Assignment 6

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January 9, 2021

1 The Boolean Expression For "e"

$$e = A.\overline{B}.\overline{C}.\overline{D} + A.B.\overline{C}.\overline{D} + \overline{A}.\overline{B}.C.\overline{D} + A.\overline{B}.C\overline{D} + A.B.C.\overline{D} + A.\overline{B}.\overline{C}.D$$

2 K-map Expression (simplified)

after simplifying the above boolean expression using k-maps it looks like this
$$e = \overline{A}.B + A.\overline{D} + \overline{B}.C$$
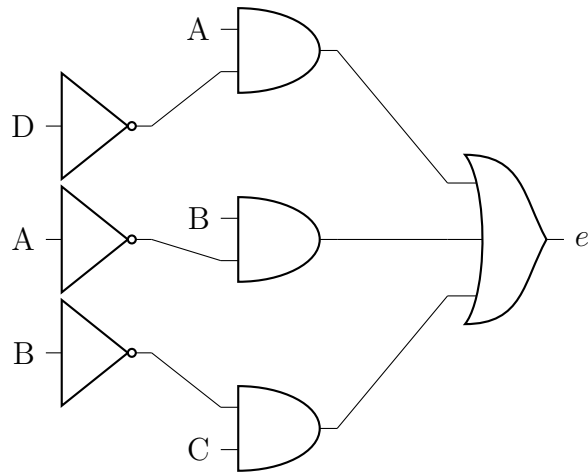
2.1 The Combinational Circuit

Figure 1: Circuit