

# N1091CKCA IEEE 802.3ck Test Application Software

Keysight N1091CKCA Software Version 1.24.1.0

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|------------------------------|------------------------------------------------------------------------------------------|
| Release Date:                | May 29, 2026                                                                             |
| Operating System:            | Microsoft Windows 10                                                                     |
| Instrument Software Version: | A.8.30.140                                                                               |
| File Name:                   | SetupN1091CKCA_IEEEck_DCA_1.24.1.0.exe                                                   |
| License:                     | Please see the product data sheet on <a href="https://www.keysight.com">keysight.com</a> |

## Issues Fixed

- Fixed an issue where the FFE source was incorrectly reported for Eye Height and Vertical Eye Closure measurements when Auto-tune was selected in the CTLE Mode configuration.
- Fixed an issue where signal presence was not checked in the Low-Frequency peak-to-peak AC common-mode voltage test.

## Modification

- Updated the default setting of Tx FFE source and Tx FFE source for Auto-tune configurations.

## Keysight N1091CKCA Software Version 1.24.0.0

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|------------------------------|------------------------------------------------------------------------------------------|
| Release Date:                | March 6, 2026                                                                            |
| Operating System:            | Microsoft Windows 10                                                                     |
| Instrument Software Version: | A.8.30.140                                                                               |
| File Name:                   | SetupN1091CKCA_IEEEck_DCA_1.24.0.0.exe                                                   |
| License:                     | Please see the product data sheet on <a href="https://www.keysight.com">keysight.com</a> |

### New Feature / Addition

- Added reporting of peak-to-peak voltage for Preset 1 testing.
- Enabled N1055A and N1060A modules to be installed in the N1000A, allowing the application to run Tx and Return Loss measurements concurrently.
- Enabled N1055A installation in Slot 2 through Slot 4.
- Enabled Channel C and Channel D of the N1055A to perform Return Loss measurements.
- Added new tests for SNDR and RLM covering Preset 1 through Preset 5.
- Added support for the Pattern Symbol Sequence feature.

### Modification

- Revised the methodology for Transition Time testing.
- Revised the precision level of RLM test.

## Issues Fixed

- Corrected an issue where de-skew values in the Set Channel Skew dialog incorrectly displayed 0 after test execution.
- Fixed an issue where the test execution status of certain tests did not appear in the Select Tests tab after loading a saved project.
- Resolved an error in the VCM-LF test that occurred when configuring “remove s4P” using InfiniiSim.
- Addressed an intermittent error observed when loading a saved project.
- Fixed an exception thrown when Autotune tests returned NA results

## Known Issues

- The message “InfiniiSim-DCA Not Available” may appear when the application is connected to FlexDCA remotely.

Workaround: Relaunch the application. InfiniiSim will reconnect automatically.

## Keysight N1091CKCA Software Version 1.23.0.0

|                              |                                                                                          |
|------------------------------|------------------------------------------------------------------------------------------|
| Release Date:                | November 15, 2024                                                                        |
| Operating System:            | Microsoft Windows 10                                                                     |
| Instrument Software Version: | A.07.60.209                                                                              |
| File Name:                   | SetupN1091CKCA_IIEEck_DCA_1.23.0.0.exe                                                   |
| License:                     | Please see the product data sheet on <a href="https://www.keysight.com">keysight.com</a> |

### New Feature / Addition

- Enabled support for slot 2 – slot 4 when all four remote head modules are inserted into N1000A.

### Known Issues

- The de-skew values of the channels in the “Set Channel Skew” dialog box display 0 after test execution.
- Intermittent error might be observed while loading a saved project.
- The “InfiniiSim-DCA Not Available” message will appear if the app is connected to the FlexDCA remotely.

Workaround: Relaunch the app, and InfiniiSim will get connected.

- The test execution status of some tests might be missing in the “Select Tests” tab after loading a saved project.

## Keysight N1091CKCA Software Version 1.22.4.0

|                              |                                                                                          |
|------------------------------|------------------------------------------------------------------------------------------|
| Release Date:                | May 31, 2024                                                                             |
| Operating System:            | Microsoft Windows 10                                                                     |
| Instrument Software Version: | A.07.41.27                                                                               |
| File Name:                   | SetupN1091CKCA_IIEEck_DCA_1.22.4.0.exe                                                   |
| License:                     | Please see the product data sheet on <a href="https://www.keysight.com">keysight.com</a> |

### New Features / Additions

- Enabled the “Clock Pattern Distortion” support.
- Added “Coefficient Initialization Tests” in 100GBASE-KR1, 200GBASE-KR2, and 400GBASE-KR4.
- Added Preset 1 Information-Only Test in CR and KR standard options (CR: 100GBASE-CR1, 200GBASE-CR2, and 400GBASE-CR4; KR:100GBASE-KR1, 200GBASE-KR2, and 400GBASE-KR4).

