

Abstract: A new universal voltage-mode second-order filter circuit is presented. The circuit uses five current-feedback operational amplifiers, two grounded capacitors three grounded resistors and three floating resistors. The circuit can realize all the standard filter functions; lowpass, highpass, bandpass, notch and allpass, without changing the passive elements. The proposed circuit enjoys independent grounded-resistance-control of the natural frequency and the bandwidth, low output impedances, high input impedance as well as low active and passive sensitivities.