

LXI Functional Test

Keysight Technologies
and LXinstruments

Accelerate functional test development with LXI-based open test platform

In the past when you needed a functional test system you only had two choices – commission a fully customized solution or buy a standard off-the-shelf system. Now with the LXI-based open test platform (OTP) from LXinstruments there is a third option. You can use the LXI-based open test platform as the standardized core of your functional test system and build your own unique capabilities around this.

Ethernet is the most common new standard for instrument control and the foundation of the LXI (LAN eXtension for Instrumentation) standard. LXI systems are low cost, easy to implement and, with ever-increasing LAN data rates, approach or exceed the throughput of traditional backplane architectures. The increasing portfolio of test instruments that support LXI makes the standard a viable option for implementing your functional test strategy.

At the heart of the LXinstruments OTP is the Keysight Technologies 34980A multifunction switch/measure unit. This provides all of the switching to route source/measure signals to and from the device-under-test (DUT). The 34980A can be configured with a standard 6½ digit DMM for basic measurements. To this you can add a wide range of source and measurement options to meet your exact functional test needs



- LXI-based open test platform for functional test development
- Provides functional test core based on LXI standard
- Uses Keysight 34980A multifunction switch/measure unit
- Can be configured with wide range of Keysight instrumentation
- Supports LXI, GPIB, USB and RS-232 instruments
- Racked configuration for additional instruments
- Comprehensive software for set-up, programming and data management
- Accelerates functional test system development

LXI Functional Test

The screenshot displays two windows. The left window is the 'LXI Functional Test' interface, showing a table of test results with columns for TestStepName, Result, Type, Operator, Measured Data, Low Limit, High Limit, Read String, and Last String. The right window is a 'Database Viewer' showing a table of PCB data with columns for PCB Serial Number, PCB Serial Number, Order Number, and Order Date.

The system can include Keysight instruments including: oscilloscopes, arbitrary waveform generators, digitizers, RF and communications devices. The LXI-based open test platform is provided in a racked configuration to accommodate the additional Keysight instrumentation and includes a DUT fixture from Virginia Panel Corporation.

The primary communications within the OTP utilize LXI. LXI instrumentation is used whenever possible with the core instruments controlled over LAN. The system also supports the GPIB, USB and RS-232 interfaces. All of the instrument interfaces are controlled through a common software environment with a graphical user interface to simplify set-up, programming and data management.

By using the LXI-based open test platform from LXinstruments with Keysight instrumentation you can accelerate the development and deployment of your functional test systems.

System Components

Keysight Technologies

34980A

Multifunction switch/measure unit

LXinstruments

Open Test Platform

Functional test system

To learn how this solution can address your specific needs please contact Keysight's solutions partner, LXinstruments

www.keysight.com/find/lxinstruments



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LXinstruments provides test solutions and consulting services for functional test and data acquisition.

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