

Abstract

A GAIN COMPENSATION CIRCUIT FOR CMOS AMPLIFIERS

A gain compensation circuit that compensates for variations in gain of a high gain, high frequency amplifier due to changes in mobility of transistor and resistor components of the amplifier. The gain compensation circuit includes a current adjustment circuit and a gain factor evaluation circuit. The current adjustment circuit modifies a bias current provided to each amplifier stage of a plurality of amplifier stages that make up the high gain, high frequency amplifier. The modification of the bias current adjusts the gain factor of the amplifier. The gain factor evaluation circuit is in communication with the current adjustment circuit to determine changes in the gain factor of the high gain, high frequency amplifier. From the determination, the gain factor evaluation circuit provides a compensation signal to the current adjustment circuit indicating a modification factor for the biasing current for each amplifier stage.

(FIGURE 3 IS SUGGESTED FOR PUBLICATION)