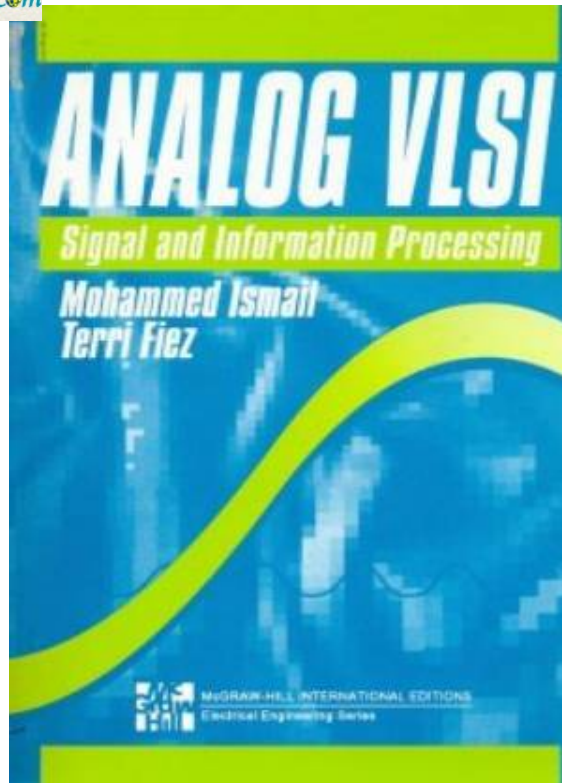




ANALOG VLSI SIGNAL AND INFORMATION PROCESSING

MOHAMMAD ISMAIL
ET
TERRI FEIZ



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| TOP | | |

Each chapter provides basic This book presents the first comprehensive treatment of analog VLSI design for signal and information processing applications by blending the basic design concepts of both traditional and contemporary analog VLSI. Outstanding features of the text include coverage of the latest in analog VLSI putting students and practicing engineers on the cutting edge of this exciting field; thorough coverage of topics unique to this book including low-voltage, BiCMOS, current-mode and neural information processing, oversampled data converters, statistical design, analog testability, analog CAD, analog layout, and analog VLSI interconnects; avoids lengthy coverage of. Abstract. Analog VLSI signal processing is most effective when precision is not required, and is therefore an ideal solution for the implementation of perception systems. The possibility to choose the physical variable that represents each signal allows all the features of the transistor to be exploited opportunistically to implement very dense time- and amplitude-continuous processing cells. This paper describes a simple model that captures all the essential features of the transistor.

Analog signal processing is a type of signal processing conducted on continuous analog signals by some analog means (as opposed to the discrete digital signal processing where the signal processing is carried out by a digital process). "Analog" indicates something that is mathematically represented as a set of continuous values. This differs from "digital" which uses a series of discrete quantities to represent signal. Analog values are typically represented as a voltage, electric current, or electric field.

2. "Analog VLSI Signal and Information Processing" by Mohammed Ismail and Terri Faiz.

3. "Analysis and Design of Analog Integrated Circuits" by Paul R Gray and R G Meyer.

Book Review: This book covers the latest advancements made in the field of Integrated circuits. The various topics included in the book are MOS transistors and bipolar physics, operational amplifiers design and usage, fabrication of integrated circuits and many more topics in the field of IC principles. The book also extensively covers CMOS circuit design, bipolar analog integrated circuit design with various examples of cascade