Curriculum Vitae

Sarallah Alizadeh Arand

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EDUCATION

2008-2011   Sharif University of Technology, Tehran, Iran,
M.Sc. in Electrical Engineering (Microelectronic Circuits)
Thesis: ***"Design & Implementation of a Programmable VCO for DVB-H Application in TSMC 0.18um Technology"***
Supervisor: Dr. *Ali Medi.* Email: medi@sharif.edu

2003-2007   Sharif University of Technology, Tehran, Iran,
B.Sc. in Electrical Engineering (Electronics)
Thesis: ***"Indoor Infrared and IRDA Protocol"***
Supervisor: Dr. *F. Behnia.* Email: behnia@sharif.edu

RESEARCH INTERESTS

- Analog/Mixed-Signal Design
- Analog/Mixed-Signal/RF IC Design
- RF Design
- Digital Design
- Wireless Transceiver Architecture
- Baseband Design

RESEARCH EXPERIENCES

- *"Physical Limits To Technology Scaling"*
  Supervisor: Prof. Sarvari, Sharif University of Technology (2009)
- *"Flow Sensors"*
  Supervisor: Prof. Rashidian, Sharif University of Technology (2008)
- *"Image Sensors and Digital Cameras"*
  Supervisor: Prof. Rashidian, Sharif University of Technology (2010)
- *"Indoor Infrared"*
  Supervisor: Prof. Behnia, Sharif University of Technology (2007)
- *"GSM and Wimax Systems"*
  Supervisor: Saeideh Parsayee Fard, Telecommunication Company of Iran (TCI)
- *"Gigabit Ethernet"*
  Supervisor: Prof. Hossein Kalaj, Sharif University of Technology (2007)
- *"Pressure Sensors"*
  Supervisor: Prof. Varahram, Sharif University of Technology (2005)

ACCOMPLISHED PROJECTS

- Design of a *"UHF frequency RF Board for testing an RFIC"*,(2012)
- Design of a *"Control Board to Command an RFIC"*,(2012)
- Having a UHF Band VCO RFIC Tape out, (2011)
- Design of a *"High-speed and Low-Voltage op-amp with $T_{settling}$(to 1%) ≤ 10ns and 5mW power dissipation in CMOS 0.18um with 1.8V Power Supply"*, (2008)
- Design of a *"3-5 GHz MESFET VCO with 10dB output Power "*, (2008)
- Design of an *"8 Bit ∑ Δ A/D with BW=100KHz in CMOS 0.18um with 1.8V Power Supply "*, (2009)
- Design of a *"Continuous time Current Mode Filter in CMOS 0.18um with 1.8V Power Supply "*, (2009)
- Design of a *"Switched capacitor Filter with f_{ck} = 100KHz and f_{-3dB} = 10KHz in CMOS 0.18um "*, (2009)
- Design of a *"Switched capacitor Biquad Filter Q = 10 and f_0 =50KHz in CMOS 0.18um "*, (2009)
- Design of a *"Switch with Clock Boosting Circuit for Low-Voltage Circuits with Minimum Stress on MOS Transistors"*, (2009)
- Design of *a "Band-pass 2.5 GHz gm-c Filter in 0.18um CMOS"*,(2008)
- Design & Implementation of *"A DC Motor Driver "*, (2007)
- Design & Implementation of *"A 1KHz NCO using AVR"*, (2006)
- Design of *"A Secure communication link with 8051"* (2005)

SOFTWARE SKILLS

- **CAD Tools:** Cadence, ADS, HSpice, MW Office, Quartus, Protel, Modelsim, LEDIT, Eclipse, Code Vision, Max Plus 2, ORCAD, Proteous, Wincupl
- **Programming Languages:** JAVA, MATLAB, C, VHDL, Assembly

PAPER PREPARED FOR SUBMISSION

- *Sarallah Alizadeh Arand; Ali Med; Seyed Mojtaba Atarodi, "A Programmable DVB-H VCO with Multiple Noise Filtering", Submitted to EEE Transactions on Circuits and Systems I.*

Abstract:

This paper proposes a novel UHF LC VCO for DVB-H applications with multiple noise filtering, which is implemented in a 0.18μm TSMC CMOS process. A new filtering technique will be introduced to reduce phase noise in a wide tuning range. This multiple noise filtering can reduce phase noise considerably compared to other reported VCOs. The measured single-sided phase noise is –140 dBc/Hz at a 1MHz offset from an 800 MHz carrier when the VCO core is drawing 3.8 mA from a 1.8 V supply.

HONORS

- Ranked 33th out of 400,000 participants in Iran's University Entrance Exam (2003)
- Ranked 3rd in Electronics among more than 13,500 participants in Electrical Engineering M.Sc. Entrance Exam, (2008)

TEACHING EXPERIENCES

- Teaching Assistant, "*Analog Circuits*", offered by Prof. *R. Sarvari*, (2010)
- Teaching Assistant, "*Analog Electronics*", offered by Prof. *A. Fotowat Ahmadi*, (2010)

WORKING EXPERIENCES

- Telecommunication Company of Iran (TCI), (Summer 2007)
- Sharif Satellite, (Spring 2010)

EXTRACURRICULAR ACTIVITIES

- Literature, History, Listening to Traditional Music, Football, Swimming

REFERENCES:

- Dr. Ali Medi, Assistant Professor, ICDL Lab, Electrical Engineering School, Sharif University of Technology, Email: medi@sharif.edu
- Dr. Seyed Mojtaba Atarodi, Associate Professor, ICDL Lab, Electrical Engineering School, Sharif University of Technology, Email: atarodi@sharif.edu
- Dr. Ali Fotowat Ahmady, Associate Professor, Electrical Engineering School, Sharif University of Technology, Email: afotowat@sharif.edu
- Dr. Fereidoon Behnia, Assistant Professor, Electrical Engineering School, Sharif University of Technology, Email: behnia@sharif.edu
- Dr. Bijan Rashidian, Professor, Electrical Engineering School, Sharif University of Technology, Email: rashidia@sharif.edu
- Dr. Seyed Mohamad Hossein Alavi, Associate Professor, Electrical Engineering School, Sharif University of Technology, Email: malavi@sharif.edu

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