

NOR2D0	tt	ss	ff	fs	sf
$X0 \rightarrow 1$	14.81	19.99	11.27	18.71	12.74
$X0 \rightarrow 0$	9.00	11.96	6.20	7.22	9.77
$0X \rightarrow 1$	17.99	25.45	14.24	23.55	16.02
$0X \rightarrow 0$	11.78	12.98	6.92	7.77	11.47

INVD0	tt	ss	ff	fs	sf
$0 \rightarrow 1$	7.39	10.04	5.68	8.35	6.83
$1 \rightarrow 0$	7.27	10.39	5.36	6.51	8.54

$$T_1 \approx \begin{bmatrix} X_f + N(C_f + I) \\ X_b + N(C_b + I) \end{bmatrix}$$

$$T_2 \approx \begin{bmatrix} X_f + 2N(C_f + I) \\ X_b + 2N(C_b + I) \end{bmatrix}$$

$$I_f \approx \frac{I_b + I_f}{2} = I$$

$$T_2 - T_1 = \begin{bmatrix} N(C_f + I) \\ N(C_b + I) \end{bmatrix}$$

$$2T_1 - T_2 = \begin{bmatrix} X_f \\ X_b \end{bmatrix}$$

$X$  = pulse generator and connector  
 $C$  = component delay  
 $I$  = inverter delay  
 $N$  = number of components in chain