

VerificationWorks™ Overview

IEEE 1800™ SystemVerilog is lauded as the industry's first standardized, unified hardware description and verification language (HDVL). As a participant in Accellera's original SystemVerilog standardization effort, Paradigm Works remains committed to delivering world class and innovative capabilities to further electronic product development.

Built for SystemVerilog-based functional verification environments, VerificationWorks™ enables rapid project ramp-up by generating a UVM, VMM, or OVM environment that is ready-to-go out of the box, complete with directory trees, run software templates, automation for register testing, scoreboard software, a verification IP library, and a convenient interface for viewing your regression test results. VerificationWorks™ enables your UVM, VMM, or OVM verification methodology to be standardized company-wide, ensures adherence to best-practice verification methods, and promotes reuse, scalability, and maintainability.

VerificationWorks™ delivers best-learned verification practices from thousands of hours of production-proven project experience in an easy to use package. The tool is a platform for a complete verification solution and is architected to be simulator independent while supporting UVM, VMM, and OVM. It can be easily customized to support any reuse methodology adopted by the user.

Key Features

- **envBuilder**
You Spec it - envBuilder Builds it
 - Compliant, consistent, scalable UVM/VMM/OVM Verification Environments
- **vipLib (Verification IP)**
Our Competency - So you can focus on your Core
 - UVM/VMM/OVM Verification Components
- **Scoreboard**
Don't Architect it – Customize it
 - Flexible UVM/VMM/OVM Scoreboard runs right Out-of-the Box
- **Spec2Reg**
Spec the Register – Get the Registers
 - Automated Specification to Implementation closure
- **Build and Run**
We Build – You Run
 - Standardized Build & Run Software
- **RRT (Regression Report Tool)**
RRT Organizes - Your Team Analyzes
 - Automated, Web Based, Centralized Reporting - So you don't have to

VerificationWorks[™] Components

envBuilder

- Verification environment and IP code acceleration
- Rapidly produce a verification environment, complete with a directory structure, driver and monitor shells, base classes, and Verification IP shells
- Builds a UVM, VMM, or OVM-compliant shell verification environment and directory structure
- Facilitates uniform verification coding styles across sites and projects

vipLib

- Project-proven VIP library
- UVM-based VIP repository

Scoreboard

- Checks expected DUT responses against actual responses and supports advanced transfer functions
- TLM and procedural interfaces
- On the fly multiple stream support
- Both in-order and out-of-order checking
- Creation of complex DUT-specific transfer functions
- Timeout checking
- Hooks for error handling
- Payload Checking
- Auto Syncing

Spec2Reg

- Converts Word or Excel-based register definitions to either Register Abstraction Layer Format (RALF) or any user-defined output format
- Provides development teams a fully automated path for taking register definitions from design specification to verification implementation
- Allows you to synchronize SystemVerilog code with your specification register definitions

