TestStation™ Dynamic Programming Extension

Simplifies Interfacing the TestStation Runtime with DLL Software Applications

KEY FEATURES

- Simplify interfacing with external applications
- Built-in library of useful functions
- Supports popular software programming environments
- Ideal interface for program control of PXI instruments in the TestStation PXI Expansion Board

Create Dynamic Link Library application programs and link to the TestStation Runtime system

Simplify Programming for External Communication

Teradyne’s Dynamic Programming Extension software allows test program developers to create DLL (Dynamic Link Library) application programs using Microsoft Visual Studio C/C++ or LabWindows/CVI software and directly link them to test programs being run by the TestStation Runtime System. This feature simplifies the programming activities that typically must be performed when manufacturers want to control an external instrument or communicate with an external software application during in-circuit test program runtime execution.

Built-In Library of Functions

The Dynamic Programming Extension feature includes a built-in library of common functions that allow external software applications to interact dynamically with the TestStation Runtime executable. These functions can be used by programmers to communicate Runtime status (Test Start, Test Stopped, Program Exit), manage external test events, set and obtain program variable values, print messages to selected output devices, and query/control TestStation execution options.

Online Tutorial Help

The Teradyne TestStation software provides comprehensive online documentation for the Dynamic Programming Extension feature under the Tutorial menu topic “Preparing Runtime DLLs Tutorial”. Additional information is provided in the TestStation Test Language Reference manual. These resources walk programmers through the steps in the development process and provide code examples that can be used by developers to build their own test applications.

TestStation PXI Expansion Board

With the TestStation PXI/Functional Expansion Board option, manufacturers can move beyond traditional ICT testing to perform value adding functional, compliance, and system testing procedures that are typically performed at separate stations on the manufacturing floor. The Dynamic Programming Extension feature can be used to quickly integrate PXI external application programs with standard in-circuit tests. A license to use the Dynamic Programming Extension feature is included with every purchase of the TestStation PXI Expansion Board.
Software Notes:

- Requires TestStation Software version 6.4.0 or greater
- Requires TestStation Dynamic_PGM_Extension software license
- License-free user for developers running the RTS Simulator mode available
- Dynamic_PGM_Extension software license included with purchase of TestStation PXI Expansion Board
- Microsoft Visual Studio and National Instruments LabWindows/CVI programming environments are not included