D9040USBC USB4 Compliance Test Application

Keysight D9040USBC Software Version 1.30.0.0

Release Date:	Feb 2, 2024
Requirements Category (e.g., operating system):	Microsoft Windows 10
Requirements Category (e.g., instrument software version):	11.50.00601 (UXR/ UXR-B)
	6.74.00701 (90000 V-Series, 90000 Q-Series, or 90000 Z-Series)
	A.17.25.05 (VNA/ENA)
File Name:	SetupInfUSB401300000.exe
Reference:	USB4 CTS Version 1.04

New Features/Additions

- Support Captive Device

- Support SBTX and SBRX tests.

- Support SigTest version 0.87

- Support CTS 1.04

KEYSIGHT

Modifications / Changes

- Updated sampling size for FVT test to 337.5us.

- Updated sampling size for rise/Fall time to 50us

- Updated sampling size for SSC measurement to 337.5us.

- Updated sampling size for Electrical Idle test to 125us.

- Updated sampling size for AC Common Mode measurement to 337.5us.

- Obsolete TBT controller support.

Known Issues:

- For return loss measurement, Gating feature not working on VNA (this is because the gating only applied on Sdd/Scc and not been applied to the SNP file that used by SigTest). Alternatively, do not use SMP fixture, please use SMA fixture for return loss measurement.

Keysight D9040USBC Software Version 1.21.0.0

Release Date:	June 08, 2023
Requirements Category (e.g., operating system):	Microsoft Windows 10
Requirements Category (e.g., instrument software version):	11.50.00401 (UXR/ UXR-B)
	6.73.00301 (90000 V-Series, 90000 Q-Series, or 90000 Z-Series)
File Name:	SetupInfUSB401210000.exe
Reference:	USB4 CTS Version 1.03

New Features/Additions

- Supports UXR-B Series oscilloscope.

- Support provided for SQ2 frequency variation training.

- Added config to use customized threshold for frequency variation training.

- Support provided for Tx and Rx return loss measurement.

- Support provided for ETT chipset argumentation. User can use –MH2 or –tgl or any customized string that is supported by the ETT tool.

- Customized ETT configuration to support "DUAL" or "Single Link" on "Electrical Idle" configuration.

- Support provided for SigTest version 0.86.

- Support provided for ETT version 1.1.2.

- Allowed user to run TP3 jitter test with the option to capture 1 PRBS31 or 5 PRBS31 waveforms from the **Configure** tab.

- Support provided for Single PC Mode.

- Equalization tests enabled to run with single preset value.

Modifications / Changes

- Removed Frequency Variation Training Test for non-rounded bit rate according to CTS 1.03.

- Obsoleted Type-C controller GUI.

- The acquisition settings in the Configure tab will use the unit "microseconds" instead of "memory points".

Notes/Recommendations

- To run single preset value in Equalization test, SigTest will still require P0 and P15 waveforms by default.

- For DUT configuration that use "-MH2", the controller automation will only run with Single Lane as per recommendation. User will need to flip the type-C connector for Lane 1 testing.

- It is recommended to not use Infiniium baseline 11.40.102 as DIFF and COM functions do not work as expected in this baseline version.

Keysight D9040USBC Software Version 1.10.4.0

Release Date:	May 17, 2023
Requirements Category (e.g., operating system):	Microsoft Windows 10
Requirements Category (e.g., instrument software version):	11.50.00102 (UXR-Series) 6.73.00102 (90000 V-Series, 90000 Q-Series, or 90000 Z-Series)
File Name:	SetupInfUSB401100004.exe
Reference:	USB4 CTS Version 1.00
License:	Please see the product data sheet on keysight.com

Modification / Change

- Updated app to support latest version (5.5.1.81) of Keysight License Manager

Keysight D9040USBC Software Version 1.10.0.0

Release Date:	February 28, 2022
Requirements Category (e.g., operating system):	Microsoft Windows 10
Requirements Category (e.g., instrument software version):	11.20.00101 (UXR-Series) 6.70.00101 (90000 V-Series, 90000 Q-Series, or 90000 Z-Series)
File Name:	SetupInfUSB401100000.exe
Reference:	USB4 CTS Version 1.00

New Features/Additions

- Supports Keysight **D9010AGGC Compliance Test Software Measurement Server** for using multiple machines/PCs over a network as processing engines in order to significantly enhance the test execution speed. To know more, please visit the D9010AGGC product page at www.keysight.com.

Modifications / Changes

- **Enable Automation** check box will initialize the controller.

- Frequency Variation Training will only support SQ128-PRBS31 pattern.

- **Preset Calibration** tests will now run on SigTest.

- The application supports SigTest Version 0.6.

- The application supports ETT version 0.9.9.

Issues Fixed

- Fixed Tx Swing Preset 15 failure issue which occurred when the application was running in standalone mode.

Notes/Recommendations

- Electrical Idle test only supports single link operation depending on the DUT. The capability to support both the dual and single link operations will be available in next release.

Keysight D9040USBC Software Version 1.1.0.0

Release Date:	8 Oct 2021
Requirements category (e.g., operating system):	Microsoft Windows 10
Requirements category (e.g., instrument software version):	11.15.00201 (UXR-Series) 6.60.00802 (90000 V-Series, 90000 Q-Series, or 90000 Z-Series)
File Name:	SetupInfUSB401010000.exe
Reference:	USB4 CTS Version 1.00

Modifications / Changes

- Removed skew measurement, it no longer required by CTS

- Integrated SigTest measurement.

- CTLE calibration in setup tab no longer available. (It is default to sweep or CTLE by SigTest)

- Added USB subscription license

- Changed preshoot and deemphasis limit for Preset 14. (Preshoot 3.6 +/- 1dB, Deemphasis 0 +/- 1dB)

Keysight D9040USBC Software Version 1.0.0.0

Release Date:	10 July 2020
Requirements category (e.g., operating system):	Microsoft Windows 7/ 10
Requirements category (e.g., instrument software version):	10.20.00503 (UXR-Series)
	6.55.00702 (90000 V-Series, 90000 Q-Series, or 90000 Z-Series)
	Note: Please do not run 20G/20.625G Lane to Lane skew using V-series due to the bandwidth limitation on this instrument.
File Name:	SetupInfUSB401000000.exe
Reference:	USB4 CTS Version 0.95

Known Issues:

- If first trial is run with full preset calibration, and second trial is run with predefined optimum preset number, the application will fail to export the results as pdf, as an alternative solution, you can export the results as html.

- Reference table of the spec is not updated within the application. Please refer to the MOI for latest reference table.

- For GMAX Sr. with 70G bandwidth, it will only be able to set 60 GHz for Rise/Fall time.

- Unable to load project settings, when in Run tab, event detection is set to "Margin".

Initial Release

© Keysight Technologies 2023