



# **Keysight Test Report**

## PASS

Report Header: Keysight Inc.

Report Date: 2025/06/04 01:39:05

Type: Framed

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SUMMARY		
IxOS Version	10.00.1000.17	
Test Start Time	2025/06/04 01:37:12	
Test End Time	2025/06/04 01:39:05	
Test Duration	00:00:30	
Pass/Fail Verdict	PASS	
Module Type	1,1,2 - 100GBASE-DR	
	1,1,4 - 100GBASE-DR	
Module Version	1,1,2 - CMIS 5.0	
	1,1,4 - CMIS 5.0	
Serial Number	1,1,2 - DN4D180001	
	1,1,4 - UNA8490003	

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## Transceiver DOM (Digital Optical Monitoring) - 128

1,1,2										
Manufacturer		Eoptolink		Model		EOLD-138HG-	-5H-SM	Mfg Revision		01
Туре		100GBASE-DR		SN		DN4D180001		Firmware Revision		3.0
MSA		CMIS 5.0	CMIS 5.0 Date Code(YYMIV		VIMDDLL)	220426		Hardware Rev	ision	1.0
Media Tech		1310 nm DFB		Media Connec	tor	MPO 1x16				
Cable Lenth		0.0 m		Identifier Type		QSFP-DD				
Reported Power C	Class	8		Reported Max	Power	18.000000 W				
Mod	dlue	High A	larm	High!	Warn	Low	Warn	Low A	larm	
	erature	78		73			3 C	-8		
		3.630		3.46			135 V	2.97		
Supply	Voltage	5.03		3.40	)5 V	5.1	135 V	2.97	U V	
	Limits	High A		, in the second second	Warn	Low	Warn	Low A		
	al Power	6.00			dBm		0 dBm	-4.90		
	al Power	6.50			5.50 dBm		-7.40 dBm		dBm	
Tx Bias	Current	6.50	6.50 dBm		5.50 dBm		-7.40 dBm		-8.40 dBm	
Host Lane	Port	Data Path State	Tx LOS	Tx CDR LOL	Media	Tx Optical	Tx Bias	Rx Optical	Rx LOS	Rx CDR LOL
1	2.1	Activated (4)	No	No	1	3.21 dBm	231.744 mA	0.66 dBm	No	No
2	2.1	Activated (4)	No	No	2	2.77 dBm	232.112 mA	2.44 dBm	No	No
3	2.1	Activated (4)	No	No	3	1.42 dBm	213.488 mA	1.58 dBm	No	No
4	2.1	Activated (4)	No	No	4	1.69 dBm	213.976 mA	-3.80 dBm	No	No
5	2.1	Activated (4)	No	No	5	3.16 dBm	214.832 mA	0.36 dBm	No	No
6	2.1	Activated (4)	No	No	6	2.90 dBm	214.952 mA	0.11 dBm	No	No
7	2.1	Activated (4)	No	No	7	3.06 dBm	214.096 mA	2.12 dBm	No	No
8	2.1	Activated (4)	No	No	8	2.76 dBm	214.216 mA	-0.88 dBm	No	No

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Eoptolink EOLO-138HG-5H-SM 01 100GBASE-DR UNA8490003 3.0 CMIS 5.0 221109 1.0 1310 nm DFB MPO 1x16 0.0 m OSFP 18.000000 W 8 78 C 73 C -8 C 3.630 V 3.465 V 3.135 V 2.970 V 6.00 dBm -3.90 dBm -4.90 dBm 6.50 dBm 5.50 dBm -7.40 dBm -8.40 dBm 6.50 dBm 5.50 dBm -7.40 dBm -8.40 dBm Activated (4) 2.49 dBm 240.384 mA 4.05 dBm 4.1 Activated (4) No No 2.16 dBm 240.624 mA 3.32 dBm No No 2 2 3 4.1 Activated (4) No No 3 2.44 dBm 215.600 mA 2.14 dBm No No 4 4.1 Activated (4) No No 4 2.33 dBm 215.232 mA 2.38 dBm No No 5 4.1 Activated (4) No No 5 2.15 dBm 184.712 mA 3.55 dBm No No 6 4.1 Activated (4) No No 6 2.11 dBm 184.592 mA 3.46 dBm No 7 4.1 Activated (4) No No 7 2.21 dBm 182.512 mA 3.28 dBm No No Activated (4) 8 4.1 No No 8 2.11 dBm 182.760 mA 2.22 dBm No No

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## **CMIS Applicatio Select**

