Keysight Infiniium Oscilloscopes Software

This software is designed to run on the Keysight Infiniium 9000 Series, S-Series, 90000A Series, 90000 X-Series, V-Series, 90000 Q-Series, and Z-Series oscilloscopes or on personal computers.

Version 6.00.00701

Released Date:	9 May 2017
Operating System:	Windows 7, Windows 10

Enhancements

- Added USB PD v1.1 support.

- Added the ability to launch the InfiniiSim viewing tool with just an offline license.

- When connecting an N7004A probe the default channel scale will be set to 1mW/div and the default setup button will set the scale to this value also.

Bug Fixes

- Fixed a problem with the application not launching if the PATH variable was too long.

- Fixes to MIPI LLI protocol decode dealing with MK0.

- Fixed an issue with a measurement not waiting until all averages are acquired when using remote query.

- Fixed a problem with measurements on a FFT Phase function.

- Using explicit clock recovery, the jitter values were not being reported correctly when using UI as the display units.

KEYSIGHT
TECHNOLOGIES

- Fixed a problem with the entry dialog for IPv6 Source IP field.

- Threshold lines will now be displayed for PAM4 signals, when selected.

- Fixed a lockup issue when switched between First and Second Order PLL clock recovery method, while doing serial decode.

- FFT vertical scale will recall correcting on power up.

- The 10076C probe will now be recognized correctly.

Version 6.00.00628

Released Date:	29 March 2017
Operating System:	Windows 7, Windows 10

Enhancements

- Added support for Windows 10 and it still supports Windows 7.

- Put in new 1st and 2nd order PLL algorithms.

- Added 3rd order PLL selection with a Thunderbolt 3.0 compliance license.

- Use the scroll wheel in a Waveform Window to adjust the waveform intensity.

- Added a Measurement Log function that will take one measurement per acquisition and plot the values over time.

- MHT/PDF Measurement Reporting save option.

- ARINC and MIL-1553 Symbolic Decode support.

- SPMI serial decode and trigger.

- Generic Raw protocol decode support for both PAM-4 and NRZ.

- Improved the performance of segmented memory navigation and statistical accumulation, along with Infinite persistence.

- Added the ability to set any supported data rate in our Hardware Serial Trigger card, instead of just being able to select from a list of rates.

- Hardware accelerated CTLE calculation.

- Added the ability to save color grade data.

- Support for an external InfiniiSim viewing tool.

- Update to using Matlab 2016b component run time.

- Added the ability to turn off the front panel LEDs on an S-Series, V-Series and Z-Series.

- When a user starts typing in a file manager, it will start matching folders in the directory.

- Added the ability to grab the Delta Marker readout to move the two markers as a pair.

- Added protocol Auto Setup capability for all PCIe supported data rates along with CDR presets.

- Added a Measurement Threshold button to the Analysis Diagram dialog.

- A user can right click on a Memory1-4, Function 1-4, or Channel 1-4 icon and change the front panel knobs to control their offset and scale.

Bug Fixes

- Fixed an issue with Eye Contour not displaying even after there is sufficient data acquired.

- Fixed a performance issue if you toggle the off/on state of either serial decode or digital busses.

- Moved the Undo/Redo buttons to a better location so that they were not accidentally pressed when using the Run/Stop/Single controls.

- Fixed the Display Port compliance license string to display version 1.4 instead of 1.3.

- Fixed a problem with a customer being able to specify a file name as just a "\" which causes a crash.

- A Jitter Complete (N8823) trial license is now working.

- Fixed the instruction for the calibration of the N282XA.

- Fixed a problem when using the Precision Probe Wizard when trying to calibrate another cable after the first probe head was calibrated.

- Fixed a labeling problem, on InfiniiMax III+ probes, with single-ended and differential offset range.

- Fixed an issue with the scope crashing when saving a screen shot in some cases.

- Fixed a waveform loading problem where units were not displaying correcting on the horizontal grid in some cases.

- Fixed an issue with measurement queries taking too long with an already installed measurement.

- Fixed slew rate units in setup information output.

- The horizontal scale readouts in the main GUI will reflect the scale units set in the Real-Time Eye dialog.

- A user is only allowed to save a mask .csv file if they have limit lines setup.

- DISPlay:BOOKmark command will now set the color correctly.

- Fixed a problem with screenshots not including vertical scale information in some cases.

- Defined the PCIE Gen3 "Compliance Receive" bit in our protocol decode.

- Fixed a lock up issue when doing large jitter analysis processes.

- Fixed a problem with reading corrupted waveform file.

- General fixes to the help system.

Version 5.75.00402

Released Date:	24 February 2017
Operating System:	Windows 7

Bug Fixes

- Made changes to support new model number sting for 1169B probes that will report themselves as 1169A otherwise.

- Change the trigger out pulse width to 300ns for better detection on S-Series, 90000 X-Series, V-Series, 90000 Q-Series, and Z-Series.

- Fixed a problem with saving and recalling automask files, because of directory specification.

- Fixed problems with UDF using digital channels as a source.

- Fixed a problem with InfiniiSim crashing in some cases.

