

Abstract: A new current-mode sinusoidal oscillator circuit is presented of which the frequency and phase are single-element controlled. The circuit has two output currents. The frequency of oscillation is controlled by using a grounded resistor without disturbing the condition of oscillation. The phase difference between the two output currents can be controlled using a grounded passive element (resistor or capacitor or inductor) without disturbing the frequency of oscillation. The theoretical results are confirmed using SPICE simulation.