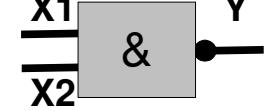
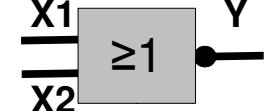
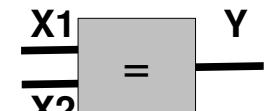
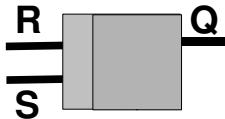
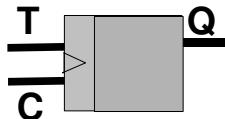
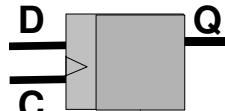


# Relevante Schaltelemente: Logik- Gatter

<u>Bezeichnung</u>	<u>Logik</u>	<u>Wahrheitstabelle</u> $X_1 = 0 0 1 1, X_2 = 0 1 0 1$	<u>Symbol</u>
NOT 74HC04	$Y = \bar{X}_1$	$Y = 1 1 0 0$	
AND 74HC08	$Y = X_1 \wedge X_2$	$Y = 0 0 0 1$	
OR 74HC32	$Y = X_1 \vee X_2$	$Y = 0 1 1 1$	
NAND 74HC00	$Y = (\bar{X}_1 \wedge \bar{X}_2)$	$Y = 1 1 1 0$	
NOR 74HC02	$Y = (\bar{X}_1 \vee \bar{X}_2)$	$Y = 1 0 0 0$	
XOR 74HC86	$Y = (\bar{X}_1 \wedge X_2) \vee (X_1 \wedge \bar{X}_2)$	$Y = 0 1 1 0$	
XNOR 74HC266	$Y = (\bar{X}_1 \wedge \bar{X}_2) \vee (X_1 \wedge X_2)$	$Y = 1 0 0 1$	

# Relevante Schaltelemente: Flip-Flops

<u>Bezeichnung</u> FF- Typ IC- Name	<u>Eingänge</u>			<u>Ausgang</u> Q sei vorher „0“ bzw. „1“	<u>Symbol</u>
	S/T/D/J „X“ → don't care	R/K „X“ → don't care	C (Takt) Flanken 		
<b>RS-FF</b> <b>kein IC</b>	0 0 1 1	0 1 0 1		Q 0 1 <b>nicht definiert</b>	
<b>T-FF</b> <b>kein IC</b>	0 1 <b>X</b>		$0 \rightarrow 1 \uparrow$ $0 \rightarrow 1 \uparrow$ <b>0, 1 oder 1 → 0 ↓</b>	$\overline{Q}$ $Q$ <b>Q</b>	
<b>D-FF</b> <b>74HC74</b>	0 1 <b>X</b>		$0 \rightarrow 1 \uparrow$ $0 \rightarrow 1 \uparrow$ <b>0, 1 oder 1 → 0 ↓</b>	0 1 <b>Q</b>	
<b>JK-FF</b> <b>74HC107</b>	0 0 1 1 <b>X</b>	0 1 0 1 <b>X</b>	$0 \rightarrow 1 \uparrow$ $0 \rightarrow 1 \uparrow$ $0 \rightarrow 1 \uparrow$ $0 \rightarrow 1 \uparrow$ <b>0, 1 oder 1 → 0 ↓</b>	Q 0 1 <b>Q</b> <b>Q</b>	