

COE 545, Term 992

Digital System Testing

List of Proposed Projects

1. BIST for delay fault testing.
2. Test vector compression and compaction techniques for deterministic testing of Combinational and Sequential circuits.
3. Test pattern generation and fault simulation for path delay faults.
4. High-level testability analysis and design for testability.
5. High-level automatic test pattern generation.
6. Core testing strategies and challenges.
7. Iddq testing.
8. Synthesis of testable Combinational and Sequential circuits.
9. Testing and design for testability for asynchronous sequential circuits.
10. Board-level testing techniques.
11. Memory BIST techniques.
12. Test pattern generation and fault simulation for bridging faults.
13. Fault diagnosis in Combinational and Sequential circuits.
14. Microprocessor testing techniques.