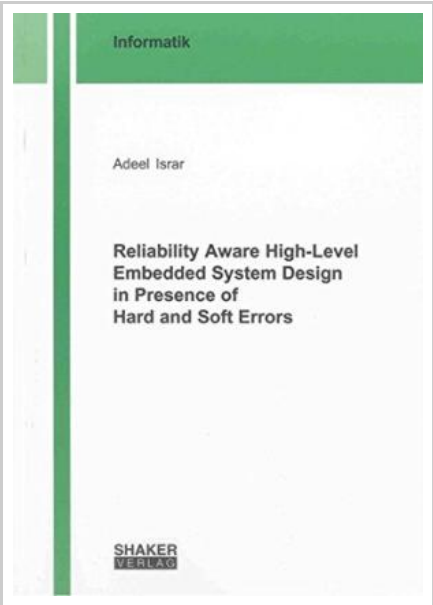

Reliability Aware High-Level Embedded System Design in presence of Hard and Soft Errors

By Adeel Israr

Shaker Verlag Jun 2012, 2012. Buch. Condition: Neu. Neuware - Following the prediction of Moore's Law the exponentially shrinking feature size has greatly increased both the processing as well as the memory resources. However, the amount of charge required to change the output of a digital circuit is becoming smaller, thereby making them more vulnerable to soft errors. In addition, the various layers of silicon in the transistor and the metal connecting them can now be measured in terms of the number of atoms, and therefore are greatly vulnerable to high temperatures and voltages. This has caused a decline in the hard errors in digital circuits due to the improvement in technology to be halted. Therefore, modeling reliability of digital devices both the soft as well as the hard errors occurring in the digital resources must be considered. In addition, the digital processing resources should be considered as fail non-silent. Nevertheless, the increase in processing and memory resources is being used to improve the present digital systems as well as to construct ones that are more complex. The use of digital resources as embedded systems are becoming more pervasive in diverse application domains such as automotive, avionic, medical, control, as...

Reviews

This is the finest book i have got study till now. It usually does not price a lot of. I found out this publication from my i and dad encouraged this book to understand.

-- ***Jamil Collins***

Absolutely among the best book I have possibly go through. I have go through and that i am certain that i am going to gonna read through once again again in the future. I am just delighted to tell you that this is basically the finest book i have got go through within my personal existence and could be he finest book for ever.

-- ***Brian Bauch***