

CURRICULUM VITAE

1. **Name Surname:** Burak KELLECI

2. **Date of Birth:** 18.07.1975

3. **Department:** Electrical and Electronics Engineering

4. **Education:**

Degree	Department	University	Year
Bachelor	Electronics and Communication Eng.	Istanbul Technical University	1998
Master	Electronics and Communication Eng.	Istanbul Technical University	2001
Ph.D.	Electrical and Computer Eng.	Texas A&M University, College Station	2007

5. **Academic Titles:**

Title	Discipline	University	Year
Assistant Professor	Electrical and Electronics Eng.	OKAN University	2010
Associate Professor			
Full Professor			

6. **Supervised Master and Ph.D. Thesis**

6.1 **Title of Master Thesis**

6.2 **Dissertation Title:**

7) **Publications**

7.1 **International Refereed Journal Publications**

- **B. Kelleci**, “*Pulse Suppression Technique for Mitigating Digital Clock Noise*”, *Circuits, Systems, and Signal Processing*, Vol. 33, 1325-1336, 2014
- L. Risbo, R. Hezar, **B. Kelleci**, H. Kiper, M. Fares, “*Digital Approaches to ISI-Mitigation in High-Resolution Oversampled Multi-Level D/A Converters*”, *IEEE Journal of Solid-State Circuits*, Vol. 46, December 2011
- **B. Kelleci**, T. W. Fischer, A. I. Karsilayan, K. Shi, E. Serpedin, “*Adaptive Narrowband Interference Suppression in Multi-Band OFDM Receivers*”, *Circuits, Systems and Signal Processing Journal*, Birkhäuser Boston, June 2008
- T. W. Fischer, **B. Kelleci**, K. Shi; A. I. Karsilayan, E. Serpedin, “*An Analog Approach to Suppressing In-Band Narrow-Band Interference in UWB Receivers*”, *IEEE Transactions on Circuits and Systems I: Regular Papers*, Vol. 54, May 2007

- K. Shi, Y. Zhou; **B. Kelleci**, T. W. Fischer, E. Serpedin, A. I. Karsilayan, “Impacts of Narrowband Interference on OFDM-UWB Receivers: Analysis and Mitigation”, *IEEE Transactions on Signal Processing*, Vol. 55, March 2007
- **B. Kelleci**, O. Palamutcuoglu, “Pre-Power Amplifier for 5.2-5.8 GHz Band”, *FACTA Universitatis, Series: Electronic & Energetics*, Vol. 15, No.1, pp: 103-109, April 2002.

7.2 International Conference Presentations & Proceedings

- **B. Kelleci**, “Jittered Clock Generation”, *TI Analog EDA Symposium 2008*, May 2008
- **B. Kelleci**, E. Sanchez-Sinencio, A. I. Karsilayan, “THD+Noise Estimation in Class-D Amplifiers”, *IEEE International Symposium on Circuits and Systems (ISCAS) 2007*, May 2007
- **B. Kelleci**, A. I. Karsilayan, “Low-Voltage Temperature-Independent Current Reference with no External Components”, *IEEE International Symposium on Circuits and Systems (ISCAS) 2007*, May 2007
- **B. Kelleci**, T. W. Fischer, K. Shi, Y. Zhou, A. I. Karsilayan, E. Serpedin, “Narrowband Interference Suppression in Multi-Band OFDM Ultra Wideband Communication Systems: A Mixed-Mode Approach”, *12th - Signal Processing Education Workshop*, Sept. 2006
- K. Shi, Y. Zhou, **B. Kelleci**, T.W. Fischer, E. Serpedin, A. I. Karsilayan, “Impact of Narrowband Interference on Multi-Band OFDM Ultra Wideband Communication Systems”, *12th - Signal Processing Education Workshop*, Sept. 2006
- K. Shi, **B. Kelleci**, T. W. Fisher, Y. Zhou, E. Serpedin, A. I. Karsilayan, “On the Design of Robust Multiband OFDM Ultra-Wideband Receivers”, *Texas Wireless Symposium 2005*, October 2005
- K. Shi, E. Serpedin, **B. Kelleci**, T. W. Fisher, A. I. Karsilayan, “The Impact of Narrowband Interference on OFDM-UWB Receivers”, *3rd International Conference on Computing, Communications and Control Technologies*, July 2005
- **B. Kelleci**, O. Palamutcuoglu, “Pre-Power Amplifier for 5.2-5.8GHz Band”, *23rd International Conference on Microelectronics*, May 2002

7.3 International Books / Chapters of Books

7.4 National Refereed Journal Publications

7.5 National Conference Presentations & Proceedings

- **B. Kelleci**, M. Öner, H. Başaran, “Hızlı Fourier Dönüşümünün FPGA uygulamasının SQNR Simülasyonu”, Eleco 2014
- **B. Kelleci**, O. Palamutcuogulları, “5.2GHz - 5.8GHz Bandı İçin Ön Güç Kuvvetlendiricisi”, URSI-Türkiye 2002

