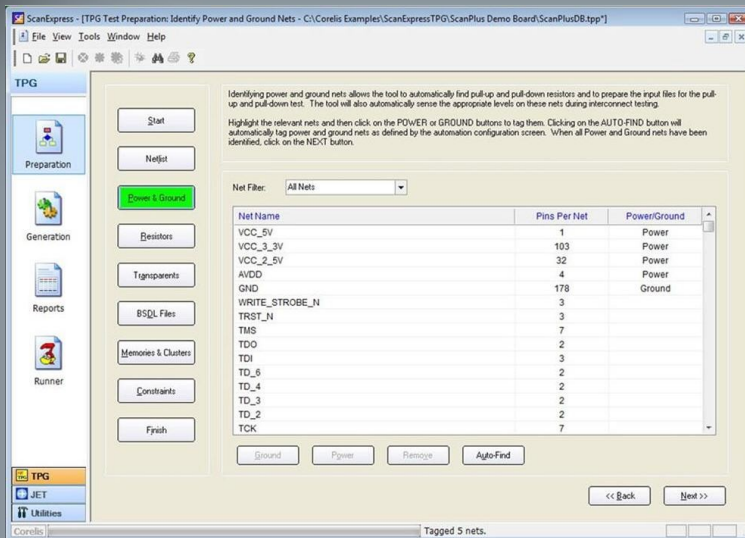


# ScanExpress TPG™

**CORELIS**  
An *AWA* Company

## Intelligent Automatic Test Pattern Generator

Preferred Boundary-Scan Test Solutions—Acclaimed Technical Support



### Features

- An intuitive wizard guides the user through the construction of complete test procedures
- Automatically generates test patterns for infrastructure, interconnect, memories, FIFOs, clusters, and resistors using proven, mature boundary-scan test algorithms
- Detects and supports industry standard CAD netlist formats
- Identifies the boundary-scan chain order and draws a graphical representation of the boundary-scan chain
- Finds and classifies all resistors and resistor packs as either pull-up/down or series type resistors
- Complex script language with integrated debugger assists in writing custom boundary-scan test steps
- Constructs test plans for integration into the ScanExpress Runner™ test execution sequencer (sold separately)
- Assembles detailed fault coverage analysis reports for use with the ScanExpress DFT Analyzer™ (sold separately)
- Single Integrated Development Environment (IDE) for all JTAG applications simplifying test development, execution, and analysis
- Complies with IEEE Stds 1149.1 and 1149.6

To deliver a product meeting the highest standards of quality and reliability, design engineers and test engineers alike must test throughout the entire product life cycle, from prototype to manufacturing. Automation in test generation is essential to ensure that tests keep up with the rapid development of modern products.

The ScanExpress TPG™ Intelligent Test Pattern Generator provides the highly advanced, automated boundary-scan test design environment necessary to quickly and efficiently create complete boundary-scan tests for all IEEE-1149.1 compliant circuit boards.

### Applications

- **Design Engineers** - TPG automatically creates tests to detect and isolate faults for all boundary-scan testable nets of a PCB prototype
- **Test Engineers** - TPG increases PCB fault coverage and reduces boundary-scan test program development time

### Benefits

- Minimizes the learning curve for JTAG-based testing
- Significantly reduces the time it takes to develop boundary-scan tests
- Automates the test vector generation process to identify defects quickly and accurately
- Helps reduce ICT usage and related fixture costs
- Creates standardized, consistent test procedures
- Improves test procedure quality enhancing overall product reliability

