



## Keysight Test Report

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**PASS**

|                |                     |
|----------------|---------------------|
| Report Header: | Keysight Inc.       |
| Report Date:   | 2025/06/04 00:48:40 |
| Type:          | Framed              |

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**SUMMARY**

|                   |  |
|-------------------|--|
| IxOS Version      | 10.00.1000.17                                  |
| Test Start Time   | 2025/06/04 00:45:41                            |
| Test End Time     | 2025/06/04 00:48:40                            |
| Test Duration     | 00:00:30                                       |
| Pass/Fail Verdict | PASS   |
| Module Type       | 1,1,122 - 100GBASE-DR<br>1,1,124 - 100GBASE-DR |
| Module Version    | 1,1,122 - CMIS 5.0<br>1,1,124 - CMIS 5.0       |
| Serial Number     | 1,1,122 - DN4D180001<br>1,1,124 - UNA8490003   |

## Transceiver DOM (Digital Optical Monitoring) - 128

|                      |      |                 |        |                    |       |                  |            |                   |        |            |
|----------------------|------|-----------------|--------|--------------------|-------|------------------|------------|-------------------|--------|------------|
| 1,1,122              |      |                 |        |                    |       |                  |            |                   |        |            |
| Manufacturer         |      | Eoptolink       |        | Model              |       | EOLD-138HG-5H-SM |            | Mfg Revision      |        | 01         |
| Type                 |      | 100GBASE-DR     |        | SN                 |       | DN4D180001       |            | Firmware Revision |        | 3.0        |
| MSA                  |      | CMIS 5.0        |        | Date Code(YMMDDLL) |       | 220426           |            | Hardware Revision |        | 1.0        |
| Media Tech           |      | 1310 nm DFB     |        | Media Connector    |       | MPO 1x16         |            |                   |        |            |
| Cable Lenth          |      | 0.0 m           |        | Identifier Type    |       | QSFP-DD          |            |                   |        |            |
| Reported Power Class |      | 8               |        | Reported Max Power |       | 18.000000 W      |            |                   |        |            |
|                      |      |                 |        |                    |       |                  |            |                   |        |            |
| Modlue               |      | High Alarm      |        | High Warn          |       | Low Warn         |            | Low Alarm         |        |            |
| Temperature          |      | 78 C            |        | 73 C               |       | -3 C             |            | -8 C              |        |            |
| Supply Voltage       |      | 3.630 V         |        | 3.465 V            |       | 3.135 V          |            | 2.970 V           |        |            |
|                      |      |                 |        |                    |       |                  |            |                   |        |            |
| Lane Limits          |      | High Alarm      |        | High Warn          |       | Low Warn         |            | Low Alarm         |        |            |
| Tx Optical Power     |      | 6.00 dBm        |        | 5.00 dBm           |       | -3.90 dBm        |            | -4.90 dBm         |        |            |
| Rx Optical Power     |      | 6.50 dBm        |        | 5.50 dBm           |       | -7.40 dBm        |            | -8.40 dBm         |        |            |
| Tx Bias Current      |      | 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     | 3.14 dBm         | 219.480 mA | 0.87 dBm          | No     | No         |
| 2                    | 2.1  | Activated (4)   | No     | No                 | 2     | 2.69 dBm         | 219.480 mA | 2.24 dBm          | No     | No         |
| 3                    | 2.1  | Activated (4)   | No     | No                 | 3     | 1.38 dBm         | 202.816 mA | 1.67 dBm          | No     | No         |
| 4                    | 2.1  | Activated (4)   | No     | No                 | 4     | 1.62 dBm         | 202.328 mA | -3.54 dBm         | No     | No         |
| 5                    | 2.1  | Activated (4)   | No     | No                 | 5     | 2.99 dBm         | 197.712 mA | 0.22 dBm          | No     | No         |
| 6                    | 2.1  | Activated (4)   | No     | No                 | 6     | 2.67 dBm         | 197.712 mA | 0.02 dBm          | No     | No         |
| 7                    | 2.1  | Activated (4)   | No     | No                 | 7     | 2.94 dBm         | 198.320 mA | 2.11 dBm          | No     | No         |
| 8                    | 2.1  | Activated (4)   | No     | No                 | 8     | 2.62 dBm         | 200.264 mA | -1.00 dBm         | No     | No         |

