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

Harry Cropper Date: February 26, 2014
Intel Corporation Report Revision: 1.2
9211 Waterford Centre Blvd – Suite 100 OFED Version: 3.5-2
Austin, TX 78758 OS Version: Scientific Linux 6.4

Enclosed are the results from OFA Logo testing performed on the following devices under test (DUTs): Intel NEO20 RNIC

The test suite referenced in this report is available at the IOL website. Release 1.49 (2013-Nov-05) was used.

http://www.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 |
|--------------------------------------|-----------------|---------------------------|
| 12.1: Ethernet Link Initialization | Mandatory | PASS |
| 13.1: TI iSER | Beta | Not Available |
| 13.2: TI NFS over RDMA | Beta | Not Available |
| 13.4: TI uDAPL | Mandatory | PASS |
| 13.5: TI RDMA Basic Interoperability | Mandatory | PASS with Comments |
| 13.6: TI RDMA Stress | Mandatory | PASS |
| 13.7: TI MPI – Open | 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 January 28, 2014

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Review Completed February 26, 2014

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OFA Logo Event Report – January 2014 DUT: Intel NE020

Result Summary

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

| Test Procedures | IWG Test Status | Result/Notes |
|--------------------------------------|------------------------|--------------------|
| 12.1: Ethernet Link Initialization | Mandatory | PASS |
| <u>13.1: TI iSER</u> | Beta | Not Available |
| 13.2: TI NFS over RDMA | Beta | Not Available |
| <u>13.4: TI uDAPL</u> | Mandatory | PASS |
| 13.5: TI RDMA Basic Interoperability | Mandatory | PASS with Comments |
| 13.6 TI RDMA Stress | Mandatory | PASS |
| <u> 13.7: TI MPI – Open</u> | Mandatory | PASS |

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Report Revision History

- v1.0 Initial Release
- v1.1 Modified test 13.5 to more accurately reflect the behavior of the DUT; modified topology
- v1.2 Fixed minor typo in test 13.5

Configuration Files

| Description | Attachment |
|---|------------|
| Scientific Linux 6.4 Configuration File | |
| | 9 |
| OFED 3.5-2 Configuration File | Q |

Result Key

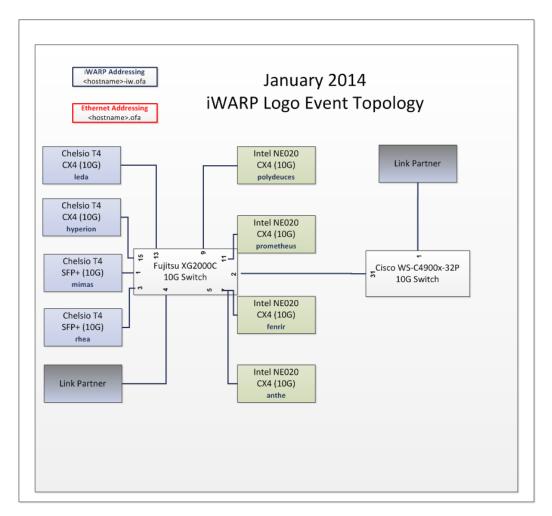
The following table contains possible results and their meanings:

| 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 |
| Comments | explanation of the situation is included. |
| FAIL | The DUT was observed to exhibit non-conformant behavior. |
| Qualified PASS | The DUT was observed to exhibit conformant behavior, with the exception of fault(s) or |
| | defect(s) which were previously known. |
| 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. |

OFA Logo Event Report – January 2014 DUT: Intel NE020

DUT and Test Setup Information

The IW fabric configuration utilized for all testing is shown below.



| DUT Details | | | |
|------------------------------|--------|--------------------|---------------------------------------|
| Manufacturer: | Intel | Firmware Revision: | 3.23 |
| Model: | NE020 | Hardware Revision: | N/A |
| Speed: | 10Gb/s | Located in Host: | anthe, fenrir, polydeuces, prometheus |
| Additional Comments / Notes: | | | |
| | | | |

Mandatory Tests - IW Device Test Results:

12.1: Ethernet Link Initialization

| Test Result | PASS |
|--------------------|------|
| Result Discussion: | |

All devices were shown to link and pass traffic to all other devices in a back-to-back configuration under nominal (unstressed) conditions.

| Link Partner | Chelsio T4 | Intel NE020 |
|-------------------|------------|-------------|
| RNIC: Chelsio T4 | PASS | PASS |
| RNIC: Intel NE020 | PASS | PASS |

13.1: TI iSER

| Test Result Not Tested | | | |
|---|--|--|--|
| Result Discussion: | | | |
| There were no iSER targets available in the cluster, therefore this was not tested. | | | |
| | | | |

13.2: TI NFS over RDMA

| Test Result | Not Tested | | |
|--|------------|--|--|
| Result Discussion: | | | |
| This test is not required for logo certification due to its beta status. | | | |
| | | | |

13.4: TI uDAPL

| Test Result PASS | | | |
|--|---|--|--|
| Discussion: | | | |
| All devices were shown to communicate correctly us | sing DAPL, by use of the Linux dapltest tool. | | |

13.5: TI RDMA Basic Interoperability

| Test Result | PASS with Comments | |
|--|--------------------|--|
| Discussion: | | |
| RDMA read and write operations were observed to cluster. RDMA sends smaller than size 240 were obs | · | |

OFA Logo Event Report – January 2014 DUT: Intel NE020

13.6: TI RDMA Stress

| | Switch Load | Switch Fan In |
|-------------|-------------|---------------|
| Test Result | PASS | PASS |
| Discussion: | | |

All switches were seen to properly handle a large load as indicated by the successful completion of control communications between two RNICs while other RNICs in the fabric were used to generate traffic in order to put a high load on the switch.

13.7: TI MPI - Open MPI

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|--|------|
| Test Result | PASS |
| Discussion: | |
| Complete heterogeneity; 1 process per system as described in the cluster topology. | |