- Fixed problems with the N8838A software not handling the detection of a mixer correctly and not listing them correctly in the GUI.

- Added license support for the PCIe Gen 4.0 compliance application.

Version 5.75.00303

Released Date:	20 January 2017
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with Multi-Scope Hosted not calibrating correctly in some cases.

- Fixed an Undo/Redo issue that would cause a crash.

- Fixed a bug with setting a Hex value for the Generic Serial Search String.

- Fixed a mask test placement problem with Real-Time Eyes.

- Fixed a bug with bandwidth upgrades not working on Z-Series in some cases.

- Fixed problems with the N8838A software:

    o Fixed a performance problem.

    o It now sets the LO to 10dBm by default.

    o It preserves the LO address across a default setup.

- Fixed a trigger time error for Storm 10-bit mode (10GSa/s and 20GSa/s). The error starts to occur when waiting for a trigger that is longer than 1.374s.

Version 5.75.00214

Released Date:	9 December 2016
Operating System:	Windows 7

Enhancements

- Added the ability to load and save .mat files.

- Added a macro recorder that will allow a user to recorder their interaction with the oscilloscope and then play it back.

- Added the ability to undo/redo the last few actions that were taken on a scope.

- Added a new 3rd order CTLE option along with some improvements to the CTLE GUI.

- Added J4 and J5 Jitter support and improved the algorithms for J2 and J9.

- Added support for HDR-TSL and HDR-TSP to the I3C protocol decode and trigger.

- Added some new data rates for the Hardware Serial option card.

Bug Fixes

- Fixed a problem with two thresholds being displayed in the Protocol Manual Setup dialog when they should not be.

- Fixed a bug with reading files that had capitalized MSK extension.

- Fixed a problem with the display of a function disappearing when zooming in on a signal in some cases.

Version 5.70.00901

Released Date:	9 November 2016
Operating System:	Windows 7

Enhancements

- Added dynamic range graphic for the N7004A probe.

Bug Fixes

- Removed the PCIe Gen1 and Gen2 from the clock recovery presets lists.

- Fixed a problem with the Signal Type dialog when only N8838A was licensed.

- Fixed a GPIB command issue when controlling an MXG signal generator that did not have a modulation license.

- Improved N7004A extinction ratio measurement tolerance, when deviating from the dark calibration settings.

- When removing an N7004A from a scope the scale will be defaulted to 1V/div to help prevent possible frontend damage.

- Fixed a problem with Real-Time Eye diagrams resetting when running a DDR4 compliance application.

- Limited the number of cores that will be used on a PC to 24 to work around a MATLAB issue.

- Fixed a Sync port issue with Multi-Scope.

- Fixed a 90000A Series issue when trying to run a calibration without administrative privileges on the oscilloscope.

- Fixed an eye contour issue when the main waveform display is turned off.

- Improved the location and size of the remote operation lock message to allow the main waveform area to be seen while running compliance applications.

- Fixed a V-Series touch screen issue when enabling it for the first time on startup.

Version 5.70.00802

Released Date:	14 October 2016
Operating System:	Windows 7

Enhancements

- Added HDR-DDR support for I3C protocol decode and trigger.

Bug Fixes

- Fixed a problem with a CD-ROM drive not being displayed correctly in the file explorer.

- Fixed a problem with draw mask not working with some Real Time Eye cases.

- Crosstalk application will now display the Time, Error for power supplies.

- Fixed a problem with Autoscale not setting the trigger level corrected when hardware invert was on.

- Fixed a problem where mask test waveform count would increment when histograms were turned on/off in some cases.

- Fixed a calibration probe skew issue in our 90000A Series oscilloscopes.

- Eye Contour improvements and bug fixes.

Version 5.70.00715

Released Date:	26 September 2016
Operating System:	Windows 7

Bug Fixes

- Fixed a compatibility issue with some of our compliance applications.

- Fixed an issue with some mask files not loading when using the CSV format.

- Fixed a problem with eye measurements not working on some optical signals.

- Change Optical Power measurement to Optical Average Power measurement to be in line with what our sampling oscilloscopes call this measurement.

Version 5.70.00714

Released Date:	20 September 2016
Operating System:	Windows 7

Enhancements

- FFT enhancements:

    o Channel Power Measurement

    o Occupied Bandwidth Measurement

    o Power Spectral Density Measurement

    o Vertical Units: dBmV, dbuV, Watt

    o RF Detectors

    o Limit Lines

- An analog channel can now be inverted in the hardware.

- Support for the N7004A 33 GHz Optical-to-Electrical Converter. Including some new capabilities associated with the probe:

    o OMA measurement

    o Optical power

    o Eye measurements (one/zero level, extinction ratio)

    o Dark calibration.

    o New vertical reference for Watts signal.

- Added a 4th order Bessel filter for all channels.

- Add the ability to do mask test using mask margins.

- Added automatic mask scaling.

- Added a number of optical standard mask files.

- ARINC 429 protocol decode and trigger support.

- MIL-STD-1553 protocol decode and trigger support.

- Enhanced Ethernet 100BaseT hardware trigger support on S-Series scopes.

- Partial I3C protocol decode and trigger, including I2C, SDR.

