CHENNAI INSTITUTE OF TECHNOLOGY
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Soft-Error-Aware SRAM With Multinode Upset Tolerance for Aerospace Applications

Name of the Participant: Suryaprakash TSS

Project Guide: Dr.R.M Bommi

Institute: Coimbatore Institute of Technology (CIT)

University: Anna University

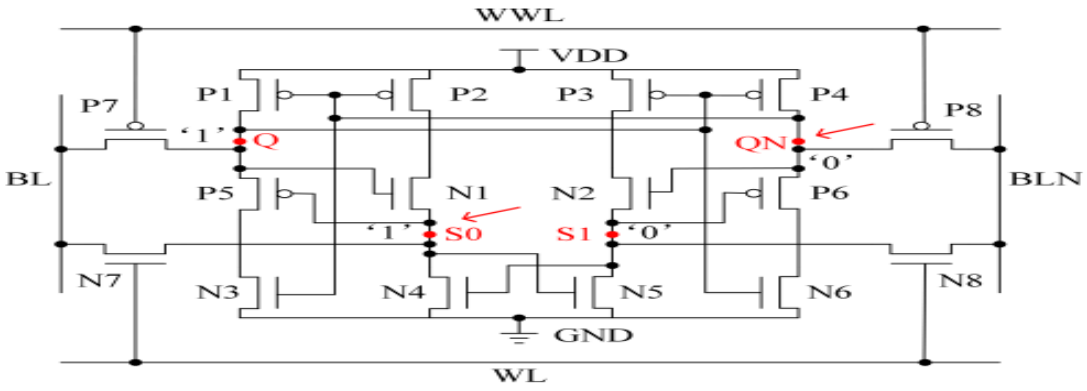
Problem Statement:

Develop a soft-error-aware SRAM design that can tolerate multinode upsets to ensure reliable memory performance in aerospace applications where radiation-induced errors are prevalent.

Theory/Description:

This study presents the design and simulation of a soft-error-aware SRAM with multinode upset tolerance for aerospace applications. By incorporating advanced error correction codes (ECCs) and redundancy, the design detects and corrects multinode errors efficiently. Simulations validate its high reliability and low power consumption, ensuring stable operation in radiation-prone environments

Circuit Diagram:



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