********** SPICE DECK **********

*** Generated from muxf201.mag by magic's spice generator
*** technology: scmos
*** timestamp: 604100040
*** version: dlm V2.0
*** Capacitance Threshold = 5000000 units
*** Resistance Scale = 1000 units

M8x39 O 50 vdd vdd PMOS W=23.0U L=2.0U
M24x44 vdd 51 120 vdd PMOS W=18.0U L=2.0U
M28x44 120 52 50 vdd PMOS W=18.0U L=2.0U
M36x45 50 53 121 vdd PMOS W=20.0U L=2.0U
M40x45 121 54 vdd vdd PMOS W=20.0U L=2.0U
M48x45 vdd 54 52 vdd PMOS W=17.0U L=2.0U
M8x13 O 50 gnd gnd NMOS W=14.0U L=2.0U
M24x12 gnd 51 150 gnd NMOS W=12.0U L=2.0U
M28x12 150 54 50 gnd NMOS W=12.0U L=2.0U
M36x8 50 53 151 gnd NMOS W=14.0U L=2.0U
M40x8 151 52 gnd gnd NMOS W=14.0U L=2.0U
M48x7 gnd 54 52 gnd NMOS W=15.0U L=2.0U

2-micron delay information.

Path	Timing	Nominal Case		Worst Case	
		No Load	1pF	No Load	1pF
A1---O	Pd 0--1	1.25	3.54	2.75	7.79
	Pd 1--0	2.21	4.16	4.86	9.15
	Tr 0--1	1.09	5.24	2.40	11.53
	Tf 1--0	1.24	3.82	2.73	8.40
B2---O	Pd 0--1	0.92	3.08	2.02	6.78
	Pd 1--0	1.99	3.93	4.38	8.65
	Tr 0--1	0.90	5.28	1.98	11.62
	Tf 1--0	1.05	3.52	2.31	7.74
SEL3---O	Pd 0--1	2.16	4.16	4.75	9.15
	Pd 1--0	1.59	3.20	3.50	7.04
	Tr 0--1	1.09	5.04	2.40	11.09
	Tf 1--0	0.99	3.42	2.18	7.52

3-micron delay information.

Path	Timing	Nominal Case		Worst Case	
		No Load	1pF	No Load	1pF
A1---O	Pd 0--1	4.43	7.38	7.37	12.20
	Pd 1--0	6.67	9.40	11.50	15.85
	Tr 0--1	3.02	8.43	4.37	12.19
	Tf 1--0	3.81	6.66	5.75	9.85
B2---O	Pd 0--1	3.77	6.41	7.11	11.04
	Pd 1--0	5.89	8.24	10.21	14.61
	Tr 0--1	2.98	8.35	5.45	11.81
	Tf 1--0	3.14	5.71	4.17	8.94
SEL3---O	Pd 0--1	6.60	9.30	11.55	15.15
	Pd 1--0	5.81	8.36	8.81	12.60
	Tr 0--1	2.97	8.34	4.55	12.26
	Tf 1--0	2.73	5.64	4.80	8.51

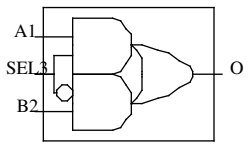
Cell Device Sizes

Transistor	Width (λ)	Length (λ)
55	15	2
51	12	2
54	12	2
53	14	2
52	14	2
50	14	2
20	23	2
22	18	2
21	18	2
23	20	2
25	17	2
24	20	2