- Multi-lane MIPI LLI decode support.

- Added an Analysis Diagram view which shows the flow of the input single through all our analysis paths.

- InfiniiSim support for Infiniium Offline.

- Added the ability to load segmented data back into a waveform memory. It will not work if you load them into a channel in offline only a memory.

- Mask tests can be run on acquired segmented data.

- Crosstalk application improvements.

- Added the ability to change the segmented play rate via SCPI.

- Added more SCPI commands for FFT functionality.

- Added a trigger scope indicator in the GUI.

Bug Fixes

- Fixed an issue with the pilot tone being lost with some signals on Z-Series.

- When sending a remote query, it will not cause a disable of the scope as much as it used to.

- When changing vertical scale between linear and log, the optimal vertical scaling will be used.

- Fixed a screen image saving having the save dialog in them.

- Added the ability to display non equalized waveform with a Real-Time Eye.

- Added back the ability to get screenshots from the oscilloscopes webpage.

- Fixed a limit test display issue in Platinum display mode.

- Fixed a problem with bandwidth limit was being set inappropriately in some InfiniiSim modes.

- Fixed a correlation issue between EZJIT+ and EZJIT when measuring period jitter.

- After a power cycle the probe head information will be restored correctly.

- Improved the vertical scale when switching between vertical FFT units.

- The probe details box will show up less often and will go away when it needs no matter where the mouse is.

- Documentation updates.

Version 5.60.00904

Released Date:	30 August 2016
Operating System:	Windows 7

Bug Fixes

- Added a warning message and disabled bad N7010A probes.

- Added support for new N7010A probes.

- Added an updated flatness test to the Quick Calibration to test for damage caused by old N7010A probes.

Version 5.60.00902

Released Date:	12 August 2016
Operating System:	Windows 7

Bug Fixes

- Fixed a firmware crash when doing an eye measurement with bad data coming in.

Version 5.60.00901

Released Date:	3 August 2016
Operating System:	Windows 7

Bug Fixes

- Added a warning message for an issue cause by our current N7010A probe.

Version 5.60.00804

Released Date:	27 July 2016
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with Real Time Eyes not being displayed after the recall of a setup.

- Fixed a problem with the Eye Height measurement not computing in some cases.

- Fixed an issue with three source UDFs.

Version 5.60.00802

Released Date:	19 July 2016
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with eye mask test results not being reported correctly.

- Fixed a problem with PAM-4 BER/SER cumulative count results.

- Made a change to eSPI decode to match the delay in the triggering.

Version 5.60.00603

Released Date:	25 May 2016
Operating System:	Windows 7

Bug Fixes

- Fixed an issue when setting Explicit Clock Recovery with some protocol settings.

- Clamped the Connect Dots option to off if in Equivalent Time sampling mode. If it is allowed to be own it may cause waveform drawing problems.

- Fixed a histogram drawing issues when in Equivalent Time sampling mode.

- Fixed a problem with Real-Time Eyes not being displayed in some cases.

- Fixed a problem with V-Series scopes crashing on a factory default when using the touchscreen.

- Fixed some Multi-Scope issues.

- Updated help content.

Version 5.60.00602

Released Date:	11 May 2016
Operating System:	Windows 7

Bug Fixes

- Fixed an issue with the application failing to startup on previous versions of firmware.

- For dialogs that have tabs in them, the active tab will be remembered when closing the dialog so that it can be recalled when opening it again.

- For the N7010A probe, a message will tell the users how to configure the probe correctly and that the VTerm value is being set to zero for front end protection.

- Disabled InfiniiSim in Offline mode.

- Fixed some Multi-Scope issues.

- Fixed a problem with the Reset block display when using Sequence trigger.

Version 5.60.00505

Released Date:	4 May 2016
Operating System:	Windows 7

Enhancements

- Added channel information in marker readouts.

Bug Fixes

- The :DISK:LOAD command will now work on channels 5-40 when running Infiniium Offline.

- Allow Eye Contour to be used without a DDR compliance application license.

- Updated help and user guide content.

- Fixed an issue with some of our demoes loading correctly.

- Fixed a problem with some front panels not working on S, V, and Z-Series scopes.

- When running Infiniium Offline channels 5-40 will appear when not hosting an oscilloscope.

Version 5.60.00503

Released Date:	11 April 2016
Operating System:	Windows 7

Bug Fixes

- Fixes a problem with specific inputs cases for Crosstalk.

- A number of fixes for Multi-Scope.

- Added a correction factor fix for new M1971E mixers.

- Fixed an installer issue with Microsoft .NET.

Version 5.60.00501

Released Date:	5 April 2016
Operating System:	Windows 7

Enhancements

- Added PAM-4 BER rate measurements.

- Added the ability to draw masks for Mask Test.

- Multi-Scope supported in the oscilloscope.

- Crosstalk analysis application.

- Added Eye Contours for DDR analysis.

- Added 3 port support to InfiniiSim.

- Added N8838A external mixer support for the M1971E smart mixer reference solution.

- Added CAN-FD protocol decode and trigger support.

- Upgraded to RFFE 2.0 protocol support.

- Added support for the N2839A InfiniiMax II Differential Browser.

