

Bit Analyzer

Bit Error Rate Tester of 400G/100G

- 4x28G and Upgradable to 8x56G
- Data Rate from 28.9GBd to 57.8GBd
- Optional multi rate PPG from 10-28GBd
- Amplitude up to 1.5V_{pp,diff} (Optional)
- Support PRBS 7/9/11/13/15/23/31/13Q/31Q, SSPRQ
- FEC Simulator



PPG	Value	Unit	Note
Number of Channel	4CH / 8CH		4CH upgradable to 8CH
Data Rate per Lane	25.78125, 26.5625, 28.05, 28.9	GBd	PPG A/B @BA8042/82
	53.125, 57.8		PPG A/B @BA8043/83
	9.95328, 10.3125, 10.709, 11.3176, 12.5, 14.025, 24.33024		PPG C/D @BA8041/81 & MR Option
Modulation	NRZ/PAM4		NRZ upgradable to PAM4
Pattern	PRBS 7/9/11/13/15/23/31, PRBS7~31Q, SSPRQ, User Defined Pattern		
Amplitude Maximum	800/1000	mV _{diff,pp}	Typical@PPG A/B w/o Emphasis
High Power Mode Amp.	1.5V	mV _{diff,pp}	PPG C/D @ 1.5V Option
Rise Time/Fall Time	11/11	ps	20%-80%, Typical@PPG A/B *1
	15/15		20%-80%, Typical@PPG C/D *2
Jitter rms	500	fs	Typical @PPG A/B *1
ED	Value	Unit	Note
Data Rate per Lane	25.78125, 26.5625, 28.05, 28.9	GBd	ED @BA8042/82
	53.125, 57.8	GBd	ED-53G @ BA8043/83
	9.95328, 10.3125, 10.709, 11.3176, 12.5, 14.025, 24.33024	GBd	ED @BA8041/81 & MR Option
Sensitivity	100~1500	mV _{diff}	@26G (Diff)@ED, Mode depends
Clock Out	Value	Unit	Note
Clock A, B	/8,/16,/32,/64/256		A, B for PPG A/B C, D for PPG C/D
Clock C, D	/8,/16,/32,/64/128		
Others	Value	Unit	Note
Connector Type	O-SMPM™ connector		Up to 50GHz Bandwidth

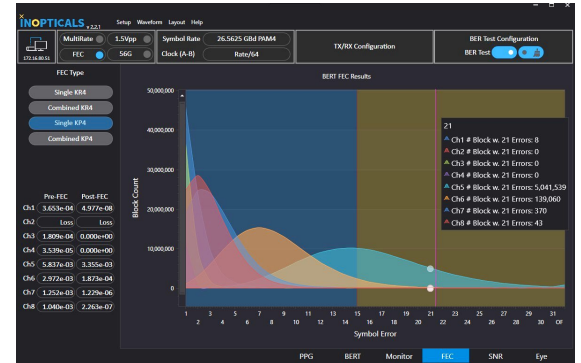
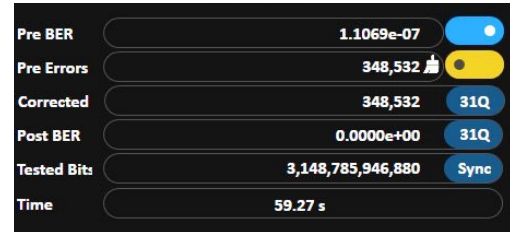
*1 NRZ signal measured by 50GHz Scope with 50GHz 2.4mm, 15cm RF cable

*2 NRZ signal measured by 50GHz Scope with 40GHz 2.92mm, 15cm RF cable

FEC Simulation Software

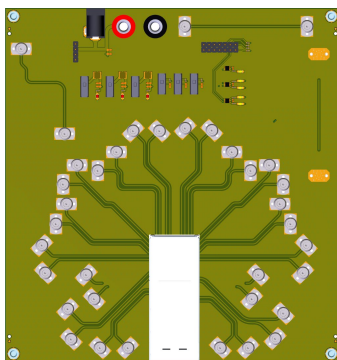
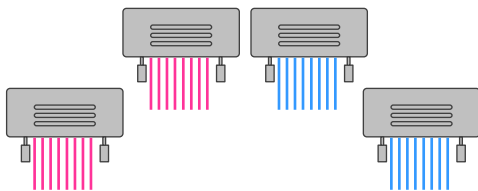
Powerful analysis function for TRX/AOC R&D engineer team

