

## CADENCE OVM STARTUP SERVICE

Accelerate your adoption of the Open Verification Methodology (OVM) and SystemVerilog with a proven testbench startup service around your RTL block. The Cadence® OVM Startup Service will teach you how to write a reusable OVM-based testbench along with an executable verification plan to improve verification effectiveness. The program combines onsite consulting, development services, Cadence Incisive® verification tools and VIP integration, and written recommendations for next steps. In less than a month, you'll be on your way to OVM proficiency.

### OVM – THE NEW STANDARD FOR SYSTEMVERILOG TESTBENCHES

Since the onset of SystemVerilog language, users have been insisting on SystemVerilog interoperability and open standards supported by multiple vendors. Now with the Open Verification Methodology (OVM), users can confidently develop their testbenches using OVM knowing the end solution will not be proprietary. Implementation such new technology, however, brings about new challenges. How do you maximize testbench reuse? How can you collect and combine coverage metrics in a meaningful way between assertions, code, direct, or randomized tests? And how should you structure your Incisive verification environment to enable the maximum amount of automation?



### LEVERAGING CADENCE OVM EXPERTISE

Cadence knows OVM and SystemVerilog. We've proven the importance of reuse methodology over many years with our **e** Reuse Methodology (**eRM**) and we know how to provide this knowledge to our users so they can maximize their productivity. Letting Cadence experts assist you with your first OVM project will reduce risk and save time. Depending on your RTL block size,

in less than one month, Cadence can teach you how to write and deliver an OVM-based SystemVerilog testbench, including SystemVerilog Assertions (SVA).

Cadence OVM Startup Service provides a comprehensive solution, combining your existing directed tests with new constrained-random tests and minimizing the time it takes to uncover bugs. We teach you how the environment should be built, how to automatically measure and track verification progress, and how to combine coverage results from multiple sources into a single, meaningful set of metrics. We leave you with a comprehensive environment that integrates your new OVM testbench and puts you on the path to system-level verification. At the end of the engagement, Cadence provides a report that indicates what bugs were identified, outlines how to proceed to the next level, and offers recommendations on tools or overall methodology enhancements that might help. Additionally, we provide a working example of "best practices" with an IP verification kit, which can be used for ongoing training or to introduce new employees to OVM-based verification.

## BENEFITS

- Delivers a full-featured OVM SystemVerilog testbench in as little as one month
- Reduces risk by leveraging industry best practices, the proven Cadence Incisive Plan-to-Closure Methodology, and other state-of-the-art functional verification methodologies
- Offers a metrics-based approach for increased quality, visibility, and predictability
- Optimizes verification productivity using best practices and Incisive technology

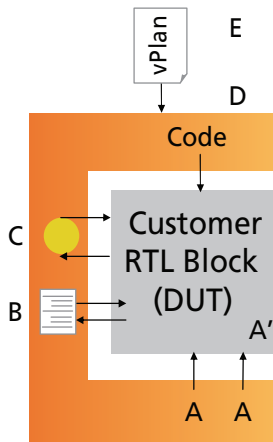


Figure 1: Cadence OVM Startup Service Covers You From Verification Planning to Closure

## METRIC-DRIVEN VERIFICATION

The key to successful OVM implementation is not just using OVM libraries. While this helps to ensure reuse, it does not show you how to plan and manage highly effective verification scenarios. Most experts agree that a metrics-based coverage-driven verification solution is the best way to maximize bug identification while minimizing time. Studies have proven that combining constrained-random testbench generation with a focus on specific functions that need to be verified (coverage points) keeps you

focused and gets you to functional verification closure faster than with any other known technique. Forget the spreadsheet; use the automation provided in the Cadence Incisive functional verification platform to focus on those new tests that are needed, rather than re-running tests that are duplicate and do not advance verification closure. This Cadence metric-driven verification solution embeds years of practical methodology engineering, from planning to closure.

## ENGAGEMENT PROCESS

Cadence OVM Startup Service starts with the identification of a specific project and RTL block. We will review the block for size and complexity along with the results of your unit-level directed test efforts. Next, we will discuss your verification goals, which features you would like to focus on, and how the block will be utilized within the chip. Finally, we will implement this using a standardized engagement approach proven on many projects. The OVM Startup Service is delivered by functional verification experts who are also experienced users of Cadence tools and technologies.

## DELIVERABLES

- OVM constrained-random testbench in a metric-driven testbench environment
- Assertions for static and dynamic use
- Integration of user-written directed tests
- Integration of code, assertion, and functional coverage into Incisive Enterprise Manager with a verification plan (vPlan)
- IP verification kit for ongoing work
- Onsite consulting
- Recommendations/report

For more information  
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