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(57) Abstract :
The present disclosure introduces a glitch detector circuit 100 designed to detect and mitigate both positive and negative glitches in electronic systems. The circuit incorporates oscilloscope 102 for real-time visualization and validation of detected glitches and power supply module 104 for stable voltage delivery. A glitch generation module 200, comprising mosfet-based circuit 202, passive components 204, and input signal voltage source 206, simulates precise positive and negative glitches for robust testing. The system also features a glitch detection module 300, which includes op-amp comparator 302 to monitor power rail signals, comparator 304 to classify glitches as positive or negative, and reference voltage source 306 for stable benchmark voltage comparison. Reference Fig 1

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