### Issues Fixed

- Fixed the issue with Transition Time Measurements not measured at correct symbol location.

## Keysight N1091CKCA Software Version 1.22.0.0

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|---------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Release Date:                                                 | November 8, 2023                                                                         |
| Requirements Category<br>(e.g., operating system):            | Microsoft Windows 7, Microsoft Windows 10                                                |
| Requirements Category<br>(e.g., instrument software version): | A.07.41.27                                                                               |
| File Name:                                                    | SetupN1091CKCA_IIEEck_DCA_1.22.0.0.exe                                                   |
| License:                                                      | Please see the product data sheet on <a href="https://www.keysight.com">keysight.com</a> |

This is the last version that supports the Microsoft Windows 7.

### New Features

- Enabled the capability for users to edit the Sigma N value in the SNDR test.
- Enabled support for non-compliant patterns (PRBS9Q, PRBS15Q, and SSPRQ) in tests related to or affected by SNDR.
- Enabled the ability to save the coefficients value in the C:\Temp folder.
- Enabled limits comparisons for coefficient other than c(coef\_sel) in the Coefficient step size tests.

### Bug Fix

- Fixed the issue of the SCMR test not running  $VCM_{FB}$  as a prerequisite test in TP0v.

## Keysight N1091CKCA Software Version 1.21.0.0

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|---------------------------------------------------------------|---------------------------------------------------|
| Release Date:                                                 | July 28, 2023                                     |
| Requirements Category<br>(e.g., operating system):            | Microsoft Windows 10                              |
| Requirements Category<br>(e.g., instrument software version): | A.07.41.27                                        |
| File Name:                                                    | SetupN1091CKCA_IIEEck_DCA_1.21.0.0.exe            |
| License:                                                      | Please see the product data sheet on keysight.com |

### New Features

- Enabled the external attenuator support.
- Support equalizers in transition time test in TP1a and TP4.
- The **number of acquisition** and **Samples per UI selection** settings in Configure Tab are available for eye and transition time tests.
- Enabled the 'Auto' separation method in Jitter Mode.
- Support F-JSA license.
- Support same Nbx value as measured ERL for reference ERL in 100GBASE-KR1, 200GBASE-KR2, and 400GBASE-KR4.

### Bug Fix

- Fixed the s-parameter files not transferred to the scope when running the app in the PC.

### Known Issues

- Simulation module's channels are not showing in "Set Channel Skew" window for the first time if insert the simulation module after app launches.

Workaround: Simulation module's channels will show after clicking the "Set Channel Skew" button again or insert the simulation module in slot 5 before launching the app.

- The "InfiniiSim-DCA Not Available" message will appear if connect the app to the FlexDCA remotely.

Workaround: relaunch the app and InfiniiSim will get connected.

- The status icon of some of the tests will get missing in "Select Tests" tab after tests completion.

## Keysight N1091CKCA Software Version 1.20.5.0

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|---------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Release Date:                                                 | May 19, 2023                                                                             |
| Requirements Category<br>(e.g., operating system):            | Microsoft Windows 10                                                                     |
| Requirements Category<br>(e.g., instrument software version): | A.07.40.319                                                                              |
| File Name:                                                    | SetupN1091CKCA_IIEEck_DCA_1.20.5.0.exe                                                   |
| License:                                                      | Please see the product data sheet on <a href="https://www.keysight.com">keysight.com</a> |

### Bug Fixes

- Fixed the optimized CTLE values to be correctly reported in the Auto-tune tests.
- Fixed the issue of being unable to run in Low-Frequency peak-peak AC CM voltage test.

## Keysight N1091CKCA Software Version 1.20.3.0

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|---------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Release Date:                                                 | April 08, 2023                                                                           |
| Requirements Category<br>(e.g., operating system):            | Microsoft Windows 10                                                                     |
| Requirements Category<br>(e.g., instrument software version): | A.07.00.763                                                                              |
| File Name:                                                    | SetupN1091CKCA_IIEEck_DCA_1.20.3.0.exe                                                   |
| License:                                                      | Please see the product data sheet on <a href="https://www.keysight.com">keysight.com</a> |

### Modification

- Update Keysight License Manager 5

## Keysight N1091CKCA Software Version 1.20.2.0

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|---------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Release Date:                                                 | Feb 10, 2023                                                                             |
| Requirements Category<br>(e.g., operating system):            | Microsoft Windows 10                                                                     |
| Requirements Category<br>(e.g., instrument software version): | A.07.00.763                                                                              |
| File Name:                                                    | SetupN1091CKCA_IIEEck_DCA_1.20.2.0.exe                                                   |
| License:                                                      | Please see the product data sheet on <a href="https://www.keysight.com">Keysight.com</a> |

### Bug Fixes

- Support N1055A in C2C and C2M Return Loss test.
- Fixed the incorrect equation used in Common Mode – Common Mode Return Loss tests in TP0v and TP2 test points.