- Added Quick Jitter and Quick Eye Diagram selections.

- Increased the Clock Multiplier max value to 1200 for SDA.

- Protocol decode and Mask test can be on at the same time.

- Added F/2 (Even/Odd) jitter result value.

- Added Peak-to-Peak Contrast measurement.

- Added some new data rates for the Hardware Serial option card.

- Added a probe dynamic range indication and removed the probe clipping message.

- Increased the maximum time/div setting in roll mode to 1000s/div.

- Increased the maximum time/div setting in real time and segmented modes to 200s/div.

Bug Fixes

- Fixes to our bandwidth limit readout.

- Fixed a problem with explicit clock recovery not working with PAM-4 signal type.

- Fixed an issue with navigation of protocol decode when in zoom mode.

- Display the correct unit for measurement histograms.

- Added TIE filter setting into the new GUI like it was in the old GUI.

- Added the ability to change the colors of derived waveforms.

- Fixed masks files that had loading errors.

- After sending a SYST:LOCK command you can break the lock by minimizing the application.

- Fixed a problem with screen invert getting stuck when saving images on trigger.

- Fixes to using the hislip connection.

- Fixed a problem with file save locations not being recalled correctly.

- Fixed some interpolation issues when saving composite file in Infiniium Offline.

- Fixed an issue with zooming in on a channel when the Timebase Reference was not set to 50%.

- Changed the PCIe Gen3 CDR preset bandwidth to 10MHz.

- Fixed a number of screen saving issues.

- Fixed a problem with the Blackman-Harris FFT window.

- Some UDF control fixes.

- Fixes for BechVue support.

- Fixed a problem with saving digital data on a 90000 X-Series

- Fixes to the Precision Cable Wizard.

- Fixed an issue with the automatic scaling of function in some cases.

- Fixed a timeout error that happened when multiple trials of a SATA compliance application.

- Remote command enhancements and fixes.

- Help documentation updates.

Version 5.52.0011

Released Date:	11 March 2016
Operating System:	Windows 7

Bug Fixes

- Added a data rate of 2.97GHz to the Hardware Serial Trigger option card.

- Increased the CTLE max frequency to accommodate greater bandwidth on Q and Z Series scopes.

- Added MTEST:FOLDING:COUNT? legacy support so that you do not have to specify a source.

Version 5.52.0008

Released Date:	16 February 2016
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with decoding PCIe Gen1,2 with the Gen 3 license.

- Fixed a problem with sequence triggering not working with some protocols.

- Fixed a calibration problem with the N2820A probe.

- Fixed an issue with memory upgrade on the S-Series.

- Fixed a problem with saving images and composite files on trigger.

- Fixed an issue with measuring date on some imported waveform memories.

- Fixed a problem with Mask Test causing a crash in some cases.

Version 5.52.0004

Released Date:	8 January 2016
Operating System:	Windows 7

Bug Fixes

- Fixed a LAN connection issue when trying to do remote control.

- Fixed a problem with Long READ Response packets in D-PHY decoder.

- Fixed a problem with 1UI value being different between the RTEye and the actual waveform.

Version 5.52.0003

Released Date:	15 December 2015
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with protocol decode not working in segmented memory mode.

- Fixed a problem where some probe offsets are not set correctly based on the attenuation of the probe.

- Fixed a crash of the Infiniium application when using the Enter Value dialog for some protocols.

- Fixed a problem with the Infiniium application crashing when running through the Equalization Wizard in some cases.

- Fixed an issue with installed bandwidth licenses not working on 90000 Q-Series with greater than 33GHz bandwidth.

Version 5.52.0001

Released Date:	30 November 2015
Operating System:	Windows 7

Enhancements

- Added legacy color grade mode under persistence.

Bug Fixes

- An N5444A probe head will report a bandwidth of 30GHz.

- Fixed a problem with high speed digital data not being saved corrected when in half channel mode, 20GSa/s.

- Fixed some issues with the new SYST:MENU? query.

- Fixed an issue with bandwidth upgrades of some 90000 Q-Series and Z-Series.

Version 5.51.0002

Released Date:	6 November 2015
Operating System:	Windows 7

Enhancements

- Added USB PD protocol decode and trigger.

- Added USB 3.1 protocol decode and search.

Bug Fixes

- Fixed a problem with the Global Bandwidth Limit not working on a 9000.

- Fixed a problem with digital and analog memory depths not collating correctly.

- Fixed a problem with probe overload happening on an S-Series and the hardware and the software get out of sync.

- The N7010A probe will now use Precision Cable instead of Precision Probe.

- Fixed an issue with our Second Order PLL setting changes when using SCIPI and the front panel.

- Fixed an issue with clock recovery not working intermittently in some cases.

- Fixed a problem with calibration not working on some heterogeneous Multi-Scope Hosted configurations.

Version 5.50.0035

Released Date:	21 October 2015
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with bandwidth upgrade license for V-Series scopes.

Version 5.50.0033

Released Date:	9 October 2015
Operating System:	Windows 7

Enhancements

- Added a SYST:MENU? remote command, to allow a user to query contents of any menu.

