

Electronic Signature Information

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Periodic Review

There are no signatures or routes related to this business object.

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There are no signatures or routes related to this business object.

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+ Indicates a task was reassigned from an original assignee

Scan Data Path Troubleshooting

Section 1: Tools and Test Equipment:

Part Number	Item
5332092-3	Fiber conversion head
5432019	Long fiber cable
2265406-2	Fiber connector
2293409-3	Cable fiber OPT

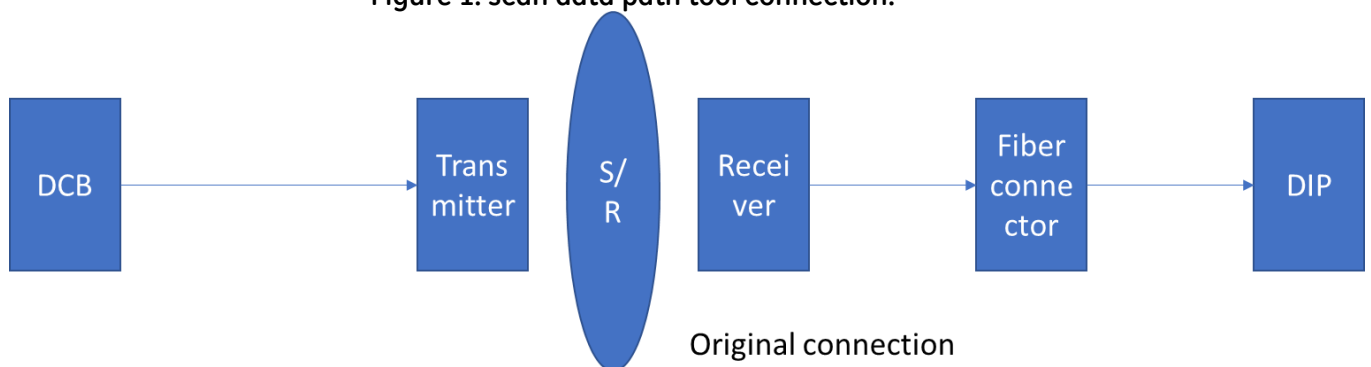
Section 2: Safety:

	<p>WARNING</p> <p>POTENTIAL FOR SHOCK. VOLTAGE MAY BE PRESENT. USE PROPER LOCKOUT/TAGOUT PROCEDURES BEFORE REPLACING COMPONENTS.</p>
	<p>NOTICE</p> <p>You must wear a grounded ESD wrist strap. Place removed electronic parts on or in an antistatic surface.</p>
	<p>NOTICE</p> <p>Follow ALL required safety and PPE procedures customary for your organization, when working on this product.</p>

Section 3: Procedure:

This diagnostic tests and isolates problems related to scan data generated and received at the scan data disk.

Figure 1. scan data path tool connection.



Use the scan data path to do troubleshooting.

Follow service manual: Troubleshooting → Diagnostics → Scan Data Path Diagnostics

If the scan data path can find the error from DCB to DIP or cannot find the error because the data test is not enough. You can use below methods to isolate issue part from DCB to DIP.

(Click below contents for quick guide. Below procedures are only applicable for system with Z840/Z8G4.)

- [DIP Card Loopback Troubleshooting.](#)
- [DIP Card and Fiber Connector Troubleshooting.](#)
- [DIP Loopback with Connector Receiver, S/R and Transmitter.](#)
- [Scan Data Path Test with DCB and DIP.](#)

1. DIP Card Loopback Troubleshooting

Figure 2. DIP card loopback connection

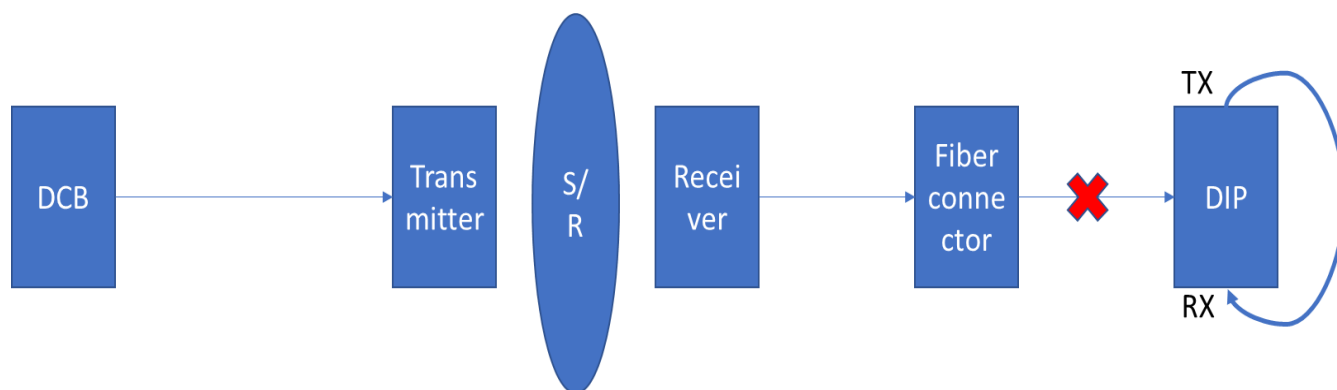


Figure 3. DIP loopback tools



Fiber conversion head (5332092-3)



