Infiniium 5.71 Release Notes

- Added USB 3.0 Compliance Application license.

Infiniium 5.70 Release Notes

- Adds support for the N2790A Probe.
- Addresses an issue supporting Compliance Applications and non-licensed features.

Infiniium 5.60 Release Notes

- Addressed compliance application screenshot capture problem.
- Addressed problem loading setup files saved from previous revisions of Infiniium software.
- Addressed server based licensing issues pertaining to the 8000 family of oscilloscopes.

Infiniium 5.50 Release Notes

- Added remote language commands to facilitate the selection of probe tips through the remote interface.
- Removed Server Licensing dependency on special user account.
- Items now store to the desktop as expected.
- Addressed SMA Probe Overload message.
- Added 7/10 bit display (handling of the read/write bit) to I2C decode.
- Added "OR" condition to InfiniiScan Zone trigger.
- Addressed issue with saving 64M points on the 8000 Series oscilloscopes.

Infiniium 5.40 Release Notes

- Enhanced Eye Height measurement to measure peak-to-peak eye height.
- Combined high-speed and low-speed serial data user interface into a single dialog.
- Adds Serial Data Analysis usability improvements.
- Adds FlexRay decode, Real Time Eye, and TIE measurements as part of the N5402A Automotive package.
- Adds 4-wire SPI to the SPI decode in the N5391A Low Speed Serial package.
- Adds bandpass (brick wall) filtering to TIE measurement, particularly useful for PCI-E 2.0 measurements.
- Adds Clock Recovery Rate measurement to the jitter packages.
- Use clock recovery dialog for all clock recovery specification. No longer able to have multiple TIE measurements with different clock recovery algorithms at the same time.
- Improved GPIB for square, square root and absolute value functions.
- Includes timebase characterization documentation for the DSO/MSO8000 family of oscilloscopes.

Infiniium 5.30 Release Notes

- Support for N5435A Infiniium application server license
    - N5435A is the industry's first server based license solution for oscilloscopes, allowing users to transport their application licenses from one scope to the other.
- Added ability to sync to all COM symbols in an 8b/10b decode on E2688A HS-SDA software.
- Added ability to exclude idle regions from 8b/10b decode on E2688A HS-SDA software.
- Added GPIB commands for N5414A and N5415A InfiniiScan Zone Trigger.
- Added Zero Phase Reference for FFT Phase functions.
- Added ability to trigger on search for high speed protocol with explicit clock recovery on E2688A HS-SDA software.
- Added temperature color grade color scheme in addition to standard color grade colors.
- Added option to boot in a default setup every time instrument starts.
- Added 8.5Gb/s to Fibre Channel clock recovery on E2688A HS-SDA software
- Added Burst Width measurement.
    - Intended to be used with N5414A and N5415A InfiniiScan's "Measurement Finder" in order to trigger on a specific burst width / length.
- Added ability to remove the tab area at the display bottom.
    - Not only will enable users to remove the tab area completely, the user will have the choice to "minimize" the tab area as well.
- Added ability to "point and scroll" setting values.
    - Most setting dialogs including vertical sensitivity, horizontal time base setting, trigger level, and more.
    - User can slide the waveform intensity control as well.
- Created MATLAB MEX files ReadScopeData and WriteScopeString to communicate with and read data out of the scope from MATLAB.
- Created ReadInfiniiumWfm.dll to read Infiniium .wfm files into a C/C++ application.
- Created MATLAB MEX file ReadInfiniium to read Infiniium .wfm files into MATLAB.
- Fixed issue with sending email from the scope to multiple recipients.
- Fixed issue with N5430A User Defined Function not getting called from a :DIGitize command.
- Fixed display of ISI Filter graph of N5400A EZJIT Plus jitter analysis software with negative taps.
- Fixed issue with N5400A EZJIT Plus jitter analysis software not using the user selected measurement threshold.
- Added support for N2779A, N2780A, N2781A, and N2783A current probes.

RECOVERY MEDIA NOTE: Oscilloscopes that were originally shipped with software revision A.03.10 do not require external recovery media to re-image the oscilloscope hard-drive. The recovery mechanism for these units is to boot the instrument while holding the CTRL key down. Instruments that were originally shipped from the factory with revision 3.00 or 3.01 can still utilize the 3.01 recovery media available on CD-ROM.