Bug Fixes

- Fixed global bandwidth setting and display.

- Fixed jitter issue for real edge channels on Q and Z Series.

- Fixed banding issue in real-time eye for differential channels with N7010A probes connected.

- Made fixes to the N7010A skew calibration.

- Made some improvements for Quick Environmental calibration along with reducing calibration failures in some cases.

- Fixed a LIN and USB2 triggering issue on S-Series.

- The calibration for the InfiniiMax III with N5444A 2.92mm head will now ask the user to added a shorting cap.

- On Multi-Scope Hosted the code will allow Aux-In as a trigger.

- On Multi-Scope Hosted fixed a problem with clock synchronization.

- On a 90000 X-Series SPI trigger will now work on the digital channels.

- Fixed a problem with the PDER remote sometimes giving false positive.

- Allow some measurements to work on a smooth function.

- Fixed a problem with eye measurements when using explicit clock recovery.

- Fixed a licensing problem with the N5459B DDR bundle.

- Fixed a problem with PCI Express 2.0 licensing on a Raptor.

- Added :BUS:B1:Type command support for eSPI and Ethernet 10/100Base T.

- Fixed it so that a user can go from 13GHz to a lower bandwidth when stepping.

Version 5.50.0031

Released Date:	1 September 2015
Operating System:	Windows 7

Bug Fixes

- Fixed a licensing problem on 90000 X-Series

Version 5.50.0030

Released Date:	26 August 2015
Operating System:	Windows 7

Enhancements

- Added support for the N7010A on a 90000 X-Series.

- Added the displaying of the "Size (in Bits)" column before the payload so the number of SKPs will be known.

Bug Fixes

- Fixed a problem with some front panels on S-Series, V-Series and Z-Series.

- Fixed a problem with probe skew calibrations failures in some cases.

- Fixed a problem when you use the right click "Copy Image Screen" option in a Waveform Window that is not window 1.

- Fixed some problems with reporting more than five measurements in the setup information printout.

- Made a fix so that the entire screen is copied if you choose "Copy Screen" from the main menu.

- Fixed a problem with a Zone moving/going away when a user changes the source after creating the zone.

- Fixe a problem with skew calibration on a N2820A when using an S-Series.

- Fixed a problem with the EZJIT wizard not working correcting with only an EZJIT plus license.

- Fixed a licensing problem for SVID.

- Fixed a problem with the vterm for a N7010A getting cleared out when you connect or disconnect another probe.

- Added some DC calibration improvements for the N7010A.

- Fixed a problem with the eye diagram mask not indicating violations correctly.

- Fixed a problem with saving an image when in tabbed mode.

Version 5.50.0027

Released Date:	31 July 2015
Operating System:	Windows 7

Enhancements

- Added Jitter Free capability for the Hardware Serial Trigger option card.

- Added ΔY/ΔX readout for your marker results.

- Added the ability to determine if a calibration is in progress for the N8834A option.

- Increased the Clock Recovery Clock Multiplier to 120.

Bug Fixes

- Fixed a problem with saving transfer function sometimes failing in InfiniiSim.

- Fixed a problem with opening some h5 files.

- Fixed problems with screen captures not getting all of the data on the screen with the Display Port compliance applications.

- Fixed problems with the icons disappear from the saving screen image dialog in some cases.

- Updated the image for the N5443A deskew calibration fixture to highlight the 50 Ohm termination needed.

- Fixed a problem with the histogram box not displaying correctly in some cases.

- When a user prints a screen the image will no longer contain the print dialog.

- Fixed a problem with Real-Time Eye folding in some cases on a Z-Series oscilloscope.

- Fixed a problem with the edge then edge measurement with a single pulse.

- Now the segmented time tag and X origin is saved in h5 files.

- Fixed a problem in histograms where the Max Bins was not updating the results.

- The scale factors for the N2800A have been corrected.

- Fixed a problem with the :MTES:FOLD:TPOS command not setting the units correctly.

- Improved the resolution of the FFT peak annotation to show more accurate results.

- Fixed a problem with :WAVeform:COMPlete not returning the correct value.

Version 5.50.0021

Released Date:	9 July 2015
Operating System:	Windows 7

Bug Fixes

- Fixed an issue that could potentially cause incorrect channel and function display data on the S-Series to be produced when using Individual Channel Bandwidth Limit filters at sample rates less than or equal to 5 GSa/s.

- Fixed an issue that could cause Precision Cable calibrations to incorrectly deskew signals.

- Fixed an issue the prevented the front panel from being detected when certain USB devices where attached to the instrument.

Version 5.50.0015

Released Date:	25 June 2015
Operating System:	Windows 7

Enhancements

- The Jitter results are now included as part of the Setup Information.

Bug Fixes

- Added the right click zoom to min/zoom to max back in for measurements.

- Made changes to remote commands for some of the N8834A calibration capability.

- Fix a problem with serial decode not working when you drag digital channels around.

- Fixed a problem with bandwidth limit not being turned on when using the :CHANnel<N>:ISIM:BWLimit command on a S-Series.

Version 5.50.0014

Released Date:	19 June 2015
Operating System:	Windows 7

Enhancements

- Added remote commands for some of the N8834A calibration capability.

