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)

4:00 PM - 4:20 PM

## [DES2-3]Highly Reliable a-IGZO TFT Gate Driver Circuit to Suppress Threshold Voltage Shift of Pull-down TFT

\*Jungwoo Lee<sup>1</sup>, Jongsu Oh<sup>1</sup>, Eun Kyo Jung<sup>1</sup>, KeeChan Park<sup>2</sup>, Jae-Hong Jeon<sup>3</sup>, Yong-Sang Kim<sup>1</sup> (1. Sungkyunkwan University (Korea), 2. Konkuk University (Korea), 3. Korea Aerospace University (Korea))
Keywords:Oxide TFT, Gate Driver Circuit, Reliability, Duty Ratio

We present the highly reliable gate driver circuit using AC-driven method of a pull-down TFTs. Two pull-down TFTs are driven with duty ratio of 33.3% and 66.7%, respectively, VOUT discharge completely. The proposed circuit can minimize coupling noise by discharging the Q and VOUT node constantly except for output period.