Hussain / Garzia / Nurmi

Computing Platforms for Software-Defined Radio

This book addresses Software-Defined Radio (SDR) baseband processing from the computer architecture point of view, providing a detailed exploration of different computing platforms by classifying different approaches, highlighting the common features related to SDR requirements and by showing pros and cons of the proposed solutions. It covers architectures exploiting parallelism by extending single-processor environment (such as VLIW, SIMD, TTA approaches), multi-core platforms distributing the computation to either a homogeneous array or a set of specialized heterogeneous processors, and architectures exploiting fine-grained, coarse-grained, or hybrid reconfigurability.

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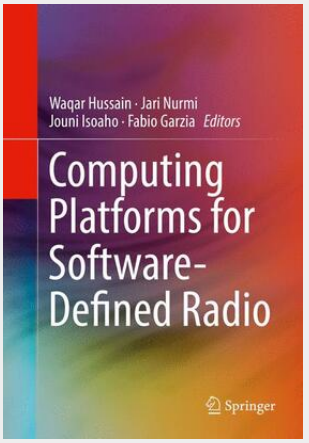

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