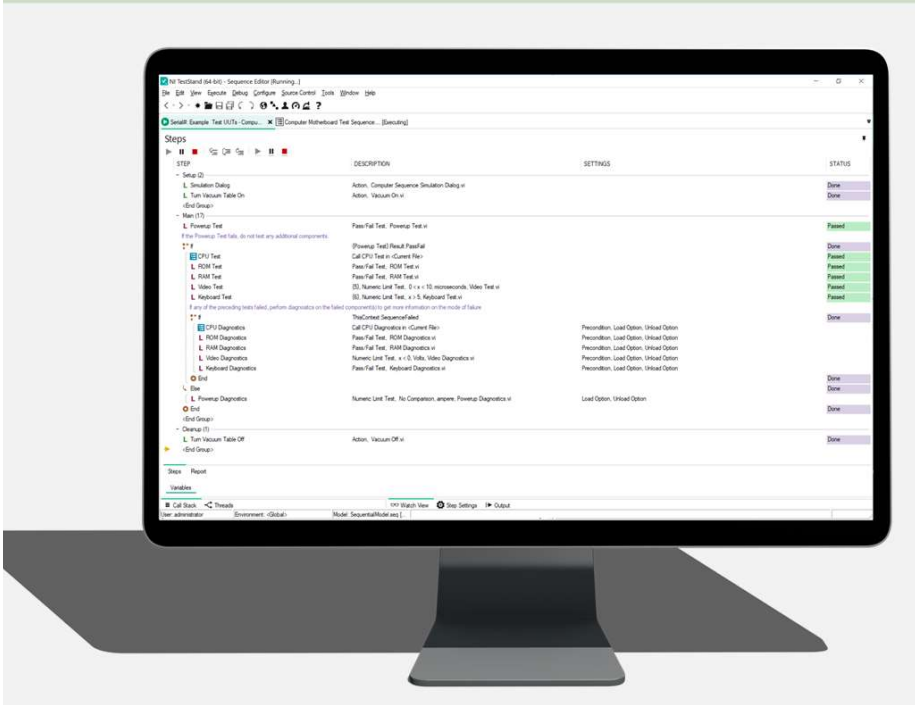
TestStand

Test executive software

ni.com/teststand

TestStand is an off-the-shelf software that you can use to:

- Rapidly develop, deploy, and manage automated test systems
- Execute tests written in a wide variety of software languages
- Test products in parallel to optimize instrument use and test times with built-in auto-scheduling intelligence
- Easily log and share test results to local and network databases



The Benefits of TestStand

75%
Development Time Saved

97%
Increase In Productivity With Parallel Testing

67%
Reduction in Maintenance

Build, Customize, and Deploy Test Systems With TestStand

Develop Test Systems Faster

- **Drag-and-Drop Development Environment**—Use the TestStand Sequence Editor to quickly sequence, configure, and execute test code modules.
- **Ability to Execute Code Modules Written in Multiple Test Languages**—Take advantage of investments in existing test code by integrating with LabVIEW, LabWindowsTM/CVI, C#, C++, Microsoft Visual Basic .NET, and more.
- **Optimized Execution Engine**—Ensure stability and maximize performance with TestStand and its underlying engine, which undergo thousands of hours of testing and benchmarking before each release.

Simplify System Development

- **Customizable User Interface**—Enhance the user experience by extending the out-of-the-box features using your language of choice—LabVIEW, Python, C#, C++, or Visual Basic .NET.
- **TestStand Deployment Utility**—Easily package all required DLLs, source code, drivers, and configuration information into a single installer.
- **Deployment Patching**—Reduce the difficulty of maintaining deployed test stations by building small deployment patches that can be quickly downloaded and installed on target machines.

Increase Test Throughput

- **Simplify Parallel Testing**—Leverage multicore processors when scaling from single-unit testing to multiple-unit parallel testing.
- **Autoschedule Hardware Resources**—Minimize equipment costs by sharing hardware among multiple threads by using built-in autoscheduling steps.
- **Visualize Hardware Usage**—Understand device use and discover potential bottlenecks by monitoring active threads with the Resource Usage Profiler or generating an Excel graph of test times with the Basic Step Time Report result processing plug-in.

Publish Test Results

- **Built-In Reporting**—Log critical results to several industry-standard report formats, such as ATML, XML, HTML, and ASCII.
- **Enterprise Connectivity**—Log test results using standard database connectivity or optimized plug-ins for specialized data management systems, such as SystemLink.

"Using NI TestStand and LabVIEW, we successfully converted a lengthy manual test process into a highly automated test cycle and reduced the regression test cycle from weeks to days, while increasing reliability, repeatability, and maintainability."

- Sambit Panigrahi, Texas Instruments