Software Version 5.20 (8 January 2007) Release Notes

New Features and Resolved Issues:

- Added ability to drag the delayed window frame to affect measurement gating.
- Added ability to save bus data to disk in both timing and state modes via file->save waveform. When saved in this method, all acquired data is stored to disk. Added GPIB support.
- Added ability to select analog channels as bus state clock signals. Added GPIB support for state clock source and polarity.
- Added GPIB support for pulling bus data out over the GPIB channel.
- Added GPIB support to save jitter data to disk.
- Added chart mode for both timing and state buses.
- The bus data is now displayed in a listing. When multiple buses are on, they are time aligned in the listing.
    - The listing data can be saved to disk. When saved in this format, only changed states are saved to disk. Added GPIB support to save listing data to disk.
    - Supports both timing and state modes.
    - Navigation is available from the listing.
    - Sorting by time, duration or symbol is available from the listing.
- Added bus mode display formats of decimal, signed and symbol. The symbol format can be user defined. Selected format is used in the bus display, listing and saved to disk.
- Multiple enhancements made to the N5430A User Defined Function application.
- Fixed saving jitter data to disk.
- Fixed issues related to the slew rate measurement.
- Fixed issues related to the plotting of histograms.

Software Version 5.10 (12 Sept 2006) Release Notes

New Features and Resolved Issues:

- Adds Support for the N5430A User Defined Functions application
- Adds new capability to the N5414A/N5415A InfiniiScan Event Identification applications:
    - Level qualification for measurement and generic serial modes
    - Four zones for InfiniiScan Zone Trigger
    - Remote command set
- Adds measurement level qualification where Measurements are only made if qualified by another signal:
    - Can also be combined with:
        - N5414A/N5415A InfiniiScan Event Identification applications
        - N5400A/N5401A EzJit+ Jitter Analysis applications
        - E2681A EZJIT application
    - Can be combined with the N5384A High-Speed Serial Data Analysis application to create real time eyes of qualified memory busses.
- Adds Trigger Shortcuts
- Adds LXI-C Support
    - With Infiniium software revision 5.10 and above, this instrument is LXI-C compliant with the exception of section 7.5 of the specification which states:
        - If Auto-MDIX is not used, the module shall be clearly labeled.

- o Infiniium series DSO80000B, MSO/DSO8000A, DSO80000A, 5485x and 5483x are not Auto-MDIX compatible, and are not so labeled if produced before this release.
- Improves WebControl performance via UltraVNC for the DSO80000B & MSO/DSO8000A series oscilloscopes (for more information on UltraVNC see http://ultravnc.sourceforge.net)
- Adds preinstalled communications masks
- Adds new absolute value, square root and square math functions
- Adds Windows Remote Desktop support for DSO80000B & MSO/DSO8000A series oscilloscopes
- Adds Histogram of voltage measurements to the N5400A/N5401A EzJit+ Jitter Analysis application
- Improves redraw speed with large number of DSO/MSO channels displayed after front panel or user interface control change for & MSO/DSO8000A series oscilloscopes
- Resolves issue where in some cases the left side of saved screenshots had been getting cut off
- Resolves issue with gain accuracy at vernier scales around10mV/div for 5485x series oscilloscopes – this issue had been seen using the E2697A High Impedance Adaptor with a 10:1 high impedance probe connected
- Resolves potential performance issue in N5400A/N5401A EzJit+ Jitter Analysis application when operating on functions

Software Version 5.02 (16 Jun 2006) Release Notes

New Features and Resolved Issues:
- Resolved multiple channel .csv file (MSTORE) alignment/phase issue
- Resolved pre-4.90/post-4.21 setup load issue inconsistency for trigger edge slope setting
- Resolved pre-4.90/post-4.21 setup load issue inconsistency for waveform and waveform memory colors
- Resolved occasional false positive cal failure for DSO80204B, DSO80304B, and DSO80404B oscilloscopes (2/3/4GHz models)
- Resolved rare false positive probe skew cal issues for DSO80000A/B series oscilloscopes
- Resolved RjDj Bathtub chart view issue
- Resolved waveform update issue after trigger level change for 5483xx, 5485xx, DSO800000A series scopes

