

Abstract

MEASUREMENT CIRCUIT WITH IMPROVED ACCURACY

A measurement circuit for measuring input voltages in an automatic test system includes a pedestal source, a differential amplifier, and a feedback amplifier. The differential amplifier measures a 'residue,' i.e., a difference between an input signal and a pedestal signal from the pedestal source, which is programmed to equal an expected input voltage. The feedback amplifier boosts the residue before it is presented to the differential amplifier, and thus allows the differential amplifier to be operated at lower gain than is typically used in conventional topologies. Consequently, the effect of the errors in the differential amplifier are reduced.

Figure 2