|  |  |
| --- | --- |
|  |  |

Keysight Test Report

**PASS**

|  |  |
| --- | --- |
| Report Header: | Keysight Inc. |
| Report Date: | 2025/06/02 22:37:22 |
| Type: | Framed |

# SUMMARY

|  |  |
| --- | --- |
| IxOS Version | 10.00.1000.17 |
| Test Start Time | 2025/06/02 22:35:14 |
| Test End Time | 2025/06/02 22:37:22 |
| Test Duration | 00:01:00 |
| Pass/Fail Verdict | PASS |
| Module Type | 1,1,3 - PassiveCopper 1,1,4 - PassiveCopper |
| Module Version | 1,1,3 - CMIS 5.0 1,1,4 - CMIS 5.0 |
| Serial Number | 1,1,3 - 57ADUAD233140Z 1,1,4 - 57ADUAD233140Z |

# Transceiver DOM (Digital Optical Monitoring) - 128

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1,1,3** | | | | | | | | | | |
| **Manufacturer** | | TE Connectivity | | **Model** | | 2369405-2 | | **Mfg Revision** | | 11 |
| **Type** | | PassiveCopper | | **SN** | | 57ADUAD233140Z | | **Firmware Revision** | |  |
| **MSA** | | CMIS 5.0 | | **Date Code(YYMMDDLL)** | | 230904 | | **Hardware Revision** | |  |
| **Media Tech** | | Copper cable unequalized | | **Media Connector** | | No separable connector | |  | |  |
| **Cable Lenth** | | 1.0 m | | **Identifier Type** | | OSFP | |  | |  |
| **Reported Power Class** | | 1 | | **Reported Max Power** | | 0.250000 W | |  | |  |
|  | |  | |  | |  | |  | |  |
| **Modlue** | | **High Alarm** | | **High Warn** | | **Low Warn** | | **Low Alarm** | |  |
| **Temperature** | | -0.001 C | | -0.001 C | | -0.001 C | | -0.001 C | |  |
| **Supply Voltage** | | -0.000 V | | -0.000 V | | -0.000 V | | -0.000 V | |  |
|  | |  | |  | |  | |  | |  |
| **Lane Limits** | | **High Alarm** | | **High Warn** | | **Low Warn** | | **Low Alarm** | |  |
| **Tx Optical Power** | | -40.00 dBm | | -40.00 dBm | | -40.00 dBm | | -40.00 dBm | |  |
| **Rx Optical Power** | | -40.00 dBm | | -40.00 dBm | | -40.00 dBm | | -40.00 dBm | |  |
| **Tx Bias Current** | | -40.00 dBm | | -40.00 dBm | | -40.00 dBm | | -40.00 dBm | |  |
|  | |  | |  | |  | |  | |  |
| **Host Lane** | **Port** | **Data Path State** | **Tx LOS** | **Tx CDR LOL** | **Media Lane** | **Tx Optical Power** | **Tx Bias Cureent** | **Rx Optical Power** | **Rx LOS** | **Rx CDR LOL** |
| 1 | 3.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 2 | 3.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 3 | 3.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 4 | 3.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 5 | 3.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 6 | 3.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 7 | 3.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 8 | 3.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1,1,4** | | | | | | | | | | |
| **Manufacturer** | | TE Connectivity | | **Model** | | 2369405-2 | | **Mfg Revision** | | 11 |
| **Type** | | PassiveCopper | | **SN** | | 57ADUAD233140Z | | **Firmware Revision** | |  |
| **MSA** | | CMIS 5.0 | | **Date Code(YYMMDDLL)** | | 230904 | | **Hardware Revision** | |  |
| **Media Tech** | | Copper cable unequalized | | **Media Connector** | | No separable connector | |  | |  |
| **Cable Lenth** | | 1.0 m | | **Identifier Type** | | OSFP | |  | |  |
| **Reported Power Class** | | 1 | | **Reported Max Power** | | 0.250000 W | |  | |  |
|  | |  | |  | |  | |  | |  |
| **Modlue** | | **High Alarm** | | **High Warn** | | **Low Warn** | | **Low Alarm** | |  |
| **Temperature** | | -0.001 C | | -0.001 C | | -0.001 C | | -0.001 C | |  |
| **Supply Voltage** | | -0.000 V | | -0.000 V | | -0.000 V | | -0.000 V | |  |
|  | |  | |  | |  | |  | |  |
| **Lane Limits** | | **High Alarm** | | **High Warn** | | **Low Warn** | | **Low Alarm** | |  |
| **Tx Optical Power** | | -40.00 dBm | | -40.00 dBm | | -40.00 dBm | | -40.00 dBm | |  |
| **Rx Optical Power** | | -40.00 dBm | | -40.00 dBm | | -40.00 dBm | | -40.00 dBm | |  |
| **Tx Bias Current** | | -40.00 dBm | | -40.00 dBm | | -40.00 dBm | | -40.00 dBm | |  |
|  | |  | |  | |  | |  | |  |
| **Host Lane** | **Port** | **Data Path State** | **Tx LOS** | **Tx CDR LOL** | **Media Lane** | **Tx Optical Power** | **Tx Bias Cureent** | **Rx Optical Power** | **Rx LOS** | **Rx CDR LOL** |
| 1 | 4.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 2 | 4.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 3 | 4.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 4 | 4.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 5 | 4.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 6 | 4.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 7 | 4.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |
| 8 | 4.1 | 0 | No | No | 0 | -40.00 dBm | 0.000 mA | -40.00 dBm | No | No |

