Agilent 90000 Series and 9000 Series Oscilloscopes Software Release Notes

Note: Versions 4.20.XXXX are the last releases for oscilloscopes that have the Windows XP operating system. To run versions 4.30.XXXX or higher, the oscilloscope must have the Windows 7 operating system.

Version 4.60.0024 (18 June 2014)

Bug Fixes:

- Fixed an issue where probe skew calibrations would not be recorded properly.

Version 4.60.0023 (9 May 2014)

New Features:

- Add support for the HDMI version 2.0 upgrade compliance application.

Version 4.60.0022 (15 April 2014)

Bug Fixes:

- Fixed an internal issue.

Version 4.60.0021 (8 April 2014)

Bug Fixes:

- RFFE decode fix.
- MIPI decode fix.
- Superframe fix for the Thunderbolt compliance application.

Version 4.60.0019 (18 March 2014)

Bug Fixes:

- Several bug fixes.

Version 4.60.0018 (27 February 2014)

New Features:

- Added protocol decode support for MIPI UniPro version 1.6.
- Added protocol decode support for UFS version 2.0.

Bug Fixes:

- MIPI RFFE protocol decode: fixed a decode issue where a packet was being shown as unknown.

Version 4.60.0016 (24 January 2014)

Bug Fixes:

- Fixed an issue when doing a :DIGITIZE when in segmented memory mode with >10,000 segments.

Version 4.60.0013 (9 January 2014)

New Features:

- When removing a probe from a 9000 Series scope, the channel impedance will return to the value that was present when the probe was connected.

Version 4.60.0012 (12 December 2013)

New Features:

- Add functionality to improve the time synchronization between multiple 90000Q series scopes.
- Allow a real time eye to be made on MIPI PWM clock data recovery.

Bug Fixes:

- Fixed some issues with the ECC header in MIPI D-PHY protocol decode.
- DDR Protocol decode changed the latency range to 127.
- Fixed the payload length in the MIPI M-PHY CSI-3 protocol decode.
- Fixed a defect detecting the E2621A during calibration.

Version 4.60.0011 (19 November 2013)

Bug Fixes:

- Fixed an internal issue.

Version 4.60.0010 (14 November 2013)

Bug Fixes:

- MIPI RFFE – fixed extended register write long decode.
- DDR decoding – fixed an issue when turning off a selected optional channel.

Version 4.60.0008 (1 November 2013)

Bug Fixes:

- Fixed an internal issue.

Version 4.60.0007 (31 October 2013)

New Features:

- Added clock recovery support for USB3.1.

Bug Fixes:

- Fixed a few minor graphical user interface issues when using a DDR interposer board.

Version 4.60.0005 (17 October 2013)

New Features:

- Add remote commands for I2C and SPI.

Bug Fixes:

- Fixed S-parameter port numbering in the user interface.
- Fixed issues when using multiple newer probes.

Version 4.60.0001 (28 September 2013)

New Features:

- Added SuperSpeed Inter-Chip (SSIC) protocol decoder (USB 3.0 protocol on MIPI M-PHY physical layer) – provides SSIC packets search and decode on scope waveform capture.
- Added CAN –dbc symbolic support: CAN decode option (N8803A/N8803B) now supports import of industry-standard -dbc files to allow message and signal symbol usage for both trigger and decode.
- CAN remote programming: SCPI commands for CAN protocol added to enable remote programming and UDA (user-defined application) interaction.
- On the MSO90000A series, you can now do mask testing while doing DDR DQS triggering.
- On the MSO90000A series scopes, you can now setup a voltage threshold for each digital bit separately in DDR trigger mode.

Bug Fixes:

- Fixed a couple issues with USB decode.
- Fixed an error when using InfiniiSim and some probes where a message box would pop up saying the filter length was too long.
- Fixed a couple issues with the PCIe decode.

Version 4.50.0010 (10 September 2013)

Bug Fixes:

- Fixed internal issues.

Version 4.50.0009 (22 August 2013)

Bug Fixes:

- Fixed an issue where an error message can occur when using some Agilent probes and InfiniiSim at the same time.

Version 4.50.0008 (25 July 2013)

New Features:

- Allows support for the Ethernet KR compliance application.

Bug Fixes:

- Fixed several issues causing the 9000H models to be significantly slower than the 9000A models.

Version 4.50.0007 (17 July 2013)

Bug Fixes:

- Fixes a problem with the standard memory depth on 9000H Series oscilloscope models.

Version 4.50.0006 (15 July 2013)

Bug Fixes:

- Fixes a problem with the standard memory depth on 9000H Series oscilloscope models.

Version 4.50.0005 (22 June 2013)

New Features:

- Allow digital to function with mask testing.

