

Oral Presentation

## [DES2]Driving Technology

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Co-Chair: Keiichi Nakajima (Tianma Japan)

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

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3:40 PM - 4:00 PM

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

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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  $\pm 0.5$  V and  $-0.5$  V  $V_{DD}$  I-R drops.