| 1,1,124              |      |                 |        |                     |       |                  |            |                   |        |            |
|----------------------|------|-----------------|--------|---------------------|-------|------------------|------------|-------------------|--------|------------|
| Manufacturer         |      | Eoptolink       |        | Model               |       | EOL0-138HG-5H-SM |            | Mfg Revision      |        | 01         |
| Type                 |      | 100GBASE-DR     |        | SN                  |       | UNA8490003       |            | Firmware Revision |        | 3.0        |
| MSA                  |      | CMIS 5.0        |        | Date Code(YYMMDDLL) |       | 221109           |            | Hardware Revision |        | 1.0        |
| Media Tech           |      | 1310 nm DFB     |        | Media Connector     |       | MPO 1x16         |            |                   |        |            |
| Cable Lenth          |      | 0.0 m           |        | Identifier Type     |       | OSFP             |            |                   |        |            |
| Reported Power Class |      | 8               |        | Reported Max Power  |       | 18.000000 W      |            |                   |        |            |
|                      |      |                 |        |                     |       |                  |            |                   |        |            |
| Module               |      | High Alarm      |        | High Warn           |       | Low Warn         |            | Low Alarm         |        |            |
| Temperature          |      | 78 C            |        | 73 C                |       | -3 C             |            | -8 C              |        |            |
| Supply Voltage       |      | 3.630 V         |        | 3.465 V             |       | 3.135 V          |            | 2.970 V           |        |            |
|                      |      |                 |        |                     |       |                  |            |                   |        |            |
| Lane Limits          |      | High Alarm      |        | High Warn           |       | Low Warn         |            | Low Alarm         |        |            |
| Tx Optical Power     |      | 6.00 dBm        |        | 5.00 dBm            |       | -3.90 dBm        |            | -4.90 dBm         |        |            |
| Rx Optical Power     |      | 6.50 dBm        |        | 5.50 dBm            |       | -7.40 dBm        |            | -8.40 dBm         |        |            |
| Tx Bias Current      |      | 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                    | 4.1  | Activated (4)   | No     | No                  | 1     | 2.46 dBm         | 228.552 mA | 3.91 dBm          | No     | No         |
| 2                    | 4.1  | Activated (4)   | No     | No                  | 2     | 2.21 dBm         | 228.920 mA | 3.10 dBm          | No     | No         |
| 3                    | 4.1  | Activated (4)   | No     | No                  | 3     | 2.38 dBm         | 203.408 mA | 2.01 dBm          | No     | No         |
| 4                    | 4.1  | Activated (4)   | No     | No                  | 4     | 2.24 dBm         | 203.064 mA | 2.35 dBm          | No     | No         |
| 5                    | 4.1  | Activated (4)   | No     | No                  | 5     | 2.10 dBm         | 173.304 mA | 3.23 dBm          | No     | No         |
| 6                    | 4.1  | Activated (4)   | No     | No                  | 6     | 2.04 dBm         | 174.000 mA | 3.22 dBm          | No     | No         |
| 7                    | 4.1  | Activated (4)   | No     | No                  | 7     | 2.13 dBm         | 171.600 mA | 3.16 dBm          | No     | No         |
| 8                    | 4.1  | Activated (4)   | No     | No                  | 8     | 2.00 dBm         | 171.480 mA | 2.10 dBm          | No     | No         |

## CMIS Applicatio Select

1,1,122

Current AppSel

1

Available Applications

| App | 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      | M    | 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      | M    | 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      | M    | 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  |

1,1,124

Current AppSel

1

Available Applications

| App | 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      | M    | 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      | M    | 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      | M    | 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                  | 1,1,122      | 1,1,124      |
| Pre-FEC Standard                  | 2.400000e-04 | 2.400000e-04 |
| <b>Pre-FEC Pass/Fail Verdict</b>  | PASS         | PASS         |
| Post-FEC Standard                 | 9.200000e-13 | 9.200000e-13 |
| <b>Post-FEC Pass/Fail Verdict</b> | PASS         | PASS         |

