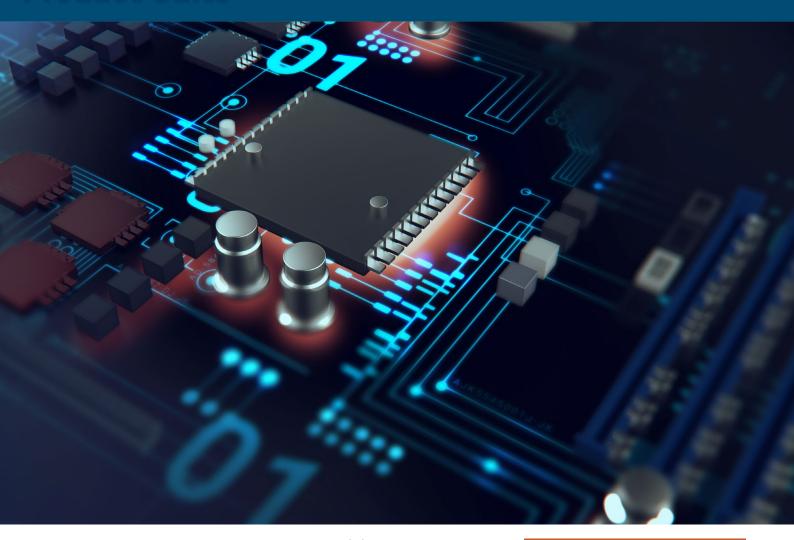
# **NVMe Product Suite**





# **Overview:**

The NVMe Verification IP (VIP) and Post-Silicon Validation Suite are based on the latest protocol standards (NVMe 1.2) from www.nvme.org. These are available from elnfochips for licensing with support and related services.

#### **NVMe Services**

elnfochips offers industry leading expertise on NVMe for flash based SSD storage products. This includes design, verification and system validation for ASIC and FPGA. Customers can accelerate product design schedule for RnD teams while reducing product and performance risks with proven solutions and services.

# **NVMe Validation Suite**

eInfochips NVMe Post-Silicon Validation Suite enables test scenarios that are defined by UNH-IOL (University of New Hampshire - Interoperability Lab) for performance and interoperability. It also covers other test scenarios for greater confidence on the product design and performance. It supports Windows and Linux OS.

#### **NVMe Verification IP**

elnfochips NVMe VIP is interoperable with other third party VIPs like PCle or SATA for a modular and comprehensive verification environment. This VIP is fully compliant to UVM, OVM, VMM and SystemVerilog.

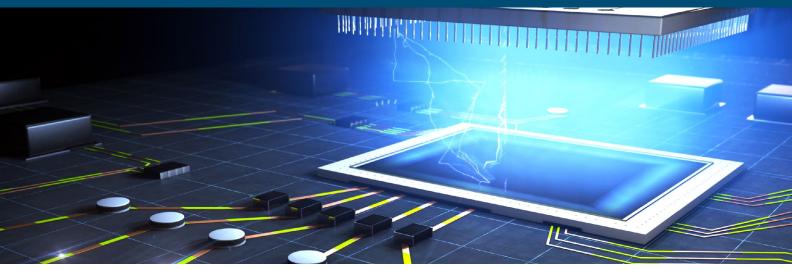
**Verification IP** 

**Validation Test Suite** 

**Customization Services** 

**Validation Services** 

**Integration Services** 

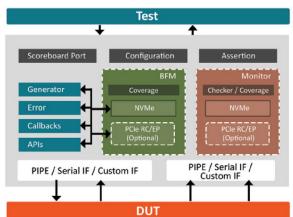


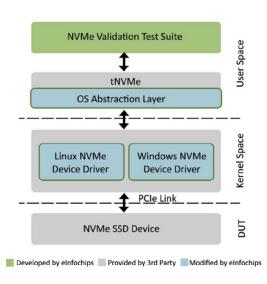
#### **NVMe VIP:**

- NVMe 1.2 Compliance
- User configurable Admin/IO queue size and configuration Admin commands for IO queues and NVM read/write, reset, abort, identify, get and set features
- Supports PRP and PRP List
- All interrupt reporting: pin-based, single message MSI, multiple messages MSI, MSI-X
- Exhaustive checkers
- Exhaustive functional coverage
- Hook-ups for score boarding and additional processing
- Bandwidth calculator per direction per component
- Works with other PCle VIP and custom BFM/IF

### **NVMe Validation Test Suite**

- System level test scenarios not covered by UNH-IOL
- Create I/O Submission queue without creating associated I/O
- Completion queue
- Same Command ID for two commands in a Submission queue
- Invalid SGL Segment location
- Common OS abstraction layer test suite for Linux and Windows OS
- Enhanced tNVMe as per test scenarios requirements
- QEMU based NVMe software model





# **eInfochips Semiconductor Services**



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