|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **A** | **B** | **C** | **D** | **Output** | **minterm** | **maxterm** |
| 0 | 0 | 0 | 0 | 0 |  | A+B+C+D |
| 0 | 0 | 0 | 1 | 1 | A’B’C’D |  |
| 0 | 0 | 1 | 0 | 1 | ABC’D |  |
| 0 | 0 | 1 | 1 | 1 | ABC’D’ |  |
| 0 | 1 | 0 | 0 | 1 | A’BC’D’ |  |
| 0 | 1 | 0 | 1 | 1 | AB’CD’ |  |
| 0 | 1 | 1 | 0 | 1 | A’BCD’ |  |
| 0 | 1 | 1 | 1 | 1 | AB’C’D’ |  |
| 1 | 0 | 0 | 0 | 1 | A’BCD |  |
| 1 | 0 | 0 | 1 | 1 | AB’C’D |  |
| 1 | 0 | 1 | 0 | 1 | A’BC’D |  |
| 1 | 0 | 1 | 1 | 1 | AB’CD |  |
| 1 | 1 | 0 | 0 | 1 | A’B’CD |  |
| 1 | 1 | 0 | 1 | 1 | A’B’CD’ |  |
| 1 | 1 | 1 | 0 | 1 | ABCD’ |  |
| 1 | 1 | 1 | 1 | 1 | ABCD |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**Team 43 Circuit Datasheet**

minterm F = ∑ (1 , 2, 3, 4 , 5 , 6 ,7,8, 9 ,10, 11 ,12,13, 14 , 15)

= A’B’C’D+ ABC’D+ ABC’D’+ A’BC’D’+ AB’CD’+ A’BCD’+ AB’C’D’+ A’BCD+ AB’C’D+ A’BC’D+ AB’CD+ A’B’CD+ A’B’CD’+ ABCD’+ ABCD

maxterm F = π (0 )

= (A+B+C+D)