AMS — Austria Mikro Systeme International AG

MU82 is an 8-input to 1-output digital multiplexer with 2x drive strength.

Truth Table

I0	I1	I2	I3	I4	I5	I6	I7	S0	S1	S2	Q
0	X	X	X	X	X	X	X	0	0	0	0
X	0	X	X	X	X	X	X	1	0	0	0
X	X	0	X	X	X	X	X	0	1	0	0
X	X	X	0	X	X	X	X	1	1	0	0
X	X	X	X	0	X	X	X	0	0	1	0
X	X	X	X	X	0	X	X	1	0	1	0
X	X	X	X	X	X	0	X	0	1	1	0
X	X	X	X	X	X	X	0	1	1	1	0
X	X	X	X	X	X	X	1	1	1	1	1
X	X	X	X	X	X	1	X	0	1	1	1
X	X	X	X	X	1	X	X	1	0	1	1
X	X	X	X	1	X	X	X	0	0	1	1
X	X	X	1	X	X	X	X	1	1	0	1
X	X	1	X	X	X	X	X	0	1	0	1
X	1	X	X	X	X	X	X	1	0	0	1
1	X	X	X	X	X	X	X	0	0	0	1
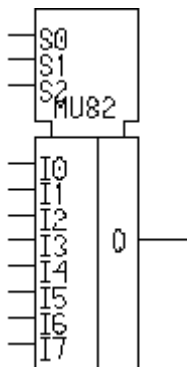
Capacitance

Pin	Cap [pF]
I0	0.008
I1	0.008
I2	0.008
I3	0.008
I4	0.008
I5	0.008
I6	0.009
I7	0.008
S0	0.053
S1	0.027
S2	0.018

Area

0.959 mils^2
619 µm^2

Power

1.733 µW/MHz

Delay [ns] = tpd.. = f(SL, L)   with SL = Input Slope [ns] ; L = Output Load [pF]
Output Slope [ns] = op_sl.. = f(SL, L)   with L = Output Load [pF]

AC Characteristics: Tj = 25°C   VDD = 3.3V   Typical Process

AC Characteristics

	Rise				Fall			
Slope [ns]	**0.1**		**2**		**0.1**		**2**	
Load [pF]	**0.03**	**0.3**	**0.03**	**0.3**	**0.03**	**0.3**	**0.03**	**0.3**
Delay I0 => Q	0.85	1.35	1.02	1.51	0.93	1.48	1.06	1.61
Delay I1 => Q	0.86	1.35	1.01	1.52	0.93	1.48	1.06	1.61
Delay I2 => Q	0.88	1.37	1.04	1.53	0.95	1.5	1.08	1.64
Delay I3 => Q	0.87	1.37	1.04	1.53	0.95	1.5	1.09	1.63
Delay I4 => Q	0.87	1.36	1.03	1.53	0.95	1.5	1.08	1.63
Delay I5 => Q	0.87	1.36	1.04	1.53	0.96	1.51	1.08	1.64
Delay I6 => Q	0.89	1.38	1.06	1.55	0.97	1.52	1.1	1.65
Delay I7 => Q	0.88	1.37	1.05	1.55	0.97	1.52	1.1	1.65
Delay S001 => Q	0.82	1.31	1.03	1.52	1.23	1.78	1.54	2.09
Delay S010 => Q	1.18	1.68	1.43	1.93	0.88	1.43	1.08	1.63
Delay S101 => Q	0.8	1.3	1.06	1.56	0.64	1.19	0.85	1.4
Delay S110 => Q	0.57	1.07	0.77	1.27	0.85	1.41	1.08	1.63
Delay S201 => Q	0.33	0.83	0.59	1.09	0.55	1.1	0.75	1.3
Delay S210 => Q	0.46	0.95	0.65	1.14	0.38	0.94	0.6	1.16
Slew I0 => Q	0.35	1.86	0.35	1.86	0.32	1.34	0.32	1.35
Slew I1 => Q	0.34	1.85	0.35	1.86	0.32	1.34	0.31	1.35
Slew I2 => Q	0.35	1.86	0.35	1.86	0.32	1.35	0.32	1.33
Slew I3 => Q	0.34	1.86	0.35	1.85	0.32	1.33	0.32	1.34
Slew I4 => Q	0.35	1.86	0.35	1.86	0.32	1.35	0.33	1.35
Slew I5 => Q	0.35	1.85	0.35	1.86	0.32	1.33	0.32	1.35
Slew I6 => Q	0.36	1.86	0.35	1.85	0.32	1.33	0.32	1.34
Slew I7 => Q	0.35	1.86	0.36	1.85	0.32	1.35	0.32	1.35
Slew S001 => Q	0.35	1.86	0.35	1.86	0.32	1.35	0.32	1.34
Slew S010 => Q	0.35	1.86	0.35	1.86	0.32	1.34	0.32	1.34
Slew S101 => Q	0.35	1.86	0.35	1.86	0.32	1.34	0.32	1.34
Slew S110 => Q	0.35	1.86	0.35	1.85	0.31	1.35	0.33	1.34
Slew S201 => Q	0.34	1.85	0.39	1.87	0.31	1.34	0.31	1.34
Slew S210 => Q	0.34	1.86	0.34	1.85	0.3	1.34	0.36	1.37