## PCS Lane Statistics - 128

Port - 1,1,122

| Physical Lane | PCS Lane Marker Lock | PCS Lane Marker Map | Relative Lane Skew (ns) | PCS Lane Marker Error Count | FEC Symbol Error Count | FEC Correct Bit Count | FEC Symbol Error | FEC Correct Bit Rate |
|---------------|----------------------|---------------------|-------------------------|-----------------------------|------------------------|-----------------------|------------------|----------------------|
| Totals        | Lock                 | all                 | 6.023                   | 0.0                         | 0.0                    | 63.0                  | 0.000000e+00     | 6.984011e-11         |
| 0             | Lock                 | 0                   | 0.0                     | 0                           | 0                      | 0                     | 0.000000e+00     | 0.000000e+00         |
| 1             | Lock                 | 1                   | 0.0                     | 0                           | 0                      | 0                     | 0.000000e+00     | 0.000000e+00         |
| 2             | Lock                 | 2                   | 0.0                     | 0                           | 0                      | 0                     | 0.000000e+00     | 0.000000e+00         |
| 3             | Lock                 | 3                   | 0.0                     | 0                           | 0                      | 4                     | 0.000000e+00     | 4.493604e-12         |
| 4             | Lock                 | 4                   | 0.0                     | 0                           | 0                      | 0                     | 0.000000e+00     | 0.000000e+00         |
| 5             | Lock                 | 5                   | 0.0                     | 0                           | 0                      | 0                     | 0.000000e+00     | 0.000000e+00         |
| 6             | Lock                 | 6                   | 0.0                     | 0                           | 0                      | 1                     | 0.000000e+00     | 1.123401e-12         |
| 7             | Lock                 | 7                   | 0.0                     | 0                           | 0                      | 0                     | 0.000000e+00     | 0.000000e+00         |
| 8             | Lock                 | 8                   | 6.023                   | 0                           | 0                      | 2                     | 0.000000e+00     | 2.246802e-12         |
| 9             | Lock                 | 9                   | 6.023                   | 0                           | 0                      | 0                     | 0.000000e+00     | 0.000000e+00         |
| 10            | Lock                 | 10                  | 6.023                   | 0                           | 0                      | 29                    | 0.000000e+00     | 3.209487e-11         |
| 11            | Lock                 | 11                  | 6.023                   | 0                           | 0                      | 2                     | 0.000000e+00     | 2.213439e-12         |
| 12            | Lock                 | 12                  | 6.023                   | 0                           | 0                      | 8                     | 0.000000e+00     | 8.853758e-12         |
| 13            | Lock                 | 13                  | 6.023                   | 0                           | 0                      | 5                     | 0.000000e+00     | 5.533598e-12         |
| 14            | Lock                 | 14                  | 6.023                   | 0                           | 0                      | 12                    | 0.000000e+00     | 1.328064e-11         |
| 15            | Lock                 | 15                  | 6.023                   | 0                           | 0                      | 0                     | 0.000000e+00     | 0.000000e+00         |

## Port - 1,1,124

| Physical Lane | PCS Lane Marker Lock | PCS Lane Marker Map | Relative Lane Skew (ns) | PCS Lane Marker Error Count | FEC Symbol Error Count | FEC Correct Bit Count | FEC Symbol Error | FEC Correct Bit Rate |
|---------------|----------------------|---------------------|-------------------------|-----------------------------|------------------------|-----------------------|------------------|----------------------|
| Totals        | Lock                 | all                 | 3.011                   | 0.0                         | 0.0                    | 984.0                 | 0.000000e+00     | 1.087564e-09         |
| 0             | Lock                 | 0                   | 0.0                     | 0                           | 0                      | 0                     | 0.000000e+00     | 0.000000e+00         |
| 1             | Lock                 | 1                   | 0.0                     | 0                           | 0                      | 0                     | 0.000000e+00     | 0.000000e+00         |
| 2             | Lock                 | 2                   | 0.0                     | 0                           | 0                      | 10                    | 0.000000e+00     | 1.106720e-11         |
| 3             | Lock                 | 3                   | 0.0                     | 0                           | 0                      | 2                     | 0.000000e+00     | 2.213439e-12         |
| 4             | Lock                 | 4                   | 0.0                     | 0                           | 0                      | 8                     | 0.000000e+00     | 8.853758e-12         |
| 5             | Lock                 | 5                   | 0.0                     | 0                           | 0                      | 1                     | 0.000000e+00     | 1.106720e-12         |
| 6             | Lock                 | 6                   | 0.0                     | 0                           | 0                      | 2                     | 0.000000e+00     | 2.213439e-12         |
| 7             | Lock                 | 7                   | 0.0                     | 0                           | 0                      | 1                     | 0.000000e+00     | 1.106720e-12         |
| 8             | Lock                 | 8                   | 3.011                   | 0                           | 0                      | 323                   | 0.000000e+00     | 3.574705e-10         |
| 9             | Lock                 | 9                   | 3.011                   | 0                           | 0                      | 322                   | 0.000000e+00     | 3.563637e-10         |
| 10            | Lock                 | 10                  | 3.011                   | 0                           | 0                      | 195                   | 0.000000e+00     | 2.158103e-10         |
| 11            | Lock                 | 11                  | 3.011                   | 0                           | 0                      | 13                    | 0.000000e+00     | 1.438736e-11         |
| 12            | Lock                 | 12                  | 3.011                   | 0                           | 0                      | 17                    | 0.000000e+00     | 1.881423e-11         |
| 13            | Lock                 | 13                  | 3.011                   | 0                           | 0                      | 17                    | 0.000000e+00     | 1.854071e-11         |
| 14            | Lock                 | 14                  | 3.011                   | 0                           | 0                      | 59                    | 0.000000e+00     | 6.434718e-11         |
| 15            | Lock                 | 15                  | 3.011                   | 0                           | 0                      | 14                    | 0.000000e+00     | 1.526882e-11         |