# CMIS Applicatio Select

|  |  |
| --- | --- |
| 1,1,3 |  |
| Current AppSel | 0 |

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 | 800GBASE-CR8 | 106 | PAM4 | 1 | 8 | 73 | PassiveCopper |  | 0 | 8 | 1 |
| 2 | 400GBASE-CR4 | 106 | PAM4 | 2 | 4 | 72 | PassiveCopper |  | 0 | 4 | 1 |
| 3 | 200GBASE-CR2 | 106 | PAM4 | 4 | 2 | 71 | PassiveCopper |  | 0 | 2 | 1 |
| 4 | 100GBASE-CR1 | 106 | PAM4 | 8 | 1 | 70 | PassiveCopper |  | 0 | 1 | 1 |
| 5 | 400GBASE-CR8 | 53 | PAM4 | 1 | 8 | 29 | PassiveCopper |  | 0 | 8 | 1 |
| 6 | 200GBASE-CR4 | 53 | PAM4 | 2 | 4 | 28 | PassiveCopper |  | 0 | 4 | 1 |
| 7 | 100GBASE-CR2 | 53 | PAM4 | 4 | 2 | 27 | PassiveCopper |  | 0 | 2 | 1 |
| 8 | 50GBASE-CR | 53 | PAM4 | 8 | 1 | 24 | PassiveCopper |  | 0 | 1 | 1 |

Preview of Auto selected applications

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Host Port Mode** | **Mod** | **Lane Groups** | **Lanes** | **AppSel** | **Link** | **Host Electrical** | **Lane Groups** | **Lanes** | **Note** |

|  |  |
| --- | --- |
| 1,1,4 |  |
| Current AppSel | 0 |

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 | 800GBASE-CR8 | 106 | PAM4 | 1 | 8 | 73 | PassiveCopper |  | 0 | 8 | 1 |
| 2 | 400GBASE-CR4 | 106 | PAM4 | 2 | 4 | 72 | PassiveCopper |  | 0 | 4 | 1 |
| 3 | 200GBASE-CR2 | 106 | PAM4 | 4 | 2 | 71 | PassiveCopper |  | 0 | 2 | 1 |
| 4 | 100GBASE-CR1 | 106 | PAM4 | 8 | 1 | 70 | PassiveCopper |  | 0 | 1 | 1 |
| 5 | 400GBASE-CR8 | 53 | PAM4 | 1 | 8 | 29 | PassiveCopper |  | 0 | 8 | 1 |
| 6 | 200GBASE-CR4 | 53 | PAM4 | 2 | 4 | 28 | PassiveCopper |  | 0 | 4 | 1 |
| 7 | 100GBASE-CR2 | 53 | PAM4 | 4 | 2 | 27 | PassiveCopper |  | 0 | 2 | 1 |
| 8 | 50GBASE-CR | 53 | PAM4 | 8 | 1 | 24 | PassiveCopper |  | 0 | 1 | 1 |

Preview of Auto selected applications

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Host Port Mode** | **Mod** | **Lane Groups** | **Lanes** | **AppSel** | **Link** | **Host Electrical** | **Lane Groups** | **Lanes** | **Note** |

# BERT Result Summary

# BERT Statistics

# FEC Result Summary - 128

|  |  |  |
| --- | --- | --- |
| **Frame Loss Ratio** | **1,1,3** | **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** |

