OpenFabrics Alliance
Interoperability Working Group (OFA-IWG)
June 2009 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

Amit Krig
Mellanox Technologies
Hermon Building 4th Floor
P.O. Box 586, Yokenam 20692
Israel

August 21, 2009
Report Rev1.4
OFED Version: 1.4.1

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

Mellanox MHGA28-XTC (InfiniHost™ III Ex HCA, dual-port 20Gb/s, PCIe1.2 x8, MemFree)
Mellanox MHGA28-1TC (InfiniHost™ III Ex HCA, dual-port 20Gb/s, PCIe1.2 x8, 128MB)
Mellanox MHRH29-XTC (ConnectX™ VPI, dual-port 20Gb/s, PCIe2.0 x8, MemFree)
Mellanox MHEH28-XTC (ConnectX™ VPI, dual-port 10Gb/s, PCIe1.2 x8, MemFree)
Mellanox MHGH28-XTC (ConnectX™ VPI, dual-port 20Gb/s, PCIe1.2 x8, MemFree)
Mellanox MHQH29-XTC (ConnectX™ VPI, dual-port 40Gb/s, PCIe2.0 x8, MemFree)
Mellanox MHEA28-1TC (InfiniHost™ III Ex HCA, dual-port 10Gb/s, PCIe1.2 x8, 128MB)
Mellanox MHGS18-XTC (InfiniHost™ III Lx HCA, single-port 20Gb/s, PCIe1.2 x8, MemFree)
Mellanox MHJH29-XTC (ConnectX™ VPI, dual-port 40Gb/s, PCIe2.0 x8, MemFree)
Mellanox MHEA28-XTC (InfiniHost™ III Ex HCA, dual-port 10Gb/s, PCIe1.2 x8, MemFree)
Mellanox MHET2X-1TC (InfiniHost™ HCA, dual-port 10Gb/s, PCI-X, 128MB)
Mellanox MHES18-XTC (InfiniHost™ III Lx HCA, single-port 10Gb/s, PCIe1.2 x8, MemFree)
Mellanox MHES14-XTC (InfiniHost™ III Lx HCA, single-port 10Gb/s, PCIe1.2 x4, MemFree)

The test suite referenced in this report is available at the OFA website, at test time release 1.28 (March 27, 2009 DRAFT) was used:

http://openfabrics.org/downloads/OFA-IWG Interoperability Test Plan-v1.28.pdf

The following table highlights the Mandatory test results required for the OpenFabrics Interoperability Logo for the DUT per the testplan referenced above and the current OpenFabrics Interoperability Logo Program (OFILP).

Mandatory Test Procedures	IWG Test Status	Result/Notes
10.1: IB Link Initialization	**Mandatory**	**PASS with Comments**
10.2: IB Fabric Initialization	**Mandatory**	**PASS**
10.3: IB IPoIB Connected Mode	**Mandatory**	**PASS**
10.4: IB IPoIB Datagram Mode	**Mandatory**	**PASS with Comments**
10.6: IB SRP	**Mandatory**	**PASS**
12.1: TI iSER	**Mandatory**	**Not Available**
12.4: TI SDP	**Mandatory**	**PASS**

For specific details regarding issues please see the corresponding test result.

Summary of all results follows on the second page of this report.

Testing Completed 06/19/2009

Nickolas Wood
ndv2@iol.unh.edu
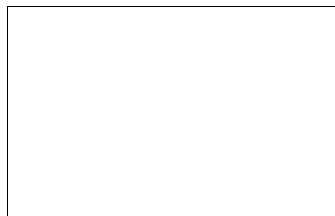
Review Completed 08/11/2009

Bob Noseworthy
ren@iol.unh.edu

Table 1: Result Summary

The following table summarizes all results from the event pertinent to an IB device.

Note: **Failing a beta test does not necessarily indicate a failure of the device under test.** There are several reasons that a device might fail a beta test that are beyond the control of the device manufacturer. Such reasons include unresolved problems with the OFED software, with other vendors' devices, and with the test plan procedures.

