Autonomous-Decentralized Low-power System LSI Using Self-Instructing Predictive Shutdown Method

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It is the important subject of system LSI to materialize low power consumption and high performance LSI in a short design period.   This paper proposes an autonomous-decentralized system LSI where each block has a predictive shutdown function using a MOS power switch controlled by a method based on self-instruction.   It is clear that it is able to reduce 80% of power consumption by this method and the DC leakage current in an active state.