

# asureVIP from TVS

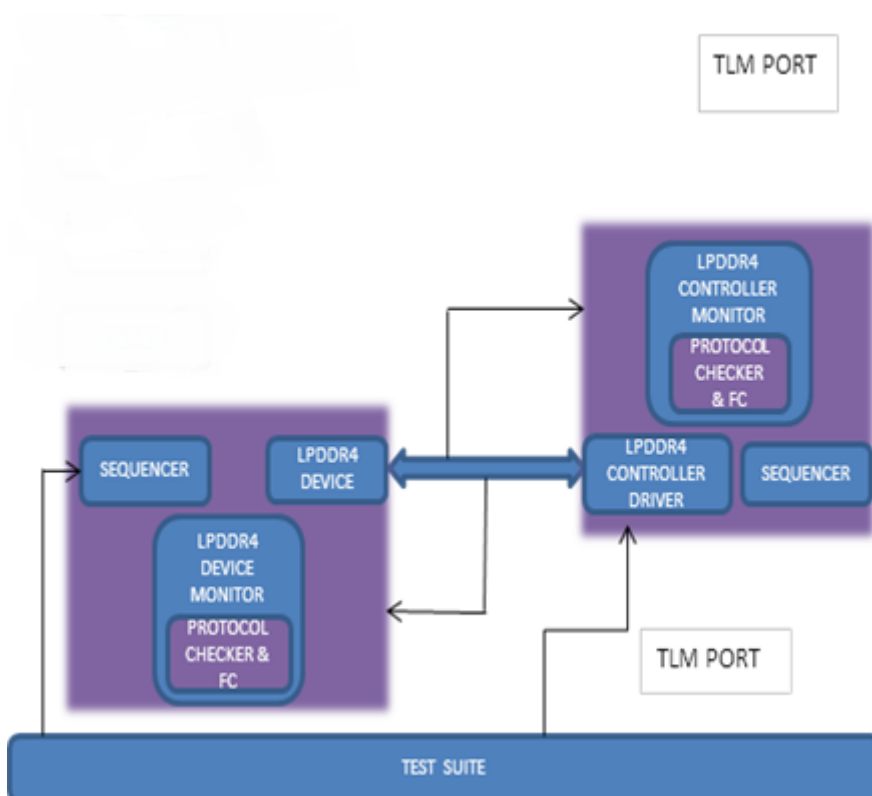
## TVS LPDDR4 UVM VIP

### Overview

Test and Verification Solutions' asureVIP™ for LPDDR4 enables constrained random metric driven verification of IP level or SOC level verification of this protocol specification. LPDDR4 VIP offers flexibility, excellent product support, while UVM support allows reusability, fully configurable, coverage driven verification.

This UVM VIP has extensive constrained-random stimuli generation capabilities, configurable monitors and checks to ensure protocol compliance for Host as well as Peripherals. Pre-defined coverage bins enable easier extension and coverage collection.

### Block Diagram



## Test and Verification Solutions Features

- Single data rate architecture for command and address;
  - all control and address latched at rising edge of the clock.
- Double data rate architecture for data Bus;
  - two data accesses per clock cycle
- Differential clock inputs.
- DMI pin support for write data masking and DBI/cd functionality.
- Programmable RL (Read Latency) and WL (Write Latency).
- Auto refresh and self refresh supported.
- All bank auto refresh and directed per bank auto refresh supported.
- Auto TCSR (Temperature Compensated Self Refresh)



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## TVS LPDDR4 UVM VIP

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### Technical Specification

Part Number	asureVIP_LPDDR4
Description	LPDDR4 UVM VIP
Provider	Test and Verification Solutions
Languages Supported	System Verilog
Methodology	UVM 1.1
Simulators	Cadence Incisive, Mentor Questa, Aldec Riviera-PRO
Compliance	SK_hynix_LPDDR4_Draft_Spec
Availability	Currently available

### 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 [sales@testandverification.com](mailto:sales@testandverification.com)

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## Test and Verification Solutions

### Benefits

- Highly Flexible, Independent and Configurable LPDDR4
- UVM VIP
- Less TAT in integrating into SOC Verification environments
- Excellent Product Support

### Deliverables

- VIP user Guide
- LPDDR4 UVM VIP
- Sample Testbench
- Sample Scoreboard
- Sample Virtual Sequencer



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