

Abstract

Analog Rank-Order Filter Using Multiple-Winners-Take-All

Luthuli Edem Dake

B.S., Kwame Nkrumah University of Science and Technology

Chair of Advisory Committee: Dr. Ugur Cilingiroglu

I present an analog VLSI Rank Order Filter (ROF), capable of ranking a wide array of inputs. Implementation is achieved using two multiple-winners-take-all blocks that compute in parallel. Simulation and experimental results show good speed, resolution, area, dynamic range and supply voltage performance at high speed by a binary words.