N109228CA OIF CEI 3.1 Compliance Test Application

N109228CA OIF CEI 3.1 Software Version 5.0.11.0

Release Date:	14 April 2023
Operating System:	Microsoft Windows 7/ Microsoft Windows 10
Minimum Instrument Software Version:	A.06.92.28
File Name:	SetupInfCEITest05000011.exe
License:	Please see the product data sheet on Keysight.com.

Modifications/Changes

- Updated Keysight License Manager 5.

KEYSIGHT

N109228CA OIF CEI 3.1 Software Version 5.0.10.0

Release Date:	30 August 2022
Operating System:	Microsoft Windows 7/ Microsoft Windows 10
Minimum Instrument Software Version:	A.06.92.28
File Name:	SetupInfCEITest05000010.exe
License:	Please see the product data sheet on Keysight.com.

Issues Fixed

o   Fixed the issue of app using incorrect channel if run using InfiniiSim.

o   Fixed the issue of incorrectly reported result for Normalized Coefficient Step Size tests.

o   Fixed the issue of app failing to run if the "Manual Baud Rate" config is selected.

Known Issues

-   Connection diagrams are not updated as per the connected PNA/N1055A.

-   Typo error in details of any aborted tests – "Error processing final **vaue**" instead of **value.**

KEYSIGHT

N109228CA OIF CEI 3.1 Software Version 5.0.0.0

Release Date:	6 March 2020
Operating System:	Microsoft Windows 7
Minimum Instrument Software Version:	A.06.50.287
File Name:	SetupInfCEITest05000000.exe
License:	Please see the product data sheet on Keysight.com.

Issues Fixed

- Fixed Even-odd jitter measurement doesn't work at 28G-MR

- Fixed Error message on every 28G data rate testing

- Fixed incorrect Common-mode voltage test measurement

New Features / Additions

- Support Normalized Step Size Test in 25G-LR, 28G-SR and 28G-MR.

- Support Loop Bandwidth Tuning

- Support Jitter optimization

Known Issues

1) The 6G/11G TJ and UUGJ tests will not run if PRBS31 is applied first with DCA-M Channel 7C and 7D.

Workaround: Apply PRBS9 first then a message will show up to request user to apply PRBS31.

2) The "Adjust True-Complement Skew, Remote Heads" test will not work in FlexDCA v6.50.287. The issue is fixed in FlexDCA v6.55.

3) The Exception will happen when clicking on "Copy to Clipboard" in "My Support ID".

Workaround: Read the Support ID from the screen and type it at notepad instead of using the clipboard

N109228CA OIF CEI 3.1 Software Version 4.15

Release Date:	4 Oct 2019
Operating System:	Microsoft Windows 7
Minimum Instrument Software Version:	A.06.40.429
File Name:	SetupInfCEITest04150000.exe

- General Comments

  o The product number is changed from "N1012A" to "N109228CA".

  o Support PPKS licenses.

KEYSIGHT

A.04.12 Release Notes, July 2018

(Differences from Release A.04.11)

Issues Fixed

- Fixed Total Jitter test do not give correct result when run with Waveform Tests.

- Fixed Common Mode Voltage issue.

- Fixed issue unable to upload results on Cygnet.

- Fixed Differential Voltage Pk- Pk tests run with other patterns.

- Fixed run error in Total Jitter for 11G-SR when RemoveCable/Fixture S-Parameter is set to ON.

- Fixed Crosstalk 28G-VSR H2M test run with non- compliant pattern when run in group.

- Fixed UBHPJ test asks for PRBS9 pattern which is not required for calculating its results.

- Fixed issue unable to detect pattern if it is changed during the test run.

- Fixed invalid trail issue in Total Jitter test.

- Fixed Total Jitter test gets aborted if run with different tests.

- Fixed J2 and J9 Jitter tests are failing in giving results.

Enhancements

- Add N1046A support.

- Add DCA-M support.

- Add N1060A support.

- Add Cygnet support.