Long fiber cable (5432019)

Disconnect the fiber from fiber connector to DIP RX, use the DIP TX to connect the connector Rx. Then run the DIP loopback, it can help confirm if the DIP card is good.

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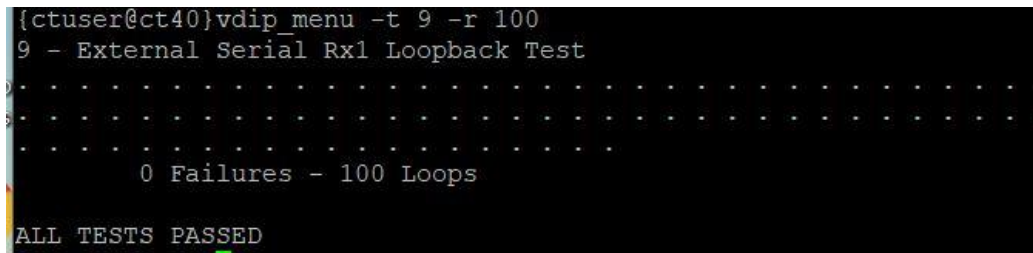
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Use below command to enable the DIP loopback. This test script allows for a choice to test the DIP Board in a stand-alone manner or with a loopback capability. If loopback capability is selected the DIP Board diagnostic will test the RX/TX ports when the loopback cable is installed.

'vdip_menu -t 9 -r 100'

Note: The 100 mean that DIP will repeat the loopback test 100 times. You can use different test times according to different issues, figure 4 shows the successful result.

Figure 4. Successful Result Interface



2. DIP Card and Fiber Connector Troubleshooting

Figure 5. DIP and Fiber connector troubleshooting connection

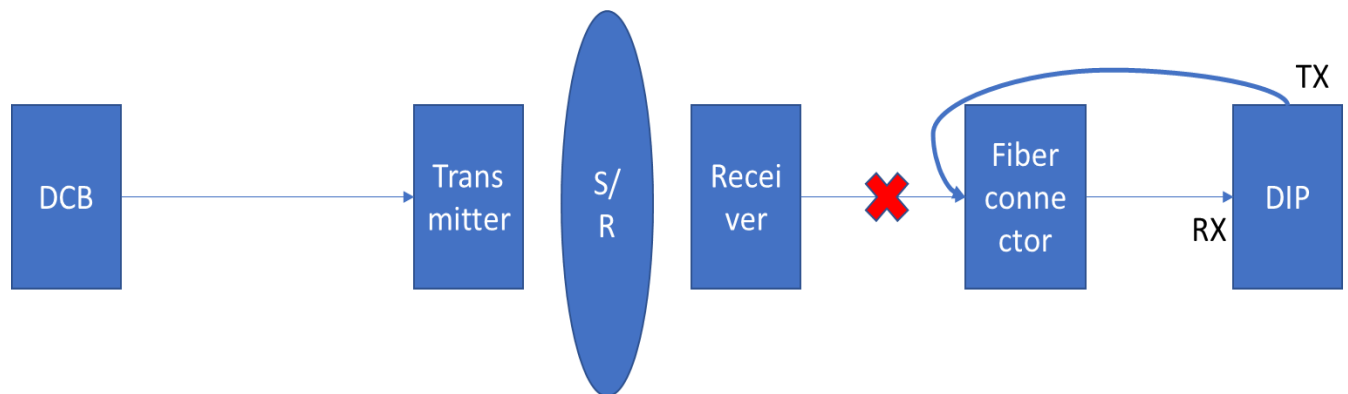


Figure 6. DIP and Fiber connector loopback tool.



Long fiber cable (5432019)

Disconnect the fiber from receiver to connector, use the DIP TX to connect the connector Rx. Then run the DIP loopback, it can help confirm if the connector and the fiber from connector to DIP are good.

Use below command to enable the DIP loopback. This test script allows for a choice to test the DIP Board in a stand-alone manner or with a loopback capability. If loopback capability is selected the DIP Board diagnostic will test the RX/TX ports when the loopback cable is installed.

```
'vdip_menu -t 9 -r 100'
```

Note: The 100 mean that DIP will repeat the loopback test 100 times. You can use different test times according to different issue.

