



# OpenFabrics Alliance

## Interoperability Working Group (OFIWG)

### September 2010 Logo Event Report

UNH-IOL – 121 Technology Drive, Suite 2 – Durham, NH 03824 - +1-603-862-0090  
OpenFabrics Interoperability Logo Group (OFILG) – ofalab@iol.unh.edu

Jess Robel  
QLogic Corporation  
26650 Aliso Viejo Parkway  
Aliso Viejo, CA 92656

January 10, 2011  
Report Revision: 3.1  
OFED Version: 1.5.2  
OS Version: CentOS 5.4

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

*QLogic 12200 (Managed Switch)*

The test suite referenced in this report is available at the IOL website. Release 1.35 (July 27, 2010) was used.

[http://www.iol.unh.edu/services/testing/ofa/testsuites/OFA-IWG\\_Interoperability\\_Test\\_Plan-v1.35.pdf](http://www.iol.unh.edu/services/testing/ofa/testsuites/OFA-IWG_Interoperability_Test_Plan-v1.35.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
<a href="#">10.1: Link Initialization</a>	Mandatory	PASS
<a href="#">10.2: IB Fabric Initialization</a>	Mandatory	PASS
<a href="#">10.3: IPoIB Connected Mode</a>	Mandatory	PASS
<a href="#">10.4: IPoIB Datagram Mode</a>	Mandatory	PASS
<a href="#">10.5: SM Failover and Handover</a>	Mandatory	PASS
<a href="#">10.6: SRP</a>	Mandatory	PASS
<a href="#">12.1: TI iSER</a>	Mandatory	Not Available
<a href="#">12.3: TI RDS</a>	Mandatory	PASS
<a href="#">12.4: TI SDP</a>	Mandatory	PASS
<a href="#">12.5: TI uDAPL</a>	Mandatory	PASS
<a href="#">12.6: TI RDMA Basic Interop</a>	Mandatory	PASS
<a href="#">12.8: TI RDMA Stress</a>	Mandatory	PASS
<a href="#">12.11: TI MPI – Open MPI (Homogenous)</a>	Mandatory	PASS
<a href="#">12.12: TI MPI – OSU MVAPICH (Homogenous)</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 11/11/2010

Christopher Hutchins  
[chutchins@iol.unh.edu](mailto:chutchins@iol.unh.edu)



Review Completed 1/10/2011

Nickolas Wood  
[ndv2@iol.unh.edu](mailto:ndv2@iol.unh.edu)

## Table 1: Result Summary

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

Test Procedures	IWG Test Status	Result/Notes
<a href="#">10.1: Link Initialization</a>	Mandatory	PASS
<a href="#">10.2: IB Fabric Initialization</a>	Mandatory	PASS
<a href="#">10.3: IPoIB Connected Mode</a>	Mandatory	PASS
<a href="#">10.4: IPoIB Datagram Mode</a>	Mandatory	PASS
<a href="#">10.5: SM Failover and Handover</a>	Mandatory	PASS
<a href="#">10.6: SRP</a>	Mandatory	PASS
<a href="#">10.7: Ethernet Gateway</a>	Beta	Not Tested
<a href="#">10.8: FibreChannel Gateway</a>	Beta	Not Tested
<a href="#">12.1: TI iSER</a>	Mandatory	Not Available
<a href="#">12.2: TI NFS over RDMA</a>	Beta	Not Tested
<a href="#">12.3: TI RDS</a>	Mandatory	PASS
<a href="#">12.4: TI SDP</a>	Mandatory	PASS
<a href="#">12.5: TI uDAPL</a>	Mandatory	PASS
<a href="#">12.6: TI RDMA Basic Interoperability</a>	Mandatory	PASS
<a href="#">12.8: TI RDMA Stress</a>	Mandatory	PASS
<a href="#">12.10: TI MPI – Intel</a>	Beta	Not Tested
<a href="#">12.11: TI MPI – Open MPI (Homogenous)</a>	Mandatory	PASS
<a href="#">12.12: TI MPI – OSU MVAPICH (Homogenous)</a>	Mandatory	PASS

### Digital Signature Information

This document was signed 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/certificates\\_and\\_fingerprints.php](http://www.iol.unh.edu/certifyDoc/certificates_and_fingerprints.php)

If the document status still indicated "Validity of author NOT confirmed", then please contact the UNH-IOL to confirm the document's authenticity. To further validate the certificate integrity, Adobe 9.0 should report the following fingerprint information:

MD5 Fingerprint: 4B 9E 65 5C 58 2A 39 80 84 EF 7C 0A BC ED 1E BF  
SHA-1 Fingerprint: 02 CB 7B 8F F1 EC 59 21 DE 3F A2 1B 66 06 B8 09 12 D9 DD 0E

## Report Revision History

- **v1.0 Initial working copy.**
- **v1.1 Added BX4010 to link init table, modified results slightly.**
- **v2.0 Major formatting revision.**
- **v3.0 Modified topology, added OS version information, modified results.**
- **v3.1 Post-Arbitration update.**

## Table 2: Result Key

The following table contains possible results and their meanings:

<b>Result:</b>	<b>Description:</b>
<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>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.