Test Procedures	IWG Test Status	Result/Notes
10.1: IB Link Initialization	**Mandatory**	**PASS with Comments**
10.2: IB Fabric Initialization	**Mandatory**	**PASS**
10.3: IB IPoIB Connected Mode	**Mandatory**	**PASS**
10.4: IB IPoIB Datagram Mode	**Mandatory**	**PASS with Comments**
10.5: IB SM Failover and Handover	Beta	**PASS**
10.6: IB SRP	**Mandatory**	**PASS**
10.7: IB Ethernet Gateway	Beta	**Not Applicable**
10.8: IB FibreChannel Gateway	Beta	**Not Applicable**
12.1: TI iSER	**Mandatory**	**Not Available**
12.10: HP MPI - HP	Beta	**FAIL**
12.11: TI MPI - Intel	Beta	**FAIL**
12.12: TI MPI - Open	Beta	**FAIL**
12.13: TI MPI - OSU	Beta	**FAIL**
12.3: TI Reliable Datagram Service	Beta	**PASS**
12.4: TI SDP	**Mandatory**	**PASS**
12.5: TI uDAPL	Beta	**FAIL**
12.6-7: TI Basic RDMA Interoperability	Beta	**Not Tested**
12.8-9: TI RDMA Operations.	Beta	**Not Tested**

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Report Revision History

- v1.0 Initial working copy

- v1.1 Fixed topology and device names

- v1.2 Fixed topology and device names. Changed results in Beta tests that were "Refer to Comments" to "Fail", added note about these tests in the Result Summery.

- v1.3 Changed ConnectX device names from "ConnectX IB HCA" to "ConnectX VPI". Added special naming note.

- v1.4 Changed topology diagram.

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 explanation of the situation is included, such as due to time limitations only a portion of the testing was performed.
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 specified 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.
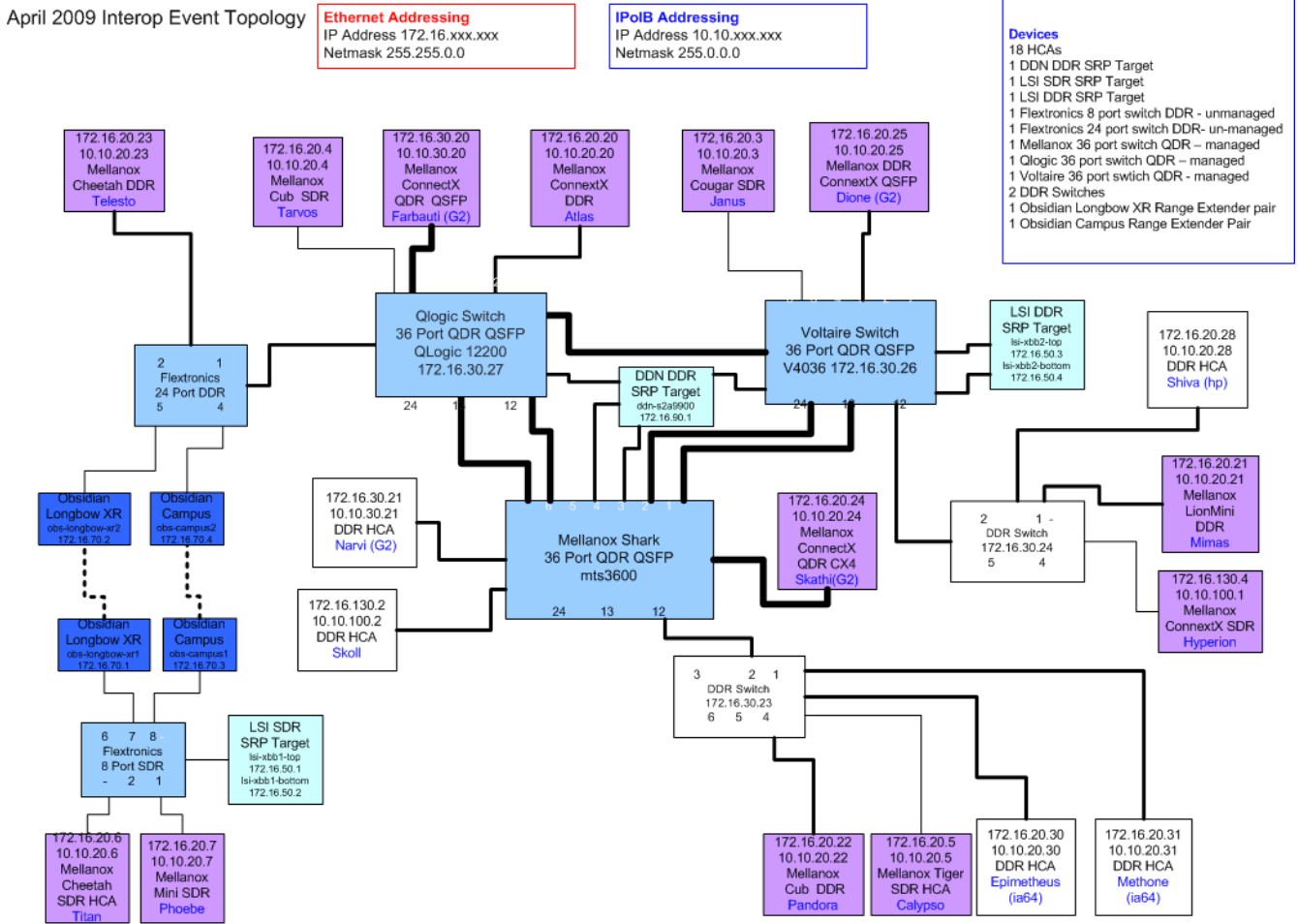
DUT #1 Details			
Manufacturer	Mellanox	Firmware Rev	`5.3.0`
Model	MHGA28-XTC	Hardware Rev	`20`
Speed	DDR 4x	Located in Host	mimas
Additional Comments/Notes			
Mellanox MHGA28-XTC (InfiniHost™ III Ex HCA, dual-port 20Gb/s, PCIe1.2 x8, MemFree, "Lion Mini DDR")			

