# DesignCon 2017 video: Expected and unexpected products

**Martin Rowe** - February 13, 2017

When I walk around trade show exhibit halls, my video camera is always at hand. Aside from the fact that I knew know who I might encounter, I find taking short videos a good way for you to see that was on display. Plus, video doesn't miss the details I might miss when taking notes. With that in mind, I present videos of usual (page 1) and unusual (page 2) products from DesignCon 2017.

With PAM4 showing up just about everywhere, you'd expect the oscilloscope companies to be on top of it. After all, a DesignCon paper covered the world's fastest PAM signal.

PAM4 is now becoming part of Optical Internetworking Forum, and Ethernet standards for 56 Gbps and the upcoming 112 Gbps data rates. To keep up with those standards, engineers will need compliance-test procedures that will use oscilloscopes, bit-error-rate testers (BERTs), and signal analyzers. The video below shows a 56 Gbps (28 Gbaud) PAM4 compliance test running on a Teledyne LeCroy 65 GHz oscilloscope. The QPHY-56G-PAM4 option was released on Feb. 1 at DesignCon.

There's more than one way to analyze a PAM4 signal. Multilane teamed with Texas instruments to show how adding equalization can improve signal quality by compensating for losses in a transmission medium. In this demonstration, Multilane's BERT generates the signals measures BER on the signal after equalization.

**Unexpected items seen at DsignCon 2017**

While you might think that DesignCon is all serial data, but there are other things in the exhibit hall. For example, National Instruments released a soft-front panel for its PXI source-measure unit.

Another unexpected item at DesignCon 2017 as a USB camera by Dino-Lite. The video blow shows an inside view of a mechanical wristwatch.

*—Martin Rowe, Senior Technical Editor*

**More from DesignCon**:

- Small spectrum analyzer uses both samples and sweeps
- BERTScope talks to DUT through protocols
- Rohde & Schwarz introduces 6 GHz oscilloscope at DesignCon 2017
- NI VirtualBench reaches 500 MHz
- DesignCon 2017: PAM4 measurements are solidifying, but remain in flux