

BIST (Built-In Self Test) Memory by Using VERILOG

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Abstract: Built-In Self-Test (BIST) is a technique that allows a set up to check itself for any error on its own. BIST is a screening mechanism that places the testing functions physically with the circuit applications where system reliability is predominant, and “failure is not an option.” The decision to execute a critical mission must be made only if the complete system is running without any error. BIST structures generate pseudo random combinations and output results for an exclusive circuit under test are compared. BIST can be implemented on entire designs, design blocks or structures within design blocks. Memory is a complex architecture (fabrication wise) and used in a large number of applications. BIST is basically used to help in the testing of memory with the help of a few extra pins. In fact, while testing a memory using BIST, applying a simple clock signal along with a few pins helps test the entire memory IC. The proposed BIST enabled RAM is designed using Verilog

Keywords: Built-In Self Test

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