In this paper, the author proposes an optimal management for system on chip (SoC) memory by using the reserved memory components and solving the covering fault problem. This method will enable to realize many services, such as SoC diagnosis with given resolution of fault location, real-time functional testing of input patterns and analysis of output reactions.
Electronics and Electrical Engineering 90 (2009).


13. IEEE 1500 Web Site, available online at: http://grouper.ieee.org/groups/1500/.


**Index Terms**

Computer Science  
Circuits and Systems

**Keywords**

Diagnosis, system on chip, infrastructure intellectual property, fault, built in repair analysis, built in self repair.