Realizations of optimal signature analyzer

Stolov E.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The realizations of optimal nonlinear signature analyzer are proposed. The analyzer is tuned for the testing sequence. The analyzer optimizes the number of signature sequences. It appears that this analyzer is essentially more effective in comparison with linear one. One of the practical realizations contains binary counter which is complicated device. Linear shift register with feedback is proposed to use instead of binary counter. Proposed circuit for nonlinear signature analyzer enable to reduce the number of sequences with equal signatures.