

Curriculum Vitae

First Name: Nizar

Last Name: Khitouni

Date of birth: September 12, 1973 in Sfax

Marital Status: Married (3kids)

Nationality: Tunisian

Mobile phone number: 0021699256635

Email: nizar.khitouni@isbs.usf.tn, nizar.khitouni@enis.rnu.tn

Language: Arabic (mother tongue), French (academic language), English (very common)

Curriculum and Degrees:

PhD thesis in electrical engineering electronic option

April 2011, National Engineering School of Sfax (Very Honorable).

D.E.A in Electronics

January 2002, National Engineering School of Sfax

Diploma in Electrical Engineering Microelectronics Option

June 1999 National School of Engineering of Sfax

Work experiences

DETACHMENT

INSTITUTION: **ISIMG** (Higher Institute of Multimedia of Gabes)

PERIOD: **15/09/2004 --15/09/2005.**

ASSISTANT

INSTITUTION: **ISBS** (National Engineering School of Gabes)

PERIOD: 15/09/2005 --15/06/2009

ASSISTANT

INSTITUTION: **ISBS** (Higher Institute of Biotechnology of Sfax)

PERIOD: 15/09/2010 --15/06/2011

ASSISTANT PROFESSOR

INSTITUTION: **ISBS** (Higher Institute of Biotechnology of Sfax)

PERIOD: Since June 2011

Professional Stage:

- July 1997 in Carthago Ceramic (1 month).
- July 1998 in ERE (1 month).

Professional Activities:

- Supervision and co-supervision of graduation projects.
- Education
- Co-supervision of doctoral theses
- Supervision of professional master
- Member of the scientific council
- Participate in organizing scientific seminars
- Reviewer in journal Biomedical Signal Processing and Control

Thesis memories:

Contribution to Design of New Structures for Analog Digital Conversions

Summary: The evolution microelectronics, bringing an increasing number of electronic components on silicon chips, is increasing dramatically. Indeed, the transistor size was a few microns in the 80s, it becomes a fraction of a micron at the end of last century. Currently one-hundredth of a micron is becoming the norm in the microelectronics industry. The AD and DA converters are presented in all areas related to signal processing. Sigma-Delta Conversion is currently a widely used technique in the field of analog-digital conversion. The work described in this paper is to contribute to the design of new structure of analog digital sigma delta using current engineering switched 0.35u CMOS technology. This conversion architecture consists of two integrators, a quantizer, a digital analog converter and a digital filter. We conducted a study and design of various sub analog circuit and mixed up the conversion circuit. The simulation results showed that the delta-sigma ADC consumes approximately 50mW with a supply voltage of 2.5V. The surface of the chip da occupies less than 6mm²

Project of habilitation

Design and synthesis for analog circuit: Application Modulator sigma delta.

Education:

Analog/Digital Electronics, Transmission Electronics, Computer Architecture, Microcontroller Programming, Arduino Card Programming, Embedded Systems Programming, Optoelectronics, Transmission Electronics, Interfacing Technique, electric security, DSP and FPGA, sensors, CAO.

Competency:

- Simulation language (Cadence, Tanner, PSpice, VHDL, Eagle, Maple, Matlab etc ...)
- Programming languages (C ++, arduino ...).
- Computer (Windows 7.8.9.10.11, Linux, Microsoft Office, etc ...).

Publication:

[J1] Slim Tahri, **Nizar Khitouni**, Med Salim Bouhlel, New 2-2 Sigma-Delta Modulators for Different Applications, **International Journal of Recent Technology and Engineering** (IJRTE) novembre 2021, 4(10):269-272

[J2] Azzouni Soumaya, **Nizar Khitouni**, Med salim Bouhlel "Sigma Delta modulator structure for an RF reception chain for a LTE network "**Australian Journal of Basic and Applied Sciences**, July 20 18.

[J3] **Nizar Khitouni**, Mohamed Masmoudi " New Decimation Filter Design for A / D Sigma Delta Converter "**Journal of Research in Engineering & Technology (IMPACT: JRET)**Vol. 2, Issue 1, Jun 2016, 25-34

[J4] **Nizar Khitouni**, Mohamed Masmoudi "Design of 2.5V second order Sigma-Delta Modulator using regulated cascode S2I memory cell "**International Journal of Electronics**, Vol. 94, No. 7, July 2007, pp: 725-741.

[Pub1] Slim Tahri, **Nizar Khitouni**, Med Salim Bouhlel, " A Sigma Delta modulator for thermo-fluid system, **6th International Conference on Smart Materials and Spectroscopy (SMS'2023)**, which will be organized from 5 to 7 July 2023, in Hotel Delphin El Habib, Monastir (Tunisia).

[Pub2] Azzouni Soumaya, **Nizar Khitouni**, Med salim Bouhlel, "A New Structure of Self Calibrated ADC Converter" **STA'2019**, pp 194-199, Hammamet, Tunisia, 27-30 March 2019.

[Pub3] Azzouni Soumaya, **Nizar Khitouni**, Med salim Bouhlel, " Excess loop delay compensation techniques in continuous-time modulators" **IC_ASET'2019 STA'2019**, Hammamet, Tunisia, 27-30 avril 2019.

[Pub4] **Nizar Khitouni**, Sonia Boujelben Mohamed Masmoudi "Sigma Delta A / D Converter Architecture using a Current Controlled Oscillator " **ICECS 2005, Gammarth, Tunisia**, 11-14 December 2005.

[Pub5] **Nizar Khitouni**, Sonia Boujelben Mohamed Masmoudi "Switched Current Integrator for Sigma Delta modulator Second order" **ICM'2004**, pp 595-599, Tunisia, Tunisia 6-8 December 2004.

[Pub6] Hanen Boussetta, **Nizar Khitouni**, Mohamed Masmoudi "Structure improved switched current memory cell" **Fifth scientific days of young researchers in Electrical Engineering and Computer Science "** GEI'2005, pp 53-56, Sousse, Tunis 24-27 March 2004.

[Pub7] Nizar Khitouni, Sonia Boujelben Mohamed Masmoudi "Design and modeling errors in the regular S2I cascode switched current memory cell to" **SCS'2004, pp 123-127, Monastir, Tunisia, 18-21 March 2004.**

[Pub8] Nizar Khitouni, Sonia Boujelben Mohamed Masmoudi "Behavioral Study of second order Sigma-Delta Modulator using regulated cascode technical S2I" **SCS'2004, pp 119-122, Monastir, Tunisia, 18-21 March 2004.**

[Pub9] Nizar Khitouni ,Mohamed Masmoudi "Integration of a new silicon architecture converter A / D multi-ramps CMOS technology." **GEI'2003, pp 99-104, Sousse, Tunisia, 15-18 March 2003.**

[Pub10] Raja Maghrebi, Naoufel Gueddah, **Nizar Khitouni** ,Mohamed Masmoudi, "A New Structure of Self Calibrated ADC Converter" **Smart Systems and Devices, pp 194-199, Hammamet, Tunisia, 27-30 March 2001.**