ASSIGNMENT-1

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IITH - Future Wireless Comunnication (FWC22033)

Contents

Abstract

The objective of this manual is to show how to Verify the Boolean Expression A+C=A+A'.C+B.C

1 Components

Component	Value	Quantity
Vaman Board	-	1
Jumper wires	-	as required

TABLE 1.0

2 Implementation

A+C=A+A'C+BC
using distributive law
A+C =(A+A')(A+C)+BC
A+C =(A+C)+BC
A+C =A+C(1+B)
A+C =A+C

2.1 Karunugh Map

Assign X=A+C

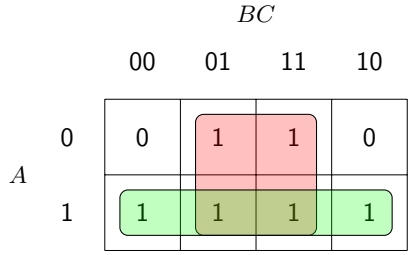

FIGURE 2.1

Assign Y=A+A'.C+BC

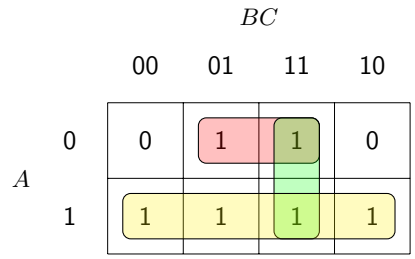

FIGURE 2.2

Above K-maps are verify using Table-0
Asumme that F=X=Y

X	Y	Z	F
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	1

TABLE 2

3 Software

Make the connections and connect the Vaman Board to the PC via USB.In the location of choice,type the below commands

1. $svncohttps : //github.com/chinnapa5264/FWC - Module1/blob/main/fpga_examples/fpga_assignment$
2. bash $fpga_build.shfpga_assignmentflash$
3. bash $scp_send.shflash$