Bug Fixes

- Fixed problems with screen shots when the GUI off remote command was used.

- Made changes to the ACVrms measurement to work on the full sampled data.

- Fixed a text entry problem when increasing the number of bytes within the numeric entry pad.

- Fixed a problem with some oscilloscopes losing their licenses.

- Fixed a problem with crossing measurement not working in some cases.

Version 5.50.0013

Released Date:	5 June 2015
Operating System:	Windows 7

Bug Fixes

- Fixed a problem in the Bookmark list view to only show the first line if you have a multiline bookmark.

- Fix a problem with measurements sometimes not updating correctly when in a stopped mode.

- Added back in the Multi-Scope control license.

- The term voltage on a N5444A probe head will recall correctly.

Version 5.50.0012

Released Date:	1 June 2015
Operating System:	Windows 7

Bug Fixes

- Added the support of 2-port S-parameter files when in set to a 4 Port type

- Fixed a problem with Digital Memories widget incorrectly tied to digital channels.

- Waveforms will now recall into the same grid that they were saved in.

- Fixed a memory upgrade problem on Z-Series

Version 5.50.0011

Released Date:	28 May 2015
Operating System:	Windows 7

Bug Fixes

- Updated the Power Rail probe demo.

- Added a new legacy mode to the :DISK:SAVE:MEASurements command to return the data in columns instead in rows.

- Fixes to Precision Probe causing overloads in some cases.

- The correct Precision Probe diagram and instructions will be display on a V-Series oscilloscope.

- Some additional fixes when saving an inverted image.

- Fixed a problem with digital memories not saving/loading correctly in Infiniium Offline.

- Auto Sin(x)/x will not work correctly in Infiniium Offline.

- Added back the ability to set the Jitter BER Levels to E6, E7, E8.

- The Hardware Serial Trigger eye diagram will now open up again once a good signal is connected.

Version 5.50.0010

Released Date:	18 May 2015
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with Jitter Tailfit Bathtub graph not displaying data.

- The number of USB connected to a oscilloscope no longer causes a problem in the File Management dialog.

- Put the RF measurement demoes in.

- Fixed a problem with the Composite Histogram not displaying any data if some parts are not reporting values.

Version 5.50.0009

Released Date:	11 May 2015
Operating System:	Windows 7

Bug Fixes

- The QuickWaveform Multipurpose action will now display all needed save options like you have in the main save dialog.

- Sequence trigger reset time will display the correct value in all cases.

- Properly display the bandwidth information in the bandwidth dialog when RealEdge is enabled.

Version 5.50.0008

Released Date:	5 May 2015
Operating System:	Windows 7

Bug Fixes

- Removed support for the 1153A probe for S-Series, V-Series, 90000 Q-Series, and Z-Series.

- Updated the Bandwidth Limit dialog to only show the bandwidth readout for a given channel if it is enabled.

- Fixed a problem where triggering would not work in some cases after a Mask Test run.

- Fixed a problem with triggering locking up when doing a QuickSave action on trigger.

- Auto incrementing will now work in all QuickSave cases.

- After saving file with setup information, histograms will now update correctly afterwards.

- Fixed a crash when doing the average of an FFT.

- Fixed a bug with the horizontal scaling of average FFTs.

- Did a better job of inverting the background when doing an image save.

- Fixed a crash when running a probe skew calibration.

Version 5.50.0007

Released Date:	24 April 2015
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with UFS search not worked corrected when Any Host to Target and Any Target to Host was selected.

- Bandwidth upgrade problem fixed for Q-Series and Z-Series.

- A problem with the Protocol Lister trigger line indication was fixed.

- Fixed a problem with Sequence trigger Reset-By-Event not triggering properly.

- When running in offline we will not try to load an FIR filter since they will not work.

- Hardware Serial Trigger is limited to 16 symbols for Generic 8b/10b in the GUI.

- Fixed a problem with CAN debug trigger in some cases.

- Fixed a problem with the Bandwidth Limit dialog not always updating the oscilloscope behavior correctly.

- When connecting a N2800/1/2/3A to a 90000X-Series the DC baseline will not shift on probes connected to other channels.

- Probe offset is not working properly for the 1169A.

Version 5.50.0006

Released Date:	16 April 2015
Operating System:	Windows 7

Bug Fixes

- Made updates to the "Quick Environmental" cal for the 90000 (Q, X, V and Z) series.

- Made the default memory to 50 Mpt. for V-Series.

- Turned interpolation control off for analog channels in Infiniium offline and on for waveform memories for both on the oscilloscope and offline.

- Fixed PAM TIE measurements at high symbol rates.

- Added support for :CHAN:PROBe:HEAD:VTERm command on N7010A probe.

- Fixed the problem with the Ethernet 100BASE-TX Protocol menu check box not displaying the correct state.

Version 5.50.0005

Released Date:	13 April 2015
Operating System:	Windows 7

Enhancements

- Multi-lane Unipro/UFS will merge data even without MK0, MK1 alignment characters.

Bug Fixes

- Fixes to Multi-Scope hosted.

- Fixes to PAM-4.

