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)

## 4:20 PM - 4:40 PM

## [DES2-4]Novel Driving Methods of Gate Driver Circuit for Depletion Mode Oxide TFTs

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Keywords:Gate Driver Circuit, Thin-Film Transistor, Depletion Mode, Threshold Voltage, Reliability

We introduce novel driving methods of pull-down unit in a gate driver circuit for enhancement and depletion mode a-IGZO thin-film transistors (TFTs). Using 3T1C diode connection structure, our circuit can compensate for  $V_{TH}$  of pull-down unit in the enhancement mode and can be normally operated in the depletion mode.