Version 4.50.0003 (6 June 2013)

New Features:

- Added support for the MSO-X 90000A series scopes.
- Added DDR2/3/4 decode support for the MSO-X 90000A series.
- Add :MEASurement<N>:SOURce command/query to change the source of an existing measurement.
- Add Amplitude Demodulation function using a Hilbert transform to find the envelope of an RF or radar signal.
- Add Fast, Worst Case Only Real Time Eye rendering.
- Add Clock Recovery Presets.

Bug Fixes:

- Various fixes for the digital channels for the MSO 9000A series.

Version 4.30.0009 (15 May 2013)

Bug Fixes:

- Fixed an internal issue.

Version 4.30.0008 (9 May 2013)

Bug Fixes:

- Fixed an internal issue.

Version 4.30.0006 (23 April 2013)

Bug Fixes:

- Fixed an issue with InfiniiSim and math functions.
- Improved the performance of FFE equalization.
- Fixed an issue with running jitter and noise measurements simultaneously with EZJIT Complete.
- Fixed a crash with the help about menu.
- Fixed a crash when autoscaling certain signals.
- Improved the visibility of a warning message when an unsupported probe is attached.

Version 4.30.0004 (2 April 2013)

Bug Fixes:

- Fixed an issue that caused the Infiniium scope application to not load if the InfiniiSim license was installed.

Version 4.30.0003 (25 March 2013)

Enhancements:

- Added SCPI command: :FUNCtion<N>:DELay <source>, <delay_time>.
- Delay math operator to shift a waveform in time.
- Ability to push a signal to the back of the display Z-Order.
- Added hardware acceleration to the real edge channels for the 90000 Q-series oscilloscopes. This will significantly speed up acquisitions, and allows full memory depth operations.
- Increased the number of functions available from 4 to 16.
- Add a new "Horizontal Gating" function which will allow measurements to be run only in a given time range.
- Add ability to recovery a clock using only rising or falling edges.
- Add ability to separate jitter on only rising or falling edges of a clock.
- Add Delay function operator to shift a waveform in time.
- Add ability to push signals to the back of the display Z-Order.
- Add UDF screen annotation capability to show messages or values from a UDF script.
- Add memory 'Place On Screen' button to find your waveform memory and put it on screen.

Bug Fixes:

- Significantly increased the performance of FFE equalization on channel waveforms.
- PCI Express Gen3: Fixed problem where 128b/130b sync is lost with some types of STP tokens.

Version 4.20.0001 (28 February 2013)

Enhancements:

- Support for the new N282xA high sensitivity probes.
- Added a new charge measurement for use with the N282xA probe.
- Added SCPI command :FUNCtion<N>:FFT:TDELay for use with the FFT Phase Function.
- Added Vtime measurement under the voltage->more menu.
- Added Hislip remote commands.
- Added the ability to save digital waveforms in composite and HDF5 files.
- Added remote commands to get and set the color grade scheme.
- Added NOISe to the :DISP:TAB remote command.
- Added :MEASure:CLOCk:METHod:EDGE {RISing | FALLing | BOTH} remote command.
- Add ability to specify PLL clock recovery in terms of OJTF or JTF.
- Added SCPI command to get/set color grade scheme.
- Support for the new N8818A UFS protocol decoder.

Bug Fixes:

- Forced the 9000A Series scopes into 1MOhm impedance during windows shut down to protect the inputs.
- Fixed a defect in the PCIe Gen 3 decode.

Version 4.10.0010 (16 January 2013)

Resolved Issues:

- Fixed an issue with autoscale with digital channels turned on where the oscilloscope would crash in certain circumstances.
- Fixed an issue that when calibrating a probe on a 9000A Series oscilloscope with multiple other probes connected -- the oscilloscope would lose connectivity with the other probes.
- Protocol Ethernet 10GBASE-KR: Fixed decoding Control block "O0 D1 D2 D3/C4 C5 C6 C7" where O0 was read from the wrong position in the packet.
- Fixed the :ACQ:MODE SCPI command for the 9000H Series oscilloscope.

New Features:

- For the 9104H and 9204H oscilloscope models, when in 1 MOhm impedance mode, increase the number of bits of resolution to better match the 500 MHz of bandwidth 1 MOhm natively provides.

Version 4.10.0008 (8 January 2013)

Resolved Issues:

- Static and live demos have been added for the 9000H Series oscilloscopes.
- In 9000H Series oscilloscopes, in high-impedance input mode, maximum bandwidth is forced to 500 MHz.
- When noise analysis is turned on, extra information is now included in print-outs.
- The MIPI D-PHY "Data Rate" setting was changed from a whole number to a decimal number with up to 3 digits after the decimal point.

