BLOOMY®

The Leader in Automated Test, Data Acquisition and Control Systems

EFT Module for TestStand

Faster time to solution for Electronics Functional Test

The Electronic Functional Test (EFT) Module for TestStand provides out-of-the-box tools to speed up development of automated tests for electronic assemblies including PCBAs, subassembiles and final assemblies. Test engineers can develop, deploy and execute test sequences quickly and efficiently with minimal custom code development for a shorter time-to-solution.

Built on NI LabVIEW and TestStand, the EFT module includes components for hardware and measurement abstraction, operator interface, database connectivity, and other architectural components.
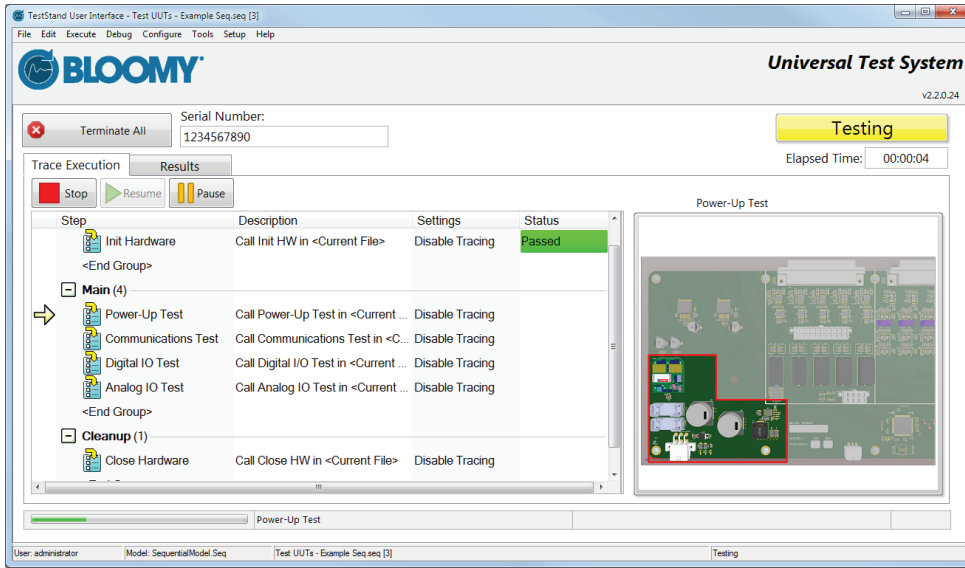
BENEFITS

- Reduce test development time
- Increase efficiency of test operations
- Decrease overall test system costs
- Minimize lifetime maintenance of test system

FEATURES

- Manufacturing Operator Interface
  - Load test sequences based on UUT part number
  - Execute and debug TestStand sequences
  - Map part numbers to sequences and fixtures
  - Display messages and images to operator
  - Integrated user management
  - Electronic ITA ID detection

- Hardware Access Framework™ (HAF)
  - TestStand step types for common EFT IO types (AIO, DIO, waveforms, power)
  - Alias mapping of I/O names to physical channels
  - Plugin drivers for adding instruments without modifying code
  - Develop tests from the point of view of the UUT

- SQL Database Reporting
  - Automatically log all pass/fail data to SQL database
  - Offline result processing
  - Generate reports by filtering for part and serial numbers, results, and test timestamps

- Test Architecture
  - Preconfigured folder hierarchy
  - Template and example sequences
  - UI interface utilities
  - Common support code modules, projects and deployments

KEY COMPONENTS

Sample screenshot of the EFT Module's user interface

Manufacturing Operator Interface

Front-end application for selecting, executing, debugging and reporting on all custom test sequences.

Hardware Access Framework

Hardware and measurement abstraction layer that decouples the test sequence from specific instrumentation.

SQL Database Reporting

Integrated result processing plugin coupled with a report generator.

SOFTWARE & SYSTEM REQUIREMENTS

MINIMUM REQUIREMENTS	
Operating System	
MS Windows	Version 7 (recommended) Version 10 (supported)
Test Developer	
NI TestStand 2014	32-bit (SP1 preferred) development system
NI LabVIEW 2014	Run-time engine
NI LabVIEW 2014 Professional Development System	Optional for developing new custom LabVIEW code
NI Device Drivers	NI-DAQmx 14.0 NI-SWITCH 14.0 NI-DMM 14.0 NI-VISA 14.0 (additional drivers may be required depending on the instrumentation requirements of the test system
Execution Deployment	
NI TestStand 2014	32-bit (SP1 preferred) base deployment license
NI LabVIEW 2014	Run-time engine
NI Device Drivers	NI-DAQmx 14.0 NI-SWITCH 14.0 NI-DMM 14.0 NI-VISA 14.0 (additional drivers may be required depending on the instrumentation requirements of the test system)

EFT MODULE COMPONENTS

INCLUDED COMPONENTS	
General	
EFT Module License Manager	Application to activate/deactivate licenses
Documentation	User manuals and setup guides
Operator Interface	
EFT Manufacturing OI	Application to load and execute test sequences
Hardware Access Framework (HAF)	
HAF TestStand™ Step-Types	TestStand steps used for creating test sequences
HAF Plugin Drivers	Instrument drivers for use with the HAF
HAF Configurator	Application to develop hardware access framework configuration files
Database Reporting	
SQL DB TestStand™ Reporting Plugin	Plugin result processing tool for TestStand
SQL DB Viewer 2014	Application to query and view data in the EFT SQL datablase
Project Resources	
Project Test Folders	File hierarchy for developing custom test applications
Sequence Template	Starting point template for developing new test sequences
Example Sequences	Example test sequences using HAF, OI, and DB utilities, with example hardware configuration

NATIONAL INSTRUMENTS — Platinum Alliance Partner

Call 860-298-9925 or visit **www.bloomy.com**