



asureVIP

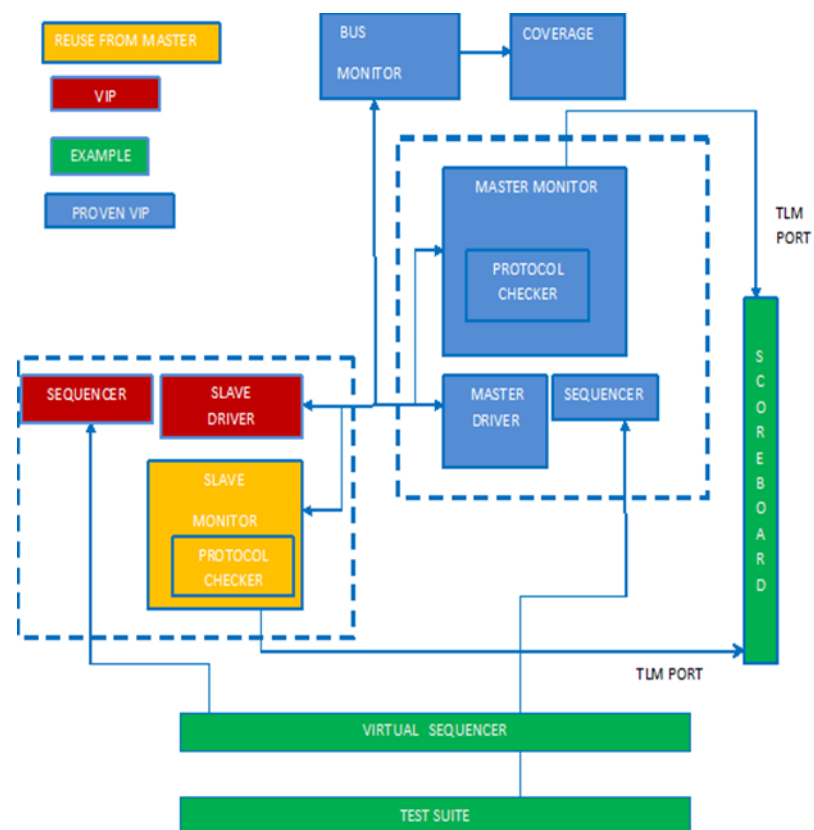
SDCARD 4.0 UVM Device VIP

Tessolve Semiconductors offers SDCARD 4.0 UVM Device VIP as part of its asureVIP series of offerings. This is a highly flexible and configurable verification IP, which can be easily integrated into any SOC verification environment.

The VIP comes with a Bus Monitor for performing all protocol checks and performs key protocol checks and reports errors for non-compliance with SDCARD 4.0 Specification.

The VIP will be used to verify an SDCard interface for a chip that is first-time fully working silicon.

Block Diagram



Overview

VIP: SDCARD 4.0 DEVICE

Compliance: SDCARD 4.0 Specification

Language: System Verilog

Methodology: UVM 1.1

Simulators: Cadence Incisive, Mentor
Questa, Aldec Riviera-PRO

Deliverables

- SDCARD 4.0 Device VIP
- Test Cases and Master BFM Testbench
- Bus checker with cycle check engine
- VIP User Guide

Key Benefits

- Highly Flexible, Independent and Configurable SDCARD 4.0 Device VIP
- Proven against Silicon Proven VIP
- Less TAT in integrating into SOC Verification environments

Technical Specifications

- UVM SD Card Device VIP is compliant with SDCARD 4.0 specification
- Lower versions supported on configuration
- Supports huge memory efficiently
- Performs protocol checks (SDCARD 4.0)
- Support for Asynchronous Interrupt to Host controller
- Support for Read Wait Control
- Support for Suspend/Resume operations
- Configurable VIP

- Supports Master and Slave Error Injection schemes such as:
 - Undefined command Frame
 - Command frame with parity error
 - Incompatible command length
 - Address frame with parity error
 - Data frame with parity error
 - Read using the broadcast ID

Other VIPs Available

- **ARM:** AXI, APB, AMBA ACE and CHI
- **Hi-Speed Interface:** Ethernet (10/100/1000MB & 10GB), PCIe RC and EP, USB 3.0 Host and Device, CSIX and SPI
- **Memory and Storage:** SDCARD 4.0, DDR 4/3, LPDDR 4/3 and ONFI
- **MIPI:** DPHY, DSI, LPDDR, MPHY, SMBUS, RFFE and Unipro
- **Universal Serial I/O:** CAN, GPIO, I2C, UART, SPDIF, I2S, SMBUS, SPI and TDM

Independent Verification Service

Tessolve can deliver an independent verification service that not only reduces development costs and time-to-market, but also improves product quality.

Proven Implementations

Use asureVIP with the confidence of knowing that they have been successfully deployed by leading SoC companies around the world.

About Tessolve

Tessolve Semiconductors Private Limited provides services and products to organizations developing complex products in the microelectronics and embedded software and systems industries.

Tessolve operates globally with offices in the UK, France, Germany, India, Singapore the USA plus a network of international partners

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