

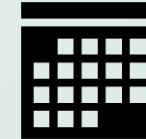
# CXL-Based Smart Network Controller for Memory SOC

- **SOC level :**
  - **Verification of primary external interfaces: DDR4/DDR5, PCIe, CXL**
  - **Verification of external interfaces: JTAG, I3C, QSPI, UART, GPIO**
  - **Formal verification for connectivity**
  - **Gate level simulations (zero delay, min and max corners) and Xprop**
  - **Power aware verification**
  - **SOC feature detailed test plan and test plan for each subsystem**
  - **UVM Based constrained random verification environment**
  - **Sign-off through functional coverage, regression pass rate**
- **Subsystem :**
  - **PCIe (32 lanes), CXL Controller Block, Performance Resource Director, System Level Cache, DDR Memory Block, Security Block**
  - **SOC with stub based subsystem verification.**

**Provides the ability to expand or pool DDR memory, PCIe/CXL storage/memory**  
**Connect to numerous host servers with high-bandwidth and low-latency**  
**High speed peripherals like USB, NAND**



**2 DV Leads**  
**16 Engineers**



**12 months**



**ODC with ownership**  
**of deliverables**