

Abstract

For odd n , binary sequences of period 2^n-1 with ideal autocorrelation are investigated with respect to the 3- and 5-valued crosscorrelation property between them. At most 5-valued crosscorrelation of m -sequences is discussed, which is linked to the crosscorrelation of some other binary two-level autocorrelation sequences. Several theorems and conjectures are established for describing the 3- and 5-valued crosscorrelation of a pair of binary two-level autocorrelation sequences.