OpenFabrics Alliance

Interoperability Working Group (OFIWG)

September 2010 Logo Event Report

Sasha Khapyorsky
Voltaire Ltd.
13 Zarchin St.
Raanana 43662
Israel

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):

Voltaire 4036

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

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
10.1: Link Initialization	Mandatory	PASS
10.2: IB Fabric Initialization	Mandatory	PASS
10.3: IPoIB Connected Mode	Mandatory	PASS
10:4: IPoIB Datagram Mode	Mandatory	PASS
10.5: SM Failover and Handover	Mandatory	PASS
10.6: SRP	Mandatory	PASS
12.1: TI iSER	Mandatory	Not Available
12.3: TI RDS	Mandatory	PASS
12.4: TI SDP	Mandatory	PASS
12.5: TI uDAPL	Mandatory	PASS
12.6: TI RDMA Basic Interop	Mandatory	PASS
12.8: TI RDMA Stress	Mandatory	PASS
12.11: TI MPI – Open MPI (Homogenous)	Mandatory	PASS
12.12: TI MPI – OSU MVPAICH (Homogenous)	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

Review Completed 1/10/2011

Nickolas Wood
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
10.1: Link Initialization	Mandatory	PASS
10.2: IB Fabric Initialization	Mandatory	PASS
10.3: IPoIB Connected Mode	Mandatory	PASS
10:4: IPoIB Datagram Mode	Mandatory	PASS
10.5: SM Failover and Handover	Mandatory	PASS
10.6: SRP	Mandatory	PASS
10.7: Ethernet Gateway	Beta	Not Tested
10.8: FibreChannel Gateway	Beta	Not Tested
12.1: TI iSER	Mandatory	Not Available
12.2: TI NFS over RDMA	Beta	Not Tested
12.3: TI RDS	Mandatory	PASS
12.4: TI SDP	Mandatory	PASS
12.5: TI uDAPL	Mandatory	PASS
12.6: TI RDMA Basic Interoperability	Mandatory	PASS
12.8: TI RDMA Stress	Mandatory	PASS
12.10: TI MPI – Intel	Beta	Not Tested
12.11: TI MPI – Open MPI (Homogenous)	Mandatory	PASS
12.12: TI MPI – OSU MVAPICH (Homogenous)	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

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:

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 explination 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

