SSP Python Test Executive Features and Benefits

Main GUI shown below.

Category	User Mode	Features	Benefits
General	**All**	Customizable User Login Profiles	Provide each user with a unique username and password. Assign Operator or Engineer mode to each user.
Hardware Abstraction Layer (HAL)	**Engineer**	Simple API using the hardware abstraction layer to control standard configuration instruments.	An instrument control step can be coded in a minute or two, often with a single line of code. This is one of the ways SSP reduces software development time and costs for standard configurations.
		Add non-standard configuration instruments to the HAL API if desired. Also for non-standard configuration instruments, the test executive includes generic read, write and query calls to send instrument SCPI commands directly to bypass the HAL API.	We can provide you with the same time and cost saving efficiencies of the standard configuration instruments.
		Instrument Library	As the SSP Python Test Executive matures, a growing library of instruments will be available for customers.
		Device Programming	Program DUT devices using all standard programming modules.
		SSH	SSH from Windows into a Linux Nuc or Raspberry Pi to download firmware to the DUT.
		Bus Pirate	Bus Pirate control scripts can be coded easily.

Development	**Engineer**	Easy to understand test architecture	SSP and customer developers can focus on writing test scripts for DUTs. Just create a configuration file and create test scripts for test steps. Use the HAL API to code even faster. Customers who already have scripts to test their DUTs can use the SSP Python Test Executive to easily automate their tests with the GUI and the benefits listed in this document.
		Create tests for multiple DUTs available to the operator to select from a pull-down menu	Config file specifies: Whether to run, skip or stop on failure for each test step Test name Test group Test script to run for each test step in proper sequence Pass/fail limits and how to evaluate them
			Test Name
Debug	**Engineer**	Manually run individual test scripts with a double-click on the GUI	Quickly jump to specific tests to speed up debugging.
		Modify test scripts on the fly to quickly troubleshoot	Quickly modify and then run test scripts in the moment.
		Run Test group	Create unique group names to run through a group of tests with one click.
		Debug Terminal Shell	Interface with DUT, instruments and peripheral devices to validate functionality outside the scripting environment.
Production	**Operator**	Unique Login Profiles	Ability to configure unique login profiles for Operators. Reports will log operator login name.
		Test Configuration	Load and populate GUI with test paraeters for easy viewing
		Automated Test Run Time	Test time for each test step and total time for the entire test sequence is included on each test results file.
		Easy to understand GUI	GUI is clearly labeled and intuitive.
		Multiple DUT Part Number Selection	The test populates a pull-down menu on the GUI listing all the available test configurations that can be run. Additional configurations can be added at any time.
		Runtime pass/fail indication for each test step as it is run	The test results table indicates whether each test step passes or fails as it is run and overall pass or fail when the test sequence is complete.
		Test Result Reporting	All test results are included in a test results report.
		Logging Functionality	Full write and read communications with instruments, peripherals and DUT are displayed in an onscreen log and saved. Flexibility to customize which data to be sent to the log.

About Solution Sources Programming, Inc.

Solution Sources Programming, Inc., a global test development leader, provides test & measurement solutions to OEMs and CMs.

Our services specialize in designing and implementing turnkey test solutions throughout the printed circuit board (PCB) and mechanical product lifecycle. With deep expertise in Design for Test (DFT), Boundary Scan Test, In-Circuit Test (ICT), and Functional Test & System Integration, SSP offers test solutions starting at a product's earliest design phases to production. SSP is a trusted partner for technology companies racing to bring their hardware product to market.

Our goal is providing quality and high performing test solutions for companies across multiple industries and sizes.

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