- Supports pure PRBS error check and correction
- Pre-FEC and Post-FEC BER
- Support KP4/KR4 FEC protocols
- Simulation 26GBd PAM 4CH/8CH at same time
- Save RD cost on purchasing the 400G Ethernet Analyzer
- Advance FEC operation advance report
 - Total Blocks
 - Correctable Symbols
 - Uncorrectable Symbols
 - Total block count - by Graphic

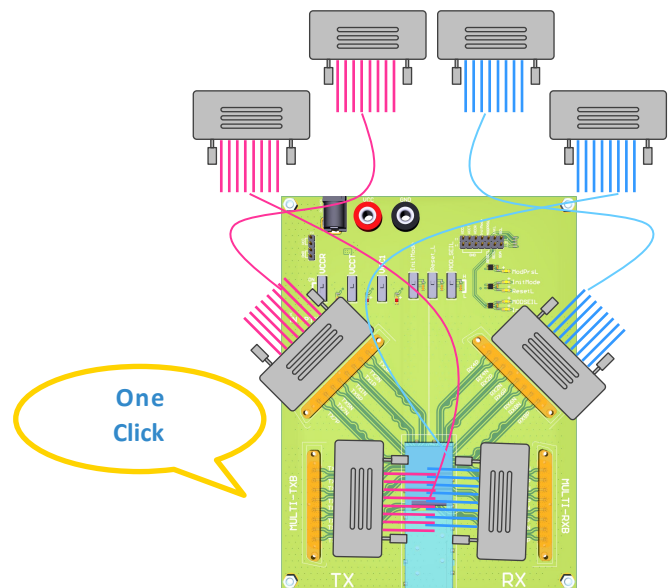


Innovative connector configuration

Easy and Quick for production maintenance



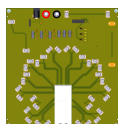
Cable: O-SMPM to K connector



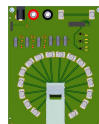
Cable: O-SMPM to O-SMPM

MCB family

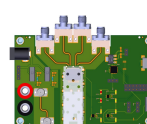
Superior SI performance



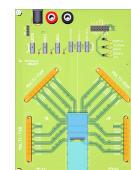
QSFP-DD & OSFP



QSFP28



SFP28



1x8 O-SMPM
type connector

• Order Information

Model Number	Description	Note
BA8041	4x28GBd NRZ BERT with O-SMPM (10G~28G)	Not continuous data rate
BA8042	4x28GBd PAM4 BERT (support NRZ) with O-SMPM	
BA8043	4x56GBd PAM4 BERT (support NRZ) with O-SMPM	
BA8081	8x28GBd NRZ BERT with O-SMPM (10G~28G)	Not continuous data rate
BA8082	8x28GBd PAM4 BERT (support NRZ) with O-SMPM	
BA8083	8x56GBd PAM4 BERT (support NRZ) with O-SMPM	

Options

BA80xx-MR	Multi data rate with second PPG added	9.95328, 10.3125, 10.709, 11.3176, 12.5, 14.025, 24.33024
BA80xx-1.5V	High amplitude 1.5V _{diff} with second PPG added	26GBd, Clock C, D
BA80xx-FEC	26GBd PAM FEC simulator software	

Optional Accessories

iCBOS-Km-7,15,30,60	40GHz, 1x8 O-SMPM to K(male) cable, Return Loss: -15dB 7cm, Loss 1.15dB, 15cm, Loss 1.4dB, 30cm, Loss 2.2dB, 60cm, Loss 3.7dB, (Max)
iCBOS-Qm-7,15,30,60	50GHz, 1x8 O-SMPM to 2.4mm(male) cable, Return Loss: -15dB 7cm, Loss 1.2dB, 15cm, Loss 1.5dB, 30cm, Loss 2.4dB, 60cm, Loss 4.2dB, (Max)
iCBOS-SMPM-7,15,30,60	50GHz, 1x8 O-SMPM to SMPM cable, Return Loss: -15dB 7cm, Loss 1.2dB, 15cm Loss 1.6dB, 30cm, Loss 2.4dB, 60cm, Loss 4.2dB, (Max)
iCBOS-OS-7,15,30,60	50GHz, 1x8 O-SMPM to O-SMPM cable, Return Loss: -15dB 7cm, Loss 1.2dB, 15cm Loss 1.6dB, 30cm, Loss 2.4dB, 60cm, Loss 4.2dB, (Max)

Environmental Specifications

Item	Spec	Note
Operation Temperature	5 to +40°C	
Storage Temperature	- 20 to +70°C	
Operating humidity	20%- 80%	For temperatures up to 35°C
Power	100/120 Vac 50/60/400 Hz	Operate with supply voltage fluctuations up to ± 10% of the nominal voltage
	220/240 Vac 50/60 Hz	
	60W typ./80W Max	