# PCS Lane Statistics - 128

Port - 1,1,3

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 | 9.035 | 0.0 | 0.0 | 1260.0 | 0.000000e+00 | 7.348584e-10 |
| **0** | Lock | 0 | 0.0 | 0 | 0 | 2 | 0.000000e+00 | 1.177256e-12 |
| **1** | Lock | 16 | 3.011 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **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 | 6.023 | 0 | 0 | 28 | 0.000000e+00 | 1.633993e-11 |
| **5** | Lock | 2 | 3.011 | 0 | 0 | 18 | 0.000000e+00 | 1.050424e-11 |
| **6** | Lock | 19 | 3.011 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **7** | Lock | 3 | 3.011 | 0 | 0 | 1 | 0.000000e+00 | 5.835690e-13 |
| **8** | Lock | 4 | 6.023 | 0 | 0 | 38 | 0.000000e+00 | 2.217562e-11 |
| **9** | Lock | 20 | 9.035 | 0 | 0 | 6 | 0.000000e+00 | 3.501414e-12 |
| **10** | Lock | 5 | 3.011 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **11** | Lock | 21 | 6.023 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **12** | Lock | 6 | 0.0 | 0 | 0 | 5 | 0.000000e+00 | 2.917845e-12 |
| **13** | Lock | 22 | 3.011 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **14** | Lock | 7 | 0.0 | 0 | 0 | 1 | 0.000000e+00 | 5.835690e-13 |
| **15** | Lock | 23 | 3.011 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **16** | Lock | 8 | 3.011 | 0 | 0 | 71 | 0.000000e+00 | 4.143340e-11 |
| **17** | Lock | 24 | 9.035 | 0 | 0 | 20 | 0.000000e+00 | 1.167138e-11 |
| **18** | Lock | 9 | 0.0 | 0 | 0 | 10 | 0.000000e+00 | 5.835690e-12 |
| **19** | Lock | 25 | 3.011 | 0 | 0 | 8 | 0.000000e+00 | 4.668552e-12 |
| **20** | Lock | 10 | 0.0 | 0 | 0 | 552 | 0.000000e+00 | 3.221301e-10 |
| **21** | Lock | 26 | 6.023 | 0 | 0 | 283 | 0.000000e+00 | 1.651500e-10 |
| **22** | Lock | 11 | 3.011 | 0 | 0 | 48 | 0.000000e+00 | 2.801131e-11 |
| **23** | Lock | 27 | 6.023 | 0 | 0 | 48 | 0.000000e+00 | 2.801131e-11 |
| **24** | Lock | 12 | 3.011 | 0 | 0 | 19 | 0.000000e+00 | 1.108781e-11 |
| **25** | Lock | 28 | 6.023 | 0 | 0 | 14 | 0.000000e+00 | 8.108385e-12 |
| **26** | Lock | 13 | 3.011 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **27** | Lock | 29 | 9.035 | 0 | 0 | 1 | 0.000000e+00 | 5.791704e-13 |
| **28** | Lock | 30 | 6.023 | 0 | 0 | 23 | 0.000000e+00 | 1.332092e-11 |
| **29** | Lock | 14 | 3.011 | 0 | 0 | 62 | 0.000000e+00 | 3.590856e-11 |
| **30** | Lock | 31 | 3.011 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **31** | Lock | 15 | 0.0 | 0 | 0 | 2 | 0.000000e+00 | 1.158341e-12 |