7.6 National Books / Chapters of Books

7.7 Other Publications

- C. G. Lin, **B. Kelleci**, H. Kiper, Y. Deng, "Receiver dynamically switching to pseudo differential mode for SOC spur reduction", under review in US Patent Office
- L. Risbo, R. Hezar, **B. Kelleci**, A. B. Josefsen, "A Method for Shaping Inter-Symbol-Interference (ISI) Errors in Audio Digital to Analog Converters", under review in US Patent Office

8. Projects

2010-Present **Okan University**

- "*Sonar Su Altı Akustik Sinyal İşleme Algoritmalarının Esnek IP Çekirdekler Olarak Gerçeklenmesi (SonarIP)*", TÜBİTAK Project, Consultant, 2013
- "*Güvenli Trafik için Araçlar Arası Haberleşme Teknolojileri*", TÜBİTAK Project, Consultant, 2010-2012

2006-2010 **Texas Instruments**

Dallas, Texas, USA

System Design and Integration Engineer

- *MEMS for mobile applications*: Worked on modeling and analysis of gyroscope and accelerometer for dead reckoning in mobile applications.
- *45nm FM Receiver*: Designed LNA, Mixer and RX Chain for FM Receiver in 45nm technology.
- *65nm Power Management of FM Receiver and Transmitter*: Responsible for power management system design and verification.
- *65nm FM Receiver and Transmitter*: Responsible system level design and verification of 65nm FM Receiver and transmitter which is targeted for mobile applications.
- *90nm FM Receiver*: Responsible system level design and verification of 90nm FM Receiver which is targeted for mobile applications. Worked also on releasing the design from prototype to mass-production. Analyzed effects of Psychoacoustic on FM Receiver and gave customer support for 90nm FM Receiver.
- *Next generation digital broadcast radio (DAB and HDRADIO)*: Worked on system level design, modeling and simulation of DAB and HDRADIO.

Summer 2004 **Conexant Systems**

San Diego, California, USA

Intern

- *High fidelity audio digital-to-analog converter* : Designed system-level and transistor-level switch-capacitor high fidelity delta-sigma DAC for audio applications

2002-2006 **Texas A&M University**

College Station, Texas, USA

Research Assistant in Analog & Mixed Signal Center

- *Ultra Wideband Transceiver Design*: Designed system-level 802.15 Multi-Band OFDM based UWB system. Designed the reference system for the transceiver and worked on the system integration.
- *Class-D Audio Amplifier*: Worked on the design of high efficiency and linear Class-D amplifier for portable applications.

2000-2001 **Alcatel Teletas RFIC Design Center**

Istanbul, Turkey

RFIC Design Engineer

- *RF Transceiver System*: Responsible for WLAN transceiver system design, and also responsible for transistor level transceiver simulation.
- *Pre-power Amplifier Design*: Designed, simulated and characterized of a Pre-Power Amplifier at 5.2GHz-5.8GHz band for Wireless LAN using SiGe Technology

- *Interconnect and Package Modeling Tool Implementation*: Determined the modeling needs for the related design area and get the management alignment on the project. Led all the technical relations with the subcontractor as a representative of the company during the design environments implementation phase.
- *LNA and Filter Design for VDSL Analog Front-end*: Designed, simulated and made the characterization of the anti-aliasing filter and LNA.
- *Cadence – Agilent Tools*: Responsible for Cadence - Agilent ADS Dynamic Link installation and maintenance.

1998-2000 **Istanbul Technical University, ETA Foundation**

Istanbul, Turkey

Design Engineer and System Administrator in ITU ETA Foundation

- *Mixed mode interface chip for ASELSAN*: Responsible for the design of the digital interface block, redesign of the analog driver and top-level layout preparation in a mixed mode interface chip for ASELSAN (Military Electronics Company) and for the installation and maintenance of the Made Design environment for the technology used in this project.
- *Feasibility analysis of digital communication system*: Analyzed the digital communication system for Alcatel
- *Digital Control Chip*: Responsible for testbench preparation, gate-level and post-P&R simulation of a 20K+ gate digital chip for NETAŞ (Joint Venture of Northern Telecom Ltd. with Turk Telekom).
- *Digital Chip*: Responsible for technology mapping, and testbench generation of a 3K+ gate digital chip for ALCATEL. Was also responsible for laboratory and field tests of FPGA prototype of the design. The design was sent to the mass production

9. Administrative Tasks:

Okan University, Engineering and Architecture Faculty - Vice Dean (2010 – 2011)

10. Academic/Professional Memberships:

- IEEE Member, 1996 – Present
- The Chamber of Electrical Engineers, 2009 - Present
- Otomotiv Teknoloji Platformu İcra Kurulu Üyesi, 2014 - Present

11. Awards:

- Scholarship, Department of Electrical Engineering, Texas A&M University, College Station, 2005
- Segers Fellowship, Texas A&M University, College Station, 2005
- Rocketchips Fellowship, Texas A&M University, College Station, 2005
- RF Power Amplifier Linearisation Techniques for Multichannel Communication Systems Certification, Davos, Switzerland, 2001
- Spectre RF Simulation Certification, 2001
- RFIC Design and Application Certification, Alcatel, Istanbul, Turkey, 2000