



# OpenFabrics Alliance

## Interoperability Logo Group (OFILG)

### May 2013 Logo Event Report

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Report Revision: 1.0  
OFED Version on Compute Nodes: 3.5  
Operating System on Compute Nodes: SL 6.3

Enclosed are the results from OFA Logo testing performed on the following devices under test (DUTs):  
*Intel QLE7340* *Intel QLE7342*

The test suite referenced in this report is available at the IOL website. Release 1.47 (2013-Apr-16) was used.

<http://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
<a href="#">11.1: Link Initialization</a>	Mandatory	PASS
<a href="#">11.2: IB Fabric Initialization</a>	Mandatory	PASS
<a href="#">11.3: IPoIB Connected Mode</a>	Mandatory	PASS
<a href="#">11.4: IPoIB Datagram Mode</a>	Mandatory	PASS
<a href="#">11.5: SM Failover and Handover</a>	Mandatory	PASS
<a href="#">11.6: SRP</a>	Mandatory	PASS
<a href="#">13.1: TI iSER</a>	Mandatory	Not Available
<a href="#">13.2: TI NFS over RDMA</a>	Mandatory	PASS
<a href="#">13.4: TI uDAPL</a>	Mandatory	PASS
<a href="#">13.5: TI RDMA Basic Interop</a>	Mandatory	PASS
<a href="#">13.6: TI RDMA Stress</a>	Mandatory	PASS
<a href="#">13.7: TI MPI – Open</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 08 July 2013

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Review Completed 08 July 2013

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## 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="#">11.1: Link Initialization</a>	Mandatory	PASS
<a href="#">11.2: IB Fabric Initialization</a>	Mandatory	PASS
<a href="#">11.3: IPoIB Connected Mode</a>	Mandatory	PASS
<a href="#">11.4: IPoIB Datagram Mode</a>	Mandatory	PASS
<a href="#">11.5: SM Failover and Handover</a>	Mandatory	PASS
<a href="#">11.6: SRP</a>	Mandatory	PASS
<a href="#">11.7: Ethernet Gateway</a>	Beta	Not Tested
<a href="#">11.8: FibreChannel Gateway</a>	Beta	Not Tested
<a href="#">13.1: TI iSER</a>	Mandatory	Not Available
<a href="#">13.2: TI NFS over RDMA</a>	Mandatory	PASS
<a href="#">13.4: TI uDAPL</a>	Mandatory	PASS
<a href="#">13.5: TI RDMA Basic Interoperability</a>	Mandatory	PASS
<a href="#">13.6: TI RDMA Stress</a>	Mandatory	PASS
<a href="#">13.7: TI MPI – Open</a>	Mandatory	PASS

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## Report Revision History

- v1.0 Initial working copy

## Configuration Files

Description	Attachment
Scientific Linux 6.3 Configuration File	
OFED 3.5 Configuration File	

## Result Key

The following table contains possible results and their meanings:

Result:	Description:
<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>Qualified PASS</b>	The DUT was observed to exhibit conformant behavior, with the exception of fault(s) or defect(s) which were previously known.
<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.