DUT #2 Details			
Manufacturer	Mellanox	Firmware Rev	`4.8.200`
Model	MHGA28-1TC	Hardware Rev	`0`
Speed	DDR 4x	Located in Host	hyperion
Additional Comments/Notes			
Mellanox MHGA28-1TC (InfiniHost™ III Ex HCA, dual-port 20Gb/s, PCIe1.2 x8, 128MB, "Lion Cub DDR")			

DUT #3 Details

Manufacturer	Mellanox	Firmware Rev	2.6.302
Model	MHRH29-XTC	Hardware Rev	a0
Speed	DDR 4x {QSFP}	Located in Host	dione

Additional Comments/Notes

Mellanox MHRH29-XTC (ConnectX™ VPI, dual-port 20Gb/s, PCIe2.0 x8, MemFree, QSFP, "ConnectX DDR")

Special Note:
The model name for this device is different than that reported by the HCA. This HCA reports this device as MHQH29-XTC and is restricted to DDR speeds.

DUT #4 Details

Manufacturer	Mellanox	Firmware Rev	2.6.302
Model	MHEH28-XTC	Hardware Rev	a0
Speed	SDR 4x	Located in Host	pandora

Additional Comments/Notes

Mellanox MHEH28-XTC (ConnectX™ VPI, dual-port 10Gb/s, PCIe1.2 x8, MemFree "ConnectX SDR")

DUT #5 Details

Manufacturer	Mellanox	Firmware Rev	2.6.302
Model	MHGH28-XTC	Hardware Rev	a0
Speed	DDR 4x	Located in Host	atlas

Additional Comments/Notes

Mellanox MHGH28-XTC (ConnectX™ VPI, dual-port 20Gb/s, PCIe21.2 x8, MemFree "ConnectX DDR")

DUT #6 Details

Manufacturer	Mellanox	Firmware Rev	2.6.302
Model	MHQH29-XTC	Hardware Rev	0
Speed	QDR 4x {QSFP}	Located in Host	farbuti

Additional Comments/Notes

Mellanox MHQH29-XTC (ConnectX™ VPI, dual-port 40Gb/s, PCIe2.0 x8, MemFree, QSFP "ConnectX QDR")

DUT #7 Details

Manufacturer	Mellanox	Firmware Rev	4.8.200
Model	MHEA28-1TC	Hardware Rev	0
Speed	SDR 4x	Located in Host	tarvos

Additional Comments/Notes

Mellanox MHEA28-1TC (InfiniHost™ III Ex HCA, dual-port 10Gb/s, PCIe1.2 x8, 128MB, "Lion Cub SDR")

DUT #8 Details

Manufacturer	Mellanox	Firmware Rev	1.2.0
Model	MHGS18-XTC	Hardware Rev	0
Speed	DDR 4x	Located in Host	telesto

Additional Comments/Notes

Mellanox MHGS18-XTC (InfiniHost™ III Lx HCA, single-port 20Gb/s, PCIe1.2 x8, MemFree, "Cheetah DDR")

DUT #9 Details

Manufacturer	Mellanox	Firmware Rev	2.6.302
Model	MHJH29-XTC	Hardware Rev	a0
Speed	QDR 4x	Located in Host	skathi

