



UNH IOL SATA Consortium

SATA Digital Report v1.4.3

InterOperability Lab — 121 Technology Drive, Suite 2 — Durham, NH 03824 — (603) 862-0090

XXCreateDateXX

XXVendorNameXX

XXVendorCompanyXX

XXVendorAddressXX

Mr. XXVendorLastNameXX:

Enclosed are the test results from the SATA Digital testing performed on the:

XXDUTDescXX

The testing was performed according to Version 1.4.3 of the *Serial ATA Interoperability Program Unified Test Document* as well as *Serial ATA Interoperability Program Revision 1.4.3 LeCroy MOI for Device Digital Tests (ASR, GTR, NCQ, SSP, IPM)*, both of which may be viewed online at:

http://www.sata-io.org/developers/interop_14.asp

Note that these tests are based on the SATA specification, *Serial ATA International Organization: Serial ATA Revision 3.2*. The tests covered by this report include those which are defined in the *Serial ATA Interoperability Program Revision 1.4.3 Unified Test Document*.

Note also for convenience, any failures specifically impacting r1.4.3 SATA-IO Integrator's List eligibility are listed as follows:

- The DUT passed all applicable r1.4.3 SATA-IO Integrator's List Digital tests.

Please feel free to contact me via email at XXEmailXX with any questions you may have regarding this report.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul A. Wirth". The signature is written in a cursive, slightly slanted style.

XXTesterNameXX

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Table 1: Test Setup and DUT Configuration Information

| DUT Details | | | | | | | | | | | |
|---|--|--------|----------------|-------------|--|---------------------------|--|-------------|--|-----------------------|--|
| Manufacturer | XXVendorCompanyXX | | | | | | | | | | |
| Description | XXModelNameXX | | | | | | | | | | |
| Mfr. Serial Number | XXSerialNumberXX | | | | | | | | | | |
| Firmware Version | XXFWVersionXX | | | | | | | | | | |
| UNH-IOL ID Number | XXUNHnumberXX | | | | | | | | | | |
| Device Type | XXFormFactorXX | | | | | | | | | | |
| | | | | | | | | | | | |
| Test System Hardware | | | | | | | | | | | |
| Test Hardware | Catalyst STX-231 | | | | | | | | | | |
| Software Version | Software Revision 3.60 | | | | | | | | | | |
| | | | | | | | | | | | |
| Additional Comments/Notes | | | | | | | | | | | |
| <p>The following table contains possible results and their meanings:</p> <table border="1"> <thead> <tr> <th>Result</th> <th>Interpretation</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, such as due to time limitations only a portion of the testing was performed.</td> </tr> <tr> <td>FAIL</td> <td>The DUT was observed to exhibit non-conformant behavior.</td> </tr> <tr> <td>Not Applicable</td> <td>The DUT does not support the technology required to perform these tests.</td> </tr> </tbody> </table> | | Result | Interpretation | 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. | Not Applicable | The DUT does not support the technology required to perform these tests. |
| Result | Interpretation | | | | | | | | | | |
| 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. | | | | | | | | | | |
| Not Applicable | The DUT does not support the technology required to perform these tests. | | | | | | | | | | |

Table 2: Summary of SATA digital results for the DUT

| Test/Parameter | Result | Note |
|---|-----------------------|------------|
| General Test Requirements (GTR) | | |
| GTR-01: Software Reset | XXgtr-01XX | |
| GTR-02: 3Gb/s Backwards Compatibility | XXgtr-02XX | |
| GTR-03: DMA Protocol Support | XXgtr-03XX | |
| GTR-04: Word 93 Counts | XXgtr-04XX | |
| GTR-05: Unrecognized FIS Recipient | XXgtr-05XX | |
| Native Command Queuing (NCQ) | | |
| NCQ-01: Forced Unit Access | XXncq-01XX | |
| NCQ-02: Read Log Ext log page 10h support | XXncq-02XX | |
| NCQ-03: Intermix of Legacy and NCQ Commands | XXncq-03XX | |
| NCQ-04: Device Response to Malformed NCQ Command | XXncq-04XX | |
| NCQ-05: DMA Setup Auto-Activate | XXncq-05XX | |
| Asynchronous Signal Recovery (ASR) | | |
| ASR-01: COMINIT Response Interval | XXasr-01XX | <<asr-01>> |
| ASR-02: COMINIT OOB Interval | XXasr-02XX | <<asr-02>> |
| Software Settings Preservation (SSP) | | |
| SSP-01: Initialized Device Parameters | XXssp-01XX | |
| SSP-02: Read/Write Stream Error Log | XXssp-02XX | |
| SSP-03: Security Mode State | XXssp-03XX | |
| SSP-04: Set Address Max | XXssp-04XX | |
| SSP-05: Set Features – Write Cache Enable / Disabled | XXssp-05XX | |
| SSP-06: Set Features – Set Transfer Mode | XXssp-06XX | |
| SSP-07: Set Features – Advanced Power Management Enable / Disable | XXssp-07XX | |
| SSP-08: Set Features – Read Look-Ahead | XXssp-08XX | |
| SSP-09: Set Features – Release Interrupt | XXssp-09XX | |
| SSP-10: Set Features – Service Interrupt | XXssp-10XX | |
| SSP-11: Set Multiple Mode | XXssp-11XX | |
| SSP-12: Set Features – Write-Read-Verify | XXssp-12XX | |
| Interface Power Management (IPM) | | |
| IPM-01: Partial State Exit Latency | XXipm-01XX | <<ipm-01>> |
| IPM-02: Slumber State Exit Latency | XXipm-02XX | <<ipm-02>> |
| IPM-03: Speed Matching upon Resume | XXipm-03XX | |
| IPM-04: Lack of IPM Support | XXipm-04XX | |
| IPM-05: Device Response to PMREQ_P | XXipm-05XX | |
| IPM-06: Device Response to PMREQ_S | XXipm-06XX | |
| IPM-07: Device Setting for Device Initiated Requests | XXipm-07XX | |
| IPM-08: Device Initiated Power Management Enable / Disable | XXipm-08XX | |
| IPM-09: Partial State exit latency (device-initiated) | XXipm-09XX | <<ipm-09>> |
| IPM-10: Slumber State exit latency (device-initiated) | XXipm-10XX | <<ipm-10>> |
| IPM-11: Speed matching upon resume (device-initiated) | XXipm-11XX | |
| Digital Optional Features (DOF) | | |
| DOF-01: Asynchronous notification | XXdof-01XX | |
| DOF-02: Phy speed indicator | XXdof-02XX | |

Test Notes:

