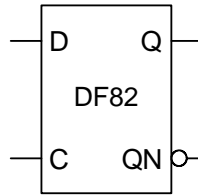


DF82 is a static, master-slave D flip-flop with 2x drive strength.

Truth Table

D	C	Q	QN
H	↑	H	L
L	↑	L	H
X	↓	no change	



Capacitance

	Ci (pF)
D	0.020
C	0.022

Area

1.35 mils²

Power

5.19 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 C to Q	tpdcqr	1.77	3.13	3.78	1.98	3.31	3.98
	tpdcqf	1.88	3.00	3.50	2.07	3.18	3.74
Delay C to QN	tpdcqnr	1.46	2.85	3.52	1.64	3.07	3.76
	tpdcqnf	1.32	2.57	3.13	1.53	2.77	3.31
Output Slope C to Q	op_slcqr	0.92	4.93	7.07	0.91	4.95	6.98
	op_slcqf	0.72	3.56	5.28	0.76	3.62	5.20
Output Slope C to QN	op_slcqnr	1.01	5.06	7.16	1.01	4.96	7.25
	op_slcqnf	0.92	3.82	5.12	0.91	3.81	5.12

Characteristics	Symbol	[ns]	Characteristics	Symbol	[ns]
Min D Setup Time to C	High	tsudch	Min D Hold Time to C	High	thdch
	Low	tsudcl		Low	thdcl
Min C Width	High	twch			
	Low	twcl			