Additional Comments/Notes

Mellanox MHJH29-XTC (ConnectX™ VPI, dual-port 40Gb/s, PCIe2.0 x8, MemFree, "ConnectX QDR")

DUT #10 Details

Manufacturer	Mellanox	Firmware Rev	5.3.0
Model	MHEA28-XTC	Hardware Rev	a0
Speed	SDR 4x	Located in Host	phoebe

Additional Comments/Notes

Mellanox MHEA28-XTC (InfiniHost™ III Ex HCA, dual-port 10Gb/s, PCIe1.2 x8, MemFree, "Lion Mini SDR")

DUT #11 Details			
Manufacturer	Mellanox	Firmware Rev	3.5.930
Model	MHET2X-1TC	Hardware Rev	a1
Speed	SDR 4x	Located in Host	janus
Additional Comments/Notes			
Mellanox MHET2X-1TC (InfiniHost™ HCA, dual-port 10Gb/s, PCI-X, 128MB, "Cougar SDR")			

DUT #12 Details			
Manufacturer	Mellanox	Firmware Rev	1.2.0
Model	MHES18-XTC	Hardware Rev	a0
Speed	SDR	Located in Host	titan
Additional Comments/Notes			
Mellanox MHES18-XTC (InfiniHost™ III Lx HCA, single-port 10Gb/s, PCIe1.2 x8, MemFree, "Cheetah SDR")			

DUT #13 Details			
Manufacturer	Mellanox	Firmware Rev	1.2.0
Model	MHES14-XTC	Hardware Rev	a0
Speed	SDR	Located in Host	calypso
Additional Comments/Notes			
Mellanox MHES14-XTC (InfiniHost™ III Lx HCA, single-port 10Gb/s, PCIe1.2 x4, MemFree, "Tiger SDR")			

Mandatory Tests - IB Device Test Summary Results:

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 10.1: IB Link Initialize	Test #1	Phy link is established	**PASS with Comments**
Discussion:			

Physical link initialization was verified between this device and every other device in the fabric. Link status was observed visually via status lights on the device. Port width and link speed was verified via ibdiagnet.

This version of the test plan does not explicitly demand a link to be at the proper speed, the next version will. Logo testing in the 2nd lf of 2009 will require proper link speed between all link combinations. Some DUTs only link at SDR speeds with certain Link Partners even though these Link Partners are rated to perform at speeds higher then SDR. The Link Partners test where this was observed are noted with a status of "Pass with Comments" (PC) in the section below.

Link Partner Device		Host: Dione, G2 PCI Express HCA: Mellanox ConnectX DDR	Host: Hyperion HCA: Mellanox Lion Cub DDR	Host: Telesto HCA: Mellanox Cheetah DDR	Host: Pandora HCA: Mellanox ConnectX SDR	Host: Phoebe HCA: Mellanox Lion Mini SDR	Host: Skathi HCA: Mellanox ConnectX QDR	Host: Janus HCA: Mellanox Cougar SDR	Host: Tarvos HCA: Mellanox Lion Cub SDR	Host: Farbuti, G2 PCI Express HCA:Mellanox ConnectX QDR	Host: Atlas HCA: Mellanox ConnectX DDR	Host: Mimas HCA: Mellanox Lion Mini DDR	Hoist: Titan HCA: Mellanox Cheetah SDR	Host: Calypso HCA: Mellanox Tiger SDR
QLogic 12200 (Switch)		**PC**	**PC**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**PC**	**P**	**P**
Flextronics F-X430066 (Switch)		**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Flextronics F-X430044 (Switch)		**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Mellanox MTS3600 (Switch)		**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Voltaire v4036 (Switch)		**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Obsidian Longbow-XR (Range Extender)		**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Obsidian Longbow-XR (Range Extender)		**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Obsidian Longbow Campus (Range Extender)		**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Obsidian Longbow Campus (Range Extender)		**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
LSI XBB1 (SRP Target)		**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
LSI XBB2 (SRP Target)		**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
DataDirect Networks (SRP Target)		**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Host: Dione, G2 PCI e	HCA: Mellanox ConnectX DDR	**X**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Host: Hyperion	HCA: Mellanox LionCub DDR	**P**	**X**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Host: Skoll	HCA: DDR HCA	**P**	**PC**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**PC**	**P**	**P**
Host: Narvi, G2 PCI e	HCA: DDR HCA	**P**	**PC**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**PC**	**P**	**P**
Host: Telesto	HCA: Mellanox Cheetah DDR	**P**	**P**	**X**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Host: Pandora	HCA: Mellanox ConnectX SDR	**P**	**P**	**P**	**X**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Host: Titan	HCA: Mellanox Cheetah SDR	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**X**	**P**
Host: Phoebe	HCA: Mellanox Lion Mini SDR	**P**	**P**	**P**	**P**	**X**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Host: Calypso	HCA: Mellanox Tiger SDR	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**X**
Host: Skathi	HCA: Mellanox ConnectX QDR	**P**	**P**	**P**	**P**	**P**	**X**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Host: Janus	HCA: Mellanox Cougar SDR	**P**	**P**	**P**	**P**	**P**	**P**	**X**	**P**	**P**	**P**	**P**	**P**	**P**
Host: Tarvos	HCA: Mellanox Lion Cub SDR	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**X**	**P**	**P**	**P**	**P**	**P**
Host: Farbauti, G2 PCI e	HCA: Mellanox ConnectX QDR	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**X**	**P**	**P**	**P**	**P**
Host: Atlas	HCA: Mellanox ConnectX DDR	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**X**	**P**	**P**	**P**
Host: Mimas	HCA: Mellanox Lion Mini DDR	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**X**	**P**	**P**
Host: Shiva	HCA: Mellanox ConnectX DDR	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Host: Methone, IA_64	HCA: Mellanox InfiniHost III DDR	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**
Host: Epimetheus, IA_64	HCA: Mellanox InfiniHost III DDR	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**	**P**

