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HIGH LINEARITY OSCILLATOR ARCHITECTURES BAND-PASS BASED AND THEIR EVOLULTION

by

Dr. Edgar Sánchez-Sinencio TI J. Kilby Professor and Director of the Analog Mixed-Signal Center

Abstract: This presentation discusses how to design a highly linear oscillators using multiphase signals to arbitrary cancel or enhance harmonics. Experimental results and theory in agreement are presented.

Edgar Sánchez-Sinencio (F'92) was born in Mexico City, Mexico. He received the degree in communications and electronic engineering (Professional degree) from the National Polytechnic Institute of Mexico, Mexico City, the M.S.E.E. degree from Stanford University, CA, and the Ph.D. degree from the University of Illinois at Champaign-Urbana, in 1966, 1970, and 1973, respectively.

He is currently the TI J Kilby Chair Professor and Director of the Analog and Mixed-Signal Center at Texas A&M University. He was the General Chairman of the 1983 26th Midwest Symposium on Circuits and Systems. He was an Associate Editor for IEEE Trans. on Circuits and Systems, (1985-1987), and an Associate Editor for the IEEE Trans. on Neural Networks. He is the former Editor-in-Chief of the Transactions on Circuits and Systems II. He is co-author of the book Switched Capacitor Circuits (Van Nostrand-Reinhold 1984), and co-editor of the book "Low Voltage/Low-Power Integrated Circuits and Systems (IEEE Press 1999). In November 1995 he was awarded an Honoris Causa Doctorate by the National Institute for Astrophysics, Optics and Electronics, Mexico. The first honorary degree awarded for Microelectronic Circuit Design contributions. He is co-recipient of the 1995 Guillemin-Cauer for his work on Cellular Networks. He is a former IEEE CAS Vice President-Publications. He was also the co-recipient of the 1997 Darlington Award for his work on high-frequency filters He received the Circuits and Systems Society Golden Jubilee Medal in 1999. He was the IEEE Circuits and Systems Society, Representative to the Solid-State Circuits Society (2000-2002). He was a member of the IEEE Solid-State Circuits Society Fellow Award Committee from 2002 to 2004. He is currently a member of the IEEE CAS Society Board of Governors. His present interests are in the area of RF-Communication circuits and analog and mixed-mode circuit design. He is an IEEE Fellow Member since 1992. He has graduated more than 39 Ph D students and nearly 54 M. Sc students.

