

عنوان مقاله:

Subthreshold Pass Transistor Logic for Ultra-Low Power Operation

محل انتشار:

پانزدهمین کنفرانس مهندسی برق ایران (سال: 1386)

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خلاصه مقاله:

In this paper, we investigate subthreshold pass-transistor logic structures for ultra-low power applications. The performance characteristics of different pass-transistor XOR structures operating in the subthreshold region have been compared in 65nm and 90nm technologies. The results of the simulations show that the subthreshold logics have some advantages compared to their strong inversion counterparts. The study includes both normal subthreshold pass-transistor logic (sub-PT) and dynamic threshold pass-transistor logic (sub-DTPD). When compared to the former, the latter logic reveals lower sensitivities to temperature and process variations. Pass-transistor logic

کلمات کلیدی:

Subthreshold operation, Ultra low power

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