

The present invention can be used in designing fault-tolerant computing systems and automatic control systems that operate in real time. The proposed device for monitoring the state and changing the configuration of a redundant system, which consists of two subsystems with redundant units (1, 2, 3, 4), contains three comparators (5, 6, 7), two registers (8, 9), a code converter (10) for control and testing signals, a data write-enabling unit (11), a unit (12) for generating a fault indication signal, a switching unit (13), an input unit (18) for a timing signal, an output unit (19) for the system state indication signal, output units (20, 21) for the corresponding subsystem fault indication signals, an output unit (22) for the signal indicating the uncontrolled operation mode of the system, and an output unit (23) for the system fault indication signal. The present invention allows the reliability and diagnostic testing of the system to be enhanced.