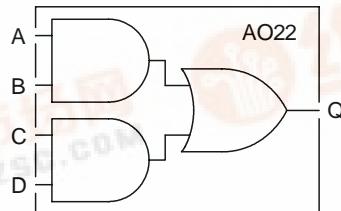


AO22 is an AND/OR circuit providing the logical function $Q = (A \cdot B + C \cdot D)$.

A	B	C	D	Q
L	X	L	X	L
X	L	L	X	L
L	X	X	L	L
X	L	X	L	L
H	H	X	X	H
X	X	H	H	H



	C_i (pF)
A	0.048
B	0.042
C	0.055
D	0.051

Area

0.81 mils²

Power

2.84 μW/MHz

Delay [ns] = $t_{pd..} = f(SL, L)$

with SL = Input Slope [ns]; L = Output Load [pF]

Output Slope [ns] = $op_sl.. = f(L)$

with L = Output Load [pF]

AC Characteristics : $T_j = 25^\circ\text{C}$ $VDD = 3.3\text{V}$ Typical Process

AC Characteristics

Characteristics	Symbol	SL = 0.1			SL = 2.0		
		L = 0.1	L = 0.7	L = 1.0	L = 0.1	L = 0.7	L = 1.0
Delay A to Q	tpdar	0.56	1.94	2.64	0.75	2.11	2.78
	tpdaf	0.56	1.68	2.17	0.74	1.84	2.39
Delay B to Q	tpdbr	0.57	1.94	2.66	0.66	1.98	2.67
	tpdbf	0.59	1.70	2.27	0.79	1.91	2.43
Delay C to Q	tpdcr	0.48	1.87	2.52	0.61	1.93	2.62
	tpdcf	0.51	1.59	2.15	0.75	1.85	2.37
Delay D to Q	tpddr	0.49	1.87	2.53	0.54	1.87	2.56
	tpddf	0.54	1.64	2.17	0.83	1.92	2.49
Output Slope A to Q	op_slar	0.93	5.33	7.50	0.90	5.23	7.50
	op_slaf	0.66	3.72	4.96	0.68	3.51	5.28
Output Slope B to Q	op_slbr	0.95	5.32	7.50	0.90	5.22	7.48
	op_slblf	0.66	3.70	5.17	0.70	3.73	5.33
Output Slope C to Q	op_slcr	0.91	5.32	7.55	0.88	5.20	7.46
	op_slcf	0.67	3.50	5.06	0.67	3.51	5.20
Output Slope D to Q	op_sldr	0.91	5.33	7.52	0.91	5.21	7.41
	op_sldf	0.68	3.72	5.03	0.67	3.53	5.15