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 10.2: IB Fabric Initialization	Test #1:	Port is Active with all SMs	PASS

Discussion:

The fabric configuration shown in Figure 1 was used for this test. 'ibdiagnet -c 1000' showed no Port error counters increment. Only one SM is run at a time. All switches are power cycled between SM trials. All links are validated via use of 'ibdiagnet' and 'ibchecknet' was used to verify that there were no duplicate guids. Refer to the table below for SM details.

SMs tested include: *OFED OpenSM (SM Only), QLogic 12200 (Managed Switch), Mellanox MTS3600 (Managed Switch) and Voltaire v4036 (Managed Switch)*

For each SM listed above	All ports Armed/Active	No Dup GUIDs	No Port errors
Host: Dione, G2 PCI Express HCA: Mellenox ConnetX DDR	PASS	PASS	PASS
Host: Hyperion HCA: Mellanox LionCub SDR	PASS	PASS	PASS
Host: Telesto HCA: Mellanox Cheetah DDR	PASS	PASS	PASS
Host: Pandora HCA: Mellanox ConnectX SDR	PASS	PASS	PASS
Host: Phoebe HCA: Mellanox Lion Mini SDR	PASS	PASS	PASS
Host: Skathi HCA: Mellanox ConnectX QDR	PASS	PASS	PASS
Host: Janus HCA: Mellanox Cougar SDR	PASS	PASS	PASS
Host: Tarvos HCA: Mellanox Lion Cub SDR	PASS	PASS	PASS
Host: Farbauti, G2 PCI Express HCA: Mellanox ConnectX QDR	PASS	PASS	PASS
Host: Atlas HCA: Mellanox ConnectX DDR	PASS	PASS	PASS
Host: Mimas HCA: Mellanox Lion Mini DDR	PASS	PASS	PASS
Host: Titan HCA: Mellanox Cheetah SDR	PASS	PASS	PASS
Host: Calypso HCA: Mellanox Tiger SDR	PASS	PASS	PASS

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 10.3: IPoIB Connected Mode	Test #1	Automated Test Script	**PASS**
	Test #2	Automated Test Script	**PASS**
	Test #3	Automated Test Script	**PASS**

Discussion: Test #1

Test #1: An automated test script was used to send ICMP Echo Request packets with payloads of specific sizes between all hosts on the configured fabric. This procedure was repeated with each subnet manager independently managing the fabric.

Test #2: An HCA was disconnected from the fabric and reconnected in a different location; the ICMP Echo Reply packets ceased while the HCA was disconnected, and then resumed when it was reconnected. This procedure was repeated once with each subnet manager independently managing the fabric.

Test #3: An automated test script was used to transfer a 4MB file using the SFTP protocol between all hosts on the configured fabric. The file was transferred once in each direction between all hosts, and the contents of the file was verified after each transfer. This procedure was repeated with each subnet manager independently managing the fabric.

