

Efficient Multichannel Optical Transceiver Measurement

Quad Optical Scope MP2110A-040+061/049
BERTWave™ MP2110A



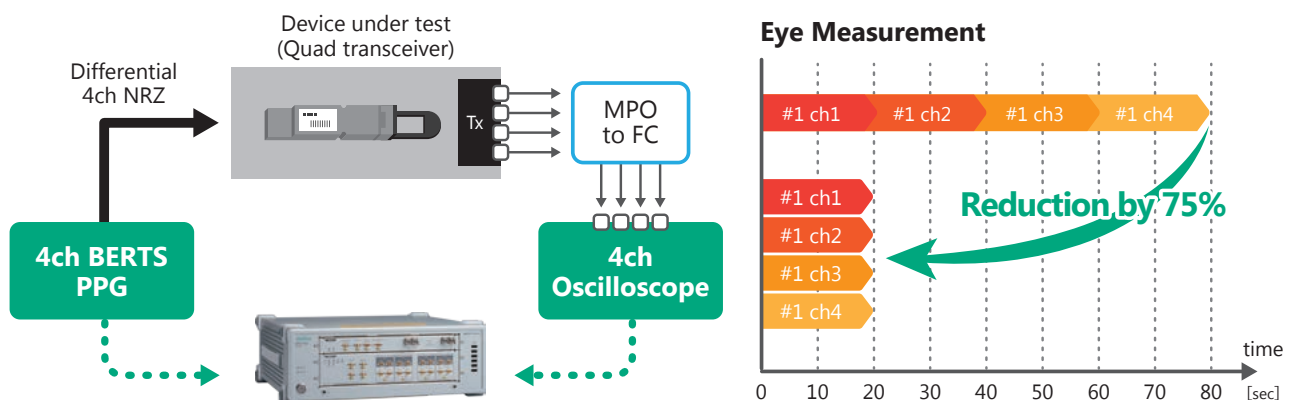
Optical transceivers required by Large-scale networks, such as 100G/400G/800G, are securing bandwidth using multichannel parallel processing. Consequently, all-at-once multichannel measurement is extremely effective for improving productivity. The BERTWave MP2110A featuring fast measurement speeds and high sensitivity not only assures high efficiency but also improves productivity by addition of the Quad Optical Scope option to halve measurement costs per channel compared to previous instruments.

Features

- 4ch optical sampling oscilloscope with all-at-once simultaneous measurement of all channels
- All-in-one Jitter analysis, PAM4 analysis and clock recovery
- Stable, fast measurement due to built-in PC

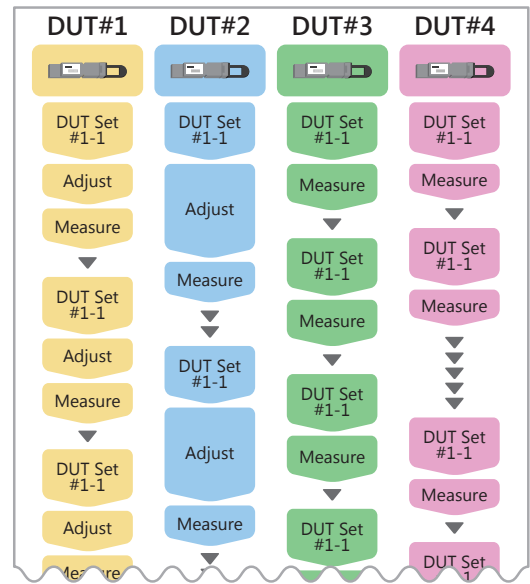
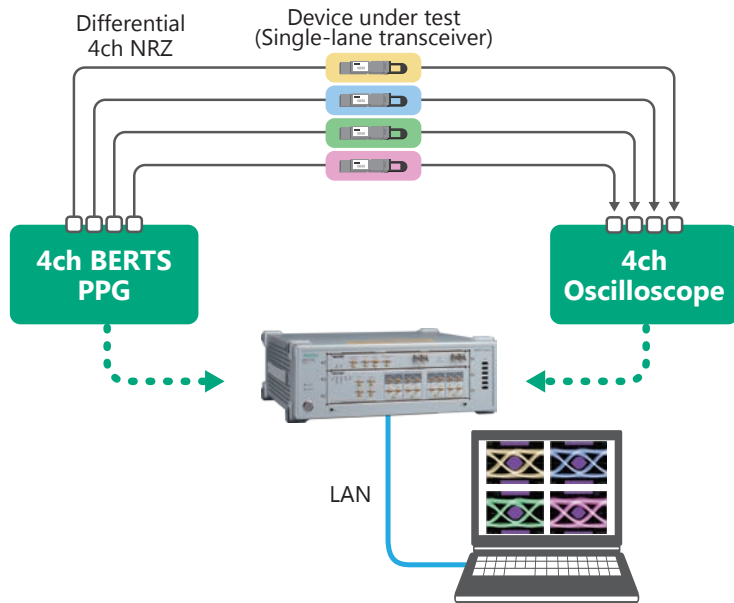
Efficiencies of Using Quad Optical Scope

< Application Example 1: QSFP28 Optical Transceiver Tx Waveform Evaluation >



- All-in-one 4ch BERTS and 4ch oscilloscope
- Lower measurement costs (about half of dual-channel model cost per channel)
- Faster measurement (time cut by 75% using all-at-once measurement)
- All-at-once 4ch PAM4 analysis

< Application Example 2: Multiple SFP28 Optical Transceiver Tx Waveform Evaluation >



Evaluate four DUTs with one 4ch oscilloscope

- Cuts costs and benchtop space compared to four 1ch oscilloscopes

Channel-independent auto-scaling and measurement start/stop

- Improves usage efficiency for each channel
- Easy remote programming

Specification

Option	MP2110A-040	MP2110A-040+061		MP2110A-049	
Bandwidth (no filter)*1	35 GHz	35 GHz		25 GHz	
Wavelength	1260 nm to 1650 nm	850 nm to 1650 nm		800 nm to 860 nm	
Sensitivity*1, *2	@1310 nm	@1310 nm	@850 nm	@850 nm	
	Optical Noise	5.8 μW	4.1 μW	12.2 μW	7.0 μW
	Mask Sensitivity*3	-12.0 dBm	-14.0 dBm	-10.0 dBm	-12.0 dBm

*1: Typical value.

*2: The 850-nm wavelength specification for MP2110A-040+061 is the value with 100 GbE/4 filter. Other values are with an OTU4 filter.

*3: Estimated optical power at which mask margin (Hit Count 0) reaches 0%.

Ordering Information

Please specify the model/order number, name and quantity when ordering.
 The names listed in the chart below are Order Names. The actual name of the item may differ from the Order Name.
 Contact your sales representative for more details.

Model/Code	Name
MP2110A	BERTWave
MP2110A-040	Quad Optical Scope for Singlemode*4
MP2110A-049	Quad Optical Scope for Multimode*4
Optional Extras	
MP2110A-061	Low Noise and Multimode Support for Opt.040*5
MP2110A-054	Clock Recovery (Electrical/Optical)
MP2110A-095	PAM4 Analysis Software
MP2110A-096	Jitter Analysis Software

*4: Can select any one, including other oscilloscope interface options.

*5: The MP2110A-061 is added at factory shipment and cannot be retrofitted.