On min-base palindromic representations of powers of 2

Donald L. Kreher*, Michigan Technological University,

Douglas R. Stinson, David R. Cheriton School of Computer Science, University of Waterloo

A positive integer N is palindromic in the base b when $N = \sum_{i=0}^{k} c_i b^i$, $c_k \neq 0$, and $c_i = c_{k-i}$, i = 0, 1, 2, ..., k, Focusing on powers of 2, we investigate the smallest base b when $N = 2^n$ is palindromic in the base b.

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