Abstract

The minimization of switching functions is important to reduce the original number of logic gates required to implement digital logic circuits. Quine-McCluskey algorithm is classical method for simplifying these functions which can handle any number of variables. This paper presents Quine-McCluskey algorithm for minimizing switching functions, with additional specific elements, such as starting part (that is decoding DNF form) and cost of circuit. An example of implementation of the algorithm is given too.

References


Index Terms

Computer Science

Digital Circuits
Keywords

switching functions  DNF form  cubes  minimization  Quine-McCluskey algorithm