



IEEE KW Section



IEEE Solid-State Circuit Chapter Presentation

Low-Power Circuit Techniques for Wireless Communications

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Abstract:

Cellular Technology is a market of 600 millions headsets a year. Due to high volume, low cost and low power consumption the ICs design is facing many challenging issues. This talk will address the special design considerations for low power RF/analog circuits used in mobile headsets. There will be presented circuit techniques and the trade-offs with system specifications for RF/analog ICs used in Bluetooth, GSM/EDGE/CDMA and WEDGE-3G systems.

Florinel Balteanu (M'98) received the M.S. degree in electrical engineering from the Polytechnic Institute, Bucharest, Romania in 1983, and Ph.D. degree in electrical engineering from Transilvania University, Brasov, Romania in 1995. From 1983 to 1992 he was with the Institute of Nuclear Research, Pitesti, Romania working on electronic instrumentation for nuclear power reactors. In 1993 he joined the Department of Electronics, University of Pitesti, Romania as Assistant Professor doing research in analog circuits. From 1992 to 1993 he was a Fulbright Visiting Scholar at Center for Reliable Computing at Stanford University, Stanford, CA. In 1996, he joined Philips Semiconductor as Senior ASIC Designer, Ottawa, ON, Canada, a company later acquired by Conexant Systems (now known as Skyworks Solutions). He is presently a Senior Principal Engineer in Skyworks, Ottawa Design Center. His work has focused on the design of radio circuits for GPS receivers, Bluetooth transceivers, and GSM/CDMA cellular radio transceivers. He holds 5 U.S. patents with several more pending.

Invited by S. Ardalan