L2 Traffic Test Summary

| Frame Size | Tx Count    | Rx Count    | Loss Count | Loss % |
|------------|-------------|-------------|------------|--------|
| 128        | 20356322827 | 20356322827 | 0          | 0.0    |

## Port Statistics - 128

| Port Statistics                   | Port 1,1,122       | Port 1,1,124       |
|-----------------------------------|--------------------|--------------------|
| link                              | link up            | link up            |
| lineSpeed                         | 400000             | 400000             |
| transmitDuration                  | 00:00:30.106123113 | 00:00:30.148592473 |
| framesSent                        | 10170987535        | 10185335292        |
| framesReceived                    | 10170987535        | 10185335292        |
| fragments                         | 0                  | 0                  |
| undersize                         | 0                  | 0                  |
| oversizeAndCrcErrors              | 0                  | 0                  |
| vlanTaggedFramesRx                | 0                  | 0                  |
| flowControlFrames                 | 0                  | 0                  |
| bitsSent                          | 10415091235840     | 10429783339008     |
| bitsReceived                      | 10429783339008     | 10415091235840     |
| pcsSyncErrorsReceived             | 0                  | 0                  |
| pcsRemoteFaultsReceived           | 0                  | 0                  |
| pcsLocalFaultsReceived            | 0                  | 0                  |
| fecTotalBitErrors                 | 61                 | 950                |
| fecMaxSymbolErrors                | 1                  | 1                  |
| fecCorrectedCodewords             | 61                 | 950                |
| fecTotalCodewords                 | 2584412120         | 2584093936         |
| fecFrameLossRatio                 | 0.000000e+00       | 0.000000e+00       |
| preFecBer                         | 4.338795e-12       | 6.757972e-11       |
| fecMaxSymbolErrorsBin0            | 2584412059         | 2584092986         |
| fecMaxSymbolErrorsBin1            | 61                 | 950                |
| 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                  |
| fecMaxSymbolErrorsBin12           | 0                  | 0                  |
| fecMaxSymbolErrorsBin13           | 0                  | 0                  |
| fecMaxSymbolErrorsBin14           | 0                  | 0                  |
| fecMaxSymbolErrorsBin15           | 0                  | 0                  |
| fecUncorrectableCodewords         | 0                  | 0                  |
| fecTranscodingUncorrectableErrors | 0                  | 0                  |
| l1BitsSent                        | 12042449241440     | 12059436985728     |
| l1BitsReceived                    | 12059436985728     | 12042449241440     |
| transceiverTemp                   | 49                 | 52                 |
| encoding                          | Unknown            | Unknown            |
| fecStatus                         | KP4-FEC            | KP4-FEC            |
| transceiverVoltage                | 3.2364000000000002 | 3.2503000000000002 |
| minLatency                        | 2270672            | 85897075506        |
| averageLatency                    | 2270674            | 179975802          |
| maxLatency                        | 2270686            | 85897075521        |
| loss_Frames                       | 0                  | 0                  |
| loss%                             | 0.0                | 0.0                |