Version 4.10.0007 (14 December 2012)

Resolved Issues:

- Fixed an issue with :CHAN:INPUT SCPI command where there were inconsistences between the command and query.
- Added documentation for the new 9000H series.
- Fixed an issue where the eye height reported was the amount of noise at the BER.
- Fixed issues with the installation of several Agilent components like Agilent IO libraries, where the scope would ask for a reboot, but then would not continue the install correctly.

Version 4.10.0004 (21 November 2012)

New Features:

- Add a serial decode demo for MHL.
- Add an addition 8B/10B symbol display format called '8-bit' which displays all 8B data s numbers even if there is a label representation of the data value.

Version 4.10.0002 (15 November 2012)

New Features:

- Support independent calibrations for PrecisionCable and SMA probe heads.
- Improve InfiniiSim support of SMA probe heads when semi-rigid and flexible cables are in front of the probe head.
- Add GPIB grammar for Real Time Eye pattern qualify.
- Add Bounded Uncorrelated Jitter and Noise measurement capability utilizing new tail fit technology.
- Add indicators to the Real-Time Eye display showing the location of jitter and noise measurements.
- Add TIE filter roll-off selections.
- Add 2-port, 4-port-1-channel and bandwidth limit filters to trigger jitter correction. The 2-port and 4-port-1-channel filters are only included for trigger jitter correction when "Include Trigger Corrected Delay" is selected in the Infiniisim setup dialog.
- Use Agilent HPP & PAL for remote drivers. This improves the instrument web page for Windows 7.

Version 4.00.0006 (27 October 2012)

This software release is for the Infiniium 90000 X-Series and Q-Series oscilloscopes only.

Resolved Issues:

- Fixed an issue with 90000 X-Series oscilloscope licensing.
- Various other defect fixes and performance tuning enhancements for the 90000 Q-Series oscilloscopes.

Version 4.00.0005 (18 October 2012)

This software release is for the Infiniium 90000 X-Series and Q-Series oscilloscopes only.

Resolved Issues:

- Fixed an issue with 90000 X-Series oscilloscope software licensing.
- Fixed several issues with 90000 Q-Series oscilloscope front panel operation.
- Various other software fixes made for both 90000 X-Series and Q-Series oscilloscopes.

Version 4.00.0004 (9 October 2012)

This is the initial system software release for the Infiniium 90000 Q-Series oscilloscopes. This software is also intended for the Infiniium 90000 X-Series oscilloscopes.

Version 3.50.0009 (24 July 2012)

NOTE: The 3.50.0009 software upgrade could require one power cycle (to program the FPGA) and multiple reboots to complete. This is expected and dependent upon which revision of software is previously installed. The installation process will notify the user when such a power cycle and/or reboot is required.

NOTE: The 3.50.0009 software upgrade will also require you to upgrade any compliance application software to the latest version as well.

Resolved Issues:

- Fixed a defect related to EZJIT+ (RJ DJ) measurements using Arbitrary Pattern Length.
- Fixed an issue with saving composite files when memories are displayed in certain circumstances.
- Fixed an issue with probe skew being overwritten by Precision Cable data.
- Increased the n-cycle count from 100 to 1024.

Version 3.50.0001 (11 May 2012)

NOTE: The 3.50.0001 software upgrade could require one power cycle (to program the FPGA) and multiple reboots to complete. This is expected and dependent upon which revision of software is previously installed. The installation process will notify the user when such a power cycle and/or reboot is required.

NOTE: The 3.50.0001 software upgrade will also require you to upgrade any compliance application software to the latest version as well.

New Features:

- Support for EZJIT Complete.
- Support for SVID Protocol.
- Remote interface support for I2C and SPI protocols.
- Support for composite file save.

Version 3.23.0003 (21 March 2012)

NOTE: The 3.23.0003 software upgrade could require one power cycle (to program the FPGA) and multiple reboots to complete. This is expected and dependent upon which revision of software is previously installed. The installation process will notify the user when such a power cycle and/or reboot is required.

NOTE: The 3.23.0003 software upgrade will also require you to upgrade any compliance application software to the latest version as well.

Resolved Issues:

- Remote :WAV:DATA? improvement.

Version 3.23.0001 (7 March 2012)

NOTE: The 3.23.0001 software upgrade could require one power cycle (to program the FPGA) and multiple reboots to complete. This is expected and dependent upon which revision of software is previously installed. The installation process will notify the user when such a power cycle and/or reboot is required.

NOTE: The 3.23.0001 software upgrade will also require you to upgrade any compliance application software to the latest version as well.

Resolved Issues:

- Improved accuracy of the Series 90000X temperature reading.
- Improved Save/Recall of clock recovery bitrate.

Version 3.23.0000 (21 February 2012)

NOTE: The 3.23.0000 software upgrade could require one power cycle (to program the FPGA) and multiple reboots to complete. This is expected and dependent upon which revision of software is previously installed. The installation process will notify the user when such a power cycle and/or reboot is required.

