

asureVIP™ from TVS

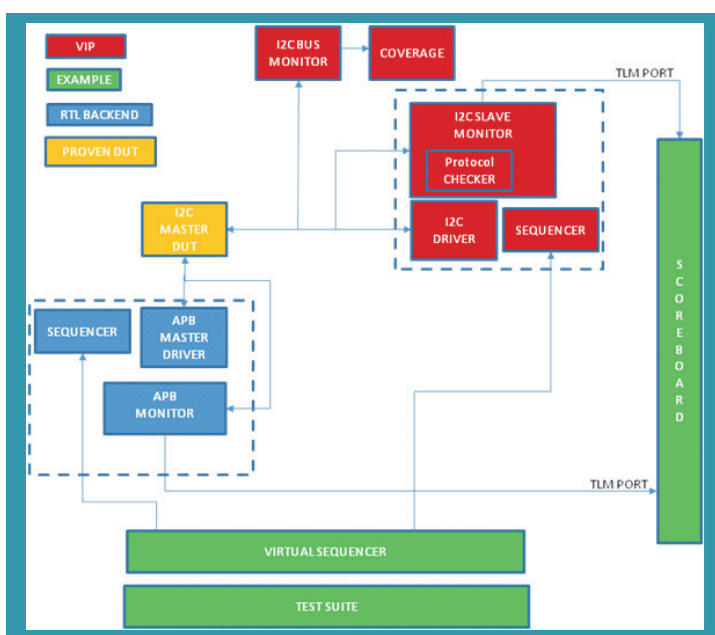
TVS I2C OVM SLAVE VIP

OVERVIEW

Test and Verification Solutions offers an I2C OVM Slave 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 I2C OVM Slave VIP supports standard, fast and high speed modes of operation. It also supports 7-bit and 10-bit addressing modes. The slave VIP was used in successfully verifying a DUT, later silicon proven.

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 Philips I2C Specification.

BLOCK DIAGRAM



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FEATURES

- Each slave device connected to the bus is software addressable by a unique address and simple master/slave relationships exist at all times.
- Serial, 8-bit oriented, bi-directional data transfers can be made at up to 100 Kbit/s in the Standard-mode, up to 400 Kbit/s in the Fast-mode, or up to 3.4 Mbit/s in the High-speed mode.
- Addressing Modes Supported (7-bit, 10-bit & general call address).
- Repeated Start Detection capabilities
- Bus monitor has capability to detect Illegal Start/Stop/Repeated Start Conditions.
- Switching between different modes (H-Speed, F-Speed and S-Speed)
- General Call Addressing Support
- Ability to differentiate between Legal and Illegal Start/Stop conditions
- Wait State Insertion capabilities



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TECHNICAL SPECIFICATION

Part Number	asureVIP_I2C_S
Description	I2C OVM SV based Slave VIP
Provider	Test and Verification Solutions
Languages Supported	System Verilog
Methodology	OVM 2.1.1
Simulators	Cadence Incisive, Mentor Questa
Compliance	I2C PHILIPS Specification January 2000
Availability	Now

ABOUT US

TVS delivers an independent verification service that not only reduces your costs and time-to-market, but also improves product quality.

TVS combines skills and experience in software testing, hardware verification and outsourcing to provide customers with an efficient, well-managed, quality assurance service.

TVS provides both consultancy and execution services using experienced engineering resources in several locations around the world. TVS removes the pain and risk from outsourcing leaving you with just the benefits.

To learn more about our offerings, write to us at vip@tandvsolns.co.uk

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June 2011 Version 1.0

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BENEFITS

- Highly Flexible, Independent and Configurable I2C Slave VIP
- Proven against Silicon Proven DUT
- Less TAT in integrating into SOC Verification environments

DELIVERABLES

- VIP user Guide
- I2C Slave OVM VIP
- Sample Testbench Integrated with proven I2C Master DUT / APB driver / monitor
- Sample Scoreboard
- Sample Virtual Sequencer



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