# Keysight N1012A
# OIF CEI 3.1 Compliance
# And Debug Application
# Release Notes

**KEYSIGHT**
TECHNOLOGIES

# A.04.12 Release Notes, July 2018

(Differences from Release A.04.11)

- General Comments

  - Defects 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

  - Added Channels for N109x.

  - Added Variable Equalization Level.

# A.04.11 Release Notes, October, 2016

(Differences from Release A.04.00)

- General Comments
  - Defects 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

  - Added User Defined S-Parameter for S2P Channel A

  - Added User Defined S-Parameter for S2P Channel B

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

  - Added Auto Adjust Pattern Number of Jitter

  - Added Channel Bandwidth Setting

  - Added Type of Pattern

  - Added Fixed RJ Value

  - Renamed *CTLE Peaking Value Maximum* to *CTLE Peaking Value, maximum for user selected range*

  - Renamed *CTLE Peaking Value Minimum* to *CTLE Peaking Value, minimum for user selected range.*

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

  - Added SIRC Functionality on 86108B and N1045A

  - Added SIRC Channel Response

  - Added SIRC Channel BW

  - Added Source for Return Loss tests

# A.04.00 Release Notes, August, 2014

(Differences from Release A.02.00)

- General Comments

  - 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.

- Added new CEI 28G-MR Medium Reach Tests

  - Baud Rate, 28G-MR

  - Common Mode Noise, 28G-MR

  - Differential Return Loss, 28G-MR

  - Differential Resistance, 28G-MR

  - Differential Termination Mismatch, 28G-MR

  - Even Odd Jitter, 28G-MR

  - Output Common Mode Voltage, 28G-MR

  - Output Differential Voltage, 28G-MR

  - Output Fall Time, 28G-MR

  - Output Rise Time, 28G-MR

  - Single Ended Output Voltage, 28G-MR

  - Total Jitter, 28G-MR

  - Uncorrelated Bounded High Probability Jitter, 28G-MR

- Uncorrelated Bounded Gaussian Jitter, 28G-MR

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

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

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

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

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

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

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

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

- Added new Utility

    - Adjust True-Complement Skew, Manually Enter Values

- Changed Configure Tab Settings

    - Added Measurement Time, Jitter on Long Patterns

    - Added Manual Baud Rate

    - Added Config for S- parameter 4- port numbering

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

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

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

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

- 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)

- General Comments

- Added the following new features:
  - 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:
  - Diff to CM Conversion Loss, 28G-VSR H2M
  - Common Mode Return Loss, 28G-VSR H2M

- Added two new CEI 28G-VSR Module to Host at TP4 tests:
  - Diff to CM Conversion Loss, 28G-VSR M2H
  - Common Mode Return Loss, 28G-VSR M2H
- Added three new utilities:
  - Adjust True-Complement Skew, N1045A

- Optimize Eye Opening for VSR M2H Using CTLE, automated

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

- Added the following Configure tab settings:

  - Channel for N1045A

  - CDR State

  - Trigger Divide Ratio

  - CTLE State for VSR Waveform Tests

  - 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)

### General Comments

- 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

### General Comments

- First version of N1012A.
- Software version A.01.00 requires FlexDCA version A.01.81 and is not compatible
- with any other FlexDCA version.