SMs tested include: *OFED OpenSM (SM Only), QLogic 12200 (Managed Switch), Mellanox MTS3600 (Managed Switch) and Voltaire v4036 (Managed Switch)*

For each SM listed above	OpenSM	QLogic 12200 SM	MTS3600 SM	VoltaireSM
Host: Dione, G2 PCI Express HCA: Mellenox ConnetX DDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Hyperion HCA: Mellanox LionCub SDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Telesto HCA: Mellanox Cheetah DDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Pandora HCA: Mellanox ConnectX SDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Phobe HCA: Mellanox Lion Mini SDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Skathi HCA: Mellanox ConnectX QDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Janus HCA: Mellanox Cougar SDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Tarvos HCA: Mellanox Lion Cub SDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Farbauti, G2 PCI Express HCA: Mellanox ConnectX QDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Atlas HCA: Mellanox ConnectX DDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Mimas HCA: Mellanox Lion Mini DDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Titan HCA: Mellanox Cheetah SDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Calypso HCA: Mellanox Tiger SDR	**PASS**	**PASS**	**PASS**	**PASS**

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 10.4: IPoIB Datagram	Test #1	Automated Test Script	**PASS with Comments**
	Test #2	Automated Test Script	**PASS**
	Test #3	Automated Test Script	**PASS**

Discussion:

Test #1: An automated test script was used to send ICMP Echo Request packets with payloads of specific sizes between all hosts on the configured fabric. This procedure was repeated with each subnet manager independently managing the fabric.

The last packet size tested; 65507 bytes, was seen to lose the very first packet sent. This can be fixed by setting the systems qlen value to 18 and as such has no bearing on this device.

Test #2: An HCA was disconnected from the fabric and reconnected in a different location; the ICMP Echo Reply packets ceased while the HCA was disconnected, and then resumed when it was reconnected. This procedure was repeated once with each subnet manager independently managing the fabric.

Test #3: An automated test script was used to transfer a 4MB file using the SFTP protocol between all hosts on the configured fabric. The file was transferred once in each direction between all hosts, and the contents of the file was verified after each transfer. This procedure was repeated with each subnet manager independently managing the fabric.

SMs tested include: *OFED OpenSM (SM Only), QLogic 12200 (Managed Switch), Mellanox MTS3600 (Managed Switch) and Voltaire v4036 (Managed Switch)*

For each SM listed above	OpenSM	QLogic 12200 SM	MTS3600SM	VoltaireSM
Host: Dione, G2 PCI Express HCA: Mellenox ConnectX DDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Hyperion HCA: Mellanox LionCub SDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Telesto HCA: Mellanox Cheetah DDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Pandora HCA: Mellanox ConnectX SDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Phobe HCA: Mellanox Lion Mini SDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Skathi HCA: Mellanox ConnectX QDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Janus HCA: Mellanox Cougar SDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Tarvos HCA: Mellanox Lion Cub SDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Farbauti, G2 PCI Express HCA: Mellanox ConnectX QDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Atlas HCA: Mellanox ConnectX DDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Mimas HCA: Mellanox Lion Mini DDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Titan HCA: Mellanox Cheetah SDR	**PASS**	**PASS**	**PASS**	**PASS**
Host: Calypso HCA: Mellanox Tiger SDR	**PASS**	**PASS**	**PASS**	**PASS**

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 10.6: IB SRP	Test #1:	Automated Test Script	PASS
Discussion:			
No SRP issues were observed with these HCAs			

Test #1	DataDirect Networks S2A 9900	LSI XBB2-IB (Dual Controller SRP Storage System)	LSI Engenio 0825 (SRP Storage System)
Host: Dione, G2 PCI Express HCA: Mellanox ConnectX DDR	PASS	PASS	PASS
Host: Hyperion HCA: Mellanox LionCub SDR	PASS	PASS	PASS
Host: Telesto HCA: Mellanox Cheetah DDR	PASS	PASS	PASS
Host: Pandora HCA: Mellanox ConnectX SDR	PASS	PASS	PASS
Host: Phoebe HCA: Mellanox Lion Mini SDR	PASS	PASS	PASS
Host: Skathi HCA: Mellanox ConnectX QDR	PASS	PASS	PASS
Host: Janus HCA: Mellanox Cougar SDR	PASS	PASS	PASS
Host: Tarvos HCA: Mellanox Lion Cub SDR	PASS	PASS	PASS
Host: Farbauti, G2 PCI Express HCA: Mellanox ConnectX QDR	PASS	PASS	PASS
Host: Atlas HCA: Mellanox ConnectX DDR	PASS	PASS	PASS
Host: Mimas HCA: Mellanox Lion Mini DDR	PASS	PASS	PASS
Host: Titan HCA: Mellanox Cheetah SDR	PASS	PASS	PASS
Host: Calypso HCA: Mellanox Tiger SDR	PASS	PASS	PASS

