

## On the Design of a Highly Linear CMOS Programmable Transconductor

By Mohamed Elamien

LAP Lambert Academic Publishing Aug 2017, 2017. Taschenbuch. Condition: Neu. Neuware - This book presents a novel highly linear CMOS digitally programmable operational transconductor amplifier (DPOTA) circuit. Two versions of the proposed DPOTA are optimized. The first version is optimized for high-frequency operation with current division networks (CDNs) designated to 3-bit control code words. On the other hand, the second version is optimized for low-frequency operation with 4-bit control code words. Moreover, this book presents two complete systems based on the proposed DPOTA. The first system is the multi-standard receiver analog baseband chain which provides a variable gain from 0 dB to 70 dB, and in-band IIP3 of 21.9 dBm. The second system is the analog front end for the biopotential signals detection systems. Finally, A novel 100 Hz-12 MHz low-pass filter based on both versions of the proposed DPOTA is also proposed. This low-pass filter is suitable for low, medium and high-frequency applications. 152 pp. Englisch.



## Reviews

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Definitely one of the best book I actually have ever go through. Sure, it can be perform, nonetheless an amazing and interesting literature. I found out this pdf from my dad and i suggested this book to discover. -- Ms. Chanel Streich

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