

asureVIP from TVS

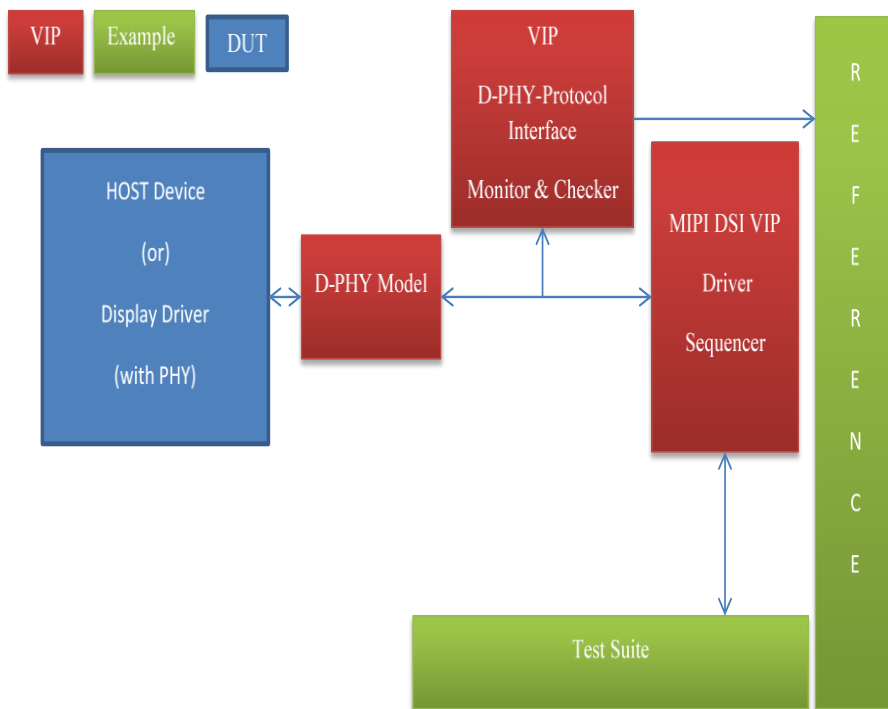
TVS MIPI DPHY UVM VIP

Overview

Test and Verification Solutions' asureVIP™ for MIPI DPHY enables constrained random metric driven verification of IP level or SOC level verification of this protocol specification. MIPI DPHY VIP offers flexibility, excellent product support, while UVM support allows reusability, fully configurable, coverage driven verification.

This UVM VIP has extensive constrained-random stimuli generation capabilities, configurable monitors and checks to ensure protocol compliance for Host as well as Peripherals. Pre-defined coverage bins enable easier extension and coverage collection.

Block Diagram



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Features

- One or more differential High-speed functions including differential transmitter HS-TX and differential receiver HS-RX
- One or More differential Low-Power functions including differential transmitter LP-TX, differential receiver LP-RX, Low-Power Contention-Detectors (LP-CD)
- Correlation between High-speed and Low-power functions
- Two Types of Data Lanes
 - Bi-directional
 - Unidirectional

Deliverables

- VIP user Guide
- MIPI DPHY UVM VIP
- Sample Testbench
- Sample Scoreboard
- Sample Virtual Sequencer



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TVS MIPI DPHY UVM VIP

Technical Specification

Part Number	asureVIP_MIPI_DPHY
Description	MIPI DPHY UVM VIP
Provider	Test and Verification Solutions
Languages Supported	System Verilog
Methodology	UVM 1.1
Simulators	Cadence Incisive, Mentor Questa
Compliance	MIPI Alliance Specification for D-PHY, version 1.00.00, MIPI Alliance, Inc., 14 May 2009
Availability	Now

About Us

TVS delivers an independent verification service that not only reduces your costs and time-to-market, but also improves product quality.

TVS combines skills and experience in software testing, hardware verification and outsourcing to provide customers with an efficient, well-managed, quality assurance service.

TVS provides both consultancy and execution services using experienced engineering resources in several locations around the world. TVS removes the pain and risk from outsourcing leaving you with just the benefits.

To learn more about our offerings, write to us at sales@testandverification.com

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Features

- Single or Multiple Data Lanes
- Supported types of Reverse communication (per Lane)
- Functionality supported by Escape mode (for each direction per Lane)
- Data transmission can be with 8-bit raw data (default) or using 8b9b encoded symbol
- Data shall be serialized in the transmitting PHY and de-serialized in the receiving PHY
- Support for different Lane states and Line levels
- Support for different operating modes
- Bi-directional data lane turnaround
- Bi-directional control
- Support for detecting protocol errors and contention

Benefits

- Highly Flexible, Independent and Configurable MIPI DPHY
- UVM VIP
- Less TAT in integrating into SOC Verification environments
- Excellent Product Support



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