

Allion Adopts Tektronix HDMI 1.4a and USB 3.0 Solutions

Tektronix High-Performance Solutions Help Bring Compatible Devices to Market Faster

BEAVERTON, Ore., May 10, 2010 - Tektronix, Inc., the world's leading manufacturer of oscilloscopes, today announced that Allion Japan Inc. has implemented Tektronix test and measurement solutions supporting HDMI® 1.4a (High-Definition Multimedia Interface), and SuperSpeed USB (USB 3.0). Allion is one of the first companies to address certification testing for HDMI 1.4a and USB 3.0 in the same testing lab, enabling them to offer highly-reliable compliance test verification services for these critical consumer electronic technologies.

HDMI is a standard used by leading consumer electronics companies to provide high fidelity digital AV equipment connectivity. Announced in June 2009, HDMI 1.4a brings even greater enhancements including a new Ethernet and audio return channel (HEAC), Automotive and Mobileconnectivity, support for 3D over HDMI and more. With this added capability there will be a need to perform additional compliance and validation test requirements to ensure complete interoperability in accordance with the new HDMI CTS1.4 test specification. In March 2010, a required format for 3D has been added as HDMI1.4a for enhanced 3D capability.

USB technology has quickly become recognized as the industry standard for connecting PCs and peripheral devices. Comparable to other state-of-the-art high-speed interfaces such as PCI Express 2.0 and SATA Gen 3, the performance of USB 3.0 has a data rate of up to 5Gbps, which poses signal integrity measurement challenges. To resolve these challenges, new tools are required.

To address the measurement challenges of the new, complex HDMI 1.4a and USB 3.0 standards, Allion has purchased from Tektronix a suite of equipment for their certification lab comprised of the AWG7122B Arbitrary Waveform Generator and the DSA72004B Digital Serial Analyzer . The AWG7122 features a maximum sample rate of 24 GS/s and a vertical resolution of 10 bits, which allows for the simple output of fast, highly complex signals, and is capable of controlling jitter, noise and other stress signals. By adding the AWG7122B model to its test lab Allion is now able to support test requirements for HDMI 1.4 HEAC (HDMI Ethernet and Audio Return Channel), and USB 3.0 that require stressing the system.

The DSA72004B is a high-performance oscilloscope model that boasts a four-channel frequency bandwidth of 20 GHz with an extremely high sample rate across all channels. The instrument offers tremendous signal integrity through a low-noise floor and high effective number of bits. With the addition of the 20GHz DSA72004B, Allion can now perform critical transmitter tests to determine USB 3.0 standards compliance up to 5 Gb/sec and provide margin testing and debug advice to customers concerning other >5 Gb/sec high speed devices being tested in their lab.

“Tektronix’s deep technical expertise and product adoption at the Panasonic ATC (Authorized Testing Center), Japan’s domestic HDMI certification testing facility, as well as in a number of other prominent Japanese device manufacturers, were the deciding factors in our implementation of Tektronix solutions to assist us in establishing a HDMI 1.4 verification environment,” said Minoru Ohara , Representative Director of Allion Japan Inc. “Our hope is that we can utilize these solutions in verification efforts for other interfaces such as SATA 3.0 and DDR .”

Tektronix HDMI Solutions

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. Tektronix HDMI test solution supports the latest HDMI 1.4a and provides video signals for 3D required format subjective test. 1080p Frame Packing is also available.

For information on our recommended testing devices, please refer to the following website:

http://www.tek.com/ja/applications/serial_data/hdmiidvi.html (Japanese).

Tektronix USB 3.0 Solutions

The Tektronix SuperSpeed USB compliance solution is built on a foundation of instruments — real-time and sampling oscilloscopes, arbitrary waveform generators, and more — that offer measurement performance that meets the demands of high speed serial protocols. The DSA71254B real-time oscilloscope, for example, provides a high-bandwidth, low-noise environment for accurate capture and analysis of fast serial signal clock rates. Having a well-matched oscilloscope acquisition system is critical to eye diagram analysis and margin testing for compliance. Similarly, the AWG7122B arbitrary waveform generator provides complex waveforms containing stresses that mimic the degrading effects of transmission paths to support receiver testing. These hardware tools are paired with expert software applications such as the DPOJET Jitter and Eye Diagram Analysis Tool, SerialXpress Advanced Jitter Generation Tool, and TekExpress™ USB 3.0 Automated Compliance Test Software to provide designers the tools they need to verify and debug their designs.

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About Allion

Allion has led the industry as an IT testing facility providing high-quality testing services primarily to the Asian region. With laboratories in Taiwan, Japan, China, South Korea and North America, Allion continues to build close-knit relationships with IT developers around the world with its high quality and affordable pricing structure. Allion Japan provides sales support and testing services to clients with Japan. Since its establishment in 1991, the company has stood on the frontlines of the IT industry as an evaluator of personal computers, multimedia, networks, wireless devices, mobile devices, digital consumer electronics, software, peripheral devices and more. Furthermore, through applying its advanced specialized knowledge and rich experience, Allion creates test plans customized to meet the development stages of a variety of new products, and continues to provide a multitude of services that meet the needs of its clients. For more information, please visit the company's official website at: <http://www.allion.com>

About Tektronix

For more than sixty years, engineers have turned to Tektronix for test, measurement and monitoring solutions to solve design challenges, improve productivity and dramatically reduce time to market. Tektronix is a leading supplier of test instrumentation for engineers focused on electronic design, manufacturing, and advanced technology development. Headquartered in Beaverton, Oregon, Tektronix serves customers worldwide and offers award-winning service and support. Stay on the leading edge at www.tektronix.com.

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