



## For Immediate Release

Voyager USB 3.0 Validation System

**Proprietary front-end circuitry provides early adopters with complete USB 2.0 and 3.0 protocol testing solution fully compliant with 5 Gb/s SuperSpeed**

<b>Media contact:</b>	Patrick Brightman; Compass SGW	(973) 263-5475
<b>Editors' Technical contact:</b>	Mike Micheletti	(408) 486-7782
<b>Customer contact:</b>	LeCroy Customer Care Center	(800) 453-2769
<b>Website:</b>	<a href="http://www.lecroy.com">www.lecroy.com</a>	

### LeCroy Introduces the World's First

### USB 3.0 Protocol Analyzer Exerciser System

**Intel Developer Forum, San Francisco, CA — August 19, 2008:** LeCroy Corporation, a leading supplier of oscilloscopes and serial data test solutions, announces its Voyager validation system, the world's first protocol analyzer for USB 3.0, also known as SuperSpeed USB. Using custom front-end circuitry developed in conjunction with LeCroy's 5 Gbps PCI-Express platform, the Voyager analyzer provides simultaneous protocol capture of both USB 2.0 and USB 3.0 signaling. Available with an integrated exerciser option, this sixth generation verification platform is LeCroy's complete solution for testing USB devices, systems and software.

The USB 3.0 specification development was announced in September 2007 offering ten times the speed of USB 2.0 and backward compatibility with legacy devices. It features physical layer characteristics similar to PCI Express 2.0, including 5 GHz signaling, that relies on link training to synchronize communication between devices. Aggressive power management represents an additional challenge for 3.0 validation teams as they contend with devices that frequently enter and exit low-power states.

To provide accurate data capture at 5 GHz, the analyzer must follow each link state transition and achieve bit lock in less than 1  $\mu$ s (when moving from idle to the active state). Any delay in signal lock can cause the analyzer to miss data. "Our USB 3.0 analyzer benefits from the expertise LeCroy has developed with its industry leading high-speed serial data test platforms", stated Carmine Napolitano, General Manager, LeCroy's Protocol Solutions Group. "The Voyager front-end circuitry seamlessly recovers from electrical idle, and shows all bus and power state transitions for the link under test."

"We are pleased to see LeCroy's long-time commitment to providing USB verification tools continue with support for USB 3.0," stated Jeff Ravencraft, USB 3.0 Promoter Group Chair. "Test tools like the LeCroy Voyager system, will help developers bring USB 3.0 products to market quickly, while ensuring backward compatibility with USB 2.0."

The Voyager analyzer uses the de facto standard CATC Trace display to illustrate USB 3.0 protocol and includes many enhancements to accelerate testing of USB 3.0 links. Advanced triggering, hardware filtering, and Spec View are all designed to help developers quickly understand and verify early USB 3.0 protocol behavior. The new Link Tracker™ view shows raw 10-bit or hex symbols from upstream and downstream links time aligned in a column format. Invaluable in debugging SuperSpeed traffic, it provides precise timing context for analyzing link power management transitions.

An integrated traffic generation option capable of transmitting both USB 2.0 and 3.0 packets allows test teams to emulate host or device behaviors with low-level control of headers, payloads, link training and timing. In addition to error injection and compliance verification, the exerciser provides early adopters with a USB 3.0 link to start bring-up testing well before commercial hosts are available.

The Voyager system features native 3.0 connectors that bifurcate USB 2.0 and 3.0 electrical signals to provide loss-less capture of traffic from both links simultaneously. With 4 GB of recording memory, both USB and Gbe links to the host PC, and support for external clock input, the Voyager is positioned as the all-encompassing test platform for USB development.

The Voyager platform is available with dual USB 2.0 and 3.0 capabilities, or as a USB 2.0 only solution that is field upgradeable to support USB 3.0. “The Voyager is the obvious choice for USB developers targeting 3.0 or even considering SuperSpeed testing in the future”, said Mike Micheletti, Product Marketing Manager, LeCroy Protocol Solutions Group. “It includes best-in-class 2.0 analysis features and it’s the only future-proof platform that’s easily upgradeable to support the emerging SuperSpeed USB standard.”

LeCroy’s Voyager USB protocol verification platform will begin shipment in September 2008. For additional information, contact LeCroy at 1-800-4LeCroy (1-800-453-2769) or visit the LeCroy web site ([www.lecroy.com](http://www.lecroy.com)).

## **About LeCroy**

LeCroy Corporation is a worldwide leader in serial data test solutions, creating advanced instruments that drive product innovation by quickly measuring, analyzing, and verifying complex electronic signals. The Company offers high-performance oscilloscopes, serial data analyzers, and global communications protocol test solutions used by design engineers in the computer and semiconductor, data storage device, automotive and industrial, and military and aerospace markets. LeCroy’s 40-year heritage of technical innovation is the foundation for its recognized leadership in “WaveShape Analysis”—capturing, viewing, and measuring the high-speed signals that drive today’s information and communications technologies. LeCroy is headquartered in Chestnut Ridge, New York. Company information is available at <http://www.lecroy.com>.

© 2008 by LeCroy Corporation. All rights reserved. Specifications are subject to change without notice.