1,1,2

Current AppSel

1

#### **Available Applications**

Арр	Host Side						Line Side Media				
	Interface	Lane	Modulation	Lane	Lanes	ID (HEex)	Interface	Lane	Lane	Lanes	ID (Hex)
		Speed (G		Groups				Speed (G	Groups		
		bit/s)						bit/s)			
1	100GAUI-	106	PAM4	8	1	75	100GBASE-	106	8	1	20
	1-S C2M						DR				

#### Preview of Auto selected applications

Host Port Mode	Mod	Lane Groups	Lanes	AppSel	Link	Host Electrical	Lane Groups	Lanes	Note
800G-R8	PAM4	1	8	1	М	100GAUI-1-S C2M	1	8	First app matching host lane speed for host id: 0x51 (800G S C2M 8x53.125 PAM4)
400G-R4	PAM4	2	4	1	М	100GAUI-1-S C2M	2	4	First app matching host lane speed for host id: 0x4f (400GAUI-4-S C2M 4x53.125 PAM4)
200G-R2	PAM4	4	2	1	М	100GAUI-1-S C2M	4	2	First app matching host lane speed for host id: 0x4d (200GAUI-2-S C2M 2x53.125 PAM4)
100G-R	PAM4	8	1	1	Y	100GAUI-1-S C2M	8	1	First app matching compatible electrical mode: 0x4b (100GAUI-1-S C2M 1x53.125 PAM4)
400G-R8	PAM4	1	8	1	N	100GAUI-1-S C2M	1	8	No matching electrical mode
200G-R4	PAM4	2	4	1	N	100GAUI-1-S C2M	2	4	No matching electrical mode
100G-R2	PAM4	4	2	1	N	100GAUI-1-S C2M	4	2	No matching electrical mode
50G-R	PAM4	8	1	1	N	100GAUI-1-S C2M	8	1	No matching electrical mode
200G-R8	NRZ	1	8	1	N	100GAUI-1-S C2M	1	8	No matching electrical mode
100G-R4	NRZ	2	4	1	N	100GAUI-1-S C2M	2	4	No matching electrical mode
50G-R2	NRZ	4	2	1	N	100GAUI-1-S C2M	4	2	No matching electrical mode
25G-R	NRZ	8	1	1	N	100GAUI-1-S C2M	8	1	No matching electrical mode

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1,1,4

#### Current AppSel

1

#### Available Applications

Арр		Host Side						Line Side Media			
	Interface	Lane Speed (G bit/s)	Modulation	Lane Groups	Lanes	ID (HEex)	Interface	Lane Speed (G bit/s)	Lane Groups	Lanes	ID (Hex)
1	100GAUI- 1-S C2M	106	PAM4	8	1	75	100GBASE- DR	106	8	1	20

#### Preview of Auto selected applications

Host Port Mode	Mod	Lane Groups	Lanes	AppSel	Link	Host Electrical	Lane Groups	Lanes	Note
800G-R8	PAM4	1	8	1	М	100GAUI-1-S C2M	1	8	First app matching host lane speed for host id: 0x51 (800G S C2M 8x53.125 PAM4)
400G-R4	PAM4	2	4	1	М	100GAUI-1-S C2M	2	4	First app matching host lane speed for host id: 0x4f (400GAUI-4-S C2M 4x53.125 PAM4)
200G-R2	PAM4	4	2	1	М	100GAUI-1-S C2M	4	2	First app matching host lane speed for host id: 0x4d (200GAUI-2-S C2M 2x53.125 PAM4)
100G-R	PAM4	8	1	1	Y	100GAUI-1-S C2M	8	1	First app matching compatible electrical mode: 0x4b (100GAUI-1-S C2M 1x53.125 PAM4)
400G-R8	PAM4	1	8	1	N	100GAUI-1-S C2M	1	8	No matching electrical mode
200G-R4	PAM4	2	4	1	N	100GAUI-1-S C2M	2	4	No matching electrical mode
100G-R2	PAM4	4	2	1	N	100GAUI-1-S C2M	4	2	No matching electrical mode
50G-R	PAM4	8	1	1	N	100GAUI-1-S C2M	8	1	No matching electrical mode
200G-R8	NRZ	1	8	1	N	100GAUI-1-S C2M	1	8	No matching electrical mode
100G-R4	NRZ	2	4	1	N	100GAUI-1-S C2M	2	4	No matching electrical mode
50G-R2	NRZ	4	2	1	N	100GAUI-1-S C2M	4	2	No matching electrical mode
25G-R	NRZ	8	1	1	N	100GAUI-1-S C2M	8	1	No matching electrical mode