- Add N1076/77A support.

- Changed Configure Tab Settings

  o   Added Channels for N109x.

  o   Added Variable Equalization Level.

A.04.11 Release Notes, October, 2016

(Differences from Release A.04.00)

Issues Fixed

- Fixed a defect that would occasionally failed at EW test.

- Fixed a defect that caused config settings unable to restore when the saved project is re-opened.

- Fixed a defect that caused the Baud Rate unable to report correctly when using N1045A/55A.

- Fixed a defect that caused Eye Opening tests failed when using iPTB.

- Fixed a defect that prevents "De-embedded" operator to turn on in 11G-MR/LR TJ measurement when "Remove Cable/Fixture S-Parameter" is ON.

- Fixed a defect in Adjust True-Complement Skew, Cables utility.

- Fixed a defect that caused Jitter Tests 25G-LR –FIR off/on fail when results are appended to previous trials.

- Fixed a defect that caused Output Differential Voltage, 25G-LR measurement crashes when run standalone or in group.

- Fixed a defect that caused Adjust True-Complement Skew, Manually Enter Values utility runs even 86108B is installed.

- Fixed a defect that caused Jitter Transfer Bandwidth/Peaking, 11G-SR issue three setup prompts when tests are run individually.

Enhancements

- Provided debug option to use PRBS9 instead of PRBS31 for differential voltage pk-pk.

- Allowed user to enter fixed RJ for 25G-LR UBHPJ measurement.

- Added ability for user to increase number of waveforms used for EW and EH measurements in Normal and Debug mode.

- Allowed De-skew utilities performed at different bandwidth.

- Added user defined S-Parameter filenames and path.

- Changed Configure Tab Settings

  o   Added User Defined S-Parameter for S2P Channel A

  o   Added User Defined S-Parameter for S2P Channel B

  o   Added User Defined S-Parameter for S4P Channel A and B

  o   Added Auto Adjust Pattern Number of Jitter

  o   Added Channel Bandwidth Setting

  o   Added Type of Pattern

  o   Added Fixed RJ Value

  o   Renamed *CTLE Peaking Value Maximum* to *CTLE Peaking Value, maximum for*

  o   *user selected range*

  o   Renamed *CTLE Peaking Value Minimum* to *CTLE Peaking Value, minimum for*

  o   *user selected range.*

  o   Renamed *JSA Peaking* to *JSA Peaking for Second Order*

  o   Added SIRC Functionality on 86108B and N1045A

  o   Added SIRC Channel Response

  o   Added SIRC Channel BW

  o   Added Source for Return Loss tests

Keysight N109228CA OIF CEI 3.1 Compliance Test Application Release Notes

A.04.00 Release Notes, August, 2014

(Differences from Release A.02.00)

Modifications / Changes

- Added support for IA #OIF-CEI 3.1

- Removed the ability to run all tests from the Set Up tab.

- Changed all UBHPJ tests to query BUJ in Jitter Mode to report results.

- Reduced the number of waveforms for CM noise test from 100 to 30.

- For VSR eye opening tests, report the equivalent number of hits measured.

- Added support for N1055A module to perform all waveform, eye, and jitter

  measurements.

