Case Study

TVS provides DFT Solution for Network SoC

Background
The customer serves customers across the spectrum of electronics applications with innovative semiconductor solutions by leveraging its vast array of technologies, design expertise and manufacturing strength.

When the customer urgently needed a team of engineers for DFT implementation and execution of its network SoC, they turned to TVS for help. TVS was chosen as the preferred vendor on the basis of its track record in executing managed services programs.

The TVS Solution
TVS initially analysed the design and estimated the effort for DFT implementation of the SOC. As part of this program, TVS also had to execute DFT DRC for Scan and implement compression. The stuck-at-coverage target for the SoC was an aggressive 99.8%.

TVS implemented a unified and modular testbench framework to cater to USB-PHY, PCIE-PHY and DDR PHY testing. The test environment was developed to test analog modules like PLLs, temperature sensors etc. The same environment could be reused to create vectors for tester also. TVS used a blended model for project execution wherein the team structure provided flexibility for both off-shore mentoring and onsite support.

By providing DFT specialists for the duration of the project, TVS reduced customer overheads involved in hiring expensive fulltime DFT resources. The TVS DFT strategy reduced event based vector to cycle based vector conversion effort to nil. TVS’ competitive pricing for the framework also enabled customer reduce overall development costs.