Assignment

Team 44

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Course Code CSE 231.L

Section- 04

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | B | C | D | Y |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 1 | 0 |
| 0 | 0 | 1 | 0 | 0 |
| 0 | 0 | 1 | 1 | 1 |
| 0 | 1 | 0 | 0 | 0 |
| 0 | 1 | 0 | 1 | 1 |
| 0 | 1 | 1 | 0 | 0 |
| 0 | 1 | 1 | 1 | 0 |
| 1 | 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 1 | 1 |
| 1 | 0 | 1 | 0 | 0 |
| 1 | 0 | 1 | 1 | 0 |
| 1 | 1 | 0 | 0 | 0 |
| 1 | 1 | 0 | 1 | 0 |
| 1 | 1 | 1 | 0 | 0 |
| 1 | 1 | 1 | 1 | 0 |

Here We Find Y(A,B,C,D) =∑m (3,5,9)

By using K Map We Find,

CD 00 01 11 10

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| AB |  |  |  |  |
| 00 | 0 m0 | 0 m1 | 1 m3 | 0 m2 |
| 01 | 0 m4 | 1 m5 | 0 m7 | 0 m6 |
| 11 | 0 m12 | 0 m13 | 0 m15 | 0 m14 |
| 00 | 0 m8 | 1 m9 | 0 m11 | 0 m10 |

From This K Map we get,

F = I+II+III

= A’B’CD+A’BC’D+AB’C’D

=A’B’D(C+C’)+A’BC’D

=A’B’D+A’BC’D

=A’D(B+BC’)

=A’D(B+B’) (B’+C’)

=A’D (B’+C’)

=A’B’D+A’C’D

Logisim Diagram