NOTE: The 3.23.0000 software upgrade will also require you to upgrade any compliance application software to the latest version as well.

Resolved Issues:

- Improves Infiniium Series 9000 fine interpolator calibration.

Version 3.22.0004 (9 February 2012)

NOTE: The 3.22.0004 software upgrade could require one power cycle (to program the FPGA) and multiple reboots to complete. This is expected and dependent upon which revision of software is previously installed. The installation process will notify the user when such a power cycle and/or reboot is required.

NOTE: The 3.22.0004 software upgrade will also require you to upgrade any compliance application software to the latest version as well.

Resolved Issues:

- Fixed the saving of segmented memory time tags.
- Improved how Win7 screen shots interact with compliance applications.
- Improved series 9000X skew with regards to temperature readings.
- Added LPDDR3 compliance licensing.
- Added ability to mask test on memory waveforms.

Version 3.22.0000 (6 January 2012)

NOTE: The 3.22.0000 software upgrade could require one power cycle (to program the FPGA) and multiple reboots to complete. This is expected and dependent upon which revision of software is previously installed. The installation process will notify the user when such a power cycle and/or reboot is required.

NOTE: The 3.22.0000 software upgrade will also require you to upgrade any compliance application software to the latest version as well.

Resolved Issues:

- Fixed Windows 7 file save naming problem.
- CAN decode improvement.
- Series 9000 probe correction performance improvement.
- PCI-E Gen3 Protocol improvement.

Version 3.21.0007 (21 December 2011)

NOTE: The 3.21.0007 software upgrade could require one power cycle (to program the FPGA) and multiple reboots to complete. This is expected and dependent upon which revision of software is previously installed. The installation process will notify the user when such a power cycle and/or reboot is required.

NOTE: The 3.21.0007 software upgrade will also require you to upgrade any compliance application software to the latest version as well.

Resolved Issues:

- Fixes screen shot issues with Windows 7.
- Addresses touch screen enabling on Windows XP.

Version 3.21.0000 (10 November 2011)

NOTE: The 3.21.0000 software upgrade could require one power cycle (to program the FPGA) and multiple reboots to complete. This is expected and dependent upon which revision of software is previously installed. The installation process will notify the user when such a power cycle and/or reboot is required.

NOTE: The 3.21.0000 software upgrade will also require you to upgrade any compliance application software to the latest version as well.

New Features:

- Support for both Windows 7 and Windows XP operating systems.
- Updated to MATLAB 2011A. (Note that this can break existing compiled UDF files.)
- Hardware Edge Find measurement performance improvements.
- New High Resolution acquisition mode selections for effective number of vertical bit resolutions.
- Variable persistence support.
- I^2C decode improvements.
- Precision Probe support for the 9000 Series oscilloscopes.

Version 3.11.0004 (13 September 2011)

NOTE: The 3.11.0004 software upgrade could require one power cycle (to program the FPGA) and multiple reboots to complete. This is expected and dependent upon which revision of software is previously installed. The installation process will notify the user when such a power cycle and/or reboot is required.

Resolved Issues:

- Fixed Mask invert.
- Added E2678A probe head with no resistors.
- Fixed CSV file when saving a large number of segments.

Version 3.11.0001 (15 August 2011)

NOTE: The 3.11.0001 software upgrade could require one power cycle (to program the FPGA) and multiple reboots to complete. This is expected and dependent upon which revision of software is previously installed. The installation process will notify the user when such a power cycle and/or reboot is required.

New Features:

- Support for Differential Channel Filters.
- Support for FFT Hamming measurement.
- HW Edge finding enabled for the 90000 and 90000X series oscilloscopes.
- Improved Auxiliary Out and Calibration Out signal management to support Precision Probe features.
- Filter Overflow fix.
- Jitter measurement fixes.

Version 3.10.0005 (28 June 2011)

NOTE: The 3.10.0005 software upgrade could require one power cycle (to program the FPGA) and multiple reboots to complete. This is expected and dependent upon which revision of software is previously installed. The installation process will notify the user when such a power cycle and/or reboot is required.

New Features:

- Precision Probe application support for 90000 and 90000-X
- Protocol Decode Additions
  - Multiple serial decode for up to 4 buses
  - New protocol support
    - 64b/66b Ethernet Decoder
    - 128/130b (PCI-E Gen3) Decoder
    - MIPI D-PHY 4 lane decode (previously limited to one lane)
- TA Adapter support for Tek P5205 and P5210 probe
- Multiple Measurement Thresholds
- J2/J9 Jitter separation
- DDPWS measurement
- Single-tap DFE
- Chart mode 30X faster
- Deep memory support for the 8b/10b serial lister
- **Usability improvements**
  - Snap to "0" threshold finder in SDA wizard
  - New "Spectral Analysis" feature from the Analyze menu
  - InfiniiSim GUI enhancements
  - New fast eye demo mode
  - Sin x/x on/off switch in equalization wizard
  - Sin x/x ability to see the granularity
  - Sin x/x ability to toggle levels of interpolation

Version 3.06.0004 (31 March 2011)

Resolved Issues:

- RS-232 seven bit Search improvement.
- Addition of DisplayPort 1.2 Compliance licensing.
- HDMI Decode improvement.
- Eye Measurement change to measure from center.
- Series 90000X channel to channel skew improvement.
- Series 90000X Calibration Plotting and demo license change.

