



OpenFabrics Alliance

Interoperability Logo Group (OFILG)

February 2018 Logo Report



UNH-IOL – 21 Madbury Rd., Suite 100 – Durham, NH 03824 – +1-603-862-0090
OpenFabrics Interoperability Logo Group (OFILG) – ofalab@iol.unh.edu

Nishant Lodha
 Cavium
 2315 N. First Street
 San Jose, CA 95131

Date: March 28, 2018
 Report Revision: 1.0
 OFED Version: OFED 4.8-2-rc3
 OS Version: Scientific Linux 7.4

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

Cavium QL41212HLCU

The test suite referenced in this report is available at the UNH-IOL website. Release 2.06 (2017-12-6) was used.

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

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

Test Procedures	IWG Test Status	Result/Notes
12.1: Ethernet Link Initialization	Mandatory	Pass
13.4: TI uDAPL	Mandatory	Pass
13.5: TI RDMA Basic Interoperability	Mandatory	Pass
13.6: TI RDMA Stress	Mandatory	Pass
13.7: TI MPI – Open MPI	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 March 28, 2018 _____

Reviewed & Issued March 28, 2018

Adam LeBlanc
aleblanc@iol.unh.edu

Stefan Oesterreich
soesterreich@iol.unh.edu

Result Summary

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

Test Procedures	IWG Test Status	Result/Notes
11.7 TI iSER	Beta	Pass
12.1: Ethernet Link Initialization	Mandatory	Pass
13.2 TI NFS over RDMA	Beta	N/A
13.4: TI uDAPL	Mandatory	Pass
13.5: TI RDMA Basic Interoperability	Mandatory	Pass
13.6: TI RDMA Stress	Mandatory	Pass
13.7: TI MPI – Open MPI	Mandatory	Pass

Digital Signature Information

This document was created using an Adobe digital signature. A digital signature helps to ensure the authenticity of the document, but only in this digital format. For information on how to verify this document's integrity proceed to the following site:

<http://www.iol.unh.edu/certifyDoc/>



If the document status still indicates "Validity of author NOT confirmed", then please contact the UNH-IOL to confirm the document's authenticity. To further validate the certificate integrity, Adobe 6.0 or later should report the following fingerprint information:

MD5 Fingerprint: 80 60 3C EA 42 D6 61 38 62 24 14 6A 1F 66 E9 84
SHA-1 Fingerprint: 81 FF 90 E8 56 CB 95 7F 3E D6 4D B8 B2 99 EF BE 3C CC 7D DE

Report Revision History

- v1.0 Initial working copy

Configuration Files

Description	Attachment
Scientific Linux 7.4 Configuration File	
OFED 4.8-2-rc3 Configuration File	

Result Key

The following table contains possible results and their meanings:

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

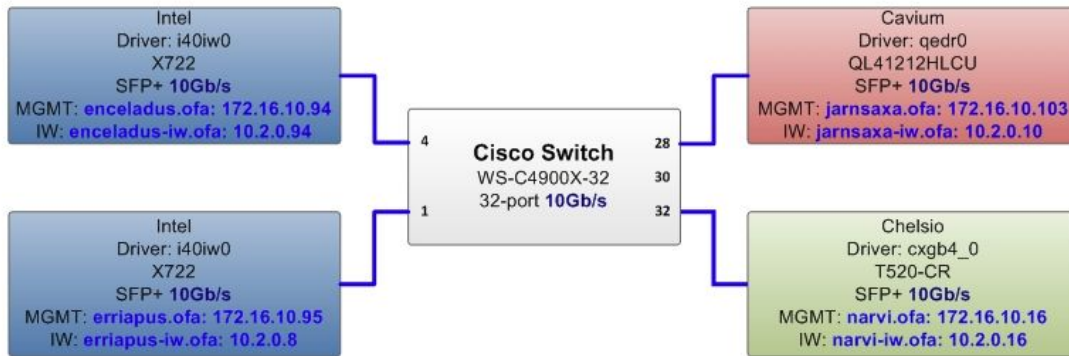
DUT and Test Setup Information

The iWARP fabric configuration utilized for all testing is shown below.

February 2018
 iWARP Topology

Ethernet Addressing
 <hostname>.ofa

iWarp Addressing
 <hostname>-iw.ofa



DUT Details			
Manufacturer:	Cavium	Firmware Revision:	8.33.8.0
Model:	QL41212HLCU	Hardware Revision:	A2
Speed:	10Gb/s	Located in Host:	jarnsaxa
Additional Comments / Notes:			
Out of box drivers were provided by Cavium			

Mandatory Tests – IW Device Test Results:

12.1: Ethernet Link Initialization

Test Result	Pass
Result Discussion:	
All devices were shown to link and pass traffic to all other devices in a back-to-back configuration under nominal (unstressed) conditions.	

13.2: TI NFS over RDMA

Subnet Manager	Result
OpenSM	N/A
Result Discussion:	
NFSoverRDMA is not supported on SL7.4. Use SL7.3 if this functionality is needed.	

13.4: TI uDAPL

Test Result	Pass
Discussion:	
All devices were shown to communicate correctly using the Direct Access Programming Library, by use of the Linux dapltest tool.	

13.5: TI RDMA Basic Interoperability

Test Result	Pass
Discussion:	
All devices were shown to correctly exchange core RDMA operations across a simple network path under nominal (unstressed) conditions. Each HCA acted as both a client and a server for all tests.	

13.6: TI RDMA Stress

	Switch Load	Switch Fan In
Test Result	Pass	Pass
Discussion:		
All switches were seen to properly handle a large load as indicated by the successful completion of control communications between two RNICs while other RNICs in the fabric were used to generate traffic in order to put a high load on the switch.		

13.7: TI MPI – Open MPI

Test Result	Pass
Discussion:	
MPI Benchmarks were performed between all HCAs and were observed to exhibit the proper behavior.	