

## Abstract

A new current-mode universal filter is proposed. The filter uses three multiple-output current-controlled translinear current-conveyors (CCCII) and can simultaneously realise lowpass, highpass and bandpass responses. Realisation of notch and allpass responses is feasible. The parameters  $\omega_0$ ,  $\omega_0/Q_0$ , and the bandpass gain can be controlled by adjusting the bias currents of the CCCIIs. The proposed circuit enjoys low sensitivities.