# Table 3: DUT and Test Setup Information

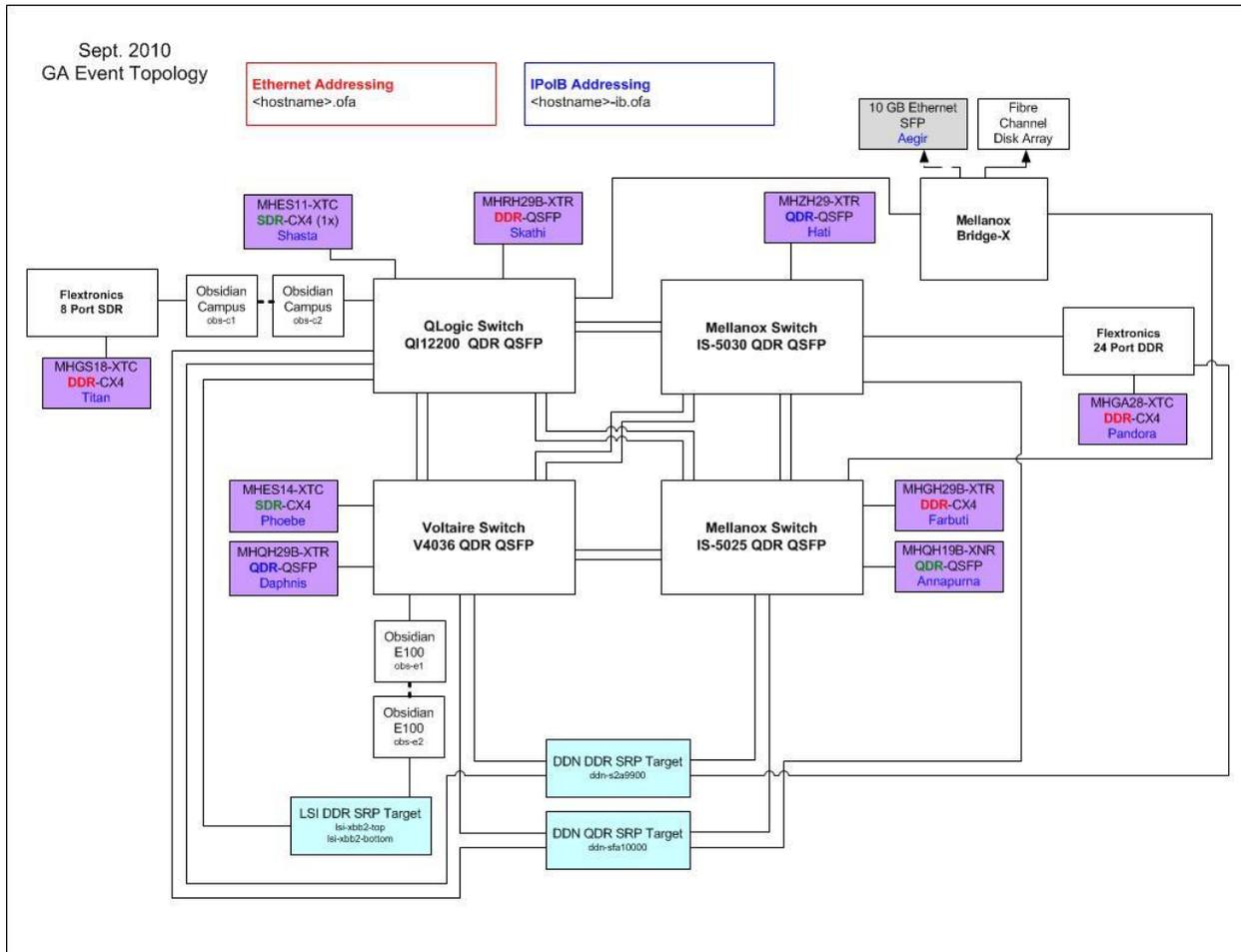


Figure 1: The IB fabric configuration utilized for any tests requiring a multi-switch configuration is shown below.

DUT #1 Details			
Manufacturer:	QLogic	Firmware Revision:	6.0.0.1.3
Model:	12200	Hardware Revision:	17
Speed:	QDR	Located in Host:	NA
Firmware MD5sum:	b6be95d95bb737a3325bc9fd1ac941b7		
Additional Comments / Notes:			

# Mandatory Tests – IB Device Test Results:

## 10.1: Link Initialization

Results	
Part #1:	PASS
<b>Discussion:</b>	
No issues seen.	

