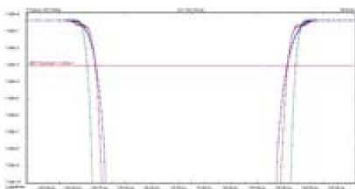
Spectral Jitter



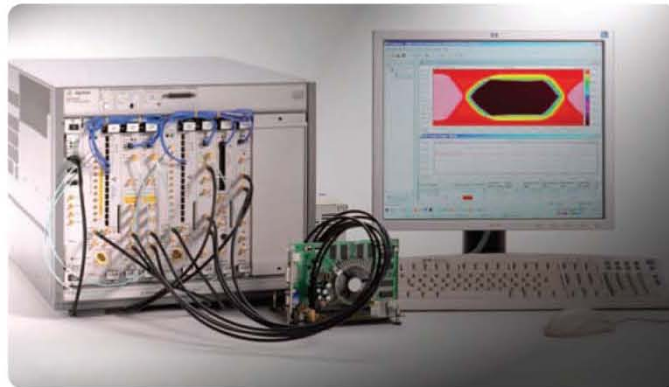
Eye Contour



BERT Scan



## Agilent ParBERT 81250 Parallel Bit Error Ratio Tester



*The only modular parallel bit error ratio test solution with*

- different modules covering a range of data rates from 333 kHz to 13.5 GHz
- up to 66 synchronous input and output channels
- powerful pattern sequencer providing looping and branching on events enabling control of complex tests and devices
- PRBS/PRWS and memory based patterns up to 64Mb
- delay control input for jitter generation
- error detector modules featuring individual CDR
- measurement suite

