Teledyne LeCroy Voyager M4x Supports USB4® Compliance Testing Program

Cooperative development with USB-IF allows comprehensive testing of next generation USB4 devices and systems.

Milpitas, CA, February 8, 2022 – Teledyne LeCroy, the worldwide leader in USB protocol test solutions has announced availability of their USB4® compliance test option for the Voyager M4x analyzer and exerciser system. This software option can be used in conjunction with the USB Implementers Forum’s (USB-IF’s) USB4 Command Verifier (USB4-CV) software to generate traffic conditions and verify responses for the official USB4 logical, protocol, and tunneling layer compliance test specifications.

USB4 combines the simplicity of the USB Type-C® connector with scalable performance capable of delivering data, video, and power across a range of platforms. Design and test engineers that embed this technology into their products need robust compliance test tools to help ensure interoperability and reduce time to market. Introduced in 2019, the Voyager M4x test platform has filled a critical role for early developers performing testing, debug, and analysis of USB4 protocol layer behaviors, and the built-in USB4 exerciser option can emulate custom traffic conditions to ensure devices offer robust operation. Now, the USB4 compliance option enables the Voyager M4x exerciser to support the USB-IF’s USB4-CV software for executing approved compliance tests while determining pass/fail results from traces captured by the analyzer.

“The USB-IF has created a comprehensive program for verifying USB4 compliance, which combines software and commercially available test equipment to allow consistent, repeatable verification of USB4 logical and protocol layer behaviors,” said Jeff Ravencraft, USB-IF President & COO. “Teledyne LeCroy’s Voyager M4x test platform is a key building block for this automated test capability and can be a useful tool to help our members deliver high quality, interoperable certified USB4 products that consumers expect from USB technology.”

“The Voyager M4x, like many USB analyzers from Teledyne LeCroy, has become the foundation for USB validation testing, from initial power-on through certification”, said Joe Mendolia, vice-president of marketing at Teledyne LeCroy’s Protocol Solutions Group. “The Voyager M4x is one of our most battle-tested platforms and enjoys a level of reliability and accuracy that is essential for validating compliance”.

In addition to USB4 and Thunderbolt 3, the Voyager M4x system supports USB 3.2 protocol analysis and generation. The platform also supports USB Type-C and USB Power Delivery compliance, allowing developers to fulfill multiple test roles with this single system. To complement the exerciser functionality and compliance tests,
the Voyager M4x now supports a comprehensive post-processing API for USB4 protocol events that enables automated verification of USB4 behaviors.

**Availability**
The Voyager M4x USB4 Compliance support is available now. For additional information, engineers and technicians can learn more by contacting their regional Sales Engineer: 1-800-909-7211 or 408-653-1262; or protocolsales@teledynelecroy.com; or visit the Teledyne LeCroy protocol analyzer web page (http://teledynelecroy.com/protocolanalyzer/usb).

**About Teledyne LeCroy**
Teledyne LeCroy is a leading manufacturer of advanced oscilloscopes, protocol analyzers, and other test instruments that verify performance, validate compliance, and debug complex electronic systems quickly and thoroughly. Since its founding in 1964, the Company has focused on incorporating powerful tools into innovative products that enhance "Time-to-Insight". Faster time to insight enables users to rapidly find and fix defects in complex electronic systems, dramatically improving time-to-market for a wide variety of applications and end markets. Teledyne LeCroy is based in Chestnut Ridge, N.Y. For more information, visit Teledyne LeCroy's website at teledynelecroy.com.

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