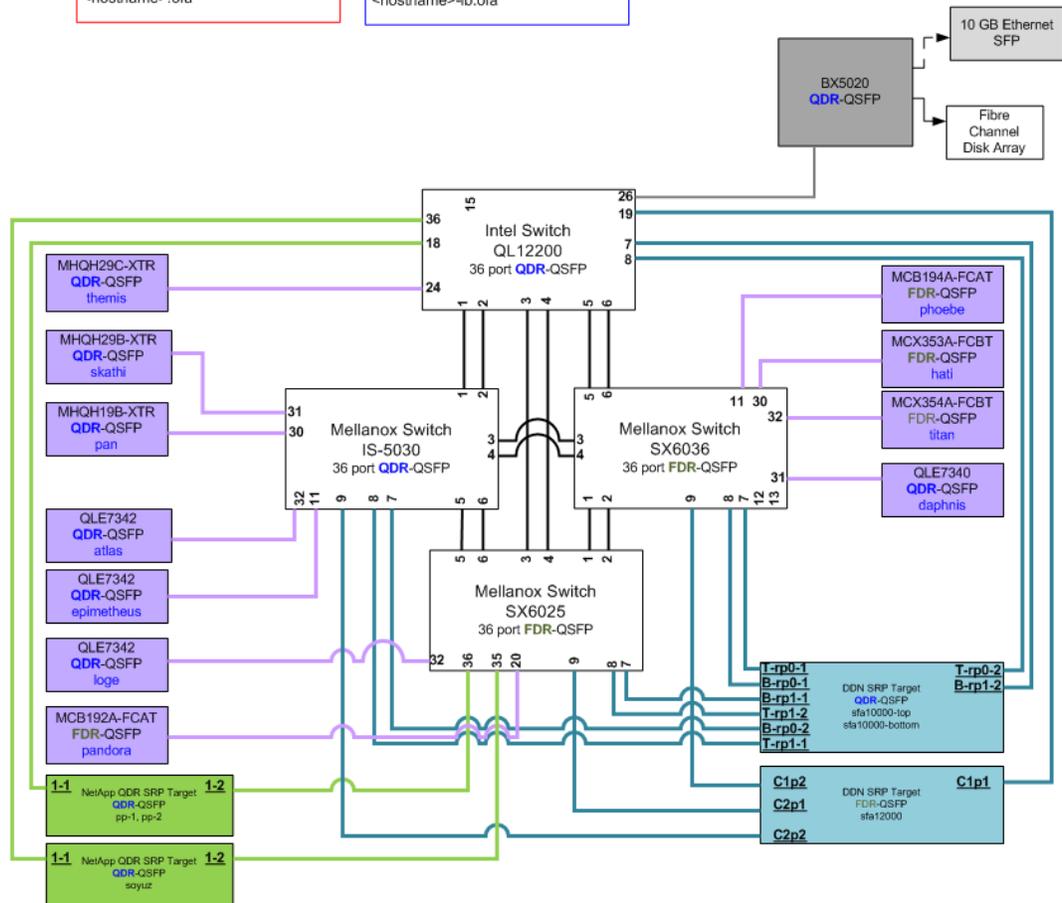
# DUT and Test Setup Information

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

May 2013  
 InfiniBand Topology

**Ethernet Addressing**  
 <hostname>.ofa

**IPoB Addressing**  
 <hostname>-ib.ofa



DUT #1 Details			
Manufacturer:	Intel	Firmware Revision:	NA
Model:	QLE7340	Hardware Revision:	2
Speed:	QDR	Located in Host:	daphnis
Firmware MD5sum:	NA		
Additional Comments / Notes:			

DUT #2 Details			
Manufacturer:	Intel	Firmware Revision:	NA
Model:	QLE7342	Hardware Revision:	2
Speed:	QDR	Located in Host:	epimetheus, loge, atlas
Firmware MD5sum:	NA		
Additional Comments / Notes:			

# Mandatory Tests – IB Device Test Results:

## 11.1: Link Initialization

Results	
Part #1:	PASS
Discussion:	
All links established with the DUT were of the proper link speed and width.	

Link Partner		QLE7340	QLE7342
Intel 12200 (Switch) – QDR		PASS	PASS
Mellanox SX6025 (Switch) – FDR		PASS	PASS
Mellanox SX6036 (Switch) – FDR		PASS	PASS
Mellanox IS-5030 (Switch) – QDR		PASS	PASS
DataDirect Networks SFA12000 (SRP Target) – FDR		PASS	PASS
DataDirect Networks SFA10000 (SRP Target) – QDR		PASS	PASS
NetApp Soyuz (SRP Target) – QDR		PASS	PASS
LSI Pikes Peak (SRP Target) – QDR		PASS	PASS
Mellanox BX5020 (Gateway) - QDR		PASS	PASS
Host: daphnis	HCA: QLE7340 (QDR)	NA	PASS
Host: epimetheus	HCA: QLE7342 (QDR)	PASS	NA
Host: themis	HCA: MHQH29C-XTR (QDR)	PASS	PASS
Host: pan	HCA: MHQH19B-XTR (QDR)	PASS	PASS
Host: hati	HCA: MCX353A-FCBT (FDR)	PASS	PASS
Host: titan	HCA: MCX354A-FCBT (FDR)	PASS	PASS
Host: pandora	HCA: MCB194A-FCAT (FDR)	PASS	PASS
Host: phoebe	HCA: MCB192A-FCAT (FDR)	PASS	PASS