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.1: TI iSER	Test #1-4	Not Available	Not Available
Discussion:			
This test was not performed due to the unavailability of an iSER target device in the fabric			

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.4: TI SDP	Test #1: Netperf	Automated Test Script	**PASS**
	Test #2: SFTP	Automated Test Script	**PASS**
	Test #3: SCP	Automated Test Script	**PASS**
Discussion:			
No SDP issues were observed with these HCAs			

	Test #1	Test #2	Test #3
Host: Dione, G2 PCI Express HCA: Mellanox ConnectX DDR	**PASS**	**PASS**	**PASS**
Host: Hyperion HCA: Mellanox LionCub SDR	**PASS**	**PASS**	**PASS**
Host: Telesto HCA: Mellanox Cheetah DDR	**PASS**	**PASS**	**PASS**
Host: Pandora HCA: Mellanox ConnectX SDR	**PASS**	**PASS**	**PASS**
Host: Phobe HCA: Mellanox Lion Mini SDR	**PASS**	**PASS**	**PASS**
Host: Skathi HCA: Mellanox ConnectX QDR	**PASS**	**PASS**	**PASS**
Host: Janus HCA: Mellanox Cougar SDR	**PASS**	**PASS**	**PASS**
Host: Tarvos HCA: Mellanox Lion Cub SDR	**PASS**	**PASS**	**PASS**
Host: Farbauti, G2 PCI Express HCA: Mellanox ConnectX QDR	**PASS**	**PASS**	**PASS**
Host: Atlas HCA: Mellanox ConnectX DDR	**PASS**	**PASS**	**PASS**
Host: Mimas HCA: Mellanox Lion Mini DDR	**PASS**	**PASS**	**PASS**
Host: Titan HCA: Mellanox Cheetah SDR	**PASS**	**PASS**	**PASS**
Host: Calypso HCA: Mellanox Tiger SDR	**PASS**	**PASS**	**PASS**

Beta Tests - IB Device Test Results:

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 10.5: IB SM Failover and Handover	Test #1	No problems detected	**PASS**
Discussion: Test Results			
SM failover/handover succeeded in a fabric utilizing these DUT's. OpenSM was the only SM tested.			

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 10.7: IB Ethernet Gateway	Test #1-10	Not applicable to DUT	**Not Applicable**
Discussion:			
The OFA Logo Program does not require these tests to be performed on a device that does not support this functionality.			

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 10.8: IB FibreChannel Gateway	Test #1-10	Not applicable to DUT	**Not Applicable**
Discussion:			
The OFA Logo Program does not require these tests to be performed on a device that does not support this functionality.			

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.3: TI Reliable Datagram Service	Test #1	No problems detected	**PASS**
	Test #2	No problems detected	**PASS**
Discussion:			
All tests succeeded from all DUT's without incident.			

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.5: TI uDAPL	Test #1	Errors seen	**FAIL**
Discussion:			
Udapl failures were observed however they have been attributed to an unstable test run. Further debugging on this issue is required.			

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.6: TI Basic RDMA Interoperability – Using XanStorm	Test #1-10	Not Tested	**FAIL**
Discussion:			
Due to time constraints this test was not performed.			

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.7: TI Basic RDMA Interoperability – Using Command Line	Test #1-10	Not Tested	**FAIL**
Discussion:			
Due to time constraints this test was not performed.			

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.8: TI RDMA Operations. Using XANStorm	Test #1-10	Not Tested	**Not Tested**
Discussion:			
Due to time constraints this test was not performed.			

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.9: TI RDMA Operations. Using Command Line	Test #1-10	Not Tested	**Not Tested**
Discussion:			
Due to time constraints this test was not performed.			

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.10: MPI – Hewlett-Packard	Test #1-24	Errors seen	**FAIL**
Discussion:			

Four tests were run using Mellanox HCA's. One where the entire fabric was used, Mellanox and other HCAs from other vendors were involved, herein referred to as heterogeneous, one where every Mellanox HCA was used, herein referred to as homogenous, one where only Mellanox HCA's in ia64 systems was used, herein referred to as ia64 homogenous, and one where only Mellanox HCA's in xeon x86-64 systems was used, herein referred to as x64 homogenous.

