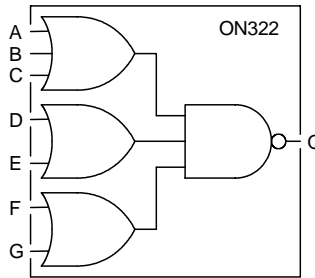


ON322 is an OR/NAND circuit providing the logical function $Q = \text{NOT}[(A+B+C).(D+E).(F+G)]$.

Truth Table

A	B	C	D	E	F	G	Q
L	L	L	X	X	X	X	H
X	X	X	L	L	X	X	H
X	X	X	X	X	L	L	H
X	X	H	X	H	X	H	L
X	X	H	X	H	H	X	L
X	X	H	H	X	X	H	L
X	X	H	H	X	H	X	L
X	H	X	X	H	X	H	L
X	H	X	X	H	H	X	L
X	H	X	H	X	X	H	L
X	H	X	H	X	H	X	L
H	X	X	X	H	X	H	L
H	X	X	X	H	H	X	L
H	X	X	H	X	X	H	L
H	X	X	H	X	H	X	L



Capacitance

	C _i (pF)
A	0.062
B	0.063
C	0.073
D	0.054
E	0.061
F	0.060
G	0.068

Area

1.08 mils²

Power

3.79 μW/MHz

Delay [ns] = tpd.. = 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°C VDD = 3.3V 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	0.85	2.24	2.91	0.96	2.31	2.97
	tpdaf	0.55	1.43	1.87	0.56	1.41	1.84
Delay B to Q	tpdbr	0.85	2.21	2.96	1.00	2.33	2.99
	tpdbf	0.51	1.38	1.81	0.52	1.36	1.79
Delay C to Q	tpdcr	0.78	2.14	2.90	1.01	2.32	2.97
	tpdcf	0.45	1.33	1.76	0.46	1.31	1.74
Delay D to Q	tpddr	0.64	1.98	2.57	0.81	2.05	2.68
	tpddf	0.51	1.42	1.83	0.61	1.44	1.87
Delay E to Q	tpder	0.62	1.93	2.63	0.89	2.08	2.75
	tpdef	0.49	1.38	1.79	0.57	1.42	1.84

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 F to Q	tpdfr	0.53	1.85	2.48	0.69	1.93	2.56
	tpdff	0.46	1.35	1.77	0.64	1.47	1.88
Delay G to Q	tpdgr	0.49	1.79	2.51	0.78	1.96	2.60
	tpdgf	0.42	1.34	1.73	0.59	1.41	1.85
Output Slope A to Q	op_slar	2.16	6.31	8.27	2.30	6.31	8.43
	op_slaf	1.18	3.77	5.12	1.31	3.80	5.15
Output Slope B to Q	op_slbr	2.15	6.31	8.35	2.30	6.30	8.36
	op_slbf	1.10	3.66	4.98	1.21	3.70	5.02
Output Slope C to Q	op_slcr	2.17	6.30	8.37	2.31	6.25	8.33
	op_slcf	0.97	3.56	4.88	1.13	3.58	4.90
Output Slope D to Q	op_sldr	2.03	6.03	8.01	2.26	5.93	8.02
	op_sldf	1.22	3.85	5.07	1.37	3.82	5.17
Output Slope E to Q	op_sler	2.07	5.91	8.05	2.31	6.13	8.03
	op_slef	1.13	3.77	4.97	1.28	3.75	5.07
Output Slope F to Q	op_slfr	1.90	5.82	8.01	2.05	5.98	8.00
	op_slff	1.18	3.85	5.08	1.47	3.88	5.20
Output Slope G to Q	op_slgr	1.86	5.88	7.81	2.16	6.05	8.01
	op_slgf	1.12	3.70	4.97	1.37	3.77	5.07