

Monte Carlo simulation of nuclear reaction induced soft error rate in modern commercial circuits

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Abstract

© 2018 IEEE. A procedure of space proton-induced Soft Error Rate calculation based on heavy ion testing data is proposed. The approach relies on Geant4-assisted Monte Carlo simulation of the secondary particle LET spectra produced by proton interactions.

<http://dx.doi.org/10.1109/MWENT.2018.8337204>

Keywords

Cross section, LET spectrum, modeling, protons, single event upsets, soft error rate

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