

OpenFabrics Alliance

Interoperability Logo Group (OFILG) May 2011 Logo Event Report

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Chris Calandro Chelsio Communications 370 San Aleso Avenue #100 Sunyvale, CA 94085 Date:July 5, 2011Report Revision:1.0OFED Version:1.5.3.1OS Version:Centos 5.5

Enclosed are the results from OFA Logo testing performed on the following devices under test (DUTs): Chelsio Communications S310E-CXA RNIC

The test suite referenced in this report is available at the IOL website. Release 1.36 (02/29/2011) was used.

http://www.iol.unh.edu/services/testing/ofa/testsuites/OFA-IWG Interoperability Test Plan-v1.36.pdf

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
11.1: Link Initialization	Mandatory	PASS with Comments
11.5 iWARP Connectivity	Mandatory	PASS with Comments
12.5: TI uDAPL	Mandatory	PASS
<u>12.11: TI MPI – Open</u>	Mandatory	PASS
<u>12.12: TI MPI – OSU</u>	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 05/30/2011

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Review Completed 07/05/2011

Madros

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Table 1: Result Summary

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

Test Procedures	IWG Test Status	Result/Notes
11.1: Link Initialization	Mandatory	PASS with Comments
11.2: Fabric Initialization	Beta	Not Tested
11.3: Ethernet Fabric Reconvergence	Beta	Not Tested
11.4: Ethernet Fabric Failover	Beta	Not Tested
11.5: iWARP Connectivity	Mandatory	PASS with Comments
<u>12.1: TI iSER</u>	Beta	Not Tested
12.2: TI NFS over RDMA	Beta	Not Tested
<u>12.3: TI RDS</u>	Beta	Not Tested
12.4: TI SDP	Beta	Not Tested
12.5: TI uDAPL	Mandatory	PASS
12.6: TI RDMA Basic Interop	Beta	Not Tested
<u>12.10: TI MPI – Intel</u>	Beta	Not Tested
<u>12.11: TI MPI – Open</u>	Mandatory	PASS
<u>12.12: TI MPI – OSU</u>	Mandatory	PASS

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Report Revision History

• v1.0 Initial Release

Table 2: Result Key

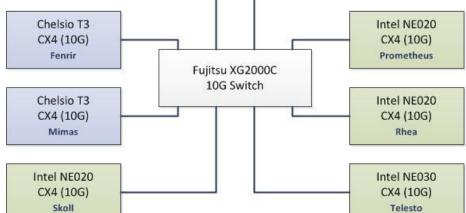
The following table contains possible results and their meanings:

Result:	Description:
PASS	The Device Under Test (DUT) was observed to exhibit conformant behavior.
PASS with	The DUT was observed to exhibit conformant behavior however an additional explination
Comments	of the situation is included.
FAIL	The DUT was observed to exhibit non-conformant behavior.
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 Applicable	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.

Table 3: DUT and Test Setup Information

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





DUT #1 Details			
Manufacturer:	Chelsio Communications	Firmware Revision:	T 7.11.0 TP 1.1.0
Model:	S310E-CXA	Hardware Revision:	T3C
Speed:	10 Gb/s	Located in Host:	Mimas, Anthe, Fenrir
Driver:	cxgb3 version: 1.1.2-ofed		
Additional Comments / Notes:			
Unless otherwise specified:			
Chelsio T3 - /sys/module/iw_cxgb3/parameters/peer2peer = 0			
Intel NE020 - /sys/module/iw_nes/parameters/send_first = 0			

OFA Logo Event Report – May 2011 DUT: Chelsio S310E-CXA

Mandatory Tests – IW Device Test Results:

11.1: Link Initialization

Results	
Part #1:	PASS with Comments
Discussion:	
rping successfully transmits data across the RDMA link, When testing Chalcie T2 (client) against Intel	

rping successfully transmits data across the RDMA link. When testing Chelsio T3 (client) against Intel NE020 (server), the server displays the message, "cq completion failed status 5".

Link Partner		Chelsio T3C
Host: anthe	RNIC: Chelsio T3	PASS
Host: rhea	RNIC: Intel NE020	PASS

11.5: iWARP Connectivity

Results	
Part #1:	PASS with Comments
Discussion:	
1. The OFED software stack does not support SendINV and SendSEINV	
2. CX4 and 10G optics do not support speed negotiation	

3. The OFED software stack does not support the ability to configure markers or CRC at runtime

Each group of tests must be run individually due to a bug in the test tool. Group 4 must be run on a fresh start of the rdma-ofa-agent due to a bug in the agent.

12.5: TI uDAPL

Results	
Part #1:	PASS
Discussion:	
No issues seen.	

12.11: TI MPI – OpenMPI

Results	
Part #1: PingPing & PingPong	PASS
Part #2: All	PASS
Discussion:	
Performed using the following homogenous cluster: Mimas (4 Cores) Anthe (8 Cores) Fenrir (8 Cores)	

12.12: TI MPI – OSU

Results	
Part #1: PingPing & PingPong	PASS
Part #2: All	PASS
Discussion:	
MVAPICH 2 test only. Performed using the following homogenous cluster: Mimas (4 Cores) Anthe (8 Cores) Fenrir (8 Cores)	

OFA Logo Event Report – May 2011 DUT: Chelsio S310E-CXA

Beta Tests – IW Device Test Results:

11.2: Fabric Initialization

Results		
Part #1:	Not Tested	
Discussion:		
This test requires at least 2 switches in the fabric.		

11.3: Fabric Reconvergence

Results	
Part #1:	Not Applicable
Discussion:	
Requires 2 or more switches.	

11.4: Fabric Failover

Results	
Part #1:	Not Applicable
Discussion:	
Requires 2 or more switches.	

12.1 TI iSER

Not Applicable

12.2: TI NFS over RDMA

Results	
Part #1:	Not Tested
Discussion:	
Not Tested.	

12.3: TI RDS

Results	
Part #1:	Not Tested
Part #2:	Not Tested
Discussion:	
Not Tested.	

OFA Logo Event Report – May 2011 DUT: Chelsio S310E-CXA

12.4: TI SDP

Results	
Part #1: Netperf	Not Applicable
Part #2: SFTP	Not Applicable
Part #3: SCP	Not Applicable
Discussion:	
Current licensing restrictions prevent SDP support in iWARP RNIC solutions.	

12.6: TI RDMA Basic Interoperability

Results	
Part #1:	Not Tested
Discussion:	
Not Tested.	

12.10: MPI – Intel

Not Applicable
Not Applicable