

MICRO-720

Techniques for Handling Noise and Variability in Analog Circuits

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Cursus	Sem.	Type
Microsystems and Microelectronics		Obl.

Language of teaching	English
Credits	2
Session	
Exam	Written
Workload	60h
Hours	33
Courses	33
Number of positions	

Frequency

Every year

Remark

January 20 to 24, 2020

Summary

Fundamentals of Noise in Electronic Devices, Random Mismatch Origins, Noise Analysis in Continuous-Time and Sampled-Data Circuits, Analyzing Mismatch and Yield in Analog Circuits, Noise Cancellation Techniques, Noise Sampling in Switched Capacitor Filters, Offset, CMRR and PSRR.

Content

1. Fundamentals of Noise in Electronic Devices
2. Random Mismatch Origins
3. Noise Analysis in Continuous-Time and Sampled-Data Circuits
4. Analyzing Mismatch and Yield in Analog Circuits
5. Noise Cancellation Techniques
6. Noise Sampling in Switched Capacitor Filters
7. Offset, CMRR and PSRR.

Keywords

Analog Circuit, Noise, Electronic Devices, Continuous-Time, Sampled-Data, Switched Capacitor Filter, CMRR and PSRR.

Learning Prerequisites**Required courses**

Analog circuits design I & II

Resources**Websites**

- <http://mead.ch/MEADNEW/techniques-for-handling-noise-and-variability-in-analog-circuits/>