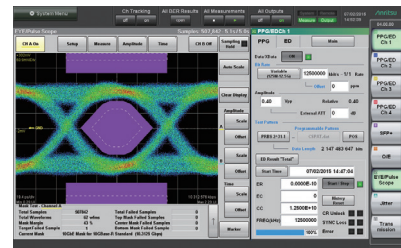
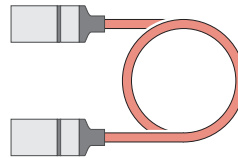
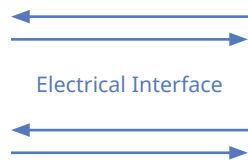


Active Optical Cable (AOC) Measurement Solution

Simultaneous 12-channel Eye & BER Measurements

BERTWave MP2100B



Active Optical Cable Evaluation

Outline

To cope with rapid rises in data volumes, data centers are introducing active optical cable (AOC) interconnects with transmission speeds faster than 10 Gbit/s between servers. These interconnects require Eye pattern and BER measurements to assure quality while overcoming problems of long-distance transmissions, high speeds and power consumption.

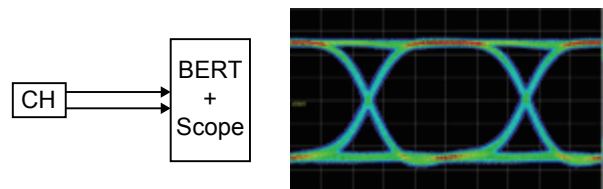
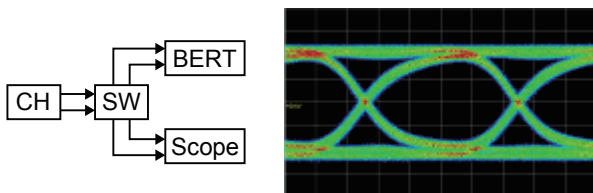
One unit measures Eye-BER of differential signal simultaneously

Using switch or power splitter...

- ✗ Degraded waveform/BER and performance
- ✗ Higher costs and difficult measurement setup

Using integrated scope + BERT

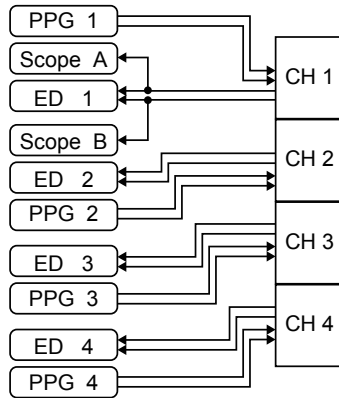
- High-quality BER and waveform measurements
- Low equipment cost, simple measurement setup



One unit measures four channels simultaneously

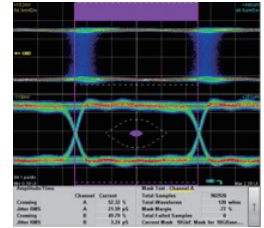
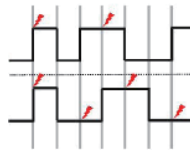
Switch PPG/ED/Scope set and measure:

- ✗ Long measurement times
- ✗ No channel crosstalk evaluation
- ✗ Difficult measurement setup



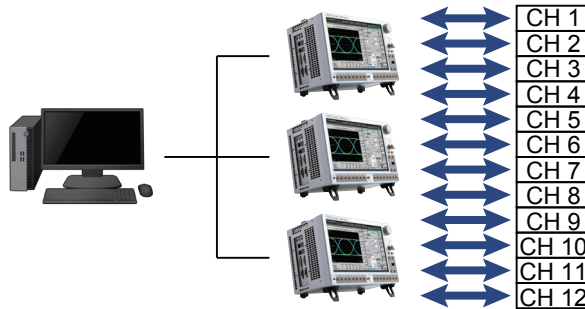
BERTWave 4-channel option supports:

- Parallel measurement
- Short measurement times
- Channel crosstalk evaluation
- Simple measurement setup



4 channels x 3 units measures 12 AOC Ch

- Reduces tact time
- Reduces investment costs
- Improves yield
- High-quality waveform
- Crosstalk evaluation



What is BERTWave MP2100B?



10 GbE × 4ch
Big Value in Small Set

All in One
4ch BERT
1 ps rms Jitter
10 mVp-p Sensitivity

Built-in BERT and Scope

Built-in 1ch to 4ch 12.5 Gbit/s BERT

Pulse Pattern Generator (PPG)
Jitter: 1 ps rms

Error Detector (ED)
Sensitivity: 10 mVp-p

Short Measurement Times

Simultaneous 4ch BERT and Eye Pattern Measurements
Simultaneous 4ch BER Measurements
High-Speed Eye Mask Tests
High-Speed BER Tests

Full-Featured Analysis Functions

Wideband Operation Frequency
Electrical and Optical Interfaces
Jitter Analysis
Clock Recovery

Cost-Effective Investment

Flexible Measurement System Configuration
Multi-channel BERT