


[DOWNLOAD](#)


On The Design of Low Power CMOS (SA-ADCs) for Biomedical Applications

By Nazzal, Tasnim / Mahmoud, Soliman

Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | This book presents three different CMOS realizations of an 8-bit successive approximation analog-to-digital converter (SA-ADC) for biomedical applications. The architecture of the proposed SA-ADCs consist of a sample and hold, a comparator, a successive approximation register (SAR) controller, and an 8-bit digital-to-analog converter. Each building block of the SA-ADC has been reviewed with different architectures in a unique chapter including the simulation results for each architecture for different frequency applications. The proposed SA-ADCs are presented, compared and simulated using 90nm CMOS technology file on LT-spice-IV. In each realization, the SAR controller is implemented using D-flip flop or hybrid latch-flip flop. The best proposed SA-ADC realization has been obtained from the different proposed realizations. According to the simulation results, the best proposed SA-ADC consumes 200nW from 1V power supply and 88.76 nW from 0.85V supply voltage without additional analog circuits. Layout and post layout have been extracted with a real recorded EEG signal for the best proposed SA-ADC. Static and Dynamic performance matrices were obtained for the proposed SA-ADCs. | Format: Paperback | Language/Sprache: english | 140 pp.



[READ ONLINE](#)

[8.52 MB]

Reviews

This ebook is worth purchasing. It is written in straightforward words and not hard to understand. You will not feel monotony at any time of your respective time (that's what catalogs are for about in the event you ask me).

-- Eileen Kling I

These sorts of pdf is the greatest ebook offered. We have studied and that I am sure that I will go to study once more once more in the future. It has been printed in a remarkably simple way and it is only after I finished reading through this pdf through which in fact transformed me, affect the way I believe.

-- Mr. Dashawn Block MD