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## **BERT Result Summary**

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#### **BERT Statistics**

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## FEC Result Summary - 128

Frame Loss Ratio	1,1,2	1,1,4
Pre-FEC Standard	2.400000e-04	2.400000e-04
Pre-FEC Pass/Fail Verdict	PASS	PASS
Post-FEC Standard	9.200000e-13	9.200000e-13
Post-FEC Pass/Fail Verdict	PASS	PASS

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#### PCS Lane Statistics - 128

Port - 1,1,2

Physical	PCS Lane	PCS Lane	Relative	PCS Lane	FEC Symbol	FEC Correct	FEC Symbol	FEC Correct
	Marker Lock	Marker Map	Lane Skew	Marker	Error Count	Bit Count	Error	Bit Rate
			(ns)	Error Count				
Totals	Lock	all	6.023	0.0	0.0	2898.0	0.000000e+00	3.190828e-09
0	Lock	0	3.011	0	0	1	0.000000e+00	1.117577e-12
1	Lock	16	3.011	0	0	34	0.000000e+00	3.799762e-11
2	Lock	1	0.0	0	0	0	0.000000e+00	0.000000e+00
3	Lock	17	0.0	0	0	0	0.000000e+00	0.000000e+00
4	Lock	18	0.0	0	0	39	0.000000e+00	4.358550e-11
5	Lock	2	0.0	0	0	25	0.000000e+00	2.793943e-11
6	Lock	19	0.0	0	0	1	0.000000e+00	1.117577e-12
7	Lock	3	0.0	0	0	0	0.000000e+00	0.000000e+00
8	Lock	20	0.0	0	0	45	0.000000e+00	5.029097e-11
9	Lock	4	0.0	0	0	33	0.000000e+00	3.688004e-11
10	Lock	21	0.0	0	0	0	0.000000e+00	0.000000e+00
11	Lock	5	0.0	0	0	0	0.000000e+00	0.000000e+00
12	Lock	6	0.0	0	0	89	0.000000e+00	9.789669e-11
13	Lock	22	0.0	0	0	52	0.000000e+00	5.719807e-11
14	Lock	7	0.0	0	0	23	0.000000e+00	2.529915e-11
15	Lock	23	0.0	0	0	13	0.000000e+00	1.429952e-11
16	Lock	24	6.023	0	0	58	0.000000e+00	6.379784e-11
17	Lock	8	6.023	0	0	24	0.000000e+00	2.639911e-11
18	Lock	25	6.023	0	0	0	0.000000e+00	0.000000e+00
19	Lock	9	6.023	0	0	1	0.000000e+00	1.099963e-12
20	Lock	10	6.023	0	0	762	0.000000e+00	8.381717e-10
21	Lock	26	6.023	0	0	729	0.000000e+00	8.018729e-10
22	Lock	11	6.023	0	0	1	0.000000e+00	1.099963e-12
23	Lock	27	6.023	0	0	3	0.000000e+00	3.299889e-12
24	Lock	28	3.011	0	0	447	0.000000e+00	4.916834e-10
25	Lock	12	3.011	0	0	508	0.000000e+00	5.587811e-10
26	Lock	29	6.023	0	0	0	0.000000e+00	0.000000e+00
27	Lock	13	6.023	0	0	0	0.000000e+00	0.000000e+00
28	Lock	30	3.011	0	0	4	0.000000e+00	4.399851e-12
29	Lock	14	3.011	0	0	6	0.000000e+00	6.599777e-12
30	Lock	31	6.023	0	0	0	0.000000e+00	0.000000e+00
31	Lock	15	6.023	0	0	0	0.000000e+00	0.000000e+00

