

Oral Presentation

[DES2]Driving Technology

Chair: Chih-Wen Lu (Nat. Tsing Hua Univ.)

Co-Chair: Keiichi Nakajima (Tianma Japan)

Wed. Nov 27, 2019 3:20 PM - 4:40 PM Room 207 (2F)

3:40 PM - 4:00 PM

[DES2-2]New External Compensated Circuit with Buffer IC for High-Resolution AMOLED Displays

*Feng-Ching Cheng¹, Po-Syun Chen¹, Chia-Lun Lee¹, Chih-Lung Lin¹ (1. National Cheng Kung University (Taiwan))

Keywords:AMOLED, external compensation, low-temperature polycrystalline silicon thin-film transistor

This work presents a new pixel circuit based on LTPS TFTs compensating for TFT V_{TH} variations and V_{DD} I-R drops for AMOLED displays. The simulated results show that the relative current error rates are less than 4.87% with TFT V_{TH} of ± 0.5 V and -0.5 V V_{DD} I-R drops.