Homogenous: FAILED

ia64 Homogenous: FAILED

x64 Homogenous: FAILED

Heterogeneous: FAILED

Refer to the logs for more information regarding these failures.

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.11: TI MPI – Intel	Test #1 PingPing and PingPong	Errors seen	**FAIL**
	Test #2 All	Errors seen	**FAIL**
Discussion:			

Four tests were run using Mellanox HCA's. One where the entire fabric was used, Mellanox and other HCAs from other vendors were involved, herein referred to as heterogeneous, one where every Mellanox HCA was used, herein referred to as homogenous, one where only Mellanox HCA's in ia64 systems was used, herein referred to as ia64 homogenous, and one where only Mellanox HCA's in xeon x86-64 systems was used, herein referred to as x64 homogenous.

Homogenous:
```
intel pingping/pingpong: FAILED
```

ia64 Homogenous:
```
intel pingping/pingpong: FAILED
```

x64 Homogenous:
```
intel pingping/pingpong: PASSED
```

Heterogeneous:
```
intel pingping/pingpong: FAILED
```

Refer to the logs for more information regarding these failures.

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.12: TI MPI – Open	Test #1 PingPing and PingPong	Errors seen	**FAIL**
	Test #2 All	Errors seen	**FAIL**
Discussion:			

Four tests were run using Mellanox HCA's. One where the entire fabric was used, Mellanox and other HCAs from other vendors were involved, herein referred to as heterogeneous, one where every Mellanox HCA was used, herein referred to as homogenous, one where only Mellanox HCA's in ia64 systems was used, herein referred to as ia64 homogenous, and one where only Mellanox HCA's in xeon x86-64 systems was used, herein referred to as x64 homogenous.

Homogenous:
```
openmpi pingping/pingpong: PASSED
openmpi all: FAILED
```

ia64 Homogenous:
```
openmpi pingping/pingpong: PASSED
openmpi all: PASSED
```

x64 Homogenous:
```
openmpi pingping/pingpong: PASSED
openmpi all: FAILED
```

Heterogeneous:
```
openmpi pingping/pingpong: FAILED
openmpi all: FAILED
```

```
Refer to the logs for more information regarding these failures.
```

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.13: TI MPI – Mvapich1	Test #1 PingPing and PingPong	Errors seen	**FAIL**
	Test #2 All	Errors seen	**FAIL**
Discussion:			

Four tests were run using Mellanox HCA's. One where the entire fabric was used, Mellanox and other HCAs from other vendors were involved, herein referred to as heterogeneous, one where every Mellanox HCA was used, herein referred to as homogenous, one where only Mellanox HCA's in ia64 systems was used, herein referred to as ia64 homogenous, and one where only Mellanox HCA's in xeon x86-64 systems was used, herein referred to as x64 homogenous.

Homogenous:
```
mvapich1 pingping/pingpong: FAILED
mvapich1 all: FAILED
```

ia64 Homogenous:
```
openmpi pingping/pingpong: PASSED
openmpi all: PASSED
```

x64 Homogenous:
```
mvapich1 pingping/pingpong: PASSED
mvapich1 all: FAILED
```

Heterogeneous:
```
mvapich1 pingping/pingpong: FAILED
mvapich1 all: FAILED
```

Refer to the logs for more information regarding these failures.

Test Number and Name	Part(s)	Summary Note(s)	Result(s)
Group 12.13: TI MPI – Mvapich2	Test #1 PingPing and PingPong	Errors seen	**FAIL**
	Test #2 All	Errors seen	**FAIL**
Discussion:			

Four tests were run using Mellanox HCA's. One where the entire fabric was used, Mellanox and other HCAs from other vendors were involved, herein referred to as heterogeneous, one where every Mellanox HCA was used, herein referred to as homogenous, one where only Mellanox HCA's in ia64 systems was used, herein referred to as ia64 homogenous, and one where only Mellanox HCA's in xeon x86-64 systems was used, herein referred to as x64 homogenous.

Homogenous:
```
mvapich2 pingping/pingpong: PASSED
mvapich2 all: FAILED
```

ia64 Homogenous:
```
mvapich2 pingping/pingpong: PASSED
mvapich2 all: PASSED
```

x64 Homogenous:
```
mvapich2 pingping/pingpong: PASSED
mvapich2 all: FAILED
```

Heterogeneous:
```
mvapich2 pingping/pingpong: PASSED
mvapich2 all: FAILED
```

Refer to the logs for more information regarding these failures.