Port - 1,1,4

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 | 12.047 | 0.0 | 0.0 | 221.0 | 0.000000e+00 | 1.271996e-10 |
| **0** | Lock | 16 | 9.035 | 0 | 0 | 13 | 0.000000e+00 | 7.529215e-12 |
| **1** | Lock | 0 | 6.023 | 0 | 0 | 11 | 0.000000e+00 | 6.370874e-12 |
| **2** | Lock | 17 | 6.023 | 0 | 0 | 3 | 0.000000e+00 | 1.737511e-12 |
| **3** | Lock | 1 | 0.0 | 0 | 0 | 6 | 0.000000e+00 | 3.475022e-12 |
| **4** | Lock | 2 | 3.011 | 0 | 0 | 3 | 0.000000e+00 | 1.737511e-12 |
| **5** | Lock | 18 | 3.011 | 0 | 0 | 4 | 0.000000e+00 | 2.316681e-12 |
| **6** | Lock | 3 | 6.023 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **7** | Lock | 19 | 6.023 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **8** | Lock | 20 | 9.035 | 0 | 0 | 2 | 0.000000e+00 | 1.158341e-12 |
| **9** | Lock | 4 | 6.023 | 0 | 0 | 1 | 0.000000e+00 | 5.791704e-13 |
| **10** | Lock | 21 | 6.023 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **11** | Lock | 5 | 3.011 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **12** | Lock | 6 | 6.023 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **13** | Lock | 22 | 12.047 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **14** | Lock | 7 | 3.011 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **15** | Lock | 23 | 6.023 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **16** | Lock | 8 | 6.023 | 0 | 0 | 55 | 0.000000e+00 | 3.160810e-11 |
| **17** | Lock | 24 | 9.035 | 0 | 0 | 16 | 0.000000e+00 | 9.195084e-12 |
| **18** | Lock | 9 | 3.011 | 0 | 0 | 8 | 0.000000e+00 | 4.597542e-12 |
| **19** | Lock | 25 | 6.023 | 0 | 0 | 2 | 0.000000e+00 | 1.149386e-12 |
| **20** | Lock | 26 | 9.035 | 0 | 0 | 34 | 0.000000e+00 | 1.953955e-11 |
| **21** | Lock | 10 | 6.023 | 0 | 0 | 46 | 0.000000e+00 | 2.643587e-11 |
| **22** | Lock | 27 | 6.023 | 0 | 0 | 4 | 0.000000e+00 | 2.298771e-12 |
| **23** | Lock | 11 | 3.011 | 0 | 0 | 2 | 0.000000e+00 | 1.149386e-12 |
| **24** | Lock | 12 | 0.0 | 0 | 0 | 10 | 0.000000e+00 | 5.746928e-12 |
| **25** | Lock | 28 | 0.0 | 0 | 0 | 1 | 0.000000e+00 | 5.746928e-13 |
| **26** | Lock | 13 | 3.011 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **27** | Lock | 29 | 6.023 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **28** | Lock | 14 | 3.011 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **29** | Lock | 30 | 6.023 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **30** | Lock | 15 | 3.011 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |
| **31** | Lock | 31 | 6.023 | 0 | 0 | 0 | 0.000000e+00 | 0.000000e+00 |

# L2 Traffic Test Summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Frame Size** | **Tx Count** | **Rx Count** | **Loss Count** | **Loss %** |
| **128** | 81604225002 | 81604225002 | 0 | 0.0 |

# Port Statistics - 128

|  |  |  |
| --- | --- | --- |
| **Port Statistics** | **Port 1,1,3** | **Port 1,1,4** |
| link | link up | link up |
| lineSpeed | 800000 | 800000 |
| transmitDuration | 00:01:00.385296745 | 00:01:00.388956427 |
| framesSent | 40800876122 | 40803348880 |
| framesReceived | 40800876122 | 40803348880 |
| fragments | 0 | 0 |
| undersize | 0 | 0 |
| oversizeAndCrcErrors | 0 | 0 |
| vlanTaggedFramesRx | 0 | 0 |
| flowControlFrames | 0 | 0 |
| bitsSent | 41780097148928 | 41782629253120 |
| bitsReceived | 41782629253120 | 41780097148928 |
| pcsSyncErrorsReceived | 0 | 0 |
| pcsRemoteFaultsReceived | 0 | 0 |
| pcsLocalFaultsReceived | 0 | 0 |
| fecTotalBitErrors | 1242 | 212 |
| fecMaxSymbolErrors | 1 | 1 |
| fecCorrectedCodewords | 1242 | 212 |
| fecTotalCodewords | 9884313328 | 9884008032 |
| fecFrameLossRatio | 0.000000e+00 | 0.000000e+00 |
| preFecBer | 2.309810e-11 | 3.942792e-12 |
| fecMaxSymbolErrorsBin0 | 9884312086 | 9884007820 |
| fecMaxSymbolErrorsBin1 | 1242 | 212 |
| 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 | 48308237328448 | 48311165073920 |
| l1BitsReceived | 48311165073920 | 48308237328448 |
| transceiverTemp | 0 | 0 |
| encoding | PAM4 106G | PAM4 106G |
| fecStatus | KP4-FEC | KP4-FEC |
| transceiverVoltage | 0 | 0 |
| minLatency | 2325843 | 85897016968 |
| averageLatency | 2325850 | 822872 |
| maxLatency | 2325855 | 85897016980 |
| Loss\_Frames | 0 | 0 |
| Loss% | 0.0 | 0.0 |