Abstract

This paper proposes an efficient residue to binary converter on a new three-moduli set \(\left(2^{2n+1}, 2^n -2^{-n}, -1\right)\) using the Mixed Radix Conversion. The proposed reverse converters are adder based and memoryless. In comparison with other moduli sets with similar dynamic range, the new schemes out-perform the existing schemes in terms of both hardware cost and propagation delay.

References


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**Index Terms**

Computer Science Information Sciences
Keywords

Reverse Converter, Mixed Radix Conversion, Dynamic Range, Moduli Set, Residue Number System