

# SdCvP-X

Specification Driven Comprehensive Verification Acceleration Al Tool



## Verification Challenges - Business Impact

Research/Surveys	Analysis
Siemens EDA/Wilson Research Group 2024 Functional Verification Study/DVCon	First-Time Silicon success dropped to 14% in 2024 75% of Design Projects are behind SCHEDULE!!
Wilson Research, Accellera	Verification consumes 60-70% of total design effort

Challenges	Business Impact
Increasing Design Complexity	Longer cycles, higher risk, strained resources
Manual Verification Planning	Inefficiency and higher costs
Unstructured Debug & Root Cause Analysis	Delays and risk of re-spins
Lack of Traceability to Specifications	Coverage gaps, missed bugs
Inconsistent Verification Reuse	Rework, cost overruns, delays



# Introducing SdCvP-X<sup>TM</sup> - Solving Verification at Once

Verification Challenge	SdCvP-X <sup>™</sup> Tool
Manual, fragmented planning	Auto-generated, spec-aligned comprehensive segregated verification plans for IP/SOC/ASIC
Specification alignment	Plan evolves with specification + version traceability
Manual Plan Alignment with Specification and upgrades	Aligns manual plans to eliminate gaps and ensure consistency and boost productivity.
Debug inefficiencies	Traceability matrix + mapping to features/test points
Configuration explosion	Smart filtering, collapsing, and prioritization
Reuse across derivatives	Scalable planning across standard & custom designs



### Who Benefits – Across the Project Hierarchy

Role	Pain Point	SdCvP-X <sup>™</sup> Benefit
Design Verification Engineers	Long debug cycles, manual test list creation	Faster test planning + structured debug: Boost Productivity
Architects	Hard to validate spec implementation	Full traceability from spec to test
Program/Project Managers	Poor visibility on verification progress	Actionable insights, milestone- based views
Business Leaders & Industries	Risk of re-spin, time-to-market delays	Higher First Silicon Success, faster TTM



# SdCvP-X<sup>™</sup> - Tool Highlights

Features	Description
Auto Verification Plan Generator	Features, test points, scenarios by config
Auto Constraints, Coverage and Assertion	Constraints, Coverage and Assertion planning
Debug Assist Engine	Traceability matrix, root-cause accelerators
Specification Evolver	Adapts plans as spec updates
Smart Manual Plan Alignment	Aligns manual plans to eliminate gaps and ensure consistency and boost productivity.

© Veripoint Technologies Pvt Ltd

### SdCvP-X<sup>™</sup> - Tiered Product Options



#### **Standard**

- ComprehensiveVerification Plan
- Features, Test Points & Scenarios
- Configuration Management
- Specification Alignment

#### **Advanced**

- All Standard Features
- Constraints and Assertions
- Enhanced Specification Evolution
- Advanced Traceability Matrix

#### **Most Popular**

#### **Premium**

- All Advanced Features
- Coverage and Mapping
- Specification Variables
  Debugging
- Priority Support

#### Premium+

- All Premium Features
- Auto-Generated Test Bench
- Custom IntegrationSupport
- Obedicated Success Manager

### SdCvP-X<sup>™</sup> Statistics Highlights



PCIe 6.2 IP

\*\*\*\*

Generation Time: ~2 Hours

Verification Plan: 4000+ Rows

Industry: Data Center

Complete verification plan with constraints, coverage, and assertions for high-speed PCle 6.2 protocol

**CXL 3.0 IP** 



Generation Time: ~1 Hour

Verification Plan: 2000+ Rows

Industry: Memory & Storage

Comprehensive verification framework for nextgeneration memory coherence interfaces **ARM Cortex-A Series** 



Generation Time: ~1 Hour

Verification Plan: 700+ Rows

Industry: Mobile & Embedded

Open source processor verification with comprehensive coverage analysis for ARM architecture

**Custom RISC SoC** 



Generation Time: ~1 Hour

Verification Plan: 800+ Rows

Industry: IoT & Edge Computing

Custom SoC verification with comprehensive coverage for RISC-V based system-on-chip designs

**Custom PIPE Interface** 



Generation Time: ~1 Hour

Verification Plan: 1200+ Rows

Industry: Multi-Protocol

Intel PIPE 7.0 interface covering PCIe, SATA, USB3.x, USB4.x, and DisplayPort 2.x protocols

**Universal Coverage** 

5+

12K+

Verified IPs

**Total Rows** 

From IP to ASIC to SOC to FPGA and more - proven across all semiconductor verticals



### Design Verification Success at a Glance

Metric	Before SdCvP-X <sup>™</sup>	After SdCvP-X <sup>™</sup>
Verification effort	100% (baseline)	↓ 40% reduction
Debug cycle time	4–6 weeks or more	↓ 50% reduction
Time to First Silicon	Slipping	On-time or early
Manual planning effort	Extensive	Near-zero with automation



# SdCvP-X: Accelerate Verification, Design Success

- Start with a free demo
- Identify 1–2 designs and see the impact in <1 week
- Scale across IPs, ASICs, SoCs and Custom Interfaces
- Seamless integration in existing verification workflow

**Request For Demo** 

### **Contact Us**



Veripoint Technologies Pvt Ltd

Office Address: Tower B, Unit 304, M Floor, WTT, Plot no. C-1, Sector 16 Noida 201301, Uttar Pradesh, India

Email: rajat@veripointtech.com

Ph: +919717580855

www.veripointtech.com

**LinkedIn**