



# OpenFabrics Alliance

## Interoperability Logo Group (OFILG)

### May 2014 Logo Event Report

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Date: July 17, 2014  
 Report Revision: 1.1  
 OFED Version: 3.12  
 OS Version: Scientific Linux 6.5

Enclosed are the results from OFA Logo testing performed on the following devices under test (DUTs):

*Emulex OCe14102*  
*Emulex OCe14401*

The test suite referenced in this report is available at the IOL website. Release 1.50 (2014-May-6) was used.

<https://www.iol.unh.edu/ofatestplan>

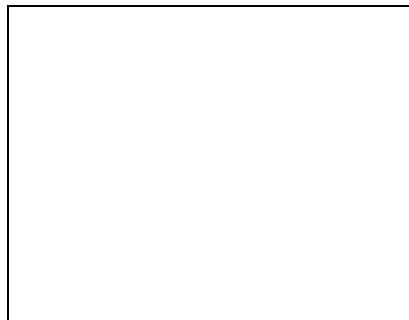
The following table highlights the Mandatory test results required for the OpenFabrics Interoperability Logo for the RoCE Network Adapter device class per the Test Plan referenced above and the current OpenFabrics Interoperability Logo Program (OFILP).

Test Procedures	IWG Test Status	Result/Notes
<a href="#">12.2: RoCE Link Initialization</a>	Mandatory	PASS
<a href="#">13.4: TI uDAPL</a>	Mandatory	PASS
<a href="#">13.5: TI RDMA Basic Interop</a>	Mandatory	PASS
<a href="#">13.7: TI Rsockets</a>	Mandatory	PASS
<a href="#">13.8: TI MPI – Open MPI</a>	Mandatory	PASS

Summary of all results follows on the second page of this report.  
 For specific details regarding issues, please see the corresponding test result.

Testing Completed June 11, 2014

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Review Completed July 31, 2014

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## Result Summary

The Following table summarizes all results from the event pertinent to this RoCE device class.

Test Procedures	IWG Test Status	Result/Notes
<a href="#">12.2: RoCE Link Initialization</a>	Mandatory	PASS
<a href="#">12.4: RoCE IPoCE</a>	Beta	Not Available
<a href="#">13.2: TI NFS over RDMA</a>	Beta	PASS with Comments
<a href="#">13.4: TI uDAPL</a>	Mandatory	PASS
<a href="#">13.5: TI RDMA Basic Interop</a>	Mandatory	PASS
<a href="#">13.6: TI RDMA Stress</a>	Beta	Not Tested
<a href="#">13.7: TI Rsockets</a>	Mandatory	PASS
<a href="#">13.8: TI MPI – Open MPI</a>	Mandatory	PASS

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## Report Revision History

- v1.0 Initial Release
- v1.1 Attached SL 6.5 and OFED configuration files

## Configuration Files

Description	Attachment
Scientific Linux 6.5 Configuration File	
OFED 3.12 Configuration File	

## Result Key

The following table contains possible results and their meanings:

Result:	Description:
<b>PASS</b>	The Device Under Test (DUT) was observed to exhibit conformant behavior.
<b>PASS with Comments</b>	The DUT was observed to exhibit conformant behavior however an additional explanation of the situation is included.
<b>Qualified PASS</b>	The DUT was observed to exhibit conformant behavior, with the exception of fault(s) or defect(s) which were previously known.
<b>FAIL</b>	The DUT was observed to exhibit non-conformant behavior.
<b>Warning</b>	The DUT was observed to exhibit behavior that is not recommended.
<b>Informative</b>	Results are for informative purposes only and are not judged on a pass or fail basis.
<b>Refer to Comments</b>	From the observations, a valid pass or fail could not be determined. An additional explanation of the situation is included.
<b>Not Applicable</b>	The DUT does not support the technology required to perform this test.
<b>Not Available</b>	Due to testing station limitations or time limitations, the tests could not be performed.
<b>Borderline</b>	The observed values of the specific parameters are valid at one extreme and invalid at the other.
<b>Not Tested</b>	Not tested due to the time constraints of the test period.

