



asureVIP

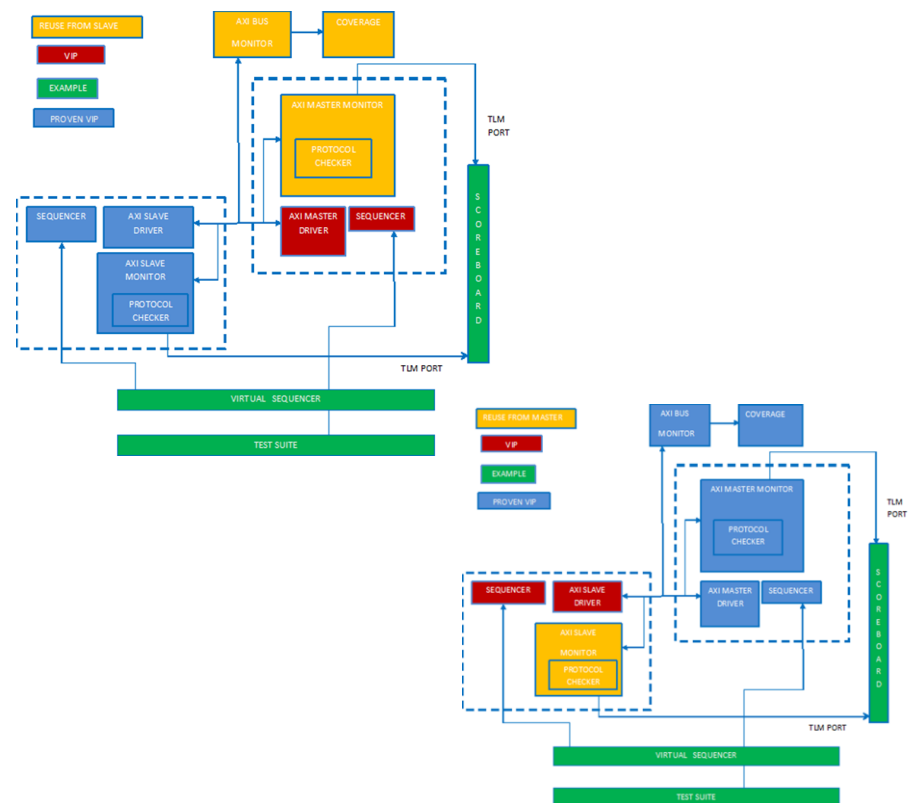
AXI 4.0/3.0 Master & Slave UVM /OVM VIP

Tessolve offers the AMBA® Advanced eXtensible Interface (AXI) 4.0/3.0 Master and Slave UVM/OVM 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 Master and Slave VIPs have been interoperability tested.

The VIP comes with a Bus Monitor for performing all protocol checks. The monitor also performs key protocol checks and reports errors for non-compliance with ARM AMBA4 AXI4-Stream Protocol version 1.0.

The VIP has been verified for protocol compliance with asureSIGN, Tessolve’s in-house Requirements Tracking tool.

Block Diagram



Overview

VIP: AMBA AXI Master or Slave

Compliance: AMBA AXI version 4.0,
3.0 Language: System Verilog

Methodology: OVM 2.1.1 / UVM 1.1

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

Deliverables

- AXI Master or Slave VIP
- Sample Virtual Sequencer
- Sample Scoreboard
- VIP User Guide

Key Benefits

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

Technical Specifications

- Supports all protocol burst type, burst length, Transfer Size and response Type
- Supports Unaligned Transfer
- Supports Write Strobe
- Supports Narrow Transfer
- Supports Multiple Outstanding Transaction
- Out-of-Order Transaction completion support
- Supports Transfer Interleaving and ordering process
- Atomic Access support
- Quality of Service Signal
- Region Identifier
- User Signal Support
- INCR Burst length support 1 to 256

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.

asureVIP™ Download the FREE "Sample VIP Code"
visit: www.tessolve.com

The Tessolve and asureVIP logos are trademarks of Tessolve. All other product or service names are the property of their respective owners. This document is subject to change without notice. The information in this document is provided "as-is" with no warranty, express or implied, including without any warranties of merchantability or fitness for a particular purpose. ©2020 Tessolve Semiconductors Private Limited. Document number: VIP-AMBA-AXI-2020114