### Flexible test solutions for



...1G 5G 10G 14G 40G 100G and beyond

#### PARALLEX® PLATFORM: LETS YOU START SMALL AND GROW BIG

PARALLEX® is a low-cost, modular Bit Error Rate Test Platform used for verification and test of optical and electrical components, sub-assemblies and systems at 1 to 28 Gbps. PARALLEX® allows users to perform several BER tests simultaneously using a single clock source. The system is ideal for parallel interfaces or multiple

independent interfaces.

PARALLEX® is scalable so users can start off with a single channel and add modules to grow the system. Manufacturers can realize great savings by taking advantage of the PARALLEX® system's scalability to perform parallel testing in volume production environments.



#### E-BERT - 1Gbps to 14.4Gbps BERT

The pair of Pattern generator and Error Detector modules offers a comprehensive feature set for BER testing.



- Pattern PRBS 7, 9, 10, 11,15, 23, 31
- User pattern 8kbyte
- Standard preset patterns like 0101...
- Detectable BER down to 0.5
- Pattern synchronization down to
- Single Error injection or BER
- Electrical interfaces 50 Ohms
- Pattern Trigger output
- Data logging

#### E-BERT - 2Gbps to 28Gbps BERT 4-Channel

The 4-channel Pattern generator and Error Detector modules extend the data rate range up to 28G.



- PG pattern PRBS 9.15.31
- ED pattern PRBS 7,9,15,23,31
- · Electrical interfaces - 50 Ohms
- High speed and low speed clock output
- Data logging

#### **CLOCK SOURCE**

The Clock Source Module provides continuous range from 78 MHz to 20 GHz. Optionally a divided clock output is offered to enable usage of scopes with limited trigger bandwidth.

Also works as clock multiplier.



#### PHASE SHIFTER 200ps



For evaluating crosstalk effects this multi channel phase shifter is the ideal tool. It can shift each of the six channels by ± 200ps.

For higher channel count multiple phase shifters can be synchronized.

#### FURTHER ELECTRICAL MODULES:

DeEmphasis 14G, 28G Clock Divider 1-256 Clock Recovery

#### **VARIETY OF OPTICAL FUNCTIONS**

#### **Optical Power Meter**

+10 to -70dBm,. 800nm to 1700nm

#### **Variable Optical Attenuator**

1 to 55 dB, Single mode and Multi mode versions Includes optical splitter for sensitivity measurement

#### **Optical Switches**

Different combinations 1x2, 1x4, 1x8, 2x8 and more

#### **Optical Spectrum Analyzer**

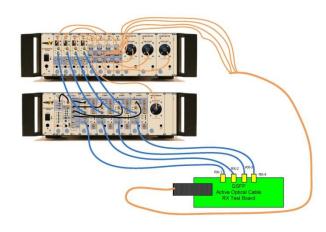
C-Band or L-band; for quick wavelength verification

#### O/E converter using MSA transceiver

XFP type and SFP+ type



#### APPLICATION EXAMPLE QSFP TEST

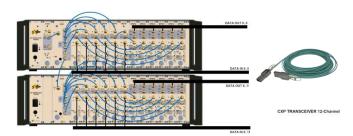


# Full four channel simultaneous crosstalk and sensitivity test

#### Contains of

- 1x Clock source
- 1x Phase Shifter
- 4x BERT
- 4x O/E converter
- 4x Variable optical attenuator
- 4x Optical power meter

#### APPLICATION EXAMPLE 120G CXP TEST



## Full twelve channel simultaneous Bit Error Rate test for CXP

#### Contains of

- 12x Pattern Generator
- 12x Error Detector
- 1x Clock source
- 2x clock distributor

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