Version 3.03.0000 (20 January 2011)

Resolved Issues:

- MIPI-DPHY Decode improvements to support standard revision 1.20.
- Support for increased default memory depths.

Version 3.02.0005 (7 January 2011)

Resolved Issues:

- MIPI-DPHY Decode improvements to support standard revision 1.20.
- Series 90000X production process enhancements.

Version 3.02.0004 (5 January 2011)

Resolved Issues:

- Dual 90000X timing enhancements.

Version 3.02.0003 (20 December 2010)

Resolved Issues:

- Channel to channel skew improvement when changing sample rate.

Version 3.02.0002 (16 December 2010)

Resolved Issues:

- Series 9000 Trigger calibration improvements to support the production process.
- Series 90000X calibration process changes to support the production process.

Version 3.02.0001 (16 December 2010)

Resolved Issues:

- Jitter TIE improvements.

Version 3.01.0007 (2 December 2010)

Resolved Issues:

- Series 9000 FPGA upgrade to revision 209 to improve acquisition communication.
- InfiniiMax probe head S-Parameter file fix.

Version 3.01.0005 (22 November 2010)

NOTE: Installation of Infiniium Revision 3.01.0005 will require many of the compliance applications to be upgraded in order to be compatible with this software. The installation process will notify the user which compliance applications need to be updated prior to completing the installation process.

Resolved Issues:

- Updated the 90000X Oscilloscope Series calibration and overload condition.

Version 3.01.0002 (12 November 2010)

NOTE: Installation of Infiniium Revision 3.01.0002 will require many of the compliance applications to be upgraded in order to be compatible with this software. The installation process will notify the user which compliance applications need to be updated prior to completing the installation process.

New Features:

- Supports the Infiniium MSO/DSO9000A, DSO/DSA90000A, and DSO/DSAX90000A Series Oscilloscopes.
- Improved probe correction for InfiniiMax I, II and III on the 90000 and 90000X series Oscilloscopes.
- Added bandwidth limiting to the Series 9000A oscilloscopes.
- Bandwidth limiting standard in the Series 90000A oscilloscopes.
- Support for deep functions and deep memories (maximum memory is most cases).
- Added "Gaussian Response" control.
- Decoupled the histogram and mask test bounding regions from markers. This allows markers to be defined and viewed when in the histogram and mask test tabs.
- RJ/DJ analysis on period jitter and N-UI jitter in addition to TIE jitter for EZJIT+.
- Employed a non-linear RJ/PJ separation threshold for EZJIT+.
    - Display a RJ/PJ separation threshold graph.
    - Accumulation of the RJ/PJ power spectrum in Arbitrary Data mode.
- Auto-calculate the memory depth in the EZJIT+ wizard.
- Added check box to assign front panel vertical knobs to functions in the math dialog.
- Ability to view memory depth or acquisition capture time span on scope display. Automatically updates captured time span when horizontal setting or memory depth is changed.
- Added Real Time Eye label to report the number of UIs and Waveforms in the real time eye.
- Added a probe block type to InfiniiSim that will automatically pick the correct probe impedance model based upon the connected probe.
- Added a probe load block type to InfiniiSim that will allow modeling a probe head stub.
- Added Vovershoot and Vpreshoot measurements to supplement Overshoot and Preshoot.
- Added Pulse Top, Pulse Base and Pulse Amplitude measurements.
- Added Burst period and Burst interval measurements to supplement Burst width.
- Added Edge – Edge measurement to allow trending of arbitrary edge relationships.
- Fixed TIE filtering on clock TIE measurements.

Version 3.00.0000 (30 September 2010)

New Features:

- Added support for the new Infiniium DSO/DSAX90000A Series Oscilloscope.
- Main FPGA: 208, Front panel FPGA: 2, Front Panel PIC: 4.59.

Version 2.52.0000 (1 September 2010)

New Features:

- Added support for the M890 motherboard on the Infiniium MSO/DSO9000A Series Oscilloscope.

Version 2.51.0000 (17 Aug 2010)

Resolved Issues:

- Binary file (.bin) format fix which inadvertently changed in 2.50.
  NOTE: an external script exists to convert incorrect 2.50 ".bin" files into the correct and supported format.
- MSO fix for the bus state mode.
- Added license for the SD Card compliance application.

