

Cubical Representation of Prime and Essential Prime Implicants of Boolean Functions

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Abstract : K Maps are generally and ideally, thought to be simplest form for obtaining solution of Boolean equations. Cubical Representation of Boolean equations is an alternate pick to incur a solution, otherwise to be meted out with Truth Tables, Boolean Laws, and different traits of Karnaugh Maps. Largest possible k- cubes that exist for a given function are equivalent to its prime implicants. A technique of minimization of Logic functions is tried to be achieved through cubical methods. The main purpose is to make aware and utilise the advantages of cubical techniques in minimization of Logic functions. All this is done with an aim to achieve minimal cost solution.

Keywords : K-maps, don't care conditions, Boolean equations, cubes

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