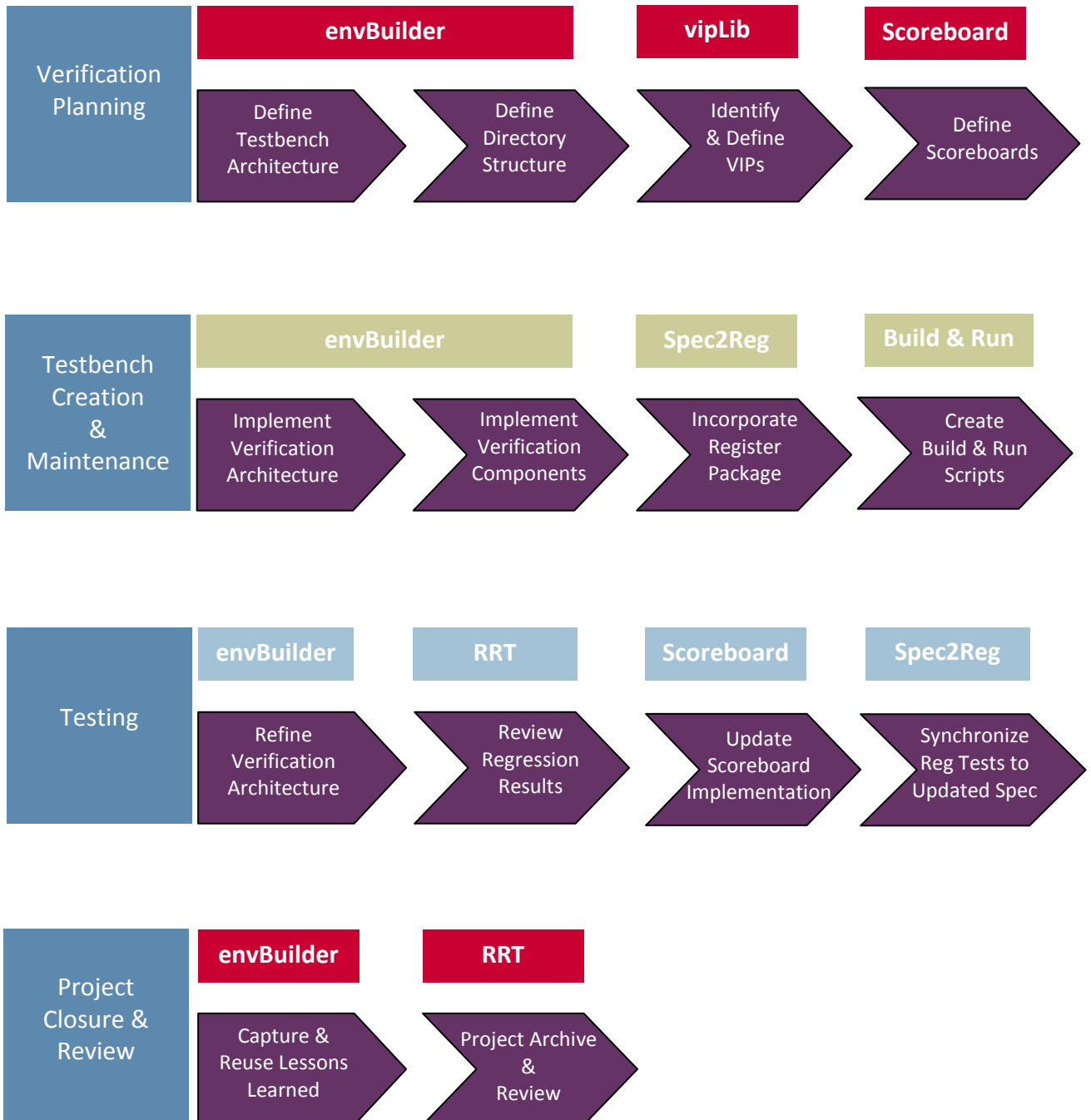
Build and Run Software

- Accelerates project ramp-up
- Provides a uniform interface across multiple simulators
- Integrates with pre-existing project build and run software

RRT (Regression Report Tool)

- Easily review your regression results via an internal project website
- Parses regression results and posts the results to an internal project website for easy viewing by the entire project team
- Allows the team to view historical results
- Navigate regression results through hyperlinks, enabling faster bug triage and root cause analysis

VerificationWorks™ in the Project



Company Background

Paradigm Works is a recognized provider of Chip Development (Design and Verification) Consulting Services, as well as Electronic Design Automation Free Open Source Software (EDA FOSS) and Supported EDA Software. Paradigm Works Software and Services help to reduce development costs, quicken time-to-revenue, and minimize schedule risk. Paradigm Works is headquartered in Andover, Massachusetts, with leading global semiconductor and electronic systems clients around the world.

For more information on Paradigm Works products and services call 978-824-1400 or visit us at www.paradigm-works.com.