

The LXI Consortium Today and Future Directions

[Steve Schink](#)

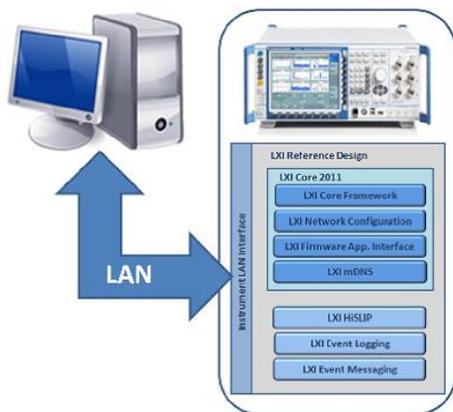
LXI Consortium President

[Keysight Technologies](#)

The [LXI Consortium](#) has been in existence for over 10 years, and we have had unprecedented Test and Measurement (T&M) industry success with the development and adoption of the LXI (LAN eXtensions for Instrumentation) Standard.

Our vision for the future of the LXI Consortium is to maintain and expand the global adoption and utilization of the LXI standard by T&M instrument vendors and their customers. Global adoption and utilization of the LXI standard by instrument vendors will ensure a lower-cost, consistent, predictable and multi-vendor interoperable experience for our customers building network-based T&M test systems.

Recently, the [LXI Consortium Released the LXI Reference Design](#) official 1.0 version for use by the LXI membership. We are excited to be offering our current and future members what we believe is a T&M industry first, the source code and support for LXI Consortium members to implement the LXI Standard!



LXI Reference Design Benefits:

- **Existing Members:** Lower the long term engineering investment required to maintain existing and adopt new LXI Standard features.
- **New members:** Lower the “barrier to entry” for adopting the LXI Standard in products.
- **Customers:** More LXI product and feature choices; they can confidently use a growing set of LXI features in their applications.

I have been asked by existing LXI Consortium members that already have LXI standard implementations for their products how they might benefit from the LXI Reference Design. I’ve explained that existing LXI members will be updating existing products and adding new products that will introduce new computing processor hardware and operating systems software architectures. Their existing

product LXI implementations were not likely developed with portability as an objective. Thus, it may take several engineering years to port an existing, or in some cases, re-implement an LXI implementation.

As existing members are upgrading existing or developing new LXI products, it is a great opportunity for them to evaluate and hopefully adopt the LXI Reference Design from the LXI Consortium. The LXI Reference Design has been implemented with portability and scalability in mind.

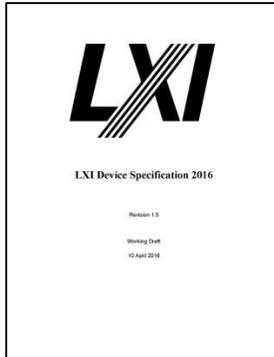
The LXI Consortium will continue to maintain, enhance and support the LXI Reference Design as the LXI Standard and Extended Functions evolve in the future. Thus making it a much lower engineering investment for LXI members to adopt the new LXI Standard features and provide timely support in their products.

The LXI Consortium is working on an LXI Reference Design version 1.1 enhancement release and is starting to engage with universities to help investigate future enhancements.

For more information on LXI Reference Design, consult the LXI [Reference Design](#) web page and the numerous LXI Reference Design Newsletter articles that are available in the [LXI Newsletter Archive](#).

At the LXI General Meeting & Plug Fest - Munich, Germany, June 8-10, 2016, we will be discussing current and future LXI Reference Design work. We will also be hosting a one day LXI Reference Design Introduction (morning session – open to the public) and an LXI Reference Design Workshop (afternoon session – members only); see the [agenda](#) and [meeting information](#) for details and signup information.

The LXI Consortium Technical Committee is in the process of creating an updated revision of the LXI Standard, LXI Device Specification 2016 – Revision 1.5.



LXI Device Specification 2016 – Revision 1.5 (LXI 1.5)

- VXI-11 based discovery methods optional
- Remove unnecessary recommendations
- Reorganize LXI Standard documentation, Extended Functions into separate documents.
- Simplify LXI specifications for future enhancements and improve the LXI Conformance process

The intent is to conduct a final review of the LXI 1.5 Standard documentation at the Munich meeting in June, 2016. The Technical Committee will be announcing the final ratification process timeline to all LXI membership in the coming weeks.

Now that the LXI Consortium has established the LXI Reference Design for current / future use and we are in the final stages of the LXI 1.5 specifications updates, what should the LXI Consortium focus on next? What additional LXI standards work would benefit the LXI membership and our customers?

We have a few ideas, but need input and involvement from our LXI members and customers.

Cyber security is an ongoing major concern in the computing and internet industries. There is a tremendous amount of focus on developing security solutions, a few examples of organizations working on IoT (Internet of Things) security:

- [Industrial Internet Consortium](#)
- [Open Interconnect Consortium](#)
- [prpl Foundation, Security Guidance for Critical Areas of Embedded Computing](#)

Below are a few ideas of what the LXI Consortium Technical Committee could investigate in the area of security.

time on the agenda to discuss the LXI future directions. We encourage members and customers to join us.