

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A | B | C | A+B | $$\overbar{A+B}$$ | $$\overbar{A+B}∙C$$ |
| 0 | 0 | 0 | 0 | 1 | 0 |
| 0 | 0 | 1 | 0 | 1 | 1 |
| 0 | 1 | 0 | 1 | 0 | 0 |
| 0 | 1 | 1 | 1 | 0 | 0 |
| 1 | 0 | 0 | 1 | 0 | 0 |
| 1 | 0 | 1 | 1 | 0 | 0 |
| 1 | 1 | 0 | 1 | 0 | 0 |
| 1 | 1 | 1 | 1 | 0 | 0 |



$$Z=\left(\overbar{A}∙B+B∙B\right)∙\left(̿+\overbar{B}\right)=\left(\overbar{A}∙B+B\right)\left(A+\overbar{B}\right)=B\left(\overbar{A}+1\right)\left(A+\overbar{B}\right)=B\left(A+\overbar{B}\right)=B∙A+B∙\overbar{B}=A∙B$$



$$z=\left(A+B\right)∙\left(\overbar{A}+\overbar{A}+̿\right)=\left(A+B\right)∙\left(\overbar{A}+B\right)=A∙\overbar{A}+A∙B+B∙\overbar{A}+B∙B=A∙B+B∙\overbar{A}+B=B\left(A+\overbar{A}+1\right)=B$$