



Accelerating Verification with a Shift-Left Mindset

Building Predictability, Quality, and Speed in the Era of AI-Driven Design

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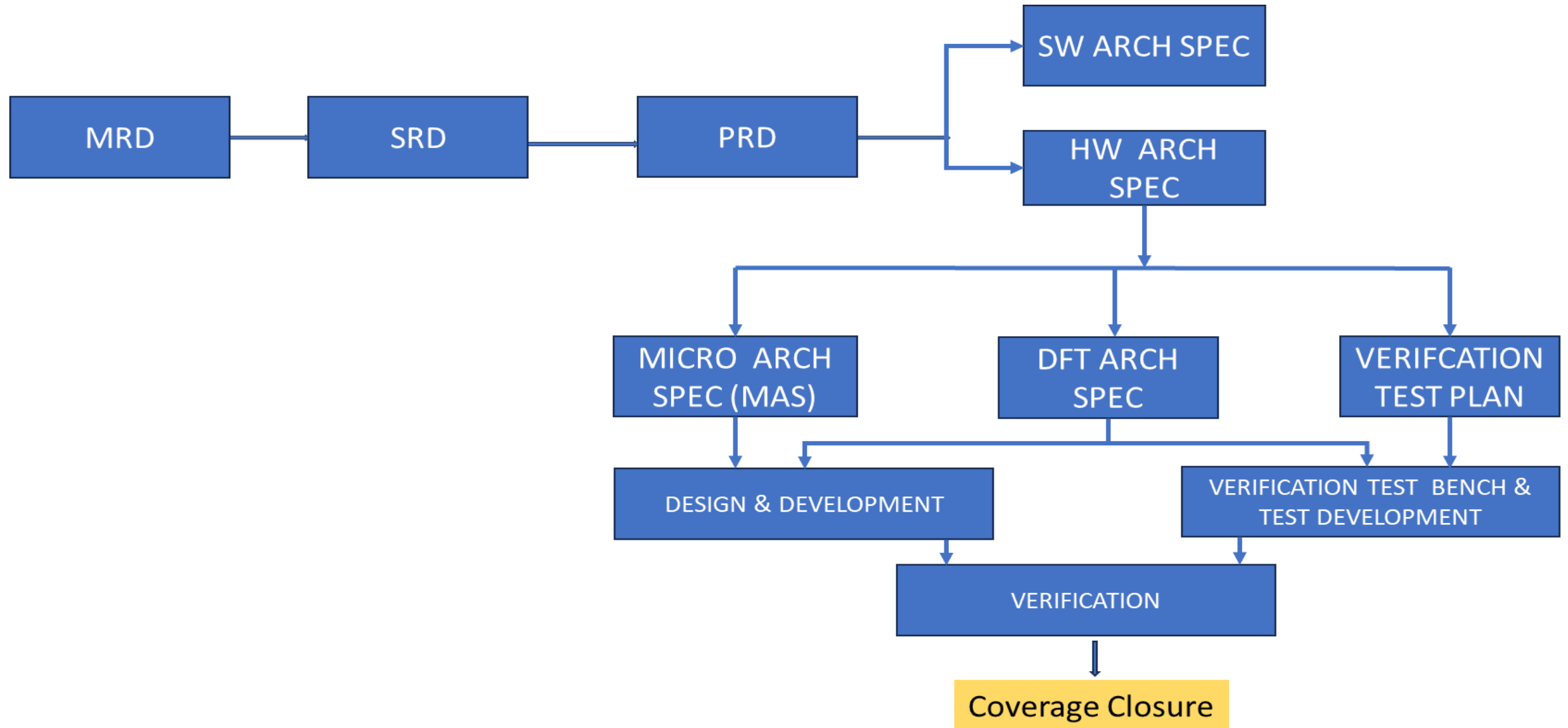
AGENDA

- *Project Planning, Execution & Governance*
- *Methodology, Innovation & AI Influence*
- *Discipline & Culture in Verification Teams*
- *Summary*

Verification in New Era

- ❑ ***Empower Early Convergence:*** Move verification upstream to catch issues early, enabling faster and more predictable design closure.
- ❑ ***Integrate Verification and Design:*** Break silos and align teams, tools, and metrics for seamless collaboration and higher quality outcomes.
- ❑ ***Lead with a Strategic Mindset:*** Transform verification from a reactive process into a proactive enabler of innovation and product excellence.

