

# CMOS Current-Mode Selectable S-Shape Correction Circuit

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## Abstract

This paper presents a CMOS current-mode S-shape correction circuit. The S-shape correction function is proposed to suit for panel-to-panel LCD displays by selecting a fractional value. Simulated results are at 1.8V supply voltage for 0.35  $\mu\text{m}$  CMOS process. Image quality improvement due to S-shape correction is observed. The -3dB bandwidth are about 50 MHz for the proposed circuit.

Keyword : LCD, S-shape curve, gamma correction, current-mode circuit, Taylor series