
Poster Presentation

[FLXp1]Flexible Electronics Technologies

Thu. Nov 28, 2019 2:30 PM - 5:00 PM Main Hall (1F)

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[FLXp1-8]A high performance 3-bit ripple counter circuit based on Organic TFTs for flexible read out integrated circuit

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We propose a high performance 3-bit negative edge-triggered ripple counter based on Organic Thin Film Transistors (OTFTs). All the logic gate circuits used in this work are inverters and NAND circuits based on OTFTs with large zero-VGS load. A voltage range of 0 to 30V and a frequency of 12.5KHz clock signal is used for the ripple counter as input clock input. A high output level of ~27.4V and a low output level of ~4 or 5V are measured at the 2nd and 3rd stages' output node of the ripple counter. Their frequencies are one quarter and one eighth of the input signal's frequency. The output signal of the proposed ripple counter changes when its input signal falls to low level from high.