## Keysight N1091CKCA Software Version 1.20.0.0

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|---------------------------------------------------------------|---------------------------------------------------|
| Release Date:                                                 | Nov 18, 2022                                      |
| Requirements Category<br>(e.g., operating system):            | Microsoft Windows 10                              |
| Requirements Category<br>(e.g., instrument software version): | A.07.00.763                                       |
| File Name:                                                    | SetupInfIEEEckDCA01200000.exe                     |
| License:                                                      | Please see the product data sheet on Keysight.com |

### New Features

- Supports IEEE P802.3ckTM/D3.3 specification.
- The samples per UI (M value) setting can be adjusted to 64 or 128 in the Configure Tab.
- The CDR Equalization Level setting is available in the Configure Tab.
- The RN Compensation State setting is available in the Configure Tab to remove scope noise for Eye and Jitter tests.
- Enabled the COM computation support in Auto-tune tests.
- Enabled the N1060A as a clock recovery for remote head.
- Enabled the clock support in N1000A + N1060A setup.
- Enabled the remote head (N1045A/N1045B/N1046A/N1040A) support in slot 3 or slot 4.
- Enabled the N1077B Optical/Electrical Clock Recovery support
- Enabled the remote interface support to add skew commands to set channel de-skew values.
- Enabled the remote interface support to set the ERL and Fixture Ref files.

### Bug Fixes

- Fixed the EH and EW values to be correctly reported in the Result tab and report in the auto-tune test.
- Fixed the Transition Time test to be able to process the signal that swings above 0 volt.
- Fixed the timeout error when creating convolution filter.
- Fixed the ERL and dERL tests to support Tfx Delay.
- Fixed the Vpeak(ref) and Vf(ref) values to be correctly reported in dVf and dRpeak tests.
- Updated the correct connection diagram (N1055A and PNA) for Return Loss Test.

- Fixed the issue of incorrect Common Mode to Common Mode Output Return Loss test limit in CR and KR standard options (CR: 100GBASE-CR1, 200GBASE-CR2, and 400GBASE-CR4; KR:100GBASE-KR1, 200GBASE-KR2, and 400GBASE-KR4).

## Known Issues

- Observed error intermittently while loading saved project.
- Observed error intermittently while creating new project.
- The modules need to be added in the FlexDCA slots before app launching to use InfiniiSim feature.

## Keysight N1091CKCA Software Version 1.11.0.0

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|---------------------------------------------------------------|---------------------------------------------------|
| Release Date:                                                 | Aug 05, 2022                                      |
| Requirements Category<br>(e.g., operating system):            | Microsoft Windows 10                              |
| Requirements Category<br>(e.g., instrument software version): | A.06.91.29                                        |
| File Name:                                                    | SetupInfIEEEckDCA01110000.exe                     |
| License:                                                      | Please see the product data sheet on Keysight.com |

## New Feature

- Supports Subscription Bundle License “SW00DCAI”– For more information, see the Data Sheet.

## Keysight N1091CKCA Software Version 1.10.0.0

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|---------------------------------------------------------------|---------------------------------------------------|
| Release Date:                                                 | October 2021                                      |
| Requirements Category<br>(e.g., operating system):            | Microsoft Windows 10                              |
| Requirements Category<br>(e.g., instrument software version): | 6.81                                              |
| File Name:                                                    | SetupInfIEEEckDCA01100000.exe                     |
| License:                                                      | Please see the product data sheet on Keysight.com |

### New Feature

- Supports IEEE P802.3ck™/D2.1 specification.

### Modifications

- Defect Fixes

### Known Issue

- dRpeak & dVf supports only the usage of s4p files but not s2p files.

## Keysight N1091CKCA Software Version 1.0.7.0

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|---------------------------------------------------------------|---------------------------------------------------|
| Release Date:                                                 | April 2021                                        |
| Requirements Category<br>(e.g., operating system):            | Microsoft Windows 10                              |
| Requirements Category<br>(e.g., instrument software version): | 6.71.21                                           |
| File Name:                                                    | SetupInfIEEEckDCA01000007.exe                     |
| License:                                                      | Please see the product data sheet on Keysight.com |

### Modification

- Defect Fixes

### Known Issue

- FlexDCA might not be able to execute pulse response algorithm on a perfect or over-equalized simulation signal. It will execute correctly in real DUT signal.

## Keysight N1091CKCA Software Version 01.00

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|---------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Release Date:                                                 | Nov 13, 2020                                                                             |
| Requirements Category<br>(e.g., operating system):            | Microsoft Windows 10                                                                     |
| Requirements Category<br>(e.g., instrument software version): | 6.60.378                                                                                 |
| File Name:                                                    | SetupInfIEEEckDCA01000000.exe                                                            |
| License:                                                      | Please see the product data sheet on <a href="https://www.keysight.com">Keysight.com</a> |

### Initial Release

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