

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

Jason Gunthorpe Obsidian Research Corp 132 Advanced Technology Centre 9650 20 Ave NW Edmonton, Alberta Canada T6N 1G1 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):

Obsidian Longbow-E100 (SDR Range Extender)
Obsidian Longbow C103 (SDR Range Extender)

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: IPolB 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 MVAPICH (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

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Review Completed 1/10/2011

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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: IPolB Datagram Mode	Mandatory	PASS
10.5: SM Failover and Handover	Mandatory	PASS
<u>10.6: SRP</u>	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
<u>12.10: TI MPI – Intel</u>	Beta	Not Tested
12.11: TI MPI – Open MPI (Homogenous)	Mandatory	PASS
12.12: TI MPI – OSU MVAPICH (Homogenous)	Mandatory	PASS

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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	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

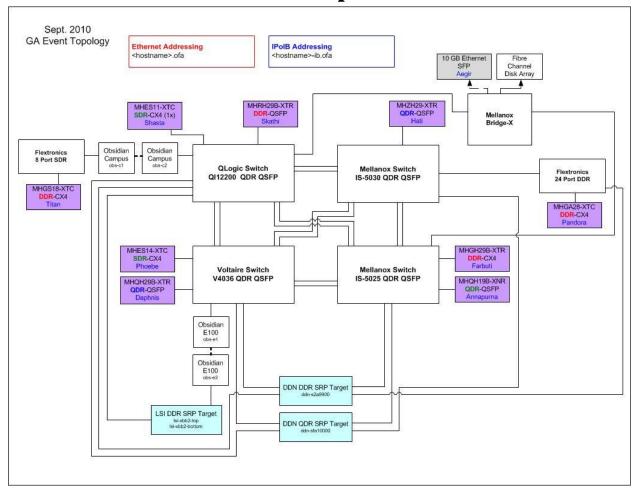


Figure 1: The IB fabric configuration utilized for any tests requiring a multi-switch configuration is shown below.

DUT #1 Details				
Manufacturer:	Obsidian Research Corp.	Firmware Revision:	1.4.1	
Model:	Longbow E100-10G	Hardware Revision:	2.0	
Speed:	SDR	Located in Host:	NA	
Firmware MD5sum:	8ecb8b216935d77fb935f7ba1abe57e2			
Additional Comments / Notes:				

DUT #2 Details				
Manufacturer:	Obsidian Research Corp.	Firmware Revision:	1.4.1	
Model:	Longbow C103	Hardware Revision:	1.0	
Speed:	SDR	Located in Host:	NA	
Firmware MD5sum: 2b718c93a0ac3472efaa2614160c5c82				
Additional Comments / Notes:				

Mandatory Tests - IB Device Test Results:

10.1: Link Initialization

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

Link Partner		E-100	Campus
QLogic 12200 (Switch) – QDR		PASS	PASS
Flextronics X430066 (Switch) -	- SDR	PASS	PASS
Flextronics X430044 (Switch) -	- DDR	PASS	PASS
Mellanox BX4010 (Gateway) –	QDR	PASS	PASS
Mellanox IS 5030 (Switch) – Q	DR	PASS	PASS
Mellanox IS 5025 (Switch) – Q	DR	PASS	PASS
Voltaire 4036 (Switch) – QDR		PASS	PASS
Obsidian Longbow C103-1 (Ra	nge Extender) –SDR	PASS	NA
Obsidian Longbow C103-2 (Ra	nge Extender) – SDR	NA	NA
Obsidian Longbow E100-1 (Ra	nge Extender) – SDR	NA	PASS
Obsidian Longbow E100-2 (Ra	nge Extender) – SDR	NA	NA
LSI XBB2 (SRP Target) – DDR		PASS	PASS
DataDirect Networks S2A9900	(SRP Target) – DDR	PASS	PASS
DataDirect Networks SFA1000	0 (SRP Target) – QDR	PASS	PASS
Host: Farbauti PCI-e Gen 2	HCA: MHGH29B-XTR – DDR	PASS	PASS
Host: Skathi PCI-e Gen 2	HCA: MHRH29B-XTR – DDR	PASS	PASS
Host: Titan	HCA: MHGS18-XTC – DDR	PASS	PASS
Host: Phoebe	HCA: MHES14-XTC – SDR	PASS	PASS
Host: Pandora HCA: MHGA28-XTC – DDR		PASS	PASS
Host: Daphnis PCI-e Gen 2 HCA: MHQH29B-XTR – QDR		PASS	PASS
Host: Hati PCI-e Gen 2 HCA: MHZH29-XTR – QDR		PASS	PASS
Host: Shasta PCI-e Gen 2	HCA: MHES11-XTC – SDR	PASS	PASS
Host: Annapurna PCI-e Gen 2	HCA: MHQH19B-XNR – QDR	PASS	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.				

OFA Logo Event Report - September 2010 DUT: Obsidian Range Extenders

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.				