

Built-In Self-Test of Configurable Cores in SoCs Using Embedded Processor Dynamic Reconfiguration

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Abstract –*Built-In Self-Test (BIST) provides an effective way to test configurable cores in System-on-Chip (SoC) implementations. We present a case study of the use of dynamic reconfiguration from an embedded processor core to implement BIST for the programmable logic and routing resources in configurable cores in commercially available SoCs. Experimental results from actual implementations include speed-up and memory savings obtained and compared to traditional BIST approaches for configurable cores.*¹

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