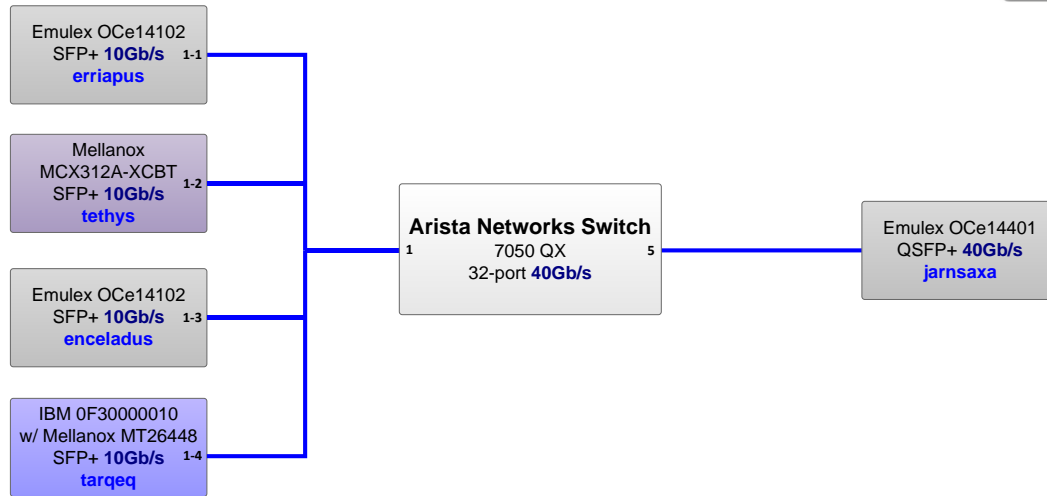
# DUT and Test Setup Information

Figure 1: The RoCE fabric configuration utilized for all testing is shown below.

May 2014  
 RoCE Topology

**Ethernet Addressing**  
 <hostname>.ofa

**RoCE Addressing**  
 <hostname>-ce.ofa



DUT# 1 Details			
Manufacturer:	Emulex	Firmware Revision:	10.2.317.0
Model:	OCe14102	Hardware Revision:	B0
Speed:	10Gb/s	Located in Host:	enceladus, erriapus
Firmware MD5sum:	f86834caacf8dc5d8469e0b566a7543f		
Additional Comments / Notes:			

DUT# 2 Details			
Manufacturer:	Emulex	Firmware Revision:	10.2.317.0
Model:	OCe14401	Hardware Revision:	B0
Speed:	40Gb/s	Located in Host:	jarnsaxa
Firmware MD5sum:	f86834caacf8dc5d8469e0b566a7543f		
Additional Comments / Notes:			

## Mandatory Tests – RoCE Device Test Results:

### 12.2: RoCE Link Initialization

<b>Test Result</b>	<b>PASS</b>
<b>Result Discussion:</b>	
All RoCE Channel Adapters were observed to link at the expected speed.	

Link Partner	OCe14102	OCe14401
RCA: Emulex OCe14102 in host enceladus	<b>PASS</b>	<b>PASS</b>
RCA: Emulex OCe14102 in host erriapus	<b>PASS</b>	<b>PASS</b>
RCA: Emulex OCe14401 in host jarnsaxa	<b>PASS</b>	<b>N/A</b>
RCA: IBMMT26448 in host tarqeq	<b>PASS</b>	<b>PASS</b>
RCA: Mellanox10Gb Technology	<b>PASS</b>	<b>PASS</b>

### 13.4: TI uDAPL

<b>Test Result</b>	<b>PASS</b>
<b>Discussion:</b>	
All of the Group 1: Point-to-Point and Group 2: Switched Topology tests were performed using OFED 3.12.	
Group 3: Switched Topology with Multiple Switches tests were not performed using OFED 3.12 due to time and equipment constraints.	

### 13.5: TI RDMA Basic Interoperability

<b>Test Result</b>	<b>PASS</b>
<b>Discussion:</b>	
RDMA read and write operations were observed to perform successfully between all RCAs in the cluster.	

### 13.6: TI RDMA Stress

<b>Test Result</b>	<b>Not Tested</b>
<b>Discussion:</b>	
This test requires a multi switch topology; it was therefore not performed due to equipment constraints.	

### 13.7: TI Rsockets

<b>Test Result</b>	<b>PASS</b>
<b>Discussion:</b>	
All RCAs were able to successfully perform all Asynchronous, Blocking, and Non-blocking procedures.	

**13.8: TI MPI – Open MPI**

<b>Test Result</b>	<b>PASS</b>
<b>Discussion:</b>	
Intel MPI Benchmarks were performed between all Emulex and Mellanox RCAs. The RCA in the PPC64 system was excluded due to Open MPI's limitations in regards to heterogeneous rings.	

## Beta Tests – RoCE Device Test Results:

### 12.4: RoCE IPoCE

Test Section	Part A	Part B	Part C
Test Result	PASS	Not Available	PASS
<b>Result Discussion:</b>			
Part A: All devices were observed to successfully ping each Link Partner in the topology. Part B: Not available, as this test requires a second Ethernet switch which was not available in the topology. Part C: Every node was observed to correctly SFTP the test file to every other node in the topology.			

### 13.2: TI NFS over RDMA

Test Result	PASS with Comments
<b>Result Discussion:</b>	
Due to an issue discovered in OFED 3.5-2 and persisting in OFED 3.12 that occurs between big and little endian architectures, this test was unable to be completed between all RCAs in the topology. See <a href="#">bug 2449</a> for additional information.	