



$$\begin{aligned}
 \overline{a \cdot \bar{b} + \bar{a} \cdot b} &= \overline{(a \cdot \bar{b}) + (\bar{a} \cdot b)} \\
 &= \overline{(a + \bar{b}) \cdot (\bar{a} + b)} \\
 &= \overline{(a + \bar{b})} \cdot \overline{(\bar{a} + b)} \\
 &= \bar{a} \cdot a + \bar{a} \cdot \bar{b} + b \cdot a + b \cdot \bar{b} \\
 &= 0 + \bar{a} \cdot \bar{b} + b \cdot a + 0 \\
 &= a \cdot b + \bar{a} \cdot \bar{b}
 \end{aligned}$$

$= a \oplus b$

a	b	a · b	\bar{a}	\bar{b}	$\bar{a} \cdot \bar{b}$	M
0	0	0	1	1	1	1
0	1	0	1	0	0	0
1	0	0	0	1	0	0
1	1	1	0	0	0	1