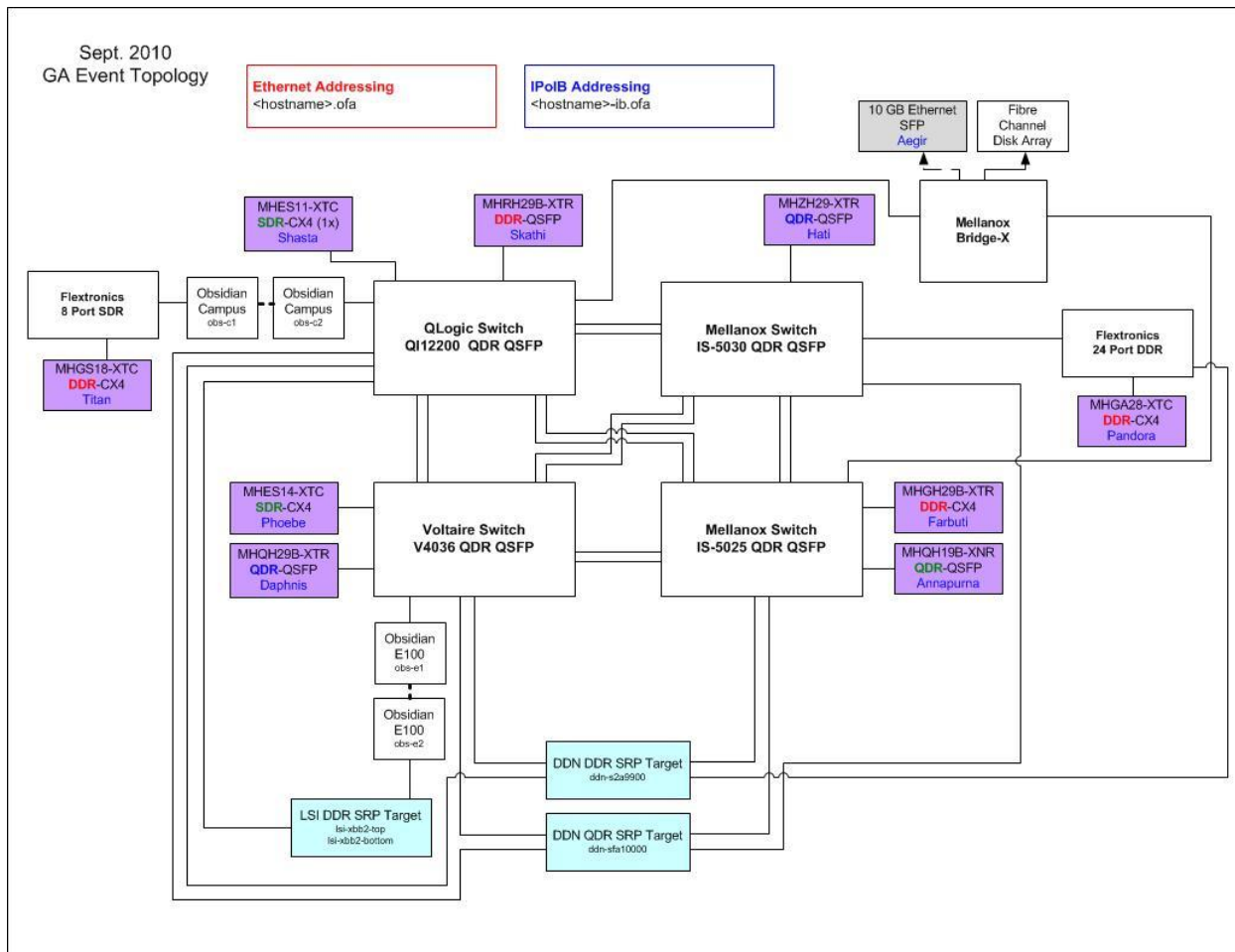**Figure 1: The IB fabric configuration utilized for any tests requiring a multi-switch configuration is shown below.**

DUT #1 Details			
Manufacturer:	Voltaire	Firmware Revision:	3.5.0
Model:	4036	Hardware Revision:	A04
Speed:	QDR	Located in Host:	NA
Firmware MD5sum:	3f9b0562397f4bf1a8343a1774f4b6c7		
Additional Comments / Notes:			

Mandatory Tests – IB Device Test Results:

10.1: Link Initialization

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

Link Partner	4036
QLogic 12200 (Switch) – QDR	**PASS**
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	**NA**
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**
Discussion:				
No issues seen.				

10.3: IPoIB 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**
Discussion:				
No issues seen.				

10.4: IPoIB 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
Discussion:				
No issues seen.				

10.5: SM Failover and Handover

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

10.6: SRP

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

12.5: TI uDAPL

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

12.6: TI RDMA Basic Interoperability

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1:	**PASS**	**PASS**	**PASS**	**PASS**
Discussion:				
No issues seen.				

12.8: TI RDMA Stress

Results	OpenSM	Voltaire 4036	QLogic 12200	Mellanox IS 5030
Part #1:	**PASS**	**PASS**	**PASS**	**PASS**
Discussion:				
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**
Discussion:				

Performed using the following homogenous clusters:

1) (Mellanox only) farbauti, daphnis, skathi, hati, titan
2) (Mellanox only) phoebe, shasta, annapurna, pandora, farbauti

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**
Discussion:				

Performed using the following homogenous clusters:

1) (Mellanox only) farbauti, daphnis, skathi, hati, titan
2) (Mellanox only) phoebe, shasta, annapurna, pandora, farbauti

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
Discussion:				
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
Discussion:				
Not tested due to time constraints.				