

# Quick Card

# T-BERD<sup>®</sup>/MTS-5800 Network Tester Ethernet AOC/DAC Cable Testing

This quick card describes how to test SFP+, SFP28, QSFP+, and QSFP28 Active Optical Cables (AOC) and Direct Attached Copper Cables (DAC) using the T-BERD/MTS 5800.

# **Equipment Requirements:**

- T-BERD/MTS-5800 equipped with the following:
  - BERT software release V27.0 or greater
  - Ethernet Options for the interface rate:
    - C510GELAN for 10GigE
    - C525GE for 25GigE
    - C540GE for 40GigE
    - C5100GE for 100GigE
  - Dual Port option for interface rate or Port 2 Monitor/Through option:
    - C5DUAL10G or C5THRU-LB for 10GigE
    - C5DUAL100G or C5THRU-LB for 25GigE
    - C5DUAL100G or C5THRU-LB for 40GigE
    - C5DUAL100G or C5THRU-LB for 100GigE

# **Connect Cable Under Test:**

 Insert each pluggable part of AOC/DAC under test into the Port 1 and Port 2 SFP+, SFP28, or QSFP28 slots on the top of the T-BERD/MTS 5800.

#### Launch Test:

- 1. Press the Power button to turn on the test set.
- Using the Select Test menu, Quick Launch menu, or Job Manager, launch an Ethernet 10GigE LAN, 25GigE, 40GigE or 100GigE, Port 1 Cable Test; for example: Ethernet ► 100GigE ► Cable Test ► P1 Cable Test.
- 3. Select Start a New Configuration (reset to

defaults) by tapping



Figure 1: Dual Port T-BERD-5800v2 (TB5822P)



Figure 2: T-BERD-5882



Figure 3: T-BERD 5800-100G

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- <u>-</u>	ble Test	Pe	ort 1: 10GigE LAN Lay	er 2 Traffic Term
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	Not Running			_
-	Configure			
P Edit	Previous Configuration	Go 🗪		
Loa	d Configuration from a Profile	60 <b></b>		
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+] Ex	it in the second se			

Figure 4: Cable Test Startup Screen



## Configure Test:

- Choose the Test Duration. Recommended is the suggested setting. Duration will be calculated based on the line rate and BER Threshold.
- 2. Select the **BER Threshold**. Lower values increase the **Recommended** test duration.
- 3. Tap Launch Other Port. Wait until Other Port Running is displayed.
- 4. Check the **Stop on Error** box if you don't want the test to continue in case of failure.
- 5. Tap to proceed to the **Report Information** screen.



#### **Report Information:**

- If you wish to save a report, you can enter the Customer Name, Technician ID, Test Location, Work Order, and Comments/Notes.
- 2. Tap **Next** to proceed to the **Run Test** screen.

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	Cable Test	Port 1: 10GigE LAN Layer 2 Traffic Term
-Q-	Report Info	Go To 🖬 🖬
_	Not Running	
	🍘 Test Report Information	
	Customer Name:	viavi solutions
	Technician ID:	7807
	Test Location:	montreal
	Work Order:	1234
	Comments/Notes:	-
	Report Logo	None selected
	€] Exit	

Figure 6: Report Information

#### Cable Test:

- 1. Tap **Test SFP Cable** or **Test QSFP28 Cable** to start the test.
- 2. At the end of the test, view the **Result Overview** tab and verify all tests pass.
- If you are testing an AOC, select the Optical Power (dBm) tab and verify that the Rx Level for all Lambdas are within +/- 1 dBm of each other.
- 4. Tap **Next** to proceed to the **Report** screen.

	Pass	Test Complete	
		Le li teg Pinc Attach Co	pper (DAC) between 2 SFP ports including this port.
Results Overvi	ew Optical Power	(dBm) DDM	
Optics/Slot T	/pe:	SFP	Test SFP Calde
Signal Presen	ce Test: Level Test:	Pass	
Excessive Ske	w Test:	Pass	
Current PPM BER Threshol	Offset: d Test:	0 Pass	
Current BER:		0.00E+00	
			Troubleshooter



# **Create Report:**

- Tap reate Report to generate a test report in .pdf format
- 2. After viewing report, tap **Exit** twice to exit the **Cable Test** workflow.

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Cable Tes Report				Port 1: 10Gige LAN L	ayer 2 Traffic Terr
	Pass	Test Complete		3010	
Format					
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File Name					
Cable_Test-2018-10	-31T10.26.42				Select
			view report after creation Include message log	Create Report	View Report

Figure 8: Create Report