A TWO-LEVEL PIPELINED IMPLEMENTATION OF DIRECT-FORM RECURSIVE FILTERS

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Abstract

A stabilized parallel algorithm for direct-form recursive filters is obtained using a new method of derivation in the Z domain. The algorithm is regular and modular, so very efficient VLSI architectures can be constructed to implement it. The degree of parallelism in these implementations can be chosen freely, and is not restricted to be a power of two.

Comments

Only the Abstract is given here. The full report appeared as [3], and a revision appeared as [4]. For related work, see [1, 2].

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