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Agilent N5399B HDMI Electrical Performance Validation & Compliance Software Release Notes

Agilent N5399B Software Version 01.11
Released Date: 22 July 2013
Minimum Infiniium Oscilloscope Baseline Version:
Windows 7:
    4.50 (9000, 90000, X90000 series)
Windows XP:
    4.20.005 (9000, 90000, X90000 series)
File Name: SetupInfHDMIHEAC0111.exe

Modifications:
• Added Support for MSOX90000 Series Oscilloscopes
• Take multiple acquisitions for Data Eye Diagram

Agilent N5399B Software Version 01.10
Released Date: 17 May 2013
Minimum Infiniium Oscilloscope Baseline Version:
Windows 7:
    4.50 (9000, 90000, X90000 series)
Windows XP:
    4.20.005 (9000, 90000, X90000 series)
File Name: SetupInfHDMIHEAC0110.exe

Modifications:
• Added Switch Matrix capability.
• Fixed HEAC Triggering issue.
• Fixed Auto-scaling issue

Agilent N5399B Software Version 01.04
Released Date: 20 September 2011
Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 2.10 (90000 series and 9000 series), 3.00 (X90000 series)
File Name: SetupInfHDMIHEAC0104.exe

Modifications:
• Added support for baseline running on Windows 7.

Agilent N5399B Software Version 01.03
Released Date: 4 March 2011
Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 2.10
(90000 series and 9000 series), 3.00 (X90000 series)
File Name: SetupInfHDMIHEAC0103.exe

Modifications:
• Fixed the histogram incompatibility issue which caused failure in Clock Single-Ended Tests in Baseline 3.00 and above.

Agilent N5399B Software Version 01.02
Released Date: 1 October 2010
Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 2.10
(90000 series and 9000 series), 3.00 (X90000 series)
File Name: SetupInfHDMIHEAC0102.exe

Modifications:
• Fixed the issue of test name is too long and causes error when report is generated with file path that is too long.
• Changed Clock and Data Intra Pair Skew test so that intra-pair skew is now measured referenced on the interval between VMid(Lane+) and VMid(Lane-).
• Changed clock recovery method to semi-automatic when locating the serial pattern for single-ended VL test. The change is to improve consistency when searching for serial pattern.
• Fixed the issue of histogram left and top limits must be greater and right and bottom limits following the changes of baseline version 3.00.

Agilent N5399B Software Version 01.01
Released Date: 16 April 2009
Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 2.10
(90000 series and 9000 series)
File Name: SetupInfHDMIHEAC0101.exe

Modifications:
- Addressed the issue of actual test lane mismatches with lane configuration when running cable tests with 4 channels connection.
- Addressed the issue of connection diagram does not prompt when changing lane configuration.

Agilent N5399B Software Version 01.00
Released Date: 15 January 2009
Minimum Infiniium Oscilloscope Baseline Version: 5.71 (80000 series), 2.10
(90000 series and 9000 series)
File Name: SetupInfHDMIHEAC0100.exe

Additions:
- Supports Infiniium 9000 Series oscilloscopes, with minimum baseline version of 2.10.
- Added HEAC test suites.
- Added equalizer for automotive cable tests.
- Added 4 lane capability for cable tests.

Modifications:
- Addressed issue of test aborts when signal voltage level is out of specification.
- Improved connection diagram.

 Notes:
- This will be the last version to support the 80000 series oscilloscope. Following releases will only support 90000 series oscilloscope.

Agilent N5399A Software Version 02.52
Released Date: 5 December 2008
Minimum Infiniium Oscilloscope Baseline Version: 5.40 (80000 series), 1.21
(90000 series)
File Name: SetupInfHDMI0252.exe

Additions:
- Supports the Infiniium 90000 Series High Performance Oscilloscope, with minimum baseline version of 1.21.
- Options to enable the custom data rate for clock recovery in Debug Mode.

Modifications:
- Addressed the issue of application hangs when the connection page which pops up while running tests is clicked too fast.
- Addressed the issue of application hangs while exporting result as csv file.
- Addressed the issue of select equalizer file dialog pops up when the Receiver Test Equalizer Mode configuration is set to manual-select model.
- Addressed the issue of invalid characters appear in the description of the Transition Time Converter Mode configuration.
- Corrected the diagram in the Probe Offset Calibration wizard.

Known Issues:
- Running the Transmitter Inter-Pair Skew test on past projects which already have this test may result in error while viewing the test results.
- Setting the Raw Clock Frequency configuration other than "Self Measure by Application" for the Cable tests disables the application from measuring the actual value.