Typical Design/Verification Flow



Project Planning, Execution, and Governance

- ✓ *Define Cross-Team Contracts:*
- ✓ *Formalize Release Process:*
- ✓ *Standardize Planning Framework:*
- ✓ *Mandate Structured Reviews:*
- ✓ *Strengthen IP Integration Discipline:*
- ✓ *Control changes*
- ✓ *Unify Methodology and Tools:*
- ✓ *Strengthen IP Quality Assurance:*

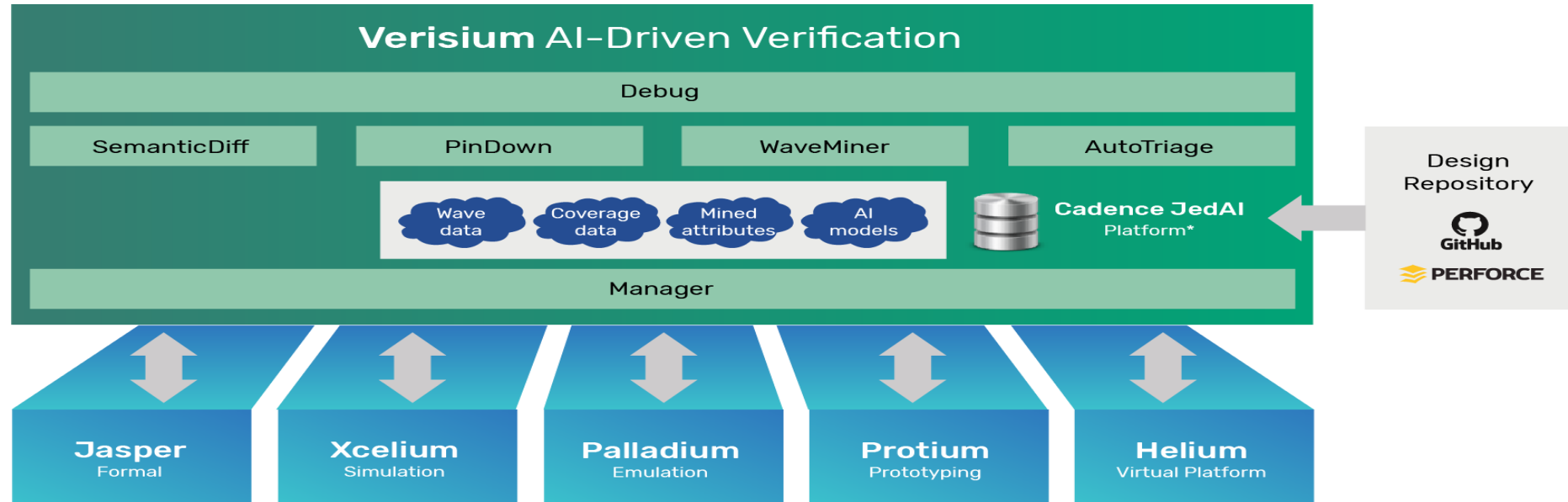
Test Planning

- ❑ *Start Early, Plan Holistically:*
- ❑ *Standardize Test Plan Templates:*
- ❑ *Collaborate Across Teams:*
- ❑ *Prioritize for Impact:*
- ❑ *Review and Iterate:*

Methodology, Innovation & AI Influence

- ✓ *Adopt a Shift-Left Mindset:*
- ✓ *Establish Reusable Verification Frameworks:*
- ✓ *Enable Continuous Integration and Automation:*
- ✓ *Leverage AI-Based EDA Tools:*
- ✓ *Accelerate Coverage and Debug Efficiency:*
- ✓ *Data-Driven Decision Making:*
- ✓ *Encourage Innovation Culture:*
- ✓ *Bridge Design and Verification:*
- ✓ *Future-Ready Workforce:*

Methodology, Innovation & AI Influence



*Cadence Joint Enterprise Data and AI (JedAI) Platform

- ☐ Unifies verification data
- ☐ AI-driven test-suite optimization
- ☐ Automated failure triage and root-cause extraction
- ☐ Coverage-closure analytics and planning
- ☐ Faster Debug
- ☐ Scalable architecture for global verification teams

Discipline & Culture in Verification Teams

- ✓ *Build a Quality-First Mindset:*
- ✓ *Strengthen Execution Discipline:*
- ✓ *Drive Timely Bug Closure:*
- ✓ *Encourage Collaboration & Transparency:*
- ✓ *Balance Agility with Predictability:*
- ✓ *Promote Continuous Learning:*
- ✓ *Drive Accountability*

Summary

- ❑ **Plan with Precision:** Build structure and accountability from day one.
- ❑ **Innovate with Intelligence:** Harness AI and automation to amplify efficiency.
- ❑ **Lead with Discipline:** Create a culture of ownership, learning, and excellence.

“Verification is no longer a checkpoint — it’s our competitive edge.”

Thank You!