Version 2.50.0003 (29 Jul 2010)

New Features:

- Add ability to show 10 measurements at a time.
- Add Qualified Versus (XYZ) function.
- Make Setup and Hold Time measurements not require an EZJIT license.
- Make N-Period measurement not require an EZJIT license.
- InfiniiSim
    - Add 4 Port, 1 Channel mode.
    - Add ability to name blocks.
- Serial Data Equalization
    - Don't require a know pattern for FFE optimization on closed eyes.
- Serial Decode
    - Add ability to decode 8b/10b waveforms without a sync symbol present in the acquisition.
- Add a new waveform command/query to configure the DATA query for rapidly downloading all segments in one query.
    - :WAVeform:SEGMented:ALL {{ON | 1} | {OFF | 0}}
    - :WAVeform:SEGMented:ALL?
    - The <start> and <size> optional parameters for the DATA query are still supported and represent the start and size of the data for each segment.
    - Power on or default setup sets :WAV:SEGM:ALL to OFF.
    - There is complete backward compatibility when the :WAV:SEGM:ALL setting is OFF.
    - The ON setting only supports channel and pod sources. If other sources such as functions are selected, a settings conflict message appears during the DATA query and no data is downloaded.
    - In segmented acquisition mode, with :WAV:SEGM:ALL set to ON, the number of segments is appended to the end of the waveform preamble.
- Add a new query for rapidly downloading x parameter values for all segments.
    - :WAVeform:SEGMented:XLISt? {RELXorigin | ABSXorigin | TTAG}
        - RELXorigin == relative X origin for each segment
        - ABSXorigin == relative X origin + time tag for each segment
        - TTAG == time tag for each segment
    - Uses the DATA query format for the returned data.
    - Supports all waveform command options including:
        - BYTeorder
        - FORMat (only ASCii or BINary (float64 with 8 bytes per value))
        - SOURce (only CHANnel<N> or POD<N>)
        - STReaming
        - VIEW

Resolved Issues:

- Don't compute bus decode if the bus decode window is iconified.
- Fixed a number of issues concerning measurement limit test and search.

Performance Improvements:

- Accelerated waveform save rates (for binary, hd5 and ASCII) for saving all segments. The acceleration ranges from 3x to 70x depending on the number of segments, the size per segment and the sin(x)/x setting. The acceleration increases with increasing number of segments, reduced segment size and sin(x)/x on.
- Accelerated segmented waveform data query download rates by the same amount as the file save rate accelerations listed above.
- Accelerated the time required to download x parameter values (relative XOrigin, absolute XOrigin and time tag) for all segments by as much as 80667x.

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Version 2.50.0002 (16 Jul 2010)

New Features:

- New FFT interface with Navigation.
- USB 3.0 protocol support.
- JTAG protocol support.
- New 10 measurement display.
- New Demo Center.
- Segmented memory save performance improvements.
- Measurement Limit Test performance improvements.
- InfiniiSim 4 port 1 channel mode support.
- Zoom Gating and Pulse counting measurements.
- Versus XYZ measurement.
- Email on Mask Test failure.

Version 2.10.0008 (15 Apr 2010)

Resolved Issues:

- Added licensing for LPDDR2.
- Addressed a Series 90000A software upgrade issue.

Version 2.10.0007 (29 Mar 2010)

Resolved Issues:

- Fixed the MSO9064A digital threshold dialog.

Version 2.10.0004 (22 Jan 2010)

Resolved Issues:

- Improved Zone Trigger when using multiple graticules.
- Web Control dialog fix.
- Web download package size reduction.
- Series 9000 MSO calibration improvements.

Version 2.10.0001 (21 Dec 2009)

NOTE: Depending upon the current configuration of your Infiniium oscilloscope, the 2.10 Infiniium software upgrade may require multiple shut-downs and/or reboots. Please follow the on-screen instructions to complete the upgrade process. The 2.10 software upgrade may need to program the main acquisition board FPGA and/or the front panel FPGA/PIC – and is the reason the shut-downs and reboots may be necessary.