Software Version 5.01 (6 Apr 2006) Release Notes

New Features and Resolved Issues:
- Resolved WebEnable image capture and configure settings page issues for DSO80000B and DSO8000A Series Oscilloscopes
- Resolved issue with measurements on sparse data records
- Resolved LED Self-Test issue on 54850A Series Oscilloscopes
- Added new Explicit 2nd-order Clock Recovery for use with HDMI application
- Enabled EzJit Measurement Trend and Jitter Spectrum to work with Waveform Memories
- Resolved ASA M1 Jitter application menu and installation issues
- Resolved ExecuteGPIBScript.exe utility issue
- Resolved issue with screen-saver switching time for DSO80000B and DSO/MSO8000A Series Oscilloscopes
- Resolved TV triggering issue on 54850A Series Oscilloscopes

Software Version 5.00.0000 (31 Jan 2006) and 5.00.0001 (7 Feb 2006) Release Notes

New Features:
- Adds support for the new DSO80000B Series Oscilloscopes (DSO81304B, DSO81204B, DSO81004B, DSO80804B, DSO80604B, DSO80404B, DSO80304B, DSO80204B,)
- Supports all currently shipping Infiniium oscilloscopes:
  - o **8000A Series:** DSO8104A, MSO8104A, DSO8064A, MSO8064A
  - o **80000A Series:** DSO81304A, DSO81204A, DSO81004A, DSO80804A

- o **5485x Series:** 54555A, 54554A, 54553A, 54552A
- o **5483xSeries:** 54833A/D, 54832B/D, 54831B/D, 54830B/D
- Adds Support for the N5414A InfiniiScan Event Identification application
- Supports the following applications:

Application	Revision
N5410A Fibre Channel	1.02
N5394A DVI	1.21
N5393A PCI-Express	1.02
N5399A HDMI	1.11
N5411A SATA	2.00
N5412A SAS	1.01
N5416A USB	3.00
N5392A Ethernet	1.02
N5413A DDRII	1.00
N5409A FBDIMM	1.00

Software Version 4.90.0000 Release Notes (2 Dec 2005)

New Features:
- Adds support for the new DSO8000A Series Oscilloscopes (DSO8104A, MSO8104A, DSO8064A, MSO8064A)
- Adds support for the N5415A InfiniiScan Event Identification application

Software Version 4.21.0000 Release Notes (12 Oct 2005)

New Features:
- Adds Ethernet Disturbing Signal support to N5392A Ethernet application (NOTE: requires new hardware test fixture)
- Improves Arbitrary RjDj mode in the N5400A/N5401A EzJit+ Jitter Analysis application

Software Version A.04.20 Release Notes (21 Jul 2005)

New Features:
- Adds Random Data support to the N5400A/N5401A EzJit+ Jitter Analysis application
- Adds support for the N5402A CAN Serial Decode application
- Adds Serial Lister support for the N5391A SPI and I2C Serial Decode application, the N5402A CAN Serial Decode application, and the E2688A 8b/10b High Speed Serial Decode Application
- Improves handling of interdependent user interface control changes

Software Version A.04.02 Release Notes (25 Apr 2005)

New Features:
- Adds support for the after-market 10GHz to 12GHz bandwidth upgrade product (N5398B)
- Adds support for the after-market 8GHz to 10GHz bandwidth upgrade product (N5398C)
- Improves online help for the DSO80804A and segmented memory

Software Version A.04.01 Release Notes (16 Mar 2005)

New Features:

- Adds support for the new 8GHz DSO80804A oscilloscope
- Adds support for the after-market 12GHz to 13GHz bandwidth upgrade product (N5398A)

Software Version A.04.00 Release Notes (28 Feb 2005)

New Features:

