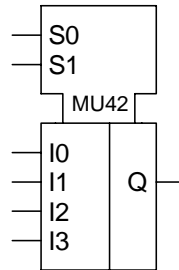


MU42 is a 4-input to 1-output digital multiplexer with 2x drive strength.

### Truth Table

S1	S0	Q
L	L	I0
L	H	I1
H	L	I2
H	H	I3



### Capacitance

	Ci (pF)
I0	0.026
I1	0.021
I2	0.024
I3	0.015
S0	0.064
S1	0.029

### Area

1.49 mils<sup>2</sup>

### Power

4.20 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 I0 to Q	tpdi0r	1.06	3.73	5.21	1.11	3.92	5.32
	tpdi0f	0.99	2.91	3.95	1.16	3.10	4.14
Delay I1 to Q	tpdi1r	1.04	3.72	5.16	1.10	3.88	5.13
	tpdi1f	1.01	2.92	3.93	1.17	3.13	4.04
Delay I2 to Q	tpdi2r	1.01	3.79	5.03	1.05	3.85	5.18
	tpdi2f	1.40	3.32	4.31	1.60	3.52	4.50
Delay I3 to Q	tpdi3r	1.03	3.74	5.25	1.08	3.87	5.11
	tpdi3f	1.39	3.31	4.24	1.58	3.50	4.49
Delay S0 to Q	tpds0r	1.36	4.07	5.53	1.68	4.35	5.88
	tpds0f	1.61	3.52	4.49	1.80	3.72	4.70
Delay S1 to Q	tpds1r	0.82	3.62	4.92	1.00	3.77	5.02
	tpds1f	0.76	2.73	3.71	1.08	2.97	4.03
Output Slope I0 to Q	op_sli0r	1.83	10.02	14.41	1.78	10.13	14.35
	op_sli0f	1.32	6.78	9.66	1.32	6.82	9.61
Output Slope I1 to Q	op_sli1r	1.83	10.02	14.41	1.78	10.17	14.13
	op_sli1f	1.33	6.78	9.46	1.33	6.82	9.58
Output Slope I2 to Q	op_sli2r	1.85	10.18	14.27	1.83	10.13	14.40
	op_sli2f	1.45	6.75	9.51	1.42	6.76	9.43

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 I3 to Q	op_sli3r	1.85	10.12	14.37	1.83	10.18	14.18
	op_sli3f	1.43	6.96	9.51	1.41	6.75	9.61
Output Slope S0 to Q	op_sls0r	1.85	10.12	14.38	1.82	10.16	14.36
	op_sls0f	1.43	6.78	9.61	1.42	6.83	9.66
Output Slope S1 to Q	op_sls1r	1.81	10.22	14.43	1.87	10.18	14.32
	op_sls1f	1.35	6.92	9.73	1.41	6.77	9.61