New Features:

- Added HW Trigger for CAN/LIN (N8803B) for the Series 9000 oscilloscopes.
- Added serial decode bits for invalid symbols in the listing.
- Added serial colorization for better correlation between the waveform decode and the listing.
- Improved usability in selecting the location of the Series 9000 digital bus symbol naming file.
- Ability to change the name of a measurement from the front panel and GPIB.
- Improved InfiniiScan Zone Trigger (N5414B and N5415B).
  - From 4 zones to 8 zones.
  - Zones may be assigned to specific channels with color coding and type
  - Zones across channels may have 'and' or 'or' relationship.
  - Ability to hide zones to de-clutter the display.
  - Zone trigger can be combined with horizontal zoom and mask testing.
- Added N-UI, N-Period, and UI-UI clock jitter measurements.
- Modified Single when Analog Averaging is enabled to acquire all the averages.
- New control in Measure Setup dialog to "Wait for average to complete for measurements."
- Added display of bandwidth in High Resolution mode.
- Enabled High Resolution mode for differential/common-mode and InfiniiSim.
- Increased the number of segments allowed in Segmented mode for the DSO90000 series to match that of the DSO9000 series. The number of segments allowed for each memory option is now the following:
  - 4096 segments @ 10MPts memory option
  - 8192 segments @ 20MPts memory option
  - 16384 segments @ 50MPts memory option
  - 32768 segments @ 100MPts memory option
  - 65536 segments @ 200MPts memory option
  - 131072 segments @ >= 500MPts memory options
- Enabled Peak Detect and High Resolution for Segmented acquisition mode.
- Added the ability to update channel to channel skew settings for all acquired segments after the acquisition has been performed.
- Added remote commands to set/query the digital sample rate control and to query the digital memory depth control.
- Main FPGA: 206, Front Panel FPGA 2, Front Panel PIC: 4.59.

Version 2.02 (16 Nov 2009)

NOTE: Depending upon the current configuration of your Infiniium oscilloscope, the 2.02 Infiniium software upgrade may require multiple shut-downs and/or reboots. Please follow the on-screen instructions to complete the upgrade process. The 2.02 software upgrade may need to program the main acquisition board FPGA and/or the front panel FPGA/PIC – and is the reason the shut-downs and reboots may be necessary.

Resolved Issues:

- Addresses the updating of jitter transitions when using arbitrary mode.
- Includes production calibration changes for the 9000 Series oscilloscope.
- Supports the new high performance motherboard used in the 90000 Series oscilloscope.

Version 2.01.0002 (07 Oct 2009)

NOTE: Depending upon the current configuration of your Infiniium oscilloscope, the 2.01.0002 Infiniium software upgrade may require multiple shut-downs and/or reboots. Please follow the on-screen instructions to complete the upgrade process. The 2.01.0002 software upgrade may need to program the main acquisition board FPGA and/or the front panel FPGA/PIC – and is the reason the shut-downs and reboots may be necessary.

Resolved Issues:

- Fixes a WebControl parser error.
- Fixes a Sequence Trigger issue when using edge and pattern.

Version 2.01.0001 (25 Sep 2009)

NOTE: Depending upon the current configuration of your Infiniium oscilloscope, the 2.01.0001 Infiniium software upgrade may require multiple shut-downs and/or reboots. Please follow the on-screen instructions to complete the upgrade process. The 2.01.0001 software upgrade may need to program the main acquisition board FPGA and/or the front panel FPGA/PIC – and is the reason the shut-downs and reboots may be necessary.

New Features:

- N5465A InfiniiSim support.
- RS232 Protocol and USB Protocol support for the 90000A family of oscilloscopes.
- MIPI and SATA Protocol support for the 9000A family of oscilloscopes.
- USB 3.0 decode support (as part of the E2688A SDA option).
- Differential and Common Mode channel support.
- HDF5 file format support.
- Deep (2^23) EZJIT+ measurements.
- New crossing Point Measurement.
- CTLE Equalization (as part of the N5461A Equalization option).
- Convenient mapping channel knobs to functions.
- Chart State and Chart Timing functions for use on the 9000A MSO oscilloscopes.
- Acquisition Roll Mode.
- Main FPGA: 204, Front Panel FPGA 2, Front Panel PIC: 4.58.

Version 1.41.0002 (22 Feb 2009)

New Features:

- Main FPGA: 109, Front Panel FPGA 1, Front Panel PIC: 4.56.

Resolved Issues:

- Fixes a User Defined Function (UDF) Convolve error.
- Improves the remote interface SINGLE behavior.
- Hard-drive clean-up.

Version 1.40.0004 (22 Jan 2009)

Resolved Issues:

- Improved histogram update behavior.
- Fixed PCI-E 1.1 mask testing run until condition.
- Fixed PCI-E 1.1 histogram measurement.
- Improved behavior when switching between serial protocols.

Version 1.40.0001 (07 Jan 2009)

Resolved Issues:

- Enabled the Equalization product license to work correctly with the DSA90000A series oscilloscope.
- Fixed issue with SPI Decode.

Version 1.40 (15 Dec 2008)

New Features and Resolved Issues:

- Supports the new N5461A Infiniium Signal Equalization product.
- Fixed a FlexRay serial lister problem.
- Fixed a Real Time Eye rendering problem.
- Addressed multiple jitter update and reset issues.