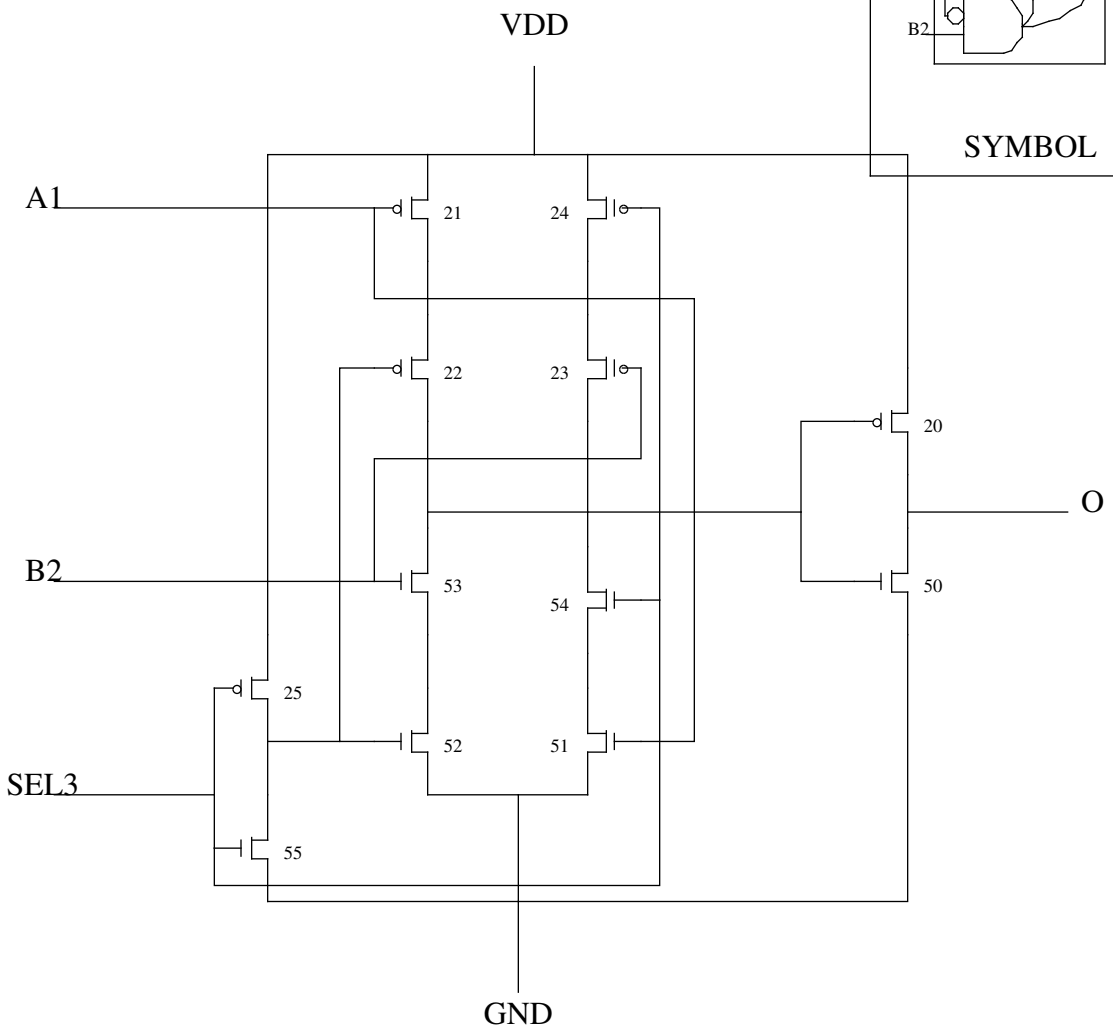
Institute for Technology Development

ADVANCED MICROELECTRONICS DIVISION

SCALABLE CMOS (SCMOS) DOUBLE METAL I / C STANDARD CELL LIBRARY	**muxf201** DATA_SELECT	DATE: Mar 11,1989 VERSION: dlmV2.0



SYMBOL



Institute for Technology Development

ADVANCED MICROELECTRONICS DIVISION

SCALABLE CMOS (SCMOS) DOUBLE METAL I / C STANDARD CELL LIBRARY	**muxf201** DATA_SELECT	DATE: Mar 11,1989 VERSION: dlmV2.0

TERMINAL LOCATION (In Lambda)

GRID	PIN_NAME	Y_LOC	CLASS
1	O	29	0
2	FeedThru	----	----
3	FeedThru	----	----
4	A1	28	1
5	B2	29	2
6	SEL3	34	3
7	FeedThru	----	----

LOGIC EQUATIONS: O = (D1 * SEL) + (D2 * SEL)'

Truth Table

D1	SEL	D2	O
-	0	1	1
1	1	-	1