Link Partner	12200	
QLogic 12200 (Switch) – QDR	NA	
Flextronics X430066 (Switch) – SDR	PASS	
Flextronics X430044 (Switch) – DDR	PASS	
Mellanox BX4010 (Gateway) – QDR	PASS	
Mellanox IS 5030 (Switch) – QDR	PASS	
Mellanox IS 5025 (Switch) – QDR	PASS	
Voltaire 4036 (Switch) – QDR	PASS	
Obsidian Longbow Campus-1 (Range Extender) –SDR	PASS	
Obsidian Longbow Campus-2 (Range Extender) – SDR	PASS	
Obsidian Longbow E100-1 (Range Extender) – SDR	PASS	
Obsidian Longbow E100-2 (Range Extender) – SDR	PASS	
LSI XBB2 (SRP Target) – DDR	PASS	
DataDirect Networks S2A9900 (SRP Target) – DDR	PASS	
DataDirect Networks SFA10000 (SRP Target) – QDR	PASS	
Host: Farbauti PCI-e Gen 2	HCA: MHGH29B-XTR – DDR	PASS
Host: Skathi PCI-e Gen 2	HCA: MHRH29B-XTR – DDR	PASS
Host: Titan	HCA: MHGS18-XTC – DDR	PASS
Host: Phoebe	HCA: MHES14-XTC – SDR	PASS
Host: Pandora	HCA: MHGA28-XTC – DDR	PASS
Host: Daphnis PCI-e Gen 2	HCA: MHQH29B-XTR – QDR	PASS
Host: Hati PCI-e Gen 2	HCA: MHZH29-XTR – QDR	PASS
Host: Shasta PCI-e Gen 2	HCA: MHES11-XTC – SDR	PASS
Host: Annapurna PCI-e Gen 2	HCA: MHQH19B-XNR – QDR	PASS

## 10.2: Fabric Initialization

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1:	PASS	PASS	PASS	PASS
<b>Discussion:</b>				
No issues seen.				

## 10.3: IPoB Connected Mode

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1: Pingtest	PASS	PASS	PASS	PASS
Part #2: SFTP	PASS	PASS	PASS	PASS
Part #3: SCP	PASS	PASS	PASS	PASS
<b>Discussion:</b>				
No issues seen.				

**10.4: IPoB Datagram Mode**

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1: Pingtest	PASS	PASS	PASS	PASS
Part #2: SFTP	PASS	PASS	PASS	PASS
Part #3: SCP	PASS	PASS	PASS	PASS
<b>Discussion:</b>				
No issues seen.				

**10.5: SM Failover and Handover**

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1:	PASS	PASS	PASS	PASS
<b>Discussion:</b>				
No issues seen.				

**10.6: SRP**

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1:	PASS	PASS	PASS	PASS
<b>Discussion:</b>				
No issues seen.				

**12.1 TI iSER**

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1:	Not Available	Not Available	Not Available	Not Available
<b>Discussion:</b>				
Test not performed.				

**12.3: TI RDS**

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1: Pingtest	PASS	PASS	PASS	PASS
Part #2: Stress	PASS	PASS	PASS	PASS
<b>Discussion:</b>				
No issues seen.				

**12.4: TI SDP**

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1: Netperf	PASS	PASS	PASS	PASS
Part #2: SFTP	PASS	PASS	PASS	PASS
Part #3: SCP	PASS	PASS	PASS	PASS
<b>Discussion:</b>				
No issues seen.				

**12.5: TI uDAPL**

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1:	PASS	PASS	PASS	PASS
<b>Discussion:</b>				
No issues seen.				

**12.6: TI RDMA Basic Interoperability**

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1:	PASS	PASS	PASS	PASS
<b>Discussion:</b>				
No issues seen.				

**12.8: TI RDMA Stress**

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1:	PASS	PASS	PASS	PASS
<b>Discussion:</b>				
No issues seen.				

**12.11: TI MPI – Open MPI (Homogenous)**

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1: PingPing & PingPong	PASS	PASS	PASS	PASS
Part #2: All	PASS	PASS	PASS	PASS
<b>Discussion:</b>				
Performed using the following homogenous clusters:				
<ul style="list-style-type: none"> <li>1) (Mellanox only) farbauti, daphnis, skathi, hati, titan</li> <li>2) (Mellanox only) phoebe, shasta, annapurna, pandora, farbauti</li> </ul>				

**12.12: TI MPI – OSU MVAPICH (Homogenous)**

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1: PingPing & PingPong	PASS	PASS	PASS	PASS
Part #2: All	PASS	PASS	PASS	PASS
<b>Discussion:</b>				
Performed using the following homogenous clusters:				
<ul style="list-style-type: none"> <li>1) (Mellanox only) farbauti, daphnis, skathi, hati, titan</li> <li>2) (Mellanox only) phoebe, shasta, annapurna, pandora, farbauti</li> </ul>				

## Beta Tests – IB Device Test Results:

### 12.2: TI NFS over RDMA

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1:	Not Tested	Not Tested	Not Tested	Not Tested
<b>Discussion:</b>				
Not tested due to time constraints.				

### 12.10: MPI – Intel

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1: PingPing & PingPong	Not Tested	Not Tested	Not Tested	Not Tested
Part #2: All	Not Tested	Not Tested	Not Tested	Not Tested
<b>Discussion:</b>				
Not tested due to time constraints.				