Thesis Title	Temperature Compensation of Translinear
	Current Conveyor and OTA
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ABSTRACT

The goal of this thesis is to propose the design a temperature compensation of translinear current conveyor and OTA which are attractive features for VLSI implementation of current-mode function circuits by using bipolar transistor technology. In the translinear current conveyor based circuit, the realization methods take advantage of the parasitic resistance that appears at the port X of the conveyor. In the OTA based circuit, the realization methods make use of the OTA transconductance gain. Both of them can be varied to the absolute temperature. This design uses a new bias circuit which has a current that is directly proportional to the absolute temperature, and can also be electronically varied. As applied with translinear current conveyor and OTA, it will display a stability with a higher temperature. The performances of the scheme are confirmed through PSPICE simulation results.