Version 1.31 (28 Oct 2008)

Resolved Issues:

- Addressed a screenshot capture issue that could possibly impact the compliance applications.
- Improved the histogram data update behavior.
- Addressed a problem with loading setup files generated from the DSO80000B family oscilloscope using software revision 5.50.

Version 1.30.0003 (29 Sep 2008)

Resolved Issues:

- Modified the histogram measurement to improve the performance of the HDMI Compliance application, and any other application that uses the pixel database, such as mask testing and color grade.

Version 1.30.0002 (19 Sep 2008)

Resolved Issues:

- Fixed the TEdge remote measurement.
- Improved the performance of the Serial Lister.

Version 1.30.0001 (03 Sep 2008)

Resolved Issues:

- Fixed an issue with PCI-Express clock recovery.

Version 1.30 (03 Sep 2008)

New Features and Resolved Issues:

- Extensive oscilloscope responsiveness enhancements were incorporated.
- Improved measurement performance as well as data throughput enhancements.
- The measurement edge database has been increased to 4M edges on two channels.
- Added support for the N5436A-003 MIPI Protocol Viewer product.
- The Application Integration Package (MyInfiniium) is now standard.

Version 1.21 (18 Jun 2008)

Resolved Issues:

- Addressed Mask Test and Histogram issues experienced when using the Ethernet Compliance Application.
- Fixed Memory upgrade license timeout issue.
- Fixed measurement level qualification navigation for two signal measurements.
- Addressed issue saving segmented waveforms.
- Contains multiple enhancements to assist the manufacturing and production process.

Version 1.20 (28 Apr 2008)

Note installing version 1.20 will require a Standard User Calibration.

New Features and Resolved Issues:

- Added Sequence Trigger functionality
- Added Protocol Viewer functionality with PCIe Gen1, PCIe Gen2, SATA and SAS protocol support
- Added Include Setup Information to Print and Save Screen dialogs
- Added Status tab
- Added Trigger Setup Save/Load support
- Added Clear Trigger Settings button
- Added support for sending setup and image files to Email on Trigger
- Added support for emailing a setup file with a selectable format (.bmp, .gif, .tif, .jpg, .png) image file
- Added File -> Save -> To Memory 1/2/3/4 choices to main File menu
- Added Probe Head remote commands (CHANnel<N>:PROBe:HEAD: -- SELect, ADD, DELete)
- Added User Defined Functions (UDF) scripts to convolve and deconvolve S-parameter files

- Improved File Save performance for some Measurement Data files and ASCII Waveform file formats (.csv, .tsv, .txt)
- Improved Text Keyboard dialog (QWERY layout)
- Improved trigger jitter for Glitch and Pulse Width End of Pulse triggers
- Improved Mask Test performance
- Improved Remote Desktop and WebEnable stability

Resolved issues with Measurements Results query (MEAS:RESULTS?)
Resolved intermittent problem with vertical Histogram loading incorrectly into Waveform Memories

Version 1.01.0003 (2 Apr 2008)

Resolved Issues:

- Resolved system performance problem with after market acquisition memory options

Version 1.01.0002 (14 Mar 2008)

Resolved Issues:

- Resolved intermittent problem with acquisition memory self test

Version 1.01.0001 (6 Mar 2008)

Resolved Issues:

- Resolved intermittent problem with main FPGA programming

Version 1.01 (22 Feb 2008)

Note installing version 1.01 will require a Standard User Calibration and will also result in the "Regenerating required data files" message upon the first re-boot.

New Features and Resolved Issues:

- Resolved occasional problem with Mask Test alignment
- Resolved problem with 1Gpt auto sample rate screen fill
- Resolved problem with Waveform Memory of HiRes data above 500kpts
- Resolved occasional problem with display of max/min segments in Segmented Memory
- Resolved problem in loading 5.40 setup files with certain Segmented Memory settings
- Resolved intermittent problem with re-locking to internal timebase after 10MHz external reference is removed
- Resolved intermittent problem where Probe overload message was erroneously displayed
- Resolved intermittent crash at startup when using EzJit previous to shutdown
- Resolved intermittent problem where internal temperature sensors read incorrectly leading to false positive temperature change message during User Calibration
- Resolved problem where Front Panel was not responsive after Front Panel Self Tests were run
- Resolved problem where UDF cancel dialog was not getting displayed properly
- Resolved occasional problem with incorrect PCI-Express 8B/10B serial decode

- Added support for saving time-stamped backup of power-on setup when defaulted via Default Setup button
- Added an additional acquisition memory Self Test

- Improved uncalibrated probe offset
- Improved error messaging when attempting to save >500Mpt .bin files
- Improved several Online Help topics
- Improved warning messaging and online help documentation for math function analysis memory depth limits

Version 1.00.0004 (14 Jan 2008)

Initial released version