- Made updates to the "Quick Environmental" cal for the 90000 (Q, X, V and Z) series.

- Fixed problem with the ExecuteGPIBScript.exe not running correctly.

- The protocol Lister will display all captured data correctly for all numbers of lines of data.

Version 5.50.0004

Released Date:	10 April 2015
Operating System:	Windows 7

Enhancements

- Added a "Quick Environmental" cal for the 90000 (Q, X, V and Z) series to reduce phase drift.

Bug Fixes

- Fixed a potential phase error issue on the real edge channels of the 90000 Q and Z series. Loading this software update on the Q and Z series will display a "Quick Environmental" cal required message after the oscilloscope starts up

- Fixed a problem with 63G license on Z-Series scopes.

- Improvements to the S-Series calibrations including probe skew calibration.

- Improvements on the accuracy in a few trigger calibrations.

Version 5.50.0001

Released Date:	26 March 2015
Operating System:	Windows 7

Enhancements

- V-Series oscilloscope support.

- PAM-4 analysis support.

- Multi-Scope Hosted support.

- Hardware Serial Trigger option card support.

- Added support for the N7000A – N7003A probes.

- Added N7020A S-parameter support.

- Added the ability to save each channel in a different CSV file and an image all with one button press.

- Added a remote command to turn off GUI updates.

- Can save waveform data and an image with on button press.

- New bandwidth filter menu that consolidates all bandwidth filters into one dialog.

- Multi-lane Unipro/UFS will merge data even without MK0, MK1 alignment characters.

Bug Fixes

- When saving a file it will remember the previous file name.

- When saving setup information as part of a save screen image, the measurement results will be included.

- Fixed a problem with printing setup information with >= 14 characters in the label.

- Fixed compliance application upgrade problem going from an Agilent branded application to a Keysight one.

- Improvements to Ethernet serial decode.

- The :DISPlay:CGRad and :MTESt:FOLDing commands were changes to keep some of the legacy behavior will still allowing new capability.

- Better indication of what is being controlled when using the Quick Control capability.

- Fixed the :DISK:SAVE:MEAS command to make sure it saves all of the data.

- The Real Time Eye horizontal controls now work correctly based on the icon on the button.

- Updated the descriptions for the N2832A skew calibration.

- Fixed an overload problem with probing on S-Series.

- The number of UIs for Real-Time Eye is now displayed as a floating point number because it could report negative numbers before.

- Fixes to Jitter graph rendering.

- Fixed a problem with gating box show when Real-Time Eye is displayed.

- Fixes to the EZJIT Complete Wizard.

- A number of precision probe calibration GUI fixes.

- Fixed units for Slew Rate results to be a more traditional expression.

Version 5.30.0004

Released Date:	31 March 2015
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with 63G license on Z-Series scopes.

Version 5.30.0003

Released Date:	18 March 2015
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with updating the 90000 X-Series front panel FPGA.

Version 5.30.0001

Released Date:	26 February 2015
Operating System:	Windows 7

Bug Fixes

- Fixes a crash when Buses are displayed and you zoom in and out in some cases.

- The CAN demo will now work with the N8803 license.

Version 5.30.0000

Released Date:	23 February 2015
Operating System:	Windows 7

Enhancements

- Added support for the N7010A probe.

- Added probe head support for N2851A.

- In Roll Mode you cans set the sample rate and function horizontal getting work while running.

- Added 1MOhm 500MHz DSP correction filter to the S-Series

- Ethernet 10/100BaseT decodes and trigger on 10BaseT. Both IPv4 and IPv6 support.

- Added support back in for Measure All Data and Measure All Edges.

Bug Fixes

- Fixes to the decimation algorithm of the color grade database.

- For the S-Series, the Bits of Resolution display the correct value.

- Better documentation on how to configure VNC Viewer was added.

- Added correction for probe offset linearity on 90000 X-Series.

Version 5.21.0001

Released Date:	18 March 2015
Operating System:	Windows 7

Enhancements

- Fix a problem with downgrading your 90000 X-Series to a pre-5.30 baseline.

Version 5.21.0000

Released Date:	23 February 2015
Operating System:	Windows 7

Enhancements

- This version allows you to downgrade your 90000 X-Series to a pre-5.30 baseline.

Version 5.20.0021

Released Date:	6 February 2015
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with mask being scaled correctly.

- Fixed a problem with bandwidth upgrades on a DSA.

Version 5.20.0018

Released Date:	22 January 2015
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with Resolution Bandwidth only driving acquisition setting in one direction.

Version 5.20.0017

Released Date:	16 January 2015
Operating System:	Windows 7

Enhancements

- Added multi-line support for bookmarks.

Bug Fixes

- Fixed a problem with the remote self-test command and made it so that the self-test dialog will be torn down when done.

- Navigation with Limit Test now works.

- Fixed a Mask recall problem.

- The FFT Resolution Bandwidth can drive acquisition settings even when the sample rate is fixed.

Version 5.20.0016

Released Date:	9 January 2015
Operating System:	Windows 7

Enhancements

- Added support to the :CHANNEL<N>:PROBE:EADAPTER command/query to support E2697A and N5449A.

