



asureVIP™

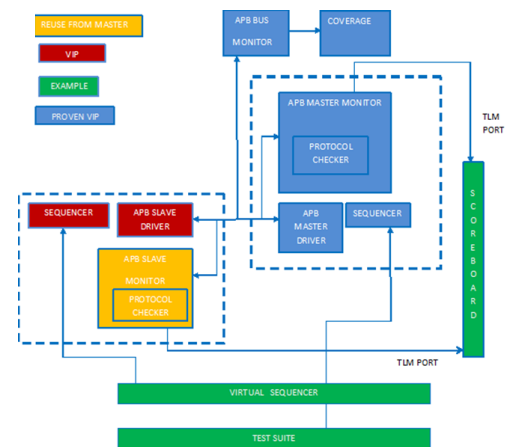
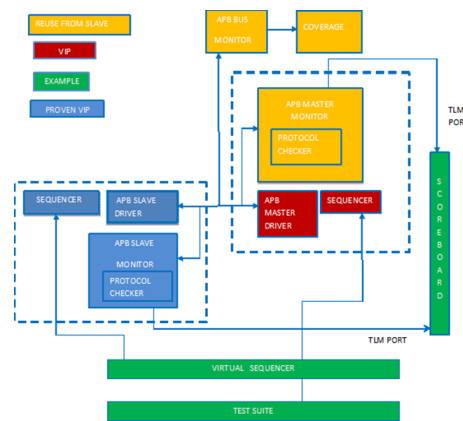
APB 4.0/3.0 Master & Slave UVM/OVM VIP

Test and Verification Solutions offers the AMBA® Advanced Peripheral Bus (APB) 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 APB 4.0/3.0 Specification.

The VIP has been verified for protocol compliance with asureSIGN, TVS' in-house Requirements Tracking tool.

Block Diagram



Overview

VIP:	AMBA APB Master or Slave
Compliance:	AMBA APB 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

- APB 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

- Configurable DataSize
- Configurable PSELx
- Supports Unaligned Address access
- Supports valid PREADY Detection
- Slave Error Detection
- Supports With No wait Transfer
- Supports With wait Transfer
- Supports PSLVERR
- User can load data via backdoor access

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

TVS 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 TVS

Test and Verification Solutions Ltd (TVS) provides services and products to organisations developing complex products in the microelectronics and embedded software and systems industries.

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

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