

Thesis Title	The Applications of Pool Circuits as Arithmetic Circuits in Current Mode and Voltage Mode
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Level of Study	Master of Engineering in Electrical Engineering King Mongkut's Institute of Technology Ladkrabang
Year	1997

Abstract

This thesis presents “the applications of pool circuits as arithmetic circuits in current mode and voltage mode” which present to current and voltage mode pool circuit. The basic operation of pool circuit are subtraction and addition function. The voltage mode pull circuit create voltage mode four-quadrant multiplier and divider circuits by using square law of MOSFET in saturation region. The current mode pool circuit creates current mode four-quadrant multiplier by using Current mode square and current mirror circuits. This thesis presents the experimental results and the performance of the circuits by using mathematics equations and Pspice program for the simulation.