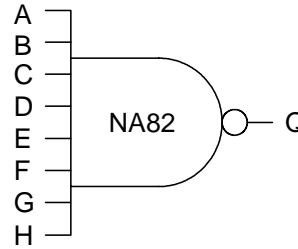


NA82 is an 8-input NAND gate with 2x drive strength.

Truth Table

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



Capacitance

	Ci (pF)
A	0.035
B	0.023
C	0.020
D	0.023
E	0.032
F	0.023
G	0.021
H	0.022

Area

1.35 mils²

Power

4.38 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 : Tj = 25°C VDD = 3.3V Typical Process

AC Characteristics

Characteristics	Symbol	SL = 0.1			SL = 2.0		
		L = 0.2	L = 1.4	L = 2.0	L = 0.2	L = 1.4	L = 2.0
Delay A to Q	tpdar	1.17	2.59	3.33	1.54	2.97	3.61
	tpdaf	1.05	2.23	2.85	0.98	2.18	2.73
Delay B to Q	tpdbr	1.10	2.54	3.18	1.48	2.89	3.57
	tpdbf	1.07	2.25	2.86	1.08	2.26	2.88
Delay C to Q	tpdcr	1.06	2.47	3.13	1.42	2.83	3.56
	tpdcf	1.01	2.20	2.80	1.07	2.24	2.85
Delay D to Q	tpddr	0.98	2.35	3.08	1.33	2.73	3.49
	tpddf	0.96	2.16	2.74	1.08	2.27	2.87
Delay E to Q	tpder	1.12	2.55	3.21	1.49	2.90	3.64
	tpdef	1.05	2.25	2.83	1.00	2.22	2.76
Delay F to Q	tpdfr	1.08	2.48	3.24	1.45	2.86	3.57
	tpdff	1.05	2.24	2.83	1.06	2.26	2.81
Delay G to Q	tpdgr	1.03	2.44	3.12	1.38	2.78	3.51
	tpdgf	1.02	2.22	2.77	1.08	2.27	2.83
Delay H to Q	tpdhr	0.97	2.36	3.01	1.30	2.74	3.35
	tpdhf	0.97	2.15	2.72	1.09	2.28	2.83

Characteristics	Symbol	SL = 0.1			SL = 2.0		
		L = 0.2	L = 1.4	L = 2.0	L = 0.2	L = 1.4	L = 2.0
Output Slope A to Q	op_slar	0.98	5.47	7.60	1.02	5.36	7.77
	op_slaf	0.78	4.00	5.51	0.80	3.82	5.25
Output Slope B to Q	op_slbr	1.01	5.37	7.77	0.98	5.47	7.80
	op_slbf	0.81	3.72	5.36	0.82	3.72	5.48
Output Slope C to Q	op_slcr	1.00	5.47	7.78	1.01	5.47	7.58
	op_slcf	0.80	3.81	5.55	0.80	3.75	5.65
Output Slope D to Q	op_sl dr	1.02	5.31	7.75	1.01	5.51	7.61
	op_sl df	0.80	3.85	5.41	0.81	3.77	5.55
Output Slope E to Q	op_sl er	1.00	5.36	7.80	1.00	5.51	7.57
	op_sl ef	0.80	3.92	5.35	0.81	3.82	5.37
Output Slope F to Q	op_sl fr	1.00	5.51	7.62	1.01	5.30	7.81
	op_sl ff	0.82	3.95	5.36	0.80	3.86	5.30
Output Slope G to Q	op_sl gr	0.98	5.36	7.81	0.98	5.42	7.78
	op_sl gf	0.80	3.70	5.40	0.81	3.77	5.27
Output Slope H to Q	op_sl hr	1.02	5.50	7.60	1.01	5.38	7.58
	op_sl hf	0.82	3.96	5.50	0.80	3.70	5.27

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