Additions / New Features

- Added new CEI 28G-MR Medium Reach Tests

  o Baud Rate, 28G-MR

  o Common Mode Noise, 28G-MR

  o Differential Return Loss, 28G-MR

  o Differential Resistance, 28G-MR

  o Differential Termination Mismatch, 28G-MR

  o Even Odd Jitter, 28G-MR

  o Output Common Mode Voltage, 28G-MR

  o Output Differential Voltage, 28G-MR

  o Output Fall Time, 28G-MR

  o Output Rise Time, 28G-MR

  o Single Ended Output Voltage, 28G-MR

  o Total Jitter, 28G-MR

  o Uncorrelated Bounded High Probability Jitter, 28G-MR

o   Uncorrelated Bounded Gaussian Jitter, 28G-MR

- Added new CEI-28G Very Short Reach Host to Module at TP1a Tests

  o   Crosstalk Diff Voltage, pk- pk, 28G- VSR H2M

  o   Crosstalk Transition Time (rise), 28G-VSR H2M

  o   Crosstalk Transition Time (fall), 28G-VSR H2M

- Added new CEI- 28G Very Short Reach Module to Host at TP4 Tests

  o   Crosstalk Diff Voltage, pk- pk, 28G- VSR M2H

  o   Crosstalk Transition Time (rise), 28G-VSR M2H

  o   Crosstalk Transition Time (fall), 28G-VSR M2H

- Added new Utility

  o   Adjust True-Complement Skew, Manually Enter Values

- Changed Configure Tab Settings

  o   Added Measurement Time, Jitter on Long Patterns

  o   Added Manual Baud Rate

  o   Added Config for S- parameter 4- port numbering

  o   Renamed *CTLE State for VSR Waveform Tests* to *CTLE Applied for VSR*

  o   *Waveform*

  o   Renamed *Channels to Channels for N1045/55ATests*

  o   Renamed *Pattern for TJ in 6G/11G Interfaces* to *Pattern for UUGJ/TJ in 6G/11G*

  o   *Interfaces*

  o   Renamed *CTLE Peaking for VSR* to *CTLE Peaking Value for VSR Test*

  o   Removed Source for UUGJ and TJ

A.03.00 Release Notes

- Revision number A.03.00 was never used. Version A.02.00 was directly followed

  by A.04.00.

A.02.00 Release Notes, May, 2013

(Differences from Release A.01.00)

New Features / Additions

- Support for OIF CEI Draft 9

- Expanded capabilities for use of CTLE with VSR interface.

- Remove effect of measurement channel

- Support for N1045A 60 GHz Remote Sampling Head module

- Support for 54754A TDR/TDT module (For electrical channel input only. TDR/TDT capability is not used.)

- Added two new CEI 28G-VSR Host to Module at TP1a tests:

  o Diff to CM Conversion Loss, 28G-VSR H2M

  o Common Mode Return Loss, 28G-VSR H2M

- Added two new CEI 28G-VSR Module to Host at TP4 tests:

  o Diff to CM Conversion Loss, 28G-VSR M2H

  o Common Mode Return Loss, 28G-VSR M2H

- Added three new utilities:

  o Adjust True-Complement Skew, N1045A

  o Optimize Eye Opening for VSR M2H Using CTLE, automated

  o Optimize Eye Opening for VSR, user selected range of values

- Added the following Configure tab settings:

  o Channel for N1045A

  o CDR State

  o Trigger Divide Ratio

  o CTLE State for VSR Waveform Tests

  o CTLE Peaking Value, minimum for user selected range

- CTLE Peaking Value, maximum for user selected range

- Samples Taken for Eye Mode

- Source for UUGJ and TJ

- Verify Pattern Length, Jitter

- Fixed Pattern Length

- Remove Cable/Fixture S-parameters

- S-parameter Bandwidth Limit

- S-parameter Filter Type

- Renamed the following Configure tab settings:

  - *From* CTLE Peaking for VSR *to* CTLE Peaking Value for VSR Tests

  - *From* JSA Peaking *to* JSA Peaking for Second Order

- Removed the following Configure tab settings:

  - Channel

  - Samples Taken

  - Samples for VSR Eye Opening

  - JSA Bandwidth

A.01.10 Release Notes, March, 2013

(Differences from Release A.01.00)

Modifications / Changes

- N1012A updated to work with FlexDCA version A.02.00.

- N1012A A.01.10 is compatible with FlexDCA version A.02.00 and is not compatible

- with FlexDCA version A.01.81.

- Fixed minor problem that affected pattern detection in jitter measurements.

A.01.00 Release Notes, July, 2012

Initial Release

Notes / Recommendations

- Software version A.01.00 requires FlexDCA version A.01.81 and is not compatible with any other FlexDCA version.