Version 5.20.0015

Released Date:	7 January 2015
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with Mask testing off screen data.

Version 5.20.0014

Released Date:	18 December 2014
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with IO Libraries Suite 17.0 connecting to our oscilloscopes.

- Allowed QuickExecute to process double quoted filenames among other changes.

Version 5.20.0013

Released Date:	4 December 2014
Operating System:	Windows 7

Bug Fixes

- Fixed a license environment variable issue causing the Offline application to start up very slowly. The fix was to ignore the default LM_LICENSE_FILE environment variable when checking for server based licenses.

- Fixed an issue where the edge-edge measurement was always using the middle threshold regardless of the threshold setting.

- Fixed an issue which was causing an incorrect measurement count for some configurations.

Version 5.20.0010

Released Date:	21 November 2014
Operating System:	Windows 7

Bug Fixes

- Fixed PCIe 3.0 Tx protocol decode of compliance preset number and lane number (mod 8).

- Fixed VTerm not always being applied correctly for the N280xA probes.

- The cable delay will now be included in Precision Probe calibration.

- Fixed problem with MISO always reporting FF in 4 wire SPI decoding.

- Fixed mask test query failure in the Display Port compliance application.

- Allow the user to select the polarity when doing an SMA calibration using Precision Probe.

Version 5.20.0008

Released Date:	11 November 2014
Operating System:	Windows 7

Bug Fixes

- Fix to measurement threshold setting when using Custom level +/- hysteresis.

- Fixed a problem with editing an existing transfer function.

- Normalize DC gain checkbox was fixed.

- Added back in Qualifying Thresholds when doing a Versus (XYZ Qualified) function.

- Fixed the ability to do GPIB measurement query.

Version 5.20.0006

Released Date:	30 October 2014
Operating System:	Windows 7

Enhancements

- Improved the performance of ASCII file save.

Bug Fixes

- Fixed the SELFtest:SCOPetest command to run a self-test, display the GUI and respond to queries.

- Offset range and other small fixes for the N7020A Probe.

Version 5.20.0005

Released Date:	17 October 2014
Operating System:	Windows 7

Enhancements

- Added source 3 and 4 to the function GUI for UDFs that support this number of sources.

Bug Fixes

- Fixed a bug in UDF calculation that was happing in a few oscilloscope configurations.

- Increased the efficiency in loading InfiniiSim transfer file.

- Fixed a problem with the "-nohpib" command turning off all remote connections.

Version 5.20.0004

Released Date:	7 October 2014
Operating System:	Windows 7

Enhancements

- The user can interpolate channel data when loading a file into Infiniium Offline.

Bug Fixes

- Fixed probe head selection slowness on the S-Series.

- Fixed decoding PACP_CAP_EXT1_ind in Unipro 1.60.

- Fixed histogram X axis windowing to plot small number of bin histograms correctly.

- Fixed a problem with MATLAB errors with InfiniiSim and no UDF license.

Version 5.20.0003

Released Date:	30 September 2014
Operating System:	Windows 7

Enhancements

- Keysight rebranding.

- Clock recovery per channel.

- Resizing the waveform does not cause statistics to reset.

- Resizing waveform area does not reset the color grade.

- Mask test does not depend on the size on the screen. It will always test as if full screen.

- Move the waveform to different areas using right click.

- Right click allows you to select 3 grids.

- HDMI 1.0 and 2.0 Clock Recovery preset will default using rising edge.

- Added remote commands for LIN and FlexRay.

- Can change the max number of bins for measurement and waveform histograms.

- Support for N7020A Probe

Bug Fixes

- General performance improvements.

- Able to save all segment data.

- Improved the performance of :DIG.

- Right click context menu comes up more easily.

- Ability to save images via the oscilloscope's webpage.

- Added keyboard shortcuts for items in the Control menu.

- Removed VNC support from the oscilloscope webpage. You will have to use UltraVNC.

Version 5.10.0005

Released Date:	1 August 2014
Operating System:	Windows 7

Bug Fixes

- Fixed a problem with importing multi-channel waveform data .h5 files from InfiniiVision products into InfiniiView.

Version 5.10.0003

Released Date:	8 July 2014
Operating System:	Windows 7

Bug Fixes

- Fixed a crash when using EZJIT

Version 5.10.0001

Released Date:	4 July 2014
Operating System:	Windows 7

Enhancements

- Changed the highlight color in list boxes and tabs to make it more clear what is selected.

- Enhanced the calibration procedure for the N2820A probe to allow for more accurate measurements.

Bug Fixes

- Fixed issues with the S-series memory options.

- Fixed an issue where the incorrect amount of available standard memory was incorrect on the S-series.

- Fixed several user interface defects.

Version 5.02.0009

Released Date:	25 June 2014
Operating System:	Windows 7

Bug Fixes

- Fixed an issue where there is a dramatic slowdown for all DSA model scopes.

- Fixed an issue where the S-series scopes did not have the right memory depth

- Fixed an issue with the 90000 X-Series where sometimes during a user calibration the oscilloscope application crashes.

- UFS decode now decodes the 1st packet data even if there is no previous packet with the EOM bit set.