## 11.2: Fabric Initialization

Subnet Manager	Result
OpenSM	PASS
Result Discussion:	
All subnet managers used while testing with OFED 3.5 were able to correctly configure the selected topology.	

**11.3: IPoIB Connected Mode**

Subnet Manager	Part A	Part B	Part C
OpenSM	PASS	PASS	PASS
<b>Result Discussion:</b>			
IPoIB ping, SFTP, and SCP transactions completed successfully between all HCAs; each HCA acted as both a client and a server for all tests.			

**11.4: IPoIB Datagram Mode**

Subnet Manager	Part A	Part B	Part C
OpenSM	PASS	PASS	PASS
<b>Result Discussion:</b>			
IPoIB ping, SFTP, and SCP transactions completed successfully between all HCAs; each HCA acted as both a client and a server for all tests.			

**11.5: SM Failover and Handover**

SM Pairings	Result
OpenSM	PASS
<b>Result Discussion:</b>	
OpenSM was able to properly handle SM priority and state rules.	

**11.6: SRP**

Subnet Manager	Result
OpenSM	PASS
<b>Result Discussion:</b>	
With the exception of the XXXX and YYYY HCAs, SRP communications between all HCAs and all SRP targets succeeded while OpenSM was in control of the fabric. The XXXX and YYYY HCAs do not currently support SRP operations.	

**13.1 TI iSER**

Subnet Manager	Result
OpenSM	Not Tested
<b>Result Discussion:</b>	
This test was not performed, as there are no devices that support the iSER test procedure present in the event topology.	

**13.2: TI NFS over RDMA**

Subnet Manager	Result
OpenSM	PASS
<b>Result Discussion:</b>	
With the exception of the XXXX and YYYY HCAs, all other devices were able to complete the Connectathon test suite; each HCA acted as both a client and a server. XXXX and YYYY were unable to insert the necessary kernel modules required for this test.	

**13.4: TI uDAPL**

Subnet Manager	Result
OpenSM	PASS
<b>Result Discussion:</b>	
All communications using DAPL were seen to complete successfully as described in the referenced test plan; each HCA acted as both a client and a server for all tests.	

**13.5: TI RDMA Basic Interoperability**

Subnet Manager	Result
OpenSM	PASS
<b>Result Discussion:</b>	
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**

Subnet Manager	Result
OpenSM	PASS
<b>Result Discussion:</b>	
All IB switches were seen to properly handle a large load as indicated by the successful completion of control communications between two HCAs while all other HCAs in the fabric were used to generate traffic in order to put a high load on the switch. Each HCA acted as both a client and a server for the control connection.	

**13.7: TI MPI – Open**

Subnet Manager	Part A	Part B
OpenSM	PASS	PASS
<b>Result Discussion:</b>		
Complete heterogeneity; 1 process per system.		

## Beta Tests – IB Device Test Results:

### 11.7: IB Ethernet Gateway

Subnet Manager	Result
OpenSM	Not Tested
<b>Result Discussion:</b>	
This test was not performed, as there are no devices that support the Ethernet Gateway test procedure present in the event topology.	

### 11.8 IB FibreChannel Gateway

Subnet Manager	Result
OpenSM	Not Tested
<b>Result Discussion:</b>	
This test was not performed, as there are no devices that support the FibreChannel Gateway test procedure present in the event topology.	