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Port - 1,1,4

Physical	PCS Lane	PCS Lane	Relative	PCS Lane	FEC Symbol	FEC Correct	FEC Symbol	FEC Correct
	Marker Lock	Marker Map	Lane Skew	Marker	Error Count	Bit Count	Error	Bit Rate
			(ns)	Error Count				
Totals	Lock	all	12.047	0.0	0.0	95.0	0.000000e+00	1.028487e-10
0	Lock	0	3.011	0	0	5	0.000000e+00	5.419562e-12
1	Lock	16	3.011	0	0	4	0.000000e+00	4.335650e-12
2	Lock	1	3.011	0	0	0	0.000000e+00	0.000000e+00
3	Lock	17	3.011	0	0	0	0.000000e+00	0.000000e+00
4	Lock	18	0.0	0	0	2	0.000000e+00	2.167825e-12
5	Lock	2	0.0	0	0	1	0.000000e+00	1.083912e-12
6	Lock	19	3.011	0	0	0	0.000000e+00	0.000000e+00
7	Lock	3	3.011	0	0	0	0.000000e+00	0.000000e+00
8	Lock	4	3.011	0	0	4	0.000000e+00	4.335650e-12
9	Lock	20	3.011	0	0	22	0.000000e+00	2.384607e-11
10	Lock	5	6.023	0	0	0	0.000000e+00	0.000000e+00
11	Lock	21	3.011	0	0	0	0.000000e+00	0.000000e+00
12	Lock	6	3.011	0	0	4	0.000000e+00	4.335650e-12
13	Lock	22	3.011	0	0	10	0.000000e+00	1.083912e-11
14	Lock	7	6.023	0	0	0	0.000000e+00	0.000000e+00
15	Lock	23	3.011	0	0	0	0.000000e+00	0.000000e+00
16	Lock	24	6.023	0	0	1	0.000000e+00	1.083912e-12
17	Lock	8	3.011	0	0	5	0.000000e+00	5.419562e-12
18	Lock	25	9.035	0	0	0	0.000000e+00	0.000000e+00
19	Lock	9	6.023	0	0	0	0.000000e+00	0.000000e+00
20	Lock	26	9.035	0	0	5	0.000000e+00	5.419562e-12
21	Lock	10	6.023	0	0	24	0.000000e+00	2.601390e-11
22	Lock	27	9.035	0	0	0	0.000000e+00	0.000000e+00
23	Lock	11	6.023	0	0	1	0.000000e+00	1.068534e-12
24	Lock	12	12.047	0	0	1	0.000000e+00	1.068534e-12
25	Lock	28	12.047	0	0	0	0.000000e+00	0.000000e+00
26	Lock	13	9.035	0	0	0	0.000000e+00	0.000000e+00
27	Lock	29	9.035	0	0	0	0.000000e+00	0.000000e+00
28	Lock	14	6.023	0	0	4	0.000000e+00	4.274136e-12
29	Lock	30	9.035	0	0	2	0.000000e+00	2.137068e-12
30	Lock	15	9.035	0	0	0	0.000000e+00	0.000000e+00
31	Lock	31	9.035	0	0	0	0.000000e+00	0.000000e+00

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## **L2 Traffic Test Summary**

Frame Size	Tx Count	Rx Count	Loss Count	Loss %
128	41157297814	41157297814	0	0.0

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### Port Statistics - 128

Port Statistics	Port 1,1,2	Port 1,1,4
link	link up	link up
lineSpeed	800000	800000
transmitDuration	00:00:30.452014666	00:00:30.460786265
framesSent	20575685529	20581612285
framesReceived	20575685529	20581612285
fragments	0	0
undersize	0	0
oversizeAndCrcErrors	0	0
vlanTaggedFramesRx	0	0
flowControlFrames	0	0
bitsSent	21069501981696	21075570979840
bitsReceived	21075570979840	21069501981696
pcsSyncErrorsReceived	0	0
pcsRemoteFaultsReceived	0	0
pcsLocalFaultsReceived	0	0
fecTotalBitErrors	2822	93
fecMaxSymbolErrors	1	1
fecCorrectedCodewords	2822	93
fecTotalCodewords	5221444584	5220716304
fecFrameLossRatio	0.000000e+00	0.000000e+00
preFecBer	9.934990e-11	3.274568e-12
fecMaxSymbolErrorsBin0	5221441762	5220716211
fecMaxSymbolErrorsBin1	2822	93
fecMaxSymbolErrorsBin2	0	0
fecMaxSymbolErrorsBin3	0	0
fecMaxSymbolErrorsBin4	0	0
fecMaxSymbolErrorsBin5	0	0
fecMaxSymbolErrorsBin6	0	0
fecMaxSymbolErrorsBin7	0	0
fecMaxSymbolErrorsBin8	0	0
fecMaxSymbolErrorsBin9	0	0
fecMaxSymbolErrorsBin10	0	0
fecMaxSymbolErrorsBin11	0	0
•	0	0
fecMaxSymbolErrorsBin12	0	0
fecMaxSymbolErrorsBin13 fecMaxSymbolErrorsBin14	0	0
fecMaxSymbolErrorsBin15	0	0
fecUncorrectableCodewords	0	0
	0	0
fecTranscodingUncorrectableErrors I1BitsSent		24368628945440
	24361611666336	
I1BitsReceived	24368628945440	24361611666336
transceiverTemp	52	55 PAM4 1066
encoding	PAM4 106G	PAM4 106G
fecStatus	KP4-FEC	KP4-FEC
transceiverVoltage	3.226599999999999	3.245000000000001
minLatency	2254846	85897088201
averageLatency	2254853	4289453
maxLatency	2254858	85897088213
Loss_Frames	0	0
Loss%	0.0	0.0