- Supports all currently shipping Infiniium oscilloscopes (54830B/D, 54831B/D, 54832B/D, 54833A/D, 54552A, 54553A, 54554A, 54555A, DSO81004A, DSO81204A and DSO81304A)
- Adds Segmented Memory acquisition feature for the following products:
  - 54830B: serial numbers MY41003401 & SG41001401 & greater
  - 54830D: serial numbers MY42001701 & SG42000701 & greater
  - 54831B: serial numbers MY41003401 & SG41001401 & greater
  - 54831D: serial numbers MY42001701 & SG42000701 & greater
  - 54832B: serial numbers MY41003401 & SG41001401 & greater
  - 54832D: serial numbers MY42001701 & SG42000701 & greater
  - 54833A: serial numbers MY43000601 & SG43000601 & greater
  - 54833D: serial numbers MY43000601 & SG43000601 & greater
  - 54852A: serial numbers MY44000301 & SG44000301 & greater
  - 54853A: serial numbers MY43001701 & SG43001701 & greater
  - 54854A: serial numbers MY42001701 & SG42001701 & greater
  - 54855A: serial numbers MY42001701 & SG42001701 & greater
  - DSO81004A: all
  - DSO81204A: all
  - DSO81304A: all
- Adds the N5400A/N5401A EzJit+ jitter analysis application for the 54852A, 54853A, 54854A, and 54855A oscilloscopes
- Adds support for saving jitter data to a file to the N5400A/N5401A EzJit+ jitter analysis application
- Adds support for N5397A FPGA Dynamic Probe application
- Adds support for E2683A USB 2.0 Compliance Test application (version A.02.10)
- Adds two additional Buses (Bus3 and Bus4) to MSO products (54830D, 54831D, 54832D & 54833D)
- Improves update rate and responsiveness for the 54852A, 54853A, 54854A, 54855A, DSO81004A, DSO81204A and DSO81304A oscilloscopes
- Adds CSV File Import for all currently shipping Infiniium oscilloscopes

Software Version A.03.90 Release Notes (28 Jan 2005)

New Features:

- Supports the new 10, 12 and 13GHz DSO81004A, DSO81204A and DSO81304A oscilloscopes
- Adds the N5400A/N5401A EzJit+ jitter analysis application for the DSO81004A, DSO81204A and DSO81304A oscilloscopes
- Adds CSV File Import for new 10, 12 and 13GHz DSO81004A, DSO81204A and DSO81304A oscilloscopes

Software Version A.03.70 Release Notes (20 Sep 2004)

New Features:
- Supports the new ultra deep memory options: #160 (16Mpts/ch, 32Mpts max), #320 (32Mpts/ch, 64Mpts max), and #640 (64Mpts/ch, 128Mpts max) as well as the Segmented Memory acquisition feature on the 54830B/D, 54831B/D, 54832B/D and 54833A/D oscilloscopes as follows:
    - o 54830B: serial numbers MY41003601 & SG41001601 and greater
    - o 54830D: serial numbers MY42001901 & SG42000901 and greater
    - o 54831B: serial numbers MY41003601 & SG41001601 and greater
    - o 54831D: serial numbers MY42001901 & SG42000901 and greater
    - o 54832B: serial numbers MY41003601 & SG41001601 and greater
    - o 54832D: serial numbers MY42001901 & SG42000901 and greater
    - o 54833A: serial numbers MY43000801 & SG43000801 and greater
    - o 54833D: serial numbers MY43000801 & SG43000801 and greater

Software Version A.03.60 Release Notes (1 Jun 2004)

New Features:
- Supports the 7GHz Enhanced Bandwidth option (#008) for the 54855A oscilloscope for serial numbers greater than or equal to MY42000301
- Fix a problem with the ability to edge trigger on alternating rising and falling edges

Software Version A.03.50 Release Notes (1 May 2004)

New Features:
- Supports the new 54852A 2GHz oscilloscope
- Supports the new N5393A PCI-Express Application
- Supports the N5391A Low-Speed Serial Application supporting SPI and I2C decode
- Supports the N5384A High-Speed Serial Data Analysis Application on the 5483X family of oscilloscopes, providing the ability to do clock recovery, real-time eyes, and mask unfolding
- Adds the following enhancements to the E2688A High-Speed Serial Data Analysis Application:
    - o Ability to do clock recovery on an explicit clock
    - o Adds 8b/10b decode for popular standards such as PCI-Express, Fibre Channel, InfiniBand, SATA, and SAS
    - o Adds the ability to unfold a mask to specific eye failure positions
- Adds the Roll Mode capability which allows the user to watch the waveform data roll across the display while the data is being acquired
- Adds the ability to edge trigger on alternating rising and falling edges

Software Version A.03.20 Release Notes (15 Dec 2003)

WARNING: The A.03.20 Upgrade CD may require the oscilloscope to be re-calibrated.

