

M1701 Data Selector

The M1701 Data Selector contains two DEC74153 Dual 4-Line-to-1-Line Data Selector/Multiplexer integrated circuits. These modules are used as input multiplexers in the ALU section of the FP15 Floating-Point Processor. Complete block schematics of these input multiplexers are shown on FP15 drawings D-BS-FP15-0-19 through -28.

For each section of each IC, one of four data inputs is selected by combinations of address input signals A and B. The selected data input is strobed to the output when the S (strobe) input goes low. Refer to the following truth table.

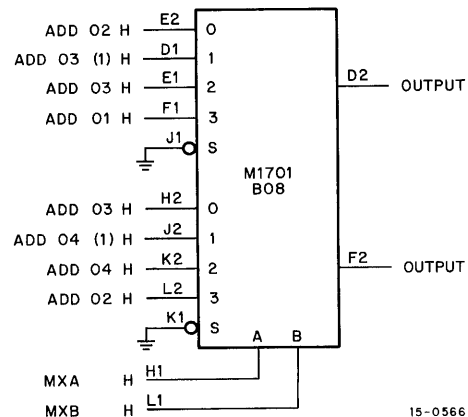
Address Inputs		Data Inputs				Strobe	Output
A	B	0	1	2	3	S	
x	x	x	x	x	x	1	0
0	0	0	x	x	x	0	0
0	0	1	x	x	x	0	1
1	0	x	0	x	x	0	0
1	0	x	1	x	x	0	1
0	1	x	x	0	x	0	0
0	1	x	x	1	x	0	1
1	1	x	x	x	0	0	0
1	1	x	x	x	1	0	1

x indicates irrelevancy. Address inputs A and B are common to both sections of each IC.

INPUTS: Each input represents 1 unit load.

OUTPUTS: Each output is capable of driving 10 unit loads.

POWER: Typical power dissipation is 170 mW for each IC on the module.



15-0566