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

Chelsio Communications T420-CR RNIC
Chelsio Communications T420-CX RNIC

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

<table>
<thead>
<tr>
<th>Test Procedures</th>
<th>IWG Test Status</th>
<th>Result/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1: Ethernet Link Initialization</td>
<td>Mandatory</td>
<td>PASS</td>
</tr>
<tr>
<td>13.1: TI iSER</td>
<td>Beta</td>
<td>Not Available</td>
</tr>
<tr>
<td>13.2: TI NFS over RDMA</td>
<td>Beta</td>
<td>Not Available</td>
</tr>
<tr>
<td>13.4: TI uDAPL</td>
<td>Mandatory</td>
<td>PASS</td>
</tr>
<tr>
<td>13.5: TI RDMA Basic Interoperability</td>
<td>Mandatory</td>
<td>PASS</td>
</tr>
<tr>
<td>13.6: TI RDMA Stress</td>
<td>Mandatory</td>
<td>Not Available</td>
</tr>
<tr>
<td>13.7: TI MPI – Open</td>
<td>Mandatory</td>
<td>PASS</td>
</tr>
</tbody>
</table>

Summary of all results follows on the second page of this report.
For specific details regarding issues, please see the corresponding test result.
Result Summary
The Following table summarizes all results from the event pertinent to this iWARP device class.

<table>
<thead>
<tr>
<th>Test Procedures</th>
<th>IWG Test Status</th>
<th>Result/Notes</th>
</tr>
</thead>
<tbody>
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<td>PASS</td>
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<td>Mandatory</td>
<td>PASS</td>
</tr>
</tbody>
</table>

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http://www.iol.unh.edu/certifyDoc/

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Report Revision History

- v1.0 Initial Release

Configuration Files

<table>
<thead>
<tr>
<th>Description</th>
<th>Attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific Linux 6.3 Configuration File</td>
<td></td>
</tr>
<tr>
<td>OFED 3.5 Configuration File</td>
<td></td>
</tr>
</tbody>
</table>

Result Key

The following table contains possible results and their meanings:

<table>
<thead>
<tr>
<th>Result</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASS</td>
<td>The Device Under Test (DUT) was observed to exhibit conformant behavior.</td>
</tr>
<tr>
<td>PASS with Comments</td>
<td>The DUT was observed to exhibit conformant behavior however an additional explanation of the situation is included.</td>
</tr>
<tr>
<td>FAIL</td>
<td>The DUT was observed to exhibit non-conformant behavior.</td>
</tr>
<tr>
<td>Warning</td>
<td>The DUT was observed to exhibit behavior that is not recommended.</td>
</tr>
<tr>
<td>Informative</td>
<td>Results are for informative purposes only and are not judged on a pass or fail basis.</td>
</tr>
<tr>
<td>Refer to Comments</td>
<td>From the observations, a valid pass or fail could not be determined. An additional explanation of the situation is included.</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>The DUT does not support the technology required to perform this test.</td>
</tr>
<tr>
<td>Not Available</td>
<td>Due to testing station limitations or time limitations, the tests could not be performed.</td>
</tr>
<tr>
<td>Borderline</td>
<td>The observed values of the specific parameters are valid at one extreme and invalid at the other.</td>
</tr>
<tr>
<td>Not Tested</td>
<td>Not tested due to the time constraints of the test period.</td>
</tr>
</tbody>
</table>
DUT and Test Setup Information
The IW fabric configuration utilized for all testing is shown below.

<table>
<thead>
<tr>
<th>May 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>iWARP Logo Event Topology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DUT #1 Details</th>
<th>DUT #2 Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer:</td>
<td>Chelsio</td>
</tr>
<tr>
<td>Model:</td>
<td>T420-CR</td>
</tr>
<tr>
<td>Speed:</td>
<td>10G</td>
</tr>
<tr>
<td>Additional Comments / Notes:</td>
<td>mimas, rhea</td>
</tr>
</tbody>
</table>

- Manufacturer: Chelsio
- Model: T420-CR
- Speed: 10G
- Located in Host: mimas, rhea

- Manufacturer: Chelsio
- Model: T420-CX
- Speed: 10G
- Located in Host: hyperion, calypso
### Mandatory Tests – IW Device Test Results:

#### 12.1: Ethernet Link Initialization

<table>
<thead>
<tr>
<th>Test Result</th>
<th>Chelsio T4</th>
<th>Intel NE020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link Partner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNIC: Chelsio T4</td>
<td>PASS</td>
<td>PASS</td>
</tr>
<tr>
<td>RNIC: Intel NE020</td>
<td>PASS</td>
<td>PASS</td>
</tr>
</tbody>
</table>

**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.

#### 13.1: TI iSER

<table>
<thead>
<tr>
<th>Test Result</th>
<th>Chelsio T4</th>
<th>Intel NE020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result Discussion:</td>
<td>Not Tested</td>
<td></td>
</tr>
</tbody>
</table>

There were no iSER targets available in the cluster, therefore this was not tested.

#### 13.2: TI NFS over RDMA

<table>
<thead>
<tr>
<th>Test Result</th>
<th>Chelsio T4</th>
<th>Intel NE020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result Discussion:</td>
<td>Not Tested</td>
<td></td>
</tr>
</tbody>
</table>

This test is not required for logo certification due to its beta status.

#### 13.4: TI uDAPL

<table>
<thead>
<tr>
<th>Test Result</th>
<th>Chelsio T4</th>
<th>Intel NE020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion:</td>
<td>PASS</td>
<td></td>
</tr>
</tbody>
</table>

All devices were shown to communicate correctly using DAPL, by use of the Linux dapltest tool.

#### 13.5: TI RDMA Basic Interoperability

<table>
<thead>
<tr>
<th>Test Result</th>
<th>Chelsio T4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion:</td>
<td>PASS</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Test Result</th>
<th>Chelsio T4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion:</td>
<td>Not Tested</td>
</tr>
</tbody>
</table>

This test requires two or more Ethernet switches in the cluster topology. Due to cluster limitations, this test could not be performed.
### 13.7: TI MPI – Open

<table>
<thead>
<tr>
<th>Test Result</th>
<th>PASS</th>
</tr>
</thead>
</table>

**Discussion:**

Complete heterogeneity; 1 process per system as described in the cluster topology.