

DLD LAB 07

Boolean algebra and Simplification of Boolean expressions - II

Objectives

Learn how to simplify Boolean logic equations using DeMorgan's theory.

Draw the simplified and the original Boolean expression and make sure that they are both equivalent by filling-in the truth table. Implement in the lab.

Task 2: Simplifying Boolean functions

Simplify the following Boolean expression

$$F(A, B) = (A \cdot B) + A'(A+B)$$

Task 3: Simplifying Boolean functions

Simplify the following Boolean expression

$$F(A, B, C) = (A+C') + C(C.A' + (B.A) + C)$$

Task 4: Simplifying Boolean functions

Simplify the following Boolean expression

$$F(A, B, C) = AB'C' + A'B'C' + A'BC' + A'B'C$$