

Tektronix Delivers Automated Test Support for New HDMI 1.4 Compliance Test Specification

Test and Measurement Leader Taps AWG7000B to Meet Growing Demand for Comprehensive, Efficient Testing of New HDMI Standard

BEAVERTON, Ore., November 10, 2009 – Tektronix, Inc., a leading worldwide provider of test, measurement and monitoring instrumentation, today announced availability of the industry's first Direct Synthesis based comprehensive, fully automated compliance test solution for the new High-Definition Multimedia Interface®(HDMI®) 1.4 CTS specification which was recently released. Featuring the Tektronix AWG7000B Series Arbitrary Waveform Generator with direct synthesis, the Tektronix automated solution has been ratified by the HDMI standards organization for use with HDMI Compliance Test Specification (CTS) 1.4.

Announced in June 2009, HDMI 1.4 brings enhancements including a new Ethernet and audio return channel -HEAC, Automotive HDMI-Type E, Mobile HDMI – Type D, support for 3D over HDMI, support for 4K x 2K resolution, and new colorimetry patterns – Adobe deep color, among other enhancements. With this added capability comes more additional compliance and validation test requirements to ensure complete interoperability and all fully compliant products must pass HDMI CTS 1.4. As the High Speed Serial Solutions leader, companies turn to Tektronix for the most reliable, accurate and wide-range of instruments and compliance test solutions available to help solve today's tough test challenges.

“With an installed base of over 1 billion multimedia devices, HDMI is a runaway success and the 1.4 specification represents an important next step,” said Dave Slack, Marketing Manager, Technology Solutions Group, Tektronix. “By being first to market with a full HDMI CTS 1.4 solution, we are helping the industry to bring HDMI 1.4 compliant devices to market in less time while also improving the efficiency of HDMI engineers and designers with faster validation cycles and higher reliability.”

Consumer electronics manufacturers are already starting to line up behind the Tektronix HDMI CTS 1.4 solution. For example, as detailed in a related announcement , the Tektronix HDMI test solution will be used in the Panasonic Authorized Testing Center (ATC) for HDMI compliance testing. Panasonic ATC anticipates that the new solution will reduce man hours and decrease operational errors, ultimately leading to faster time to market for HDMI 1.4 compliant devices.

Simple, Reliable, Repeatable HDMI Compliance Testing

Through use of the AWG7000B Series Arbitrary Waveform Generator with innovative direct synthesis, Tektronix offers accurate HDMI CTS 1.4 compliance testing and eliminates non-linearities involved with test setup for source, sink and cable tests. The AWG7000B Series can easily generate all the required signals, complete with controllable jitter, noise and other signal impairments. In the case of HDMI, the direct synthesis method, provided only by Tektronix, offers greater repeatability as dependency on hardware TTC filters and cable emulators is eliminated and replaced by software-enabled emulation. Tektronix is the only solution provider to support all cable emulators for HDMI sink testing.

Available with the new solution are new automated test setups to validate the HDMI Ethernet and Audio Return Channel (HEAC), Automotive HDMI –Type E, Mobile HDMI –Type D and necessary 3D, 4K x 2K and colorimetric patterns to meet the full test capability for HDMI 1.4. Without direct synthesis, designers would be dependent on hardware Cable emulators, hardware TTC filters or PCB for jitter component insertion or signal combiners, leading to inaccuracy and rigidity in HEAC testing. By eliminating this dependency, the Tektronix HDMI 1.4 solution increases flexibility, accuracy and repeatability.

A long-time leader in HDMI test solutions, Tektronix offers a comprehensive set of tools and processes for HDMI compliance testing, fully supporting all physical layer testing for source and sink devices as well as cables. These tools include HDMI compliance test software, DPO7000 & DPO/DSA70000B series real-time oscilloscopes, AWG5000/7000B series arbitrary waveform generators, DSA8200 sampling oscilloscopes and test fixtures, including HEAC and Types D and E. The TekExpress automation framework reduces the time needed for compliance testing from days to minutes.

Availability

The Tektronix HDMI CTS 1.4 test solution is available for order or download beginning in mid-November 2009.

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