**Learn More:** For more information about Corelis products, please visit [www.corelis.com](http://www.corelis.com)

## The ScanExpress TPG User Interface

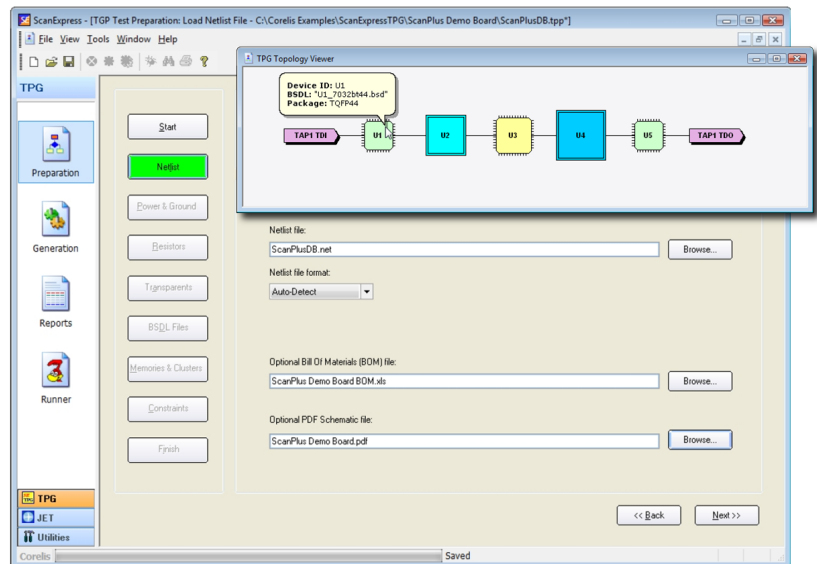
TPG leverages a versatile IDE to provide automation and guidance for novice users without sacrificing customizability and power for expert users. Test development is divided into two distinct phases: Preparation and Generation. By guiding the user through the process of defining the Unit Under Test (UUT), TPG creates a comprehensive boundary-scan test in a matter of minutes.

### The Preparation Phase

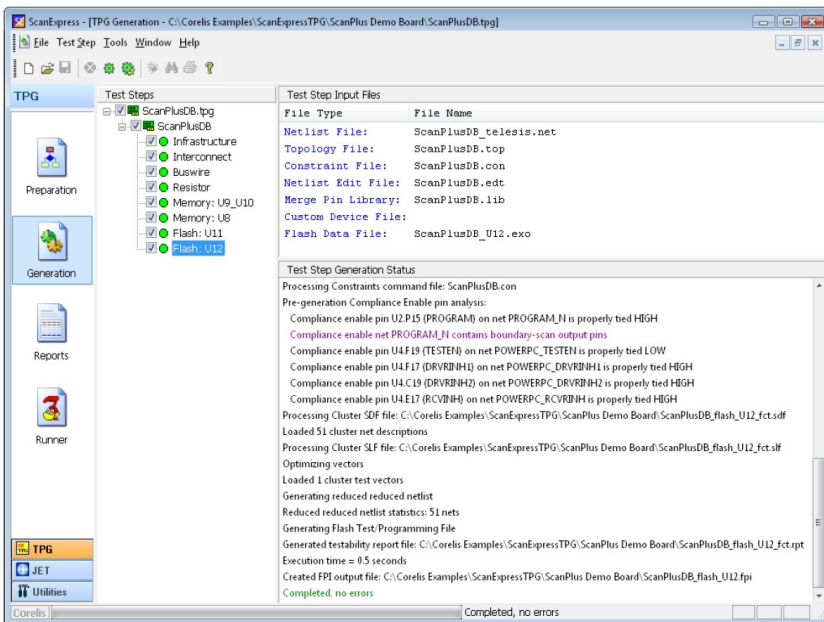
ScanExpress TPG test development begins by gathering details about the UUT from the user in an interactive session through a series of steps. The intelligent preparation engine assists the user with assigning input files, identifying special nets, and modeling devices on the UUT.

TPG features a comprehensive and ever-expanding library of device models for popular devices including resistors, buffers, RAM, Flash, and many more. The automatic association features quickly find appropriate models every step of the way.

ScanExpress TPG optionally logs all part numbers and associated data within each project for re-use in additional projects, further reducing new test development time and eliminating redundant steps for each new project.



**ScanExpress TPG Main Preparation Window with Topology Viewer**



**ScanExpress TPG Main Generation Window**

The ScanExpress TPG GUI includes a centralized launch platform for all tools and utilities in the ScanExpress family. The IDE provides full integration with the complete family of ScanExpress boundary-scan test software for easy access and seamless transition from test development to test integration, analysis, debug, and execution.

### The Generation Phase

The Generation phase provides tools to further personalize, fine tune, and generate test files. The user is free to directly modify the input files, add customized test steps, and utilize TPG's advanced "C"-style scripting language with integrated debugger to edit or create adaptive and interactive test steps.

When the user is ready to compile tests, the state-of-the-art automatic test pattern generation (ATPG) engine creates test steps ready-to-run in the ScanExpress Runner™ test execution sequencer.

### Ordering Information

**Part Number - 20400**

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