Agilent N5399A Software Version 02.50
Released Date: 11 Jan 2008
Minimum Infiniium Oscilloscope Baseline Version: 5.40 (80000 series), 1.00 (90000 series)
File Name: SetupInfHDMI0250.exe

Additions
- Supports the Infiniium 90000 Series High Performance Oscilloscope.
- Supports both HDMI 1.3b and HDMI 1.2 Compliance Specification; users can select the HDMI specification on the Setup page of the N5399A Application.
- Allow users to enter the Device ID to comply with ISO requirement.
- Included the N5399A Application version on the report page to comply with ISO requirement and ease of maintenances.
- Supports the vertical mask movement in the Eye Diagram Test for better margin presentation.
- Supports the Inter-pair skew's histogram offset setting under the debug mode to enhance the debugging capabilities.
- Support the automatic switching between 10 bits and 20 bits trigger for the Inter-Pair skew.

Modifications:
- Addressed the Channel's Offset issue that caused misplace of triggering level.
- Modified the rise time and fall time measurement threshold for better presentation.
- Addressed the Single-ended tests' pattern trigger hang issue.

Agilent N5399A Software Version 02.30
Released Date: 13 June 2007
Minimum Infiniium Oscilloscope Baseline Version: 05.20.00
File Name: SetupInfHDMITest0230.exe

Additions
- Supports the HDMI 1.3b Compliance Specification.
- Supports the Probe Offset Calibration; Allows user to calibrate the N5380A SMA Probe head with 3.3V offset voltage.
- Supports the Hide Informative test option; Informative test list can be chose to be hidden to ease testing operation.
- Supports the Multi-Trial environment test; Allows user to run a specific or all the tests multiple times to obtain results statistically.
- Auto Detect Invalid Signal on Clock and Data Channel to prevent invalid result to the user.
- Ability to detect the older version of HDMI project files and allows these files to be opened as READONLY project.
- Includes the Connection Diagrams for Receiver and Cable test.

Modifications:
- Addressed the Rise Time/Fall Time test's edge acquisition issue.
- Addressed the Receiver test's timeout issue.
- Addressed the Issue regarding Eye Diagram offset that causes Mask test failure.

Agilent N5399A Software Version 02.10
Released Date: 26 Dec 2006
Minimum Infiniium Oscilloscope Baseline Version: 05.20.00
File Name: SetupInfHDMITest0210.exe

Additions
- Supports the HDMI 1.3a Compliance Specification.
- Supports the Remote Access, allowing remote client software to control and run test remotely.
- Supports the Mask test for both HDMI 1.2 and HDMI 1.3 Specification, selection for mask revision is available under the Debug Mode.
- Test structure has changed for the Cable/Receiver test. Cable/Receiver test is further divided into Receive Eye and Cable Eye test.
- Supports the Software Time Transition Converter feature for the Cable test. Allows cable test to run without the need to have the hardware time transition converter for the cable calibration process.

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- Supports both TP1 and TP2 mask selection for the Cable test. Selection of the Mask Type is available under the Debug Mode.
- Test Structure has changed for the Single Ended test. Single Ended test is changed to allow the test of Clk+/Clk- and Dx+/Dx- to run together to reduce connection in the middle of the test.
- Test Structure has changed for the Single Ended VL test. Changes allow different test Limit for different Pixel Rate for the HDMI 1.3 on different test ID. VL test is divided into VL High Rate test (for pixel rate > 165 MHz) and VL Low Rate (for Pixel rate <= 165 MHz).
- Supports the Auto Mask Movement for the Transmitter Eye Diagram test to automatically search for passing condition whenever the Mask test fails.
- Ability to detect the same Channel Settings on the Compliance Application and alert the user at the Connection Page.
- Ability to detect the Fixture Type for the running test and alert the user whenever user tries to run a test without specifying Fixture Type.
- Ability to allow user to confirm when exiting the software.
- Ability to detect the older version of HDMI project files and allows these files to be opened as READONLY project.

Modifications:
- The Fixture Type Name is changed from N5405B to N5405.
- The Over/Undershoot tests are renamed as Informative Only as these tests were removed from the Compliance Specification 1.3a.
- The Inter-Pair Skew test for Clock Lane is renamed as Informative Only as this test was removed from the Compliance Specification 1.3a.
- Fixed issues with the Single-Ended test's Connection Diagram.