Overview
National Instruments TestStand is a ready-to-run test management environment for organizing, controlling, and executing your automated prototype, validation, and manufacturing test systems. Quickly build your test sequences with NI TestStand by incorporating tests written in LabVIEW, LabWindows/CVI, Visual C/C++, Visual Basic .NET, and C#. Built on a high-speed, multithreaded execution engine, TestStand delivers the performance to meet your most rigorous test throughput requirements. TestStand is also completely customizable, so you can modify it to match your specific needs, including customizing the operator interface, generating custom reports, and modifying sequence execution requirements. Using TestStand, you can focus your engineering efforts on unique test requirements, while TestStand manages the common sequencing, execution, and reporting tasks for you.

Modular TestStand Architecture
- Graphical sequence editor environment
- Adapters for tests written in any programming language
- Multithreaded sequence execution engine
- ASCII, HTML/Web, XML report generation
- Access, Oracle, SQL Server database connectivity

Interactive Test Development
- Create, edit, execute, and debug sequences
- More than 30 built-in step types to choose from
- Develop custom test steps for unique requirements
- Advanced sequencing, branching, and flow control

Source code control system integration

Deployment Tools and Options
- Convenient deployment options
- Customize operator interfaces for deployment
- Deployment utility generates Windows Installer

Operating Systems
- Windows 2000/NT/XP/98

Recommended Software
- NI LabVIEW™
- NI LabWindows™/CVI™
- NI Measurement Studio™
- NI Switch Executive

Other Compatible Software
- C/C++
- Visual Basic .NET
- C#
Automatic Code Generation
You can use TestStand as a tool to help guide your test developers in creating test programs. TestStand is integrated with NI LabVIEW, LabWindows/CVI, and Microsoft Visual Studio .NET to assist in test code generation. From TestStand, you can automatically create test code in each of these development languages. You can also customize the code templates used in TestStand to generate code according to your test standards. In addition to automating the development process for test engineers, TestStand code generation capabilities are useful for ensuring corporate standards for error handling, test initialization, and general code structure.

TestStand Enterprise Connectivity
The modular TestStand architecture provides the necessary functionality to interface with your enterprise database, reporting, and automation systems. The TestStand database components offer a seamless link to any software or database with an ADO or ODBC-compliant interface. You can easily store your test data and results to a database through default schemas or using your own customized schema by configuring the database options within TestStand. The report-generation features automatically collect your test results during execution and generate comprehensive reports in a variety of formats, including XML, HTML/Web, and ASCII. You can also integrate TestStand with your manufacturing execution systems (MES) and enterprise resource planning (ERP) systems by using the configurable TestStand database layer.

Simplify Switch Programming
Every test step in TestStand contains the ability to automate the control of your switching operations through NI Switch Executive. This feature eliminates the need to program switching operations within your test programs, saving a significant amount of time. You can use the autorouting features within NI Switch Executive to configure your desired routes and simply specify in TestStand which routes or route groups you need to connect for each test. This integration also permits dynamic routing for determining switch routes on the fly, based simply on supplying endpoints to be connected.

TestStand System Deployment Tools
TestStand is designed for use in prototype, validation, and manufacturing test applications. For applications that require deploying to multiple test stations, TestStand offers a variety of tools and licensing options to maximize the cost-effectiveness of your systems. TestStand provides run-time operator interfaces and specialized tools for creating custom operator interfaces used on a deployed test station. A robust deployment utility also ensures that all of your required files are packaged in a Windows Installer that can be easily distributed for deployment. Lastly, TestStand provides three licensing options to meet your specific needs – TestStand Development System, TestStand Debug Deployment Environment, and TestStand Base Deployment Engine.

Ordering Information
NI TestStand
Development System ..........................................777777-03
Debug Deployment Environment ...........................900851-01
Base Deployment Engine ......................................900850-01

Service and Support
TestStand Fundamental Course Series ..............910632-xx1
TestStand Advanced: System Design Course ....910621-xx1
TestStand Fundamentals –
Introduction Course Kit .................................777873-01
TestStand Fundamentals –
Customization Course Kit .................................778429-01
TestStand Start-Up Assistance Program ...........910513-02
TestStand Software Subscription Program ..........930777-01

More Information Online!
For online demos, a white paper, and more, visit ni.com/info and enter teststand3.