AMBA AXI4 Verification IP

WWAGO

Features

- Compliant to AMBA®AXI4 specifications from ARM
- Support for all variants of AXI4, AXI4-Lite and AXI4 Stream
- Support for all type of AMBA AXI4 devices:
    - Master Agent
    - Slave Agent
- Strong protocol checking Bus Monitor which also provides statistics of the transactions
- Parameterized data and address bus
- Support for all protocol Burst Types, Burst Lengths and Response Types
- Configurable wait states on different channels
- Internal Architecture Based on TLM 2.0
- Rich set of configuration parameters to control AXI4 functionality
- AXI4 Verification IP comes with Extensive Coverage Across the Channels
- Supports FIFO , memory and Cache Model integrated
- VIP supports protected accesses
- Supports out of order transaction with Parameterized out of order width
- Supports data interleaving on read data channel
- Supports Endianess check and conversion
- Rich set of error injections
- Supports exclusive transfers

AMBA AXI4 Verification IP provides an effective & efficient way to verify the components interfacing with AMBA® AXI4 bus of an IP or SoC.

This AMBA AXI4 VIP is fully compliant with standard AMBA® AXI4 specification from ARM. This VIP is a light weight VIP with easy plug-and-play interface so that there is no hit on the design time and the simulation time.

This VIP is compatible with Mentor Questa, Cadence NC and Synopsys VCS , and can be used for verification in standalone or in SoC environment.
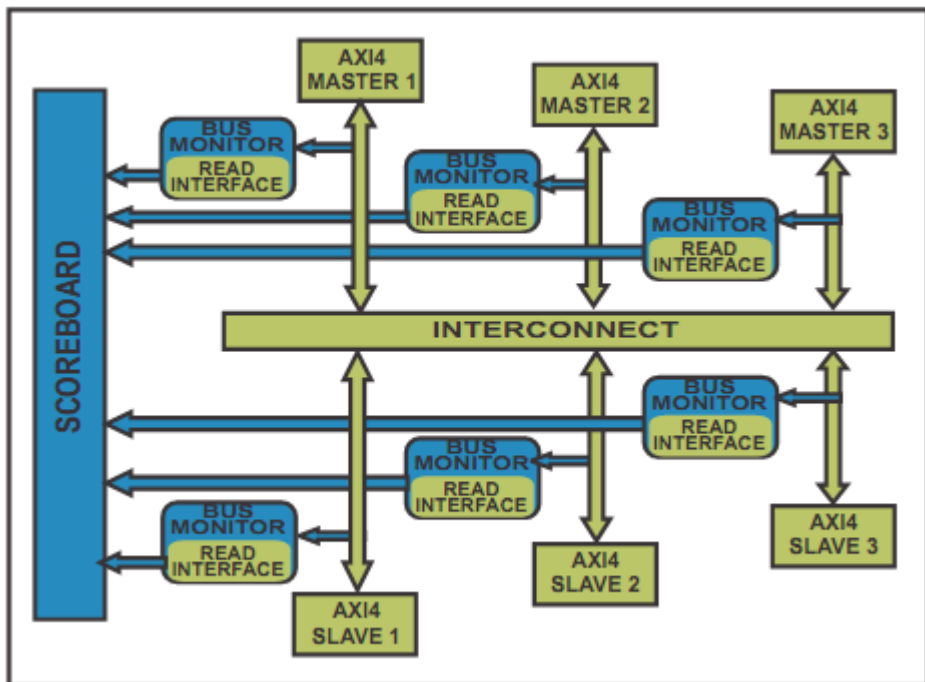
Key Benefits

- Available in native System Verilog (UVM/OVM/VMM) and Verilog

- Unique development methodology to ensure highest levels of quality

- Availability of Compliance & Regression Test Suites

- 24X5 customer support

- Unique and customizable licensing models

- Exhaustive set of assertions and coverage points with connectivity example for all the components

- Consistency of interface, installation, operation and documentation across all our VIPs.

Block Diagram

Deliverables

- AMBA AXI4 Master/Slave Agent
- AMBA AXI4 Bus Monitor and Scoreboard
- AMBA AXI4 Interconnect Model (Optional)
- Test-Bench Configurations
- Test Suite   (Available in Source code) :
    - Basic and Directed Protocol Tests
    - Random Tests
    - Error Scenario Tests
    - Assertions & Coverage Tests
    - Compliance Tests
    - User Tests
- User Guide and Release Notes

Related products

We can offer different Verification IP solution for your selection.
- MIPI M-PHY Verification IP
- MIPI CSI-2 Verification IP
- MIPI UniPro Verification IP
- AMBA 3 AHB-lite Verification IP
- AMBA 2.0 AHB Verification IP
- AMBA APB Verification IP
- AMBA ATB Verification IP
- AMBA AXI3 Verification IP
- I2C Verification IP
- USB3.0 Verification IP
- USB3.1 Verification IP
- USB2.0 xHCI Verification IP
- SSIC Verification IP

For more information about the above VIP documents can be gotten from WWAGO sales contacts.