CSIX

asureVIP

CXIM UVM VIP

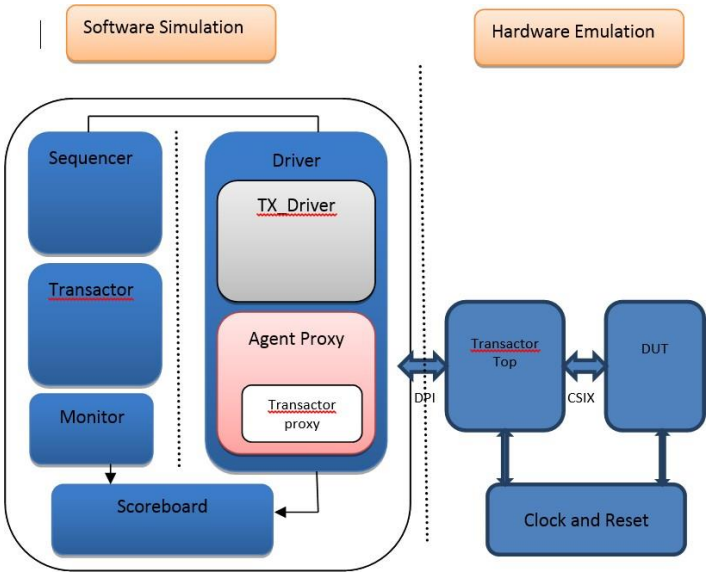
Tessolve Semiconductors offers CSIX UVM VIP as part of its asureVIP series of offerings. This is a highly flexible and configurable verification IP, which can be easily integrated into any SOC verification environment. VIP can be used for both functional verification & for emulator. The Tessolve CSIX UVM VIP provides capability to communicate over 32-bit CSIX bus.

Tessolve CSIX transactor comprises of:

- Synthesizable hardware part written in System Verilog
- Software part written in C++ and System Verilog
- API written in System Verilog
- Test Bench Support with UVM

The VIP comes with a UVM Monitor for checking the conformance of the design with the technical specifications. The monitor performs the protocol checks and reports errors for noncompliance of features with CSIX-L1 bus specification.

Block Diagram



TESSOLVE.com

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TESSOLVE
A Hero Electronix Venture

Overview

VIP: CSIX

Compliance: CSIX-L1 1.0 Bus specification

Language: System Verilog

Methodology: UVM 1.1

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

Deliverables

- CSIX UVM VIP
- Sample Testbench integrated with proven XILINX CSIX core
- Sample Scoreboard
- Sample Virtual Sequencer
- VIP User Guide

Key Benefits

- Highly Flexible, Independent and Configurable IP
- Excellent Technical Support

Technical Specifications

- Compatible with Data and Control type CFRAMES
- Compatible with different Data CFRAME formats IDLE & NORMAL
- Supports Maximum Configurable Payload Size
- Supports NORMAL CFRAME Types (Unicast, Multicast, Broadcast)
- Supports Flow Control CFRAME
- Supports Link Level Flow Control and Fabric Flow Control
- Support Pause and Resume Operation for (Link level Flow Control)
- Generation of Vertical Parity
- Generation of Horizontal Parity
- Error Detection for Vertical & Horizontal Parity
- Synchronous Clock (for interface size 64, 96,128)
- Supports Error Insertion for Vertical and Horizontal Parity
- Callback Support to inform Received & Transmitted Packet Information to the User

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-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"**

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