3. DIP Loopback with Connector Receiver, S/R and Transmitter

Figure 7. DIP loopback connection with connector Receiver, S/R and Transmitter

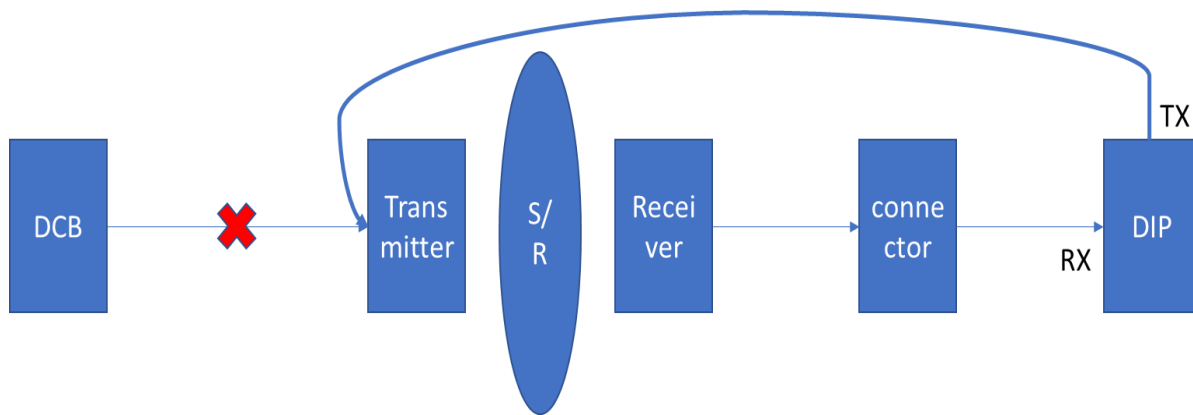


Figure 8. DIP loopback tool with connector Receiver, S/R and Transmitter



Fiber connector (2265406-2)



Long fiber cable (5432019)



Cable fiber OPT (2293409-3)

Disconnect the fiber from DCB to Transmitter, use the DIP TX fiber to connect the transmitter RX. Then run the DIP loop back, it can help confirm if the transmitter, S/R and Receiver are good.

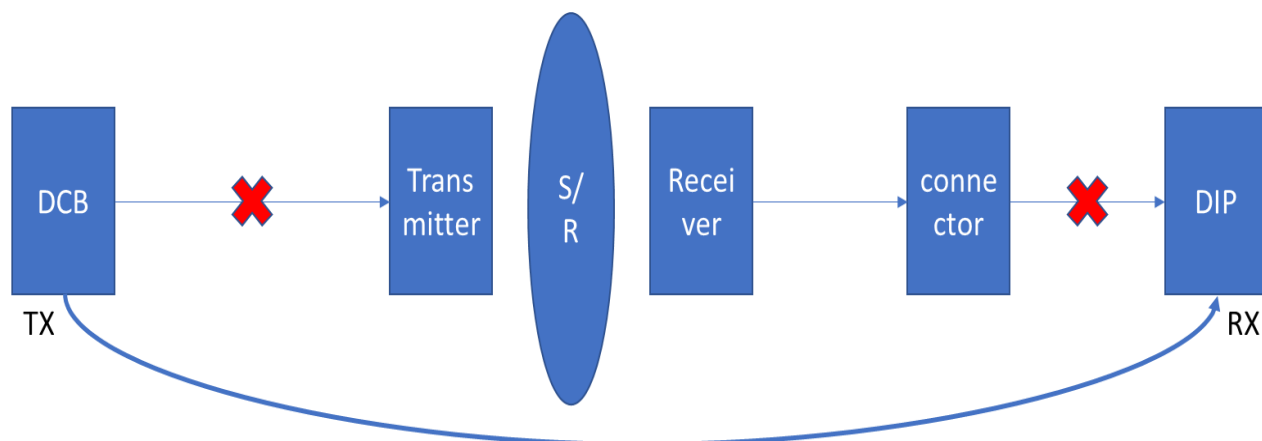
Use below command to enable the DIP loopback. This test script allows for a choice to test the DIP Board in a stand-alone manner or with a loopback capability. If loopback capability is selected the DIP Board diagnostic will test the RX/TX ports when the loopback cable is installed.

```
'vdip_menu -t 9 -r 100'
```

Note: The 100 mean that DIP will repeat the loopback test 100 times. You can use different test times according to different issue.

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4. Scan Data Path Test with DCB and DIP**Figure 9. Scan data path test connection with DCB and DIP**

The connection tool refers to the figure7.

Disconnect the fiber from DCB to transmitter. Connect the fiber from DCB TX to DIP RX directly. Then run the scan data path to confirm the DCB is good. Use the scan data path to check the DCB.