New Features:
- Enhances the system calibration
- Enhances the threshold level behavior of the digital channels on the Mixed Signal Oscilloscopes

Software Version A.03.19 Release Notes (5 Dec 2003)

WARNING: The A.03.19 Upgrade CD may require the oscilloscope to be re-calibrated.

New Features:
- Addresses the ability to run applications while logged in as a non-administration user
- Addresses an issue regarding the display of functions consisting of sparse points when in color grade mode
- Removes the "Undefined Header" message when using automask in Advanced trigger mode

Software Version A.03.18 Release Notes (3 Nov 2003)

WARNING: The A.03.18 Upgrade CD will require the oscilloscope to be re-calibrated.

New Features:
- Addresses an issue regarding the capture of screen shots when in single trigger mode
- Enhances the vertical calibration algorithm for better offset resolution in the non-vernier ranges
- Enhances connectivity with the 89601A Vector Signal Analyzer
- Enhances the probe characteristics dialog

Software Version A.03.17 Release Notes (14 Oct 2003)

WARNING: The A.03.17 Upgrade CD will require the oscilloscope to be re-calibrated.

New Features:
- Enhances the vertical calibration algorithm for better offset resolution in the vernier ranges
- Factory Default and the remote interface command *RST will no longer remove the InfiniiMax probe head list
- Revision A.03.17 will not remove the InfiniiMax probe head lists during self-test and calibration
- Enhances the Delta Time measurement
- Addresses a remote interface issue regarding the YINC? query

Software Version A.03.16 Release Notes (19 Sep 2003)

NOTE: Revision A.03.16 is only available as an Upgrade CD. The Upgrade CD should not require the customer to recalibrate his instrument nor lose data.

New Features:
- Enhances the communications mask test alignment algorithm

Software Version A.03.15 Release Notes (12 Sep 2003)

NOTE: Revision A.03.15 is only available as an Upgrade CD. The Upgrade CD should not require the customer to recalibrate his instrument nor lose data.

New Features:
- Revision A.03.15 will fix a system identification problem which causes stability issues with both the Jitter Analysis Application (E2681A) and the Serial Data Analysis Application (E2688A)

Software Version A.03.10 Release Notes (1 Aug 2003)

This software is only compatible with the 54855A, 54854A, and 54853A oscilloscope models.

NOTE: Revision A.03.10 is only available as an Upgrade CD. The Upgrade CD will not require the customer to recalibrate his instrument nor lose data.

New Features:
- Adds support for the following software applications:
  - Serial Data Analysis Application (E2688A)
  - USB 2.0 Test Application (E2683A)
  - Voice Control Application (E2682A)
  - Communications Mask Test Kit (E2625A)
  - My Infiniium Application Integration Package (E2699A)

- Adds support for the new E2695A InfiniiMax SMA Adapter probe head
- Adds support for the new E2697A High Impedance probe adapter
- Support for variable persistence color grade mode
- Adds measurement functions for High and Low pass filters
- Adds the ability to simultaneously store channel data from multiple channels to a single ASCII file
- Adds the ability to perform Jitter Analysis on functions

Software Version A.03.01 Release Notes (1 May 2003)

This software is only compatible with the 54855A, 54854A, and 54853A models.

NOTE: Revision A.03.01 is available as both an Upgrade and a Recovery. The Upgrade CD will not require the customer to recalibrate his instrument nor lose data.

New Features:
- Incorporates new software filtering mechanism
- Enhances functionality of the remote data query
- Supports the Serial ATA Test Option
- Supports the Voice Control Option released August 2003

Software Version A.03.00 Release Notes

Revision A.03.00 is the first shipping revision of the new 6GHz High Bandwidth oscilloscope family (54855A, 54854A, 54853A).